

Alliance for National Health CoVid Articles: Compilation for 2020

Covid - Adapt, Don't Fight Campaign

This is our Covid Zone campaign page that links you to all the content we've created and published on our website as it relates to Covid-19 since 12 March 2020.



https://www.anhinternational.org/campaigns/covid-adapt-dont-fight-campaign/

Foreword

I felt compelled to edit this collection of articles as a highlight of the actions taken by this government and global impacts of Covid policy. It has offered a road-map of actions and inactions taken by ministers and 'experts' endorsed by private political policy and I ask you to consider the history of this blight and its impact on the wellbeing, mental health and isolation of the people.

We are ruled by consent with your health on the line. Are you happy with the response to this emergency or does the approach outweigh the risks?

I encourage you to reflect, reason and critically evaluate the approaches for an informed opinion. People over profit in public health.

John Horsfield

'I'm currently a consultant Health Psychologist who divides his time between research/writing, design/editing and teaching/troubleshooting.'

https://open.academia.edu/johnhorsfield; https://www.researchgate.net/search/publication?q=john%2Bhorsfield;

https://scholar.google.co.uk/citations?user=ZrPwRtMAAAAJ&hl=en; https://www.amazon.co.uk/s?i=digital-text&rh=p 27%3AJOHN+HORSFIELD

Group Director of the Alliance Research Group.

Hearts and Minds Media (<u>heartsmmedia.com</u>) - social change through talks, documentaries and research.

Return learn gaming - Promoting Positive games & media (<u>returnlearn.com</u>) Retro Reloader - Educational designs (<u>retroreloader.com</u>) to inspire.

Open faith thinking (<u>iesusaviour.com</u>) - Resources for thinking about faith perspectives.

Full list of Articles included:

23 Dec 2020	Founder's Blog: Virus versus humanity
17 Dec 2020	Transvac vaccine transparency tool launched
17 Dec 2020	Cronyism and censorship update
14 Dec 2020	Campaign to put the C into Covid
14 Dec 2020	'Long covid': what is it and what might be the best way back?
14 Dec 2020	Covid catalysed collaborations
04 Dec 2020	Have you decided what you'll do or say if offered a covid vaccine?
04 Dec 2020	The 188,000 of us who the UK Dept of Health ignored
04 Dec 2020	Scientific challenges to mass testing and vaccine trials
27 Nov 2020	What's hurting us more: Virus or Governments?
27 Nov 2020	Podcast: The pieces of the covid jigsaw the mainstream don't talk about
19 Nov 2020	Could we be the losers in the vaccine race?
19 Nov 2020	Kids aren't superspreaders, and they may even be superbarriers
13 Nov 2020	Premature, presumptuous and thunderous Pfizer vaccine publicity
13 Nov 2020	Evidence of collateral damage from lockdowns consolidates
06 Nov 2020	ANH Feature: Legal actions against government overreach gather momentum
06 Nov 2020	Lies, damned lies and [UK government] statistics
28 Oct 2020	Sunshine vitamin covid protection that governments need to back
28 Oct 2020	Why covid myopia is killing us
28 Oct 2020	ANH-Intl Guest Feature: The case for vitamin D
22 Oct 2020	Democracy suspended in UK in preparation for mass vaccination
22 Oct 2020	Vitamin D - what governments are and aren't telling us
22 Oct 2020	Walk & Talk with Rob Verkerk PhD #1
16 Oct 2020	The Great Reset or the Great Divide?

16 Oct 2020	Showdown: Great Barrington Declaration v John Snow Memorandum
16 Oct 2020	Why the public distrusts official Covid science
08 Oct 2020	Will science and law be our oppressors or our saviour?
08 Oct 2020	Is the tide of public opinion turning against governments?
01 Oct 2020	Half a million sharks that shouldn't be Covid casualties
01 Oct 2020	Trafalgar protest transition at the 'witching hour'
24 Sep 2020	Why your positive test result is likely wrong
24 Sep 2020	Crony trackers soon to exploit public and abuse privacy
24 Sep 2020	The one-sided battle of Trafalgar
16 Sep 2020	Operation Moonshot: What the Boris is going on?
16 Sep 2020	UK vax consultation countdown
10 Sep 2020	UK law changes for COVID-19 mass vaccination
10 Sep 2020	Is there a waning pandemic behind the 'casedemic'?
10 Sep 2020	Profiteering from the pandemic
02 Sep 2020	Who's fact checking the 'fact checkers'?
02 Sep 2020	Are governments playing with fire?
27 Aug 2020	The Big 6 areas of Covid misinformation
20 Aug 2020	Immune resilience - adapt, don't fight
12 Aug 2020	Covid deception unravelled
05 Aug 2020	Devastating lockdown consequences
05 Aug 2020	Pandemic induced emotional trauma - a lasting legacy for ourselves and our childre
29 Jul 2020	Bill Gates on covid vaccines: the video
29 Jul 2020	Swiss Policy Research - Facts about covid-19
22 Jul 2020	Protecting our brains - because we only have one!
22 Jul 2020	Covid vaccines – like apples and oranges
16 Jul 2020	'Promising' and 'safe' Moderna vaccine trial causes severe adverse events

16 Jul 2020	A crash course in resilience: the video
16 Jul 2020	The grassroots are getting restless
11 Jul 2020	Pandemonium within a pandemic
02 Jul 2020	Coronavirus: could it be burning out after 20% of a population is infected?
26 Jun 2020	Coronacast 6: how many are really dying?
17 Jun 2020	How a not-so-dangerous virus created a global crisis
11 Jun 2020	Mask science unmasked
03 Jun 2020	Vaccine transparency - more needed now than ever
03 Jun 2020	The R number – what we're not being told
27 May 2020	Immune support protocols to support a return to school
27 May 2020	Social distancing in schools?
27 May 2020	Guest Feature: Back to school debate
27 May 2020	Remdesivir – out of the ashes but no miracle cure
20 May 2020	Should schools reopen? Coronacast with Rob Verkerk
20 May 2020	Global Covid status, tests, masks and the sunshine vitamin
14 May 2020	Never have so few controlled the lives of so many
14 May 2020	Why is success in critical care being ignored?
07 May 2020	Three numbers that may mislead
07 May 2020	Humble, heroic, multi-faceted vitamin C
07 May 2020	Call to action – help create the new vaccine narrative
29 Apr 2020	The 10-point vaccine transparency plan
29 Apr 2020	Lessons from the outdoors
29 Apr 2020	Dissent in the ranks
22 Apr 2020	Thinking and saving lives outside the box
22 Apr 2020	Talking turkey over tea about lockdown
22 Apr 2020	Natural bodies need natural agents

16 Apr 2020	Getting (over) the (first) hump
16 Apr 2020	The Wild West of coronavirus testing
09 Apr 2020	Have we lost control to the State?
09 Apr 2020	New video: The biology of positivity - creating profound change from within
02 Apr 2020	Call for concerted action on Vitamin C in C*v*d crisis
02 Apr 2020	C*v*d-19: it's not Russian roulette
02 Apr 2020	Dr Eccles: strengthening resilience in the face of *ovid-19
26 Mar 2020	Covid-19: when the world went into lockdown
26 Mar 2020	Covid-19 - the video: Adapt, don't fight
19 Mar 2020	Founders Blog: Covid-19 – be empowered, not paralysed
19 Mar 2020	Covid-19 science update
12 Mar 2020	ANH-Intl Special Report: Covid-19 - fearmongering born out of uncertainty
12 Mar 2020	Build your immune resilience - as nature intended

Build your immune resilience - as nature intended

Date:

12 March 2020

Comments:

10

10 top tips for supporting your immune system function by natural means

Content Sections

- Supporting immune resilience naturally
- Is your immune system pandemic-ready?

IMPORTANT NOTICE

The information in this article is for educational purposes only and should not be construed as medical advice. If you are experiencing any symptoms of illness, or consider that you might have been exposed to the coronavirus, follow the advice of your health authority [the UK's NHS advice is fairly detailed and useful wherever you may live]. This will typically mean staying at home and avoiding close contact with other people.

Do not go to a GP surgery, pharmacy or hospital and, in the UK, use the NHS 111 coronavirus service to get advice on what to do.

Maintaining health also means maintaining the right balance between host and pathogens.

We attempt to do this unconsciously on a daily basis given the sheer number of microbes we're exposed to from the air we breathe, the food we eat, the ground we walk on and the things we touch. A large majority of these microbes are friendly, beneficial even, but some most definitely are not if they start developing in significant numbers. Sorting friend from foe is exactly what our immune systems are there to do. Our innate and adaptive immune responses evolve during our lifetime. Constantly learning and adding more information to the 'memory banks' so that the right weapons can be manufactured in time to destroy whichever foe has been identified before it can destroy us. Our gut microbiome plays an integral and essential role in maintaining proper immune defence and essentially governs immune resilience.

Find related articles, information and videos in our Covid Zone

The extreme ingenuity of our part-human, part non-human immune make-up has got us this far in evolution. Integral to this is understanding that what we eat and how and where we live provided the basis for this millennia-long co-evolution of our immune systems, both with the microbial and non-microbial worlds within and around us. It's all we had at our disposal to modulate and support our immune systems for the majority of our own species' evolution. Despite the advances of modern science and medicine, nutrition and lifestyle interventions are still one of the most powerful ways to ensure the resilience of your immune system. Despite the incredible sophistication of immunological processes, and a deep knowledge of things we can do to modulate our immune system to our advantage, somehow we tend to put managing our immune resilience on the backburner. We assume there's not much we can do to improve it, which is just plain wrong. What's more, the kinds of things we can do to enhance immune resilience tend to be cheap, practical and largely within the remit of our own self-care.

Surely that's helpful when the world is gripped by fear over the consequences of infection by the new coronavirus, COVID-19 (the subject of our special report released today). Apart from behavioural measures designed to reduce transmission, the primary interface between us and the new coronavirus is our immune systems.

Supporting immune resilience naturally

Following are our top 10 picks for immune system support, naturally. However, this is definitely not an exhaustive list nor the only beneficial natural immune support available.

1. Food is medicine. It's also information for your DNA and your immune modulation. Fundamentally, food provides thousands of individual naturally occurring substances that help our bodies perform optimally. Our nutrition requirements change as we go through different times in our life and particularly when our immune system kicks into action and needs to protect us. At times of high demand, paying attention to food quality is paramount. Eating a diverse range of fresh, preferably whole, unprocessed or minimally processed plant foods helps to provide all-important phytonutrients to arm our defences. Fresh herbs (e.g. garlic, rosemary, sage, oregano) and spices (e.g. turmeric, black pepper, saffron) are especially polyphenol-rich to support modulation of the immune system, as well as being anti-inflammatory. Adapting what we eat, the way we prepare it and using targeted supplements to support immune function is safe and effective. Antibiotics are no use against viruses. Your immune system and your internally-generated 'chemical warfare' remains the best defence. Consume a nutrient-dense diet following the 10 pointers as per our Food4Health guidelines.



2. Zinc was discovered as a critical element in the functioning of the immune system of mammals, including humans, in the early 1960s. Newer research has demonstrated that zinc's key mechanism of action in the immune system is by stimulating serum thymulim (a thymus specific hormone involved in T cell function) and through modulation of T helper cell functions, which coordinate our entire adaptive immune system response. Conversely, immune function is compromised with zinc deficiency, which is becoming more widespread as we eat fewer zinc-rich animal foods. Many of the soils on which animals are farmed or animal feeds are cultivated are now depleted. Significant amounts of zinc now come from fortified foods like breakfast cereals, however, this is often not wellabsorbed because it is bound to phytic acid in grain-based foods and excreted. Many adults are sub-optimal in zinc, and a recent UK dietary survey found 5-30% of most adults (18 and over) are chronically deficient. Therefore, taking 25-50 mg per day of supplemental zinc in a bioavailable form may help to modulate cytokine activity (chemical messengers) and to stimulate the activity of natural killer cells and T-cell precursors. Don't take zinc supplements with grain-based foods to avoid binding with phytic acid. Consider taking it in liquid or lozenge form between meals.



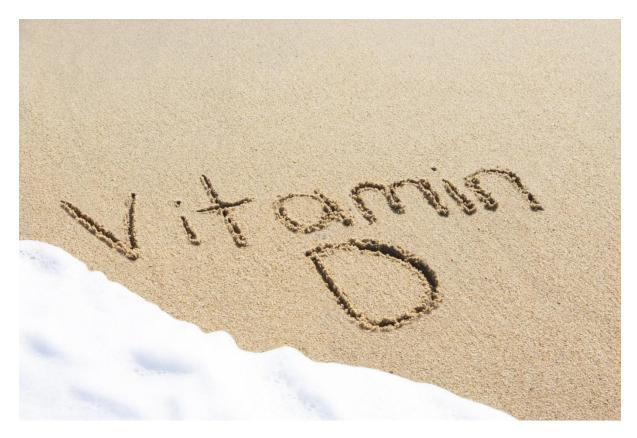
3. **Vitamin A** is essential for normal growth, for cell maturation, particularly neurodevelopment; for cell membrane stability, for visual and skin health, as an antioxidant, as well as for immunity. Vitamin A is needed for the normal functioning of both the innate and the adaptive immune response. Being deficient in vitamin A (retinol) can severely impair immunity and lead to increases in illness and death because it's so integral to all aspects of immune defence. Many people are deficient in vitamin A because they consume few foods that are rich natural sources of preformed vitamin A like liver, fish, cheese and eggs. They also may not consume sufficient provitamin A carotenoids that are converted, somewhat inefficiently and variably to vitamin A in the body. These provitamin A carotenoids, hundreds of which have been identified and beta-carotene is just one, are especially abundant in red, yellow and orange vegetables and fruit. In diets low in vitamin A (retinol) or provitamin A (carotenoid) food sources, retinol supplements (e.g. retinyl palmitate) should typically provide 800 - 1,500 mcg retinol equivalents (RE) per day, but this might double for 2-3 days during an immune challenge. Vitamin A should always be taken at a different time to vitamin D because they can be functionally antagonistic.



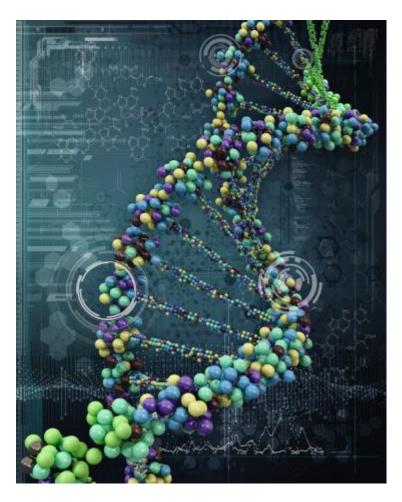
4. The role of vitamin C (ascorbic acid, ascorbate) in fighting infectious diseases became well known (and controversial) with the publication of Dr Linus Pauling's book, 'Vitamin C and the Common Cold' (1970), which advocated vitamin C megadoses (grams, not milligrams daily). Vitamin C is indeed a powerful antioxidant against a large number of free radical species, but it also functions as a cofactor for enzyme reactions. Interestingly the antiviral effects of vitamin C may be down to it also acting as a pro-oxidant when the need arises, such as in the case of cancer or viral infections. Healthy cells tend not to be affected by this pro-oxidant effect, but viruses and cancer are, which is why intravenous vitamin C is used to deliver large doses to affected people. Maintenance doses for general immune health are typically in the region of 250 - 500 mg per day. When immune challenged, divided doses can be used to deliver 2-3 grams per day in total. The primary adverse effect from higher doses of vitamin C is a loose bowel, but during a viral infection, the vitamin C requirement increases so that higher doses can be tolerated without bowel symptoms.



5. Clinical experience and research by leading vitamin D researchers Professor Michael Holick and Dr Reinhold Vieth have consistently shown levels of 100 mcg (4,000 IU) or more of vitamin D3 (cholecalciferol) need to be taken orally to deliver optimal circulating levels of 25-hydroxyvitamin D (25(OH)D). Optimum levels of 100-150 nmol/L (40-60 ng/ml) have been determined by a group of leading vitamin D researchers that have come together under the banner of Grassroots Health. Clinical experience has shown, short-term, that levels around 10-fold greater than this can be used where bacterial or viral infections have taken hold. These very high intakes should be managed under health professional supervision and should not be maintained for more than a week, before returning to levels of 250 mcg (10,000 IU) or less. High dose vitamin D should be accompanied with regular measurement of circulating 25(OH)D as there can be big differences in amounts required by individuals to optimise circulating levels. It's generally assumed that the prevalence of colds and flu during the winter months is caused by the cold weather. However, inadequate sunlight and resulting vitamin D deficiency are likely underlying causes of the 'flu season', an argument first put forward with accompanying evidence back in 2008 in the journal Virology by Professor John Cannell and colleagues. Additionally, most will benefit from taking supplemental magnesium (at least at the recommended daily level of 375 mg/day) given how many people are deficient in magnesium from their normal diets as it's required for vitamin D activation.



6. Nucleotides are less well known, but nonetheless an important emerging group of ingredients that have great potential for improving the modulation of our very complex immune systems. Nucleotides, being the basic building blocks of DNA and RNA, are fundamental to all life. They're also not new. Evidence suggests they were among the chemical compounds that helped kick-start life in the 'primordial soup' over 4 billion years ago. Every new cell requires nucleotides. DNA holds the genetic code, while RNA is responsible for the translation of information from the genetic code to the production of proteins which make everything happen in our bodies. Nucleotides are in especially high demand when the immune system is upregulated given the rapid and increased turnover and replication of cells. Being so essential, our bodies can make nucleotides or salvage them from dead cells, but when demand outstrips supply (infections, stress, exercise, gut repair, injury), we must take them in from food sources. The most concentrated sources are organ meats and offal, which are increasingly rarely consumed in the modern, especially Western, diet. They are also quite abundant in fermented foods, such as properly fermented tofu, tempeh and natto. Mirroring what was likely to be normal dietary intake of around 500 - 1500 mg of nucleotides for much of human evolution, these amounts can be consumed from nucleotide-containing food supplements to ensure you have a daily supply. If you can, source a pyrimidine dominant nucleotide supplement to best mirror nature. Very high intakes of purine-based nucleotides can be an issue for those susceptible to gout (i.e. high circulating uric acid), but this is rarely an issue at typical supplemental doses.



7. Andrographis paniculata is a herb with a long history of use in both Ayurveda and Traditional Chinese Medicine. When looking at what it's been used for traditionally, it appears to be a kind of panacea, but it's especially well known today for treating viral infections, particularly of the upper respiratory tract, and relieving cold and flu symptoms. The bitter herb is a powerful immune modulator, down to the andrographolides in the plant which are thought to enhance the production of white blood cells, to support the release of interferon, and to promote the healthy activity of the lymphatic system. Andrographis is also anti-inflammatory and pain relieving, whilst having a supportive action on the liver in much the same way as milk thistle. Given the rising spectre of antimicrobial resistance, last year, Southampton University embarked on a trial to evaluate the effect of an Andrographis product made by the organic herbal company. Pukka Herbs, to assess whether it might be effective in treating acute upper respiratory tract infections. The results are due to be published in the near future and provisional results released at a meeting at Chelsea Physic Garden last October were very positive. Relatively, it's an inexpensive supplement, and a typical dose during an immune challenge is around 500 mg dried Andrographis leaf, twice a day.



8. Beta-glucans are one of the best documented and most effective natural group of compounds known to enhance the function of the innate immune system. Particularly, the beta 1-3/1-6 glucan, generally derived from brewer's yeast (Saccharomyces cerevisiae), or found within mushrooms such as shiitake and maitake. Mushrooms may be a bit like Marmite – you either love them or hate them - but more than 50 species have been found to be 'immunoceutical' hot houses. If you loathe eating mushrooms, you can still benefit from their immune power by taking a food supplement. Macrophages, the clean-up cells of our immune system, have receptors that specifically recognise beta 1-3/1-6 glucan because they occur in the cell walls of many bacteria and fungi. Consumption of beta 1-3/1-6 glucan has been shown to amplify the immune response of immune effector cells such as macrophages, dendritic cells, natural killer cells and cytotoxic T-cells in animals and humans. Beta-glucans are best taken on an empty stomach in the morning in typical doses of 700 - 1500 mg. You can also use a body weight calculation of 2 mg beta 1,3/1,6 glucan per kg body weight for general maintenance.



9. Echinacea preparations from Echinacea purpurea and E. angustifolia are one of the most widely used herbal products for the common cold, in both Europe and the USA. Studies have shown that dried leaf and root powders acted as potent immuno-stimulants in murine and in vitro tests, while fresh juice extracts or extracts standardised to phenolic acid or echinacoside content were relatively inactive. However, it appears from a review of 13 randomised, double blind, placebo-controlled trials that Echinacea may be more effective in treating the early symptoms of common cold, than in its prevention. Caution should be observed with regard to dosing as higher dose Echinacea can upregulate TNFa cytokine, which is one of several cytokines associated with serious disease and cytokine storm in COVID-19. Probably the continued use of Echinacea during infection is not advised.



10. Curcumin from turmeric (Curcuma longa) is king amongst spices. Hailed as 'the spice of life' turmeric/curcumin has been used for thousands of years in traditional medicine. Every house should have a stock of both the fresh root (keeps well in the freezer, grate when needed) and dried turmeric powder (non-irradiated if possible). Curcumin may be one of the most studied components of turmeric root, but using the whole root or supplements containing the full-spectrum of carcuminoids rather than just isolated and concentrated curcumin, likely allows for better synergy and a wider array of benefits. Full spectrum turmeric products and the fresh root also contain small amounts of volatile turmeric essential oil that enhance bioavailability and absorption.



The diverse range of health benefits of turmeric are linked to its multi-target activity in the body, and so include: immune modulation, anti-viral, anti-inflammatory, antioxidant, anti-microbial, anti-tubercular, cardio-protective, anti-diabetic, hepato-protective, neuro-protective, nephron-protective, anti-rheumatic, and anti-cancer effects. It's fair to say that turmeric, and its active components, likely have an action on every cell in the body and benefit every process in the body. It's truly medicinal food. Whilst there are many curcumin and turmeric supplements to choose from on the market, it's very versatile in the kitchen and can be used in both sweet and savoury dishes, as a tea, herbal root infusion or enjoyed as 'golden milk' - the now famous 'turmeric latte'. In India, consumption of turmeric root is typically around 2 to 4 grams per day in food. Good food supplements usually provide 500 mg capsules with a standardised amount of curcumin, alongside other curcuminoids and the essential oil (or other bioavailability enhancers). Daily dose targets should be 1000 - 1800 mg per day taken in 3 doses alongside food during immune challenge.

Is your immune system pandemic-ready?

There is ample evidence that human immune-competence is strongly related to nutrition, physical exercise and psycho-social stress. Through much of the Western world, there is a dearth of evidence-based nutritional and lifestyle advice and recommendations being communicated to citizens. This is especially risky when there are already rogue players with inferior or ineffective products trying to capitalise on the 'opportunity' provided by COVID-19.

A recent systematic review on alternate COVID-19 treatment strategies in China has found that the immune response is weakened by inadequate nutrition and they are

proposing that the nutritional status of patients should be assessed before any drug treatment begins.

Nutritional and lifestyle patterns during a pandemic could actually negatively affect immune function. Food quality may deteriorate as people rush to stock up on packaged, dry and tinned goods. People may be more stressed and sleep less well because of the impacts on their home or working lives. This is not what the immune system needs if it's to be resilient and defence-ready. Maintain your supply of fresh foods, use box (CSA) schemes which deliver organic or from the farm-gate to your door, get lots of sleep, stay connected with your tribe even if it means doing so electronically and not in person, and remember that targeted supplementation can be helpful to counter micronutrient deficiencies and provide enhanced immune support.

While many might be spending a little less on travel given the need to reduce transmission risk, it may be one of the best times to invest more in your own health. Booking an appointment with a health professional, such as a functional medicine, nutritional or herbal practitioner, may not be what your doctor (GP) has ordered, but it makes sense. A resilient immune system is one that responds appropriately to challenge and then turns off when the foe is vanquished. It allows us to become ill, but get better again in a shorter time frame, often with fewer and less pronounced symptoms. There is also a silver lining: a less naïve, and even more primed immune system for any subsequent exposures to the same pathogen.

ANH-Intl Special Report: Covid-19 - fearmongering born out of uncertainty

By Rob Verkerk PhD, founder, executive and scientific director, ANH-Intl

Coronavirus 2 or SARS-CoV-2, that causes Covid-19 or just plain old 'coronavirus' – call it what you like – has taken the world by storm. Humans in every corner of the globe are coming together to ostensibly minimise human tragedy, suffering and hardship linked to the severe acute respiratory syndrome caused by the new circulating virus. Unwittingly, some of these efforts, especially if maintained too long or timed incorrectly, might actually be counterproductive to the interests of society. Governments, corporations, transportation companies, schools, the entertainment and sporting sectors – mostly everyone – have accepted that in the absence of a silver, pharmaceutical bullet against this novel viral infective agent, we must accept the cost of the economic impacts caused by our efforts in trying to contain and control transmission.

• Find related articles, information and videos in our Covid Zone

One positive outcome of the outbreak is the sense of cooperation that has been enabled. Citizens, regardless of geographic borders or background, can contribute, in the words of Tedros Adhanom Ghebreyesus, the Director General of the World Health Organization (WHO), "to protect themselves, to protect others, whether in the home, the community, the healthcare system, the workplace or the transport system."

But have health authorities, governments and corporations got enough information and context to be making the decisions they are making, often on our behalf? What are we not being told that we should be told?

Many healthcare professionals working in the natural health or integrative medicine sectors with whom we've spoken over the last month or so, like us, feel that context has been sorely missing in the public dialogue on the coronavirus outbreak. As has been comprehensive and relevant advice, especially for older people who are more susceptible, on supporting the immune system (see our separate piece on natural immune support) in the event of infection.

In this special report, released the day after the WHO upgraded the outbreak's status from epidemic to pandemic, I have attempted to highlight some of the anomalies and problems around the publicly available information, and, just as importantly, identify where key data gaps lie. We hope you'll find it provides some additional and helpful context to the information that's being delivered by the mainstream media.



WHO declares pandemic status of Covid-19

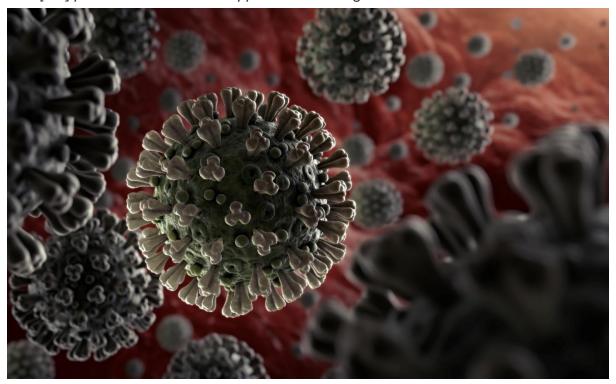
Before we kick off proper, if you want to gen up on some basics, albeit from a largely scientific perspective, the following links give you something of a starting point:

- Comparison of Covid-19 and flu by Johns Hopkins
- Key features of Covid-19 outbreak
- Epidemiology and pathogenesis of the Covid-19 outbreak
- Our World in Data looking at the numbers behind the outbreak

If you already need some light relief, here's a couple of tidbits of trivia:

- Coronaviruses get their name from the Latin word 'corona', which means 'crown' or 'halo'. When you look at them through a 2D transmission electron microscope you see what looks something like a crown comprised of the club-shaped spikes that cover the surface around the virus particles
- Did you know that around 20% of all instances of the common cold are caused by coronaviruses? Unsurprising therefore that most of the symptoms of COVID-19 are something like a common cold

• There's nothing new about this family of viruses that have co-existed with animals and humans for millennia. This one is called novel because it's the first time it's been found in humans. No one can be sure about the origins of the virus, but among the more supported theories is that it jumped from bats to pangolins to humans, where it turned up in the wet market of Wuhan in the Hubei province of China. While the origins remain unclear, there are of course fertile grounds for conspiracy theories. Among them was a view expressed by former Iranian President Mahmoud Ahmadinejad, who sent a letter to the United Nations stating the virus was "a new weapon for establishing and/or maintaining [the] political and economic upper hand in the global arena."

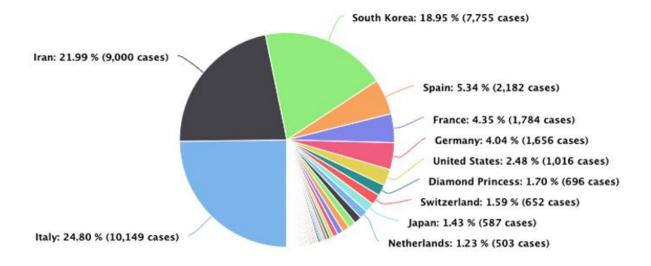


WHO said?

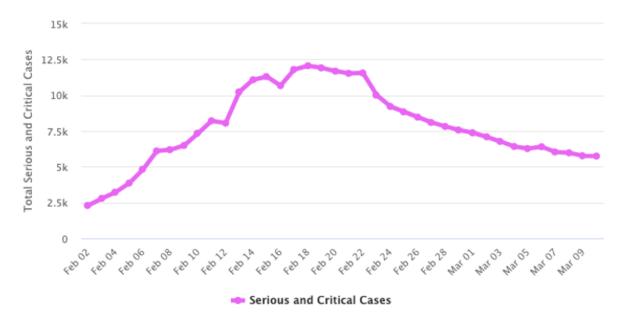
Tedros Adhanom Ghebreyesus at the WHO referred to a "sombre moment" as the number of confirmed cases of COVID-19 passed 100,000 in 100 countries over the weekend.

As of yesterday, based on data from Johns Hopkins' Covid-19 tracker, 87% of cases so far have occurred in just 4 countries (China, Italy, Iran and Korea; see Category 1 countries/areas).

According to the WHO, of the 80,000 reported cases in China, 70% have already fully recovered.



Distribution of cases outside Mainland China as of 11 March 2020. Source: Worldometer



Total serious and critical cases as of 11 March 2020. Source: Worldometer

Context by comparison with other infectious diseases

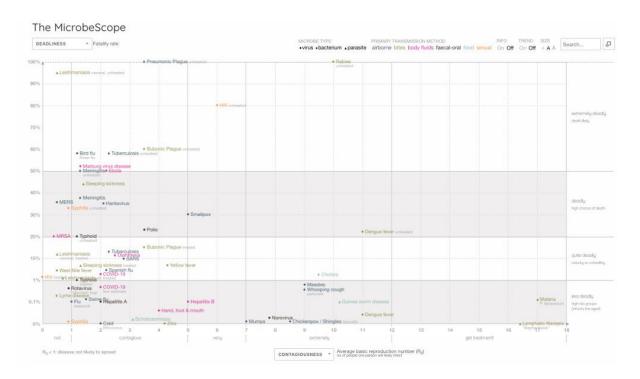
One way of getting context on Covid-19 is to compare the rate of contagiousness (the average basic reproduction number (R_{o}) which is the number of people one person will likely infect) with the case fatality rate (CFR), against other important infectious diseases. This way of looking at the infection makes sense because the Covid-19 outbreak is so recent, while other infectious agents like seasonal flu (caused mostly by

influenza A/H1N1 viruses) or 'swine flu' (A/H1N1pdm09) have been circulating considerably longer.

One such comparison has been carried out through an interactive graphic called the MicrobeScope (see below) on the *Information is Beautiful* website. You'll see data for Covid-19 sitting in the bottom left corner, with moderate contagiousness and relatively low fatality rate (presently around 1-2% of those infected). It's somewhat higher in Italy (5%), probably because many of those infected have been elderly with comorbidities (heart disease, diabetes, cancer, etc.) so are therefore more susceptible.

You'll also see, so far, SARS-CoV-2 appears very much less contagious than the mosquito vectored diseases, malaria or dengue fever. It is also much less deadly than tuberculosis, Ebola, meningitis or bird flu, while being slightly more deadly – based on just the first 10 weeks of available data – than seasonal flu.

Link to interactive version of MicrobeScope.



We also need to keep the numbers infected so far in context with those affected by other infectious diseases. Following is a comparison of COVID-19 with 4 other infectious diseases, bearing in mind Covid-19 has reportedly only been circulating for a little over two months:

Infectious agent	Estimated annual new cases	Estimated related deaths	Source
Covid-19	113,703*	4,012*	WHO Covid-2019 situation repo
Malaria	228 million	405,000	WHO malaria fact sheet

Tuberculosis	~7 million	1,491,000	TBFacts.org
Influenza	3-5 million	290,000 -650,000	WHO seasonal influenza fact sh
HIV/AIDS	~1.7 million	770,000	UNAIDS

*COVID-19 cases only from 31 December 2019 to 10 March 2020.

Other coronaviruses that caused huge public disturbances, albeit in more geographically limited areas, namely China and the Middle East, were the SARS (Severe Acute Respiratory Syndrome) and MERS (Middle East Respiratory Syndrome) epidemics of 2002 and 2012, respectively. SARS caused just over 8,000 deaths and had a fatality rate of nearly 10% as against MERS with around 2,500 causes and 834 deaths, amounting to 34% fatality rate. These figures demonstrate just how many more people are being affected by COVID-19, but relatively, how much less harmful it appears to be too. That's not something the mainstream media often reports in its bid to fearmonger.

Another good way of estimating infection potential is to look at the doubling rate.

Here, for ease, I suggest you look at data collated from official WHO figures by Australian investment guru, Damien Klassen on the website Nucleuswealth. It makes sense if you're wanting people to invest that you know how a virus like Covid-19 can change market values. Looked at this way, things don't presently look optimistic in South Korea, Italy and Iran.

Health threat

The trouble is, these bald numbers tell us only a part of the picture. They can also be misleading. When trying to size up the nature of the threat caused by the infectious agents and what priorities you should give to containment and mitigation, you really need solid answers to a lot of questions. These include knowing the age, gender and location of those who've died, how many people are infected (including those with and without symptoms), how long it took them to die after infection, did the infection really cause the death or was it just associated with it, what was the lag time between infection and death, what is the reproductive rate of the agent and does this change with time, what was the person's health status at the time of infection regardless of outcomes, what was the nature and severity of any symptoms....I could go on.

There are data on only some of these parameters. Even less of it is in the public domain.

When you look at the daily stats of escalating infection rates, they tell you nothing about whether lots of these people are recovering from mild symptoms of disease, or were they dying slow, painful deaths in an ICU? Or were they at home or in remote rural areas where they couldn't gain access to medical care?

What degree of trust can you put in official data being supplied to the WHO? Again, as Damien Klassen suggests, some data can be trusted less than others.

And just how many people out there would be positive if sampled and tested, but they haven't been tested because they have no symptoms? Take the case of the cruise

ship, the Diamond Princess that was docked in Yokohama, Japan. A whopping 52% of the 621 confirmed cases onboard (322) were found to be asymptomatic – according to Japan's Ministry of Health.

Also, are the laboratory tests being used rock solid, meaning do all positive tests mean the virus is present, and vice versa? Back to the Diamond Princess, why did one women test negative during the two weeks of testing while under quarantine on the boat, only to then be found positive when she returned home in Japan? A similar discovery was subsequently made in the cases of two Australian men.

As you delve into what little is known, and note the mass of information that isn't, an interesting story emerges, one that is at odds with the more definitive viewpoints underpinning public health policy that are being blasted at us daily across the airwaves.

The likely high (unknown) numbers of unreported cases of infection in part explains why Dr Anthony Fauci, the head of the NIH's National Institute of Allergy and Infectious Diseases, said in his co-written editorial in the *New England Journal of Medicine* published on 28 February 2020 that "the case fatality rate may be considerably less than 1%".

Remember the bird flu pandemic of 2007 caused by the H5N1 virus – or should we say, the human immune reaction to it? At its most virulent, the risk of transmission remained low, relative to many other infectious diseases. The WHO data estimates that the H5N1 avian influenza has killed 53% of those infected between 2003 and 2020, the majority of cases being in just 3 countries, namely Egypt, Indonesia and Vietnam.

However, re-analysis of available data shows that the rate might be closer to 14-33%. This change in fatality rate was linked by the study authors to 3 things: 1) many asymptomatic and mild cases might go unreported, 2) there is common under-reporting by some countries for political reasons, and 3) the virulence, in common with many viral infections, declines over time. All of these concerns apply to Covid-19.

A Chinese study published in *The Lancet* compared those infected by the novel avian influenza (A/H7N9) which broke out in China in 2013 and the more lethal H5N1 avian influenza virus. It looked at the location and age of infected individuals, among other things. It revealed that the median age of those infected was 62 years for H7N9 and just 26 years for H5N1. In both cases, most of those infected (71-75%) were exposed to poultry.

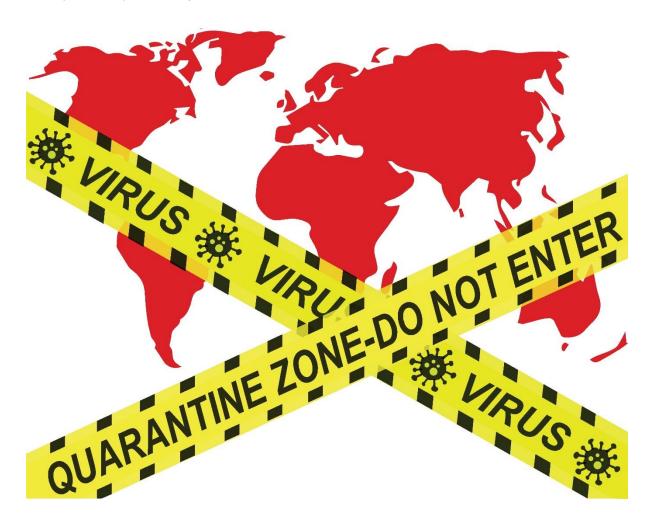
In Italy, which has seen the highest rate of infection outside of China, the average age of death reported by the country's national health institute was reported as 81, the majority with underlying health problems and 72% being men.

The WHO continues to uphold the 2% case fatality rate. Prof Neil Ferguson and his team at Imperial College London estimate the case fatality rate (CFR) at half this value, 1% which is close to another assessment by a group of New Zealand experts of a CFR of 1.4% for COVID-19 cases outside China.

But there are problems with all of these estimates. Most of the data we see in peer reviewed papers, being issued by governments and health authorities and in the media are based on confirmed cases provided by national governments to the WHO. This involves cases where there has at least been the matching of viral material taken

from nose and throat swabs using real-time reverse transcription polymerase chain reaction (rRT-PCR).

Being at the early stage of the outbreak, there are limited data on what is happening at a given period in time. For example, if it takes a susceptible person 4 weeks to die following infection, your case-fatality data will be out of step with your infectivity data, being one month behind. The problem is exacerbated further if you have a relatively long incubation time. While varying views on incubation have been put forward, a study just published by Johns Hopkins suggests around a 5-day incubation, which is somewhat shorter than many had previously believed. However, the study also shows that 97.5% of those infected will show symptoms after 11.5 days, while around 1 in 100 will still likely develop symptoms after 14 days of active monitoring or quarantine. Given the infection capacity of Covid-19 and these figures, it's not hard to see how easily the virus can spread exponentially.



Economic threat

Herein lies the double-edge sword delivered to us by Covid-19. The more humans enact containment and social distancing and isolation policies in an effort to slow down the contagion of the virus, the less at risk are the most vulnerable members of our society. But also, the greater is the economic impact. The sheer scale of infection makes it a problem.

Very important decision need to be made now, especially in countries in which the virus has arrived, but has yet to become endemic. Policies to ensure social distancing, such as school closures, and probably even more importantly, care home visitations, need to be considered with great care, being informed by all the relevant, available epidemiological data. Given the typical 5-10 day incubation period of the virus and its droplet transmission mechanism, short intense action early one may in fact be preferable to delayed actions that would need to be maintained for longer.

SARS, caused by anther coronavirus, had a significantly higher case fatality rate, but much lower rates of infection. It killed only 813 people in total but caused a 2% fall in GDP in China where all but two cases occurred.

The scale of the current threat means big pledges are being made. The "international community" has asked for US\$675 million to help protect states with weaker health systems as part of the WHO Strategic Preparedness and Response Plan.

The Gates Foundation have launched funding to identify COVID-19 treatments in conjunction with Wellcome and Mastercard, with US\$125 million being made available.

The UN has released US\$15 million from the Central Emergency Response Fund (CERF) to help fund global efforts to contain the Covid-19 virus.

But all this pales into insignificance when you look at the potential impacts on certain industries and economies. One sector that will be hit particularly hard by shutdowns and social isolation policies is the airline industry. The International Air Transport Association (IATA) suggests that as much as US\$113 billion might be lost by the airline industry in 2020 alone. While it might be better for the environment, it's not good for those who benefit from the services provided by the airline industry in linking up the world's economies.

Back in 2003, SARS cost the world US\$40 billion in 6 months. How much more will COVID-19 cost?

Pharma solutions in the pipeline?

No drugs have been proven effective against the virus.

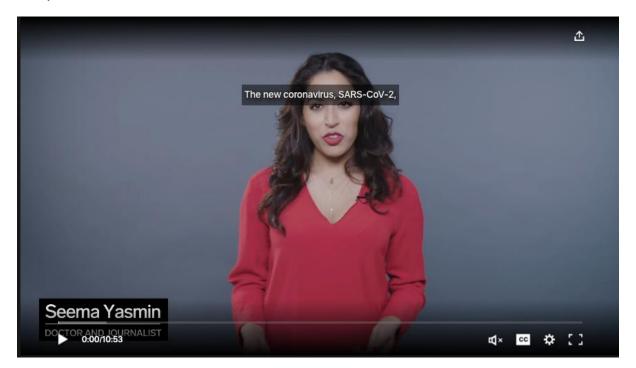
A vaccine is being developed, but Dr. Anthony Fauci (National Institute of Allergy and Infectious Diseases) said it will likely take 12 months before a vaccine is ready for the public, having clashed with US President Donald Trump who said he wanted the vaccine ready in just 2 months.

Gilead Science's remdesivir is an antiviral drug originally developed against Ebola, which has found use against infections by Marburg and other RNA-stranded viruses. It is currently being trialled in China. It was administered to a US patient on "compassionate grounds" and the patient, whose condition was worsening prior to the drug being given, recovered quickly.

There is a significant risk that mutations by SARS-CoV-2 could lead to resistance to antiviral agents if they were to be used at scale, as occurred with neuraminidase inhibitors like oseltamivir (Tamiflu®) used against seasonal A(H1N1) viral infections.

Useful videos

Prof Neil Ferguson and Prof Christl Donnely (Imperial College London, MRC Centre for Global Infectious Disease Analysis) on current status of Covid-19, containment, and non-pharmaceutical interventions



Dr Seema Yasmin on COVID-19, personal protection and pandemics

Do's and Don'ts

IMPORTANT NOTICE

The information below is for informational and educational purposes only, and should not be construed as medical advice. If you are experiencing any symptoms of illness, or consider that you might have been exposed to the coronavirus, follow the advice of your health authority [the UK's NHS advice is fairly detailed and useful wherever you may live]. This will typically mean staying at home and avoiding close contact with other people. Do not go to a GP surgery, pharmacy or hospital and, in the UK, use the NHS 111 coronavirus service to get advice on what to do.

As SARS-CoV-2 is another coronavirus, similar to the type that causes 20% of cases of common cold, the same basic hygiene and sanitation requirements apply and, apart from making sure your immune system is in peak condition to deal with any threats, is your best form of prevention.

The virus is transmitted by droplets or contact.

So, following the CDC non-pharmaceutical advisory makes a lot of sense:

- Wash your hands often with soap and water for 20 seconds, and help young children do the same.
- Cover your nose and mouth with a tissue when you cough or sneeze, then throw the tissue in the trash.
- Avoid touching your eyes, nose, and mouth with unwashed hands.
- Avoid close contact, such as kissing, or sharing cups or eating utensils, with sick people.
- Clean and disinfect frequently touched surfaces, such as toys and doorknobs.

Add to that the NHS guidance, which has only two items in common with the CDC advice (see brackets):

- (wash your hands with soap and water often do this for at least 20 seconds)
- always wash your hands when you get home or into work
- use hand sanitiser gel if soap and water are not available
- (cover your mouth and nose with a tissue or your sleeve (not your hands) when you cough or sneeze)
- put used tissues in the bin straight away and wash your hands afterwards
- try to avoid close contact with people who are unwell

The **don'ts** are clearly spelled out by the NHS: "do not touch your eyes, nose or mouth if your hands are not clean". So there's a real possibility that if you use a disposable mask, especially a next-to-useless dust mask, you'll increase, not decrease your risk of infection.

Taking this advice from the CDC and NHS into account, as well as the overall picture of the threat both from infection and from our efforts to mitigate infection, it's not difficult to consider many reactions to Covid-19 as an over-reaction.

OK – if we're talking about a very large public meeting for the over-70s in a country or region with known infection by the virus, stop the meeting. Some golf clubs and Bingo halls might be affected, but it won't bring economies to a standstill. Otherwise, let people get on with their lives, cognisant of the hygiene and sanitation measures. We must also demand more transparency in the reporting.

So keep an eye on the stats, and we're finding there's more relevant data delivered daily by Worldometer than there is by the WHO itself.

What the data so far suggest to us is that the vast majority of people (>97%) will be fine, even with infection. Most people will at most have mild symptoms that are not very different from the closely related common cold. Efforts should be made, just as is the case routinely with flu, to in particular protect the most vulnerable groups, especially older people with underlying conditions.

On balance, at the time of writing, social distancing appears to be the most powerful weapon we have.

Conclusions

Covid-19 has now achieved pandemic status. That label generates fear. Yet the decision is based on geography, not biology. So while some estimates suggest two-thirds of the global population will become infected, for many this might just involve a 'sniffle and a tickle' – or be entirely without symptoms.

We shouldn't forget that a new virus using the human species as its host is something entirely natural. We will adjust to it - and this new coronavirus, from wherever it originated, will make its home in many of our bodies, and our immune systems will become more resilient as a result.

As stated by the WHO's Director-General, Tedros Ghebreyesus, "it would be the first pandemic in history that could be controlled". More importantly, perhaps being something worth celebrating, this could be achieved largely without pharmaceuticals or vaccines – just human cooperation around containment and control.

The way things are currently looking, in our view, the biggest cost of the pandemic will not be through suffering and illness caused by direct infection. The greatest costs will be the economic and social consequences of our efforts to combat the virus. It is not just drugs that have side effects.

In order to minimise this impact, employers, event managers, transportation companies, health authorities and all those responsible for how those they communicate with behave, need to think things threw very carefully. Careful consideration, not panic or knee-jerking, will be the way forward.

I found myself resonating with the commentary in the BMJ offered by Dr Peter Gøtzsche, expelled co-founder of the Cochrane Collaboration and founder of the Institute for Scientific Freedom in Copenhagen. So, let's finish with Dr Gøtzsche's words as he explores the notion of us being potential "victims of mass panic".

He asks:

"Why all the panic? Is it evidence-based healthcare to close schools and universities, cancel flights and meetings, forbid travel, and to isolate people wherever they happen to fall ill? In Denmark, the government recommends cancellation of events with over 1000 participants. When some organisers crept just below 1000, they were attacked by professors in virology and microbiology. But if it is wrong to invite 990 people, it should also be wrong to invite 980, and so forth. Where does this stop? And should big shopping centres be closed, too?"

Covid-19 science update

Date:

19 March 2020

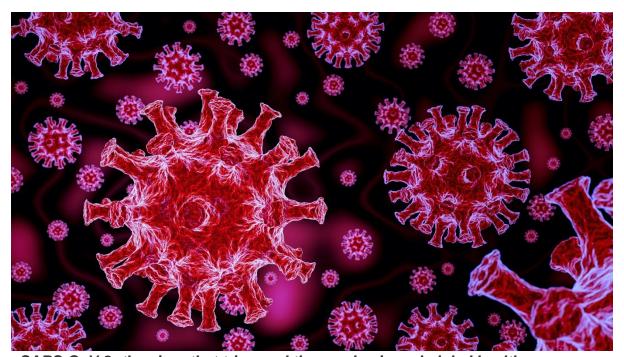
You'll remember when Donald Rumsfeld made famous the phrases "known knowns", "known unknowns" and "unknown unknowns" during the discourses over the existence or otherwise of weapons of mass destruction (WMD) in Iraq. Here's a link to a 34-second video if you need reminding.

With such uncertainty over the reliability of data and assumptions underpinning the rollout of the current global health emergency around Covid-19, we thought this might present a useful framework to look at some of the most topical issues to be emerging around Covid-19.

• Find related articles, information and videos in our Covid Zone

Mechanisms of infection

You've seen those lovely pictures of the SARS-CoV-2 virus that causes Covid-19 disease? Those lovely antennae-like, clubbed spikes around the outside of the viral particle are very important as they provide the virus with the mechanism it needs to start replicating like there's no tomorrow if your immune system doesn't put the brakes on quickly.



SARS-CoV-2: the virus that triggered the pandemic and global health emergency

It's a 'known known' that the trimeric spike glycoprotein (i.e. those clubbed spikes) around the outside of the SARS-cov-2 virus binds to the angiotensin-converting enzyme

2 (ACE2) binding sites (host cell receptor) on alveolar cells in the lung epithelium. The alveoli are the tiny little sacs deep in the respiratory zone of the lungs where oxygen and carbon dioxide exchange occur. The higher the ACE2 expression of lung alveolar cells in the lower lungs, the greater the chances of triggering a chain of events that cause symptoms of infection, especially inflammation, induced lung damage that, in the most severe cases, can be lethal. In effect, these severe symptoms that are referred to as acute respiratory syndromes disease are in many respects alternate forms of viral pneumonia.

It's also a 'known known' that ACE2 expression in males is greater than females and it's also greater in Asians than Whites or Afro-Americans.

This mode of entry into the human body using ACE2 is the same as the coronavirus that caused the SARS epidemic (SARS-CoV) of 2003 but is different to that which caused the Middle East respiratory syndrome (MERS) (MERS-CoV) in 2012, this being CD26.

But it may not be that simple; there may be additional mechanisms. One that's been proposed is that the spike glycoproteins that project from the virus surface contain a second domain that causes fusion of the virus and host cell membranes via furin receptors, and this provides another mechanism that helps the virus gain entry into its host.

Children may be less susceptible to developing symptoms, but one of the 'known unknowns' is whether or not they are less susceptible to being carriers of disease. Viral shedding as determined by rectal swabs appears to continue long after initial symptoms. This begs the question – yes, another 'known unknown' – around whether children generally have less pronounced disease because their innate immune responses may better quell infection? Could this be because this rapid, efficient action of their innate immune response means there is a lesser requirement for a massive upregulation of the adaptive immune system that causes most of the symptoms and any collateral lung damage and fibrosis? Whatever the answers, the established continued viral shedding via the anus after nasopharyngeal swabs show no signs of the virus' presence means children really need to be reminded to wash their hands more carefully than usual after going to the bathroom!!

What's also interesting is that binding by SARS-CoV-2 appears to be at least 10 times greater than for the virus that caused SARS back in 2003 (SARS-CoV).

All of this explains why respiratory disease and symptoms linked to viral infection of the lower respiratory lung tissue are the most obvious symptoms of infection. It also means our individual degree of susceptibility is at least in part dependent on how easily and quickly triggered are the ACE2 binding sites in our lungs, and how quickly our immune system can quell the infection without causing collateral damage through the 'over-response' of our adaptive immune system (notably via upregulated cytokines, chemokines and effector T-cells).

With at least one key part of the mechanism of SARS-CoV-2 infection of humans now a 'known', it means that pharmaceutical and vaccine research is being targeted to interfere with virus binding in the lung alveoli. Over 80 clinical trials targeting SARS-CoV-2 have been initiated in China so far.

Where did SARS-cov-2 come from?

SARS-CoV-2 is the third coronavirus from the β -coronavirus cluster that we know has infected humans in significant numbers over the last couple of decades. What we think we know is that SARS-cov-2 is a zoonotic virus, meaning it's jumped from animals to humans in exactly the way the World Health Organization (WHO) postulated a few years back. Back in 2016, the WHO considered the prospect of a yet unknown zoonotic infection, which it called Disease X, that would trigger a global health emergency of unprecedented scale.

With the closely related SARS outbreak of 2003 and the MERS outbreak of 2012, both being zoonotic viruses from the same β -coronavirus cluster, we know the intermediary animals. Civets and dromedaries were the likely the intermediate hosts between bats and humans, for SARS and MERS respectively. With respect to the new coronavirus, SARS-CoV-2, snakes are thought by one group of researchers to be the most likely intermediary between bats and humans. It has also been established from whole genome sequencing that 79.5% of the genotype of SARS-cov-2 is identical to that of SARS-cov that caused the 2003 SARS outbreak.

We wait with baited breath for something more certain about the origins or intermediate host of SARS-cov-2.

What does the healthy immune response to SARS-cov-2 look like?

A group of Australian immunologists at the University of Melbourne in Australia has studied the intricate way in which the immune system responded to combat the new coronavirus in a patient who experienced mild to moderate disease which required hospitalisation. The 47-year-old women had come from Wuhan where the outbreak started, but had had no known contact with infected individuals, was healthy, not on any medication and didn't smoke. No drugs were used during her management in hospital, which involved only intravenous fluid rehydration. She recovered fully and was discharged a week after hospitalisation after which she self-isolated.

Cell counts of neutrophils and lymphocytes (innate immune system) were normal, while the adaptive immune response was pronounced, involving significant increases in specialised immune cells, namely antibody-secreting cells (ASCs), three types of T-cell (follicular helper T cells [T_{FH} cells], activated CD4+ T cells and CD8+ T cells) as well as immunoglobulin M (IgM) and IgG antibodies, being part of the humoural immune response.

While the innate immune system appeared, from the numbers of neutrophils and lymphocytes to be non-responsive, the reality was that it would have been critical in quelling infection in alveolar and lung tissues, as well as informing the adaptive immune system in its effective response. Critical here, is the role of dendritic cells in signalling to the T-cells how they should respond.

There is evidence that RNA viruses capable of causing severe respiratory illness, like the new coronavirus, may be able to use particular mechanisms to try to evade the innate immune response. However, a 'known unknown' is the extent to which SARS-CoV-2 can evade the innate immune response. It could be hypothesised that because children appear less susceptible than adults to SARS-CoV-2, such evasion mechanisms are not well developed, because children are heavily reliant on their innate immune response given their adaptive immune system has yet to mature.

Known unknowns

A huge 'known unknown' in our view is just how common are asymptomatic carriers of the virus? An interesting paper has been published in JAMA on familial cluster of patients, with one being asymptomatic. This contrasts with the cases on the Diamond Princess cruise ship in which 52% appeared asymptomatic according to the Japanese Ministry of Health's own testing.

A case report <u>published</u> in the New England Journal of Medicine describes transmission from an asymptomatic carrier who went on to develop non-specific symptoms of Covid-19.

We also have no idea, as yet, how many people who've been infected, knowingly or unknowingly, will maintain immunity to re-infection, and for how long. The antibody test that has already been used in Asia, is in the process of being rolled out in Western countries and will provide very useful and much needed information on such things as the prevalence of silent infections and extent of retained immunity.

What is the false positive rate from testing? Despite the WHO's call to 'test, test, test', the assumed accuracy in interpretations is unfounded as the accuracy of the current PCR tests being used and the ability to predict false positives or even negatives is strictly a 'known unknown'. A Chinese study has shown that testing of close contacts of COVID-19 patients, over half of those who are shown by the genetic tests to be asymptomatic infected individuals are false positives.

More next week – stay healthy, and if you want to find out how to stay or become empowered as we deal with this unfolding crisis, check out our founder's blog also released today.

PLEASE SHARE THIS WIDELY AS SOCIAL MEDIA PLATFORMS LIKE FACEBOOK AND TWITTER ARE DOWNGRADING ALL POSTS RELATING TO COVID-19 NOT FROM MAINSTREAM SOURCES. THANK YOU.

Founders Blog: Covid-19 – be empowered, not paralysed

Date:

19 March 2020

Content Sections

- How big a threat is Covid-19, relatively speaking?
- From free society to police state?
- Immune censorship?
- Citizen empowerment is the answer
- Adapt don't fight

Rob Verkerk PhD, founder, scientific and executive director, ANH-Intl

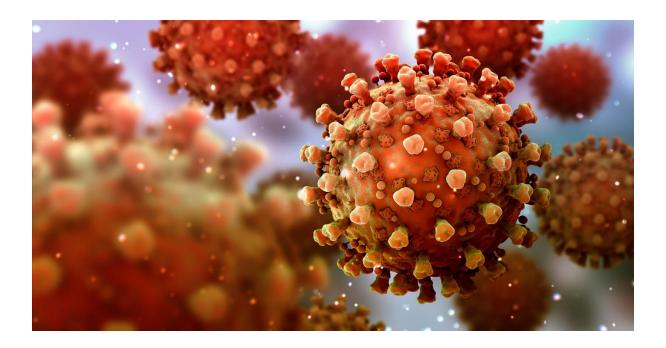
A week is a long time in the midst of an unprecedented global social, economic and health emergency.

Many of us are still aghast by how quickly governments all around the world have decided to implement incredibly life-changing, draconian measures in an effort to stem transmission of the new coronavirus, SARS-cov-2, responsible for the Covid-19 pandemic.

While global and national economies will shrink dramatically, the biggest impacts caused by the measures will inevitably be on those who are not insulated financially. Capital Economics has predicted that the British economy alone could shrink by 15% in the next 3 months and we are moving swiftly into a deep global economic recession that will last at least 2 years.

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In some European countries like Italy, France and Germany, the police and even military are being deployed to help enforce lockdowns and curfews and presumably be prepared for civil disobedience and possible unrest.



The questions so many are asking go something like this: Are these kinds of heavy-handed measures justified? And if so, on what basis?

We suggest there are six important assumptions that should be satisfied in order that democratically-elected governments be given powers to enforce these measures on their populations:

- 1. Predictable disastrous outcome assuming business as usual. You have reliably predicted that, assuming no changes to civil behaviour, there is a moderate to high chance that COVID-19 related fatalities and illness would exceed anything most societies have been accustomed to dealing with from existing lower respiratory diseases, such as pneumonia and tuberculosis. These presently account for the third most common cause of death globally. The fatality rate from lower respiratory conditions drops to sixth position in upper-middle income countries largely because these don't suffer significant problems from tuberculosis
- 2. **Business as usual will collapse the healthcare system**. You assume this additional burden will overrun a given nation's capacity, either in hospitals or in the community, to deliver respiratory care to infected patients
- 3. Countries can accurately 'test, test, test'. You assume that testing methods used to determine persons who are infected or those who have developed immunity (specific antibodies) are delivered equitably to all those who need them and are accurate
- Compliant citizens. You assume the package of intensive measures to reduce social contact as a means of stopping or slowing transmission will work and be complied with by the public as long as they are required
- 5. The individual can't affect the course of disease if infected. You assume there's nothing an individual can do can reduce the severity of the disease if he or she becomes infected

6. All options involving less draconian measures are exhausted. You regard the threat as one so great that even in the absence of robust information about susceptibility, transmission, infection rates and health impacts, or about the risks and benefits of a variety of alternate packages of other measures, you are prepared to sideline, until further notice, citizens' civil liberties and rights to free movement, education, employment, recreation, entertainment and social interaction.

From the available data and information in the public domain, it would seem that there is insufficient evidence or data to satisfy most if not all of these assumptions, at least fully. It's as if the new coronavirus has given governments the chance to trial the implementation of the kind of joined up international health emergency action that was contemplated when the World Health Organization (WHO) considered the 'Disease X' scenario.

How big a threat is Covid-19, relatively speaking?

Breaking this down a little, let's look at the comparative risks as they stand now, days after draconian measures have been enacted by multiple governments around the world. The current challenge to healthcare systems from the influx of people with severe respiratory illness is not (yet) significant – it is the prospect of disease rates escalating, as shown in some of the computer simulations, that is driving the radical public health policy. These potential future scenarios have been central to the modelling studies, including the most recent one applied to the UK and USA carried out by Prof Neil Ferguson's group at Imperial College London, the MRC Centre for Global Infectious Disease Analysis (see the latest report on *Impact of non-pharmaceutical interventions (NPIs) to reduce COVID-19 mortality and healthcare demand* [16 March 2020]).

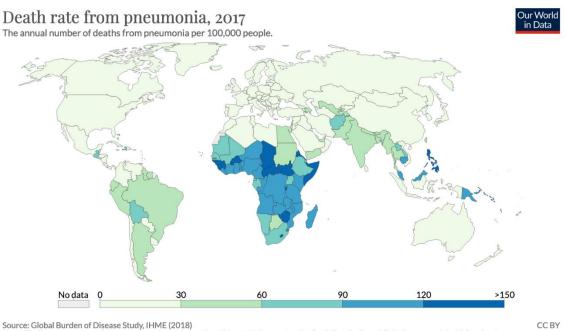
Covid-19 is in effect a new form of viral pneumonia with relatively low lethality, as compared with the SARS and MERS outbreaks of 2003 and 2012 respectively. As of today, the burden from the new coronavirus, SARS-cov-2, is small by comparison with that from all causes of pneumonia, including bacterial (e.g. pneumococcal) and viral forms (e.g. respiratory syncytial virus, RSV).

The maps from Our World in Data below compare the annual death rates around the world from pneumonia, with those from Covid-19 as of two days ago. If you take the fatality rate as 16 per 100,000 (0.016%) as a typical figure for pneumonia-related deaths in northern hemisphere, industrialised countries, the current death rate of one-in-a-million (0.0001%) from Covid-19 would have to escalate 160-fold by the end of the year for it to be comparable with pneumonia deaths. You won't need to be told that these pneumonia are rarely the subject of mass media attention, let alone being the basis for the draconian public health measures that threaten livelihoods and economies.

Comparing the Covid-19 situation the world has faced over the last two and a half months, that has given rise to around 8,000 confirmed cases and less than 800 deaths (data source: WHO, it would have to kill over 3,000 times more people than it has so far by the end of the year to equalise with the current 2.6 million that die each year (data source: Global Health Exchange) from lower respiratory tract infections.

These data comparisons serve to remind us that what we're being asked to engage with has little to do with the current burden of the disease. It's rather more about a possible eventuality that's based on uncertain data, multiple assumptions that may or may not be valid, and a series of computer models.

A.

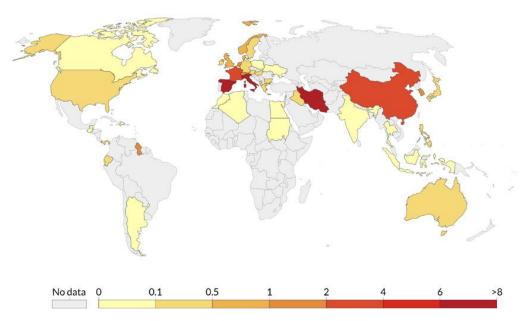


Note: To allow comparisons between countries and over time this metric is age-standardized. Deaths from 'clinical pneumonia', which refers to a diagnosis based on disease symptoms such as coughing and difficulty breathing and may include other lower respiratory diseases.

B.

Total confirmed deaths due to COVID-19 per million people, Mar 17, 2020





Source: WHO COVID-2019 Situation Reports

CC BY

Comparison of death rate from pneumonia (A) and confirmed deaths due to COVID-19 (B) from Our World in Data.

From free society to police state?

The Italian, French and German experiences show us that it's not easy to get people to enact the social distancing and isolation policies governments are asking for. Using people's inborn fear (which is in itself a very useful survival emotion) as a 'weapon' to encourage or force compliance seems to be part of the *modus operandi* of governments and health authorities.

The computer models show that all the social and economic sacrifices we're being asked to endure are worthwhile based on widespread public adherence. Time will tell – and of course it's an opportunity to convert previously free societies to ones that function more like police states, at least for a time. And that time, we are also being told, cannot be disclosed because we are at the mercy of this perilous disease which will itself manifest as a net consequence of our and the virus' behaviours.



Immune censorship?

I shared a platform earlier today with a leading UK GP talking to the workforce of a London business that's deeply concerned about the impacts of the coronavirus on its staff with a view to getting independent advice. The doctor had spent most of the day talking with the media on the issue, sometimes alongside other experts. One of the things he said struck him over and over again was the reticence so many of these experts had in considering the importance of the immune system.

Herein lies, in our view, the biggest information gap coming from governments and health authorities. They are largely mute on the subject. It seems we're meant to sit tight, distanced and isolated, until vaccines or antiviral drugs are available. But whether those experts like it or not, if we become infected, our immune response is critical to the outcome, whether that means being completely asymptomatic (we know this happens but are uncertain about its frequency), having mild to moderate symptoms of disease (the vast majority of people), or suffering severe respiratory disease (a small minority who are vulnerable owing to their older age or underlying conditions).

In the cases where the disease is asymptomatic, mild or moderate, the immune system has delivered the goods and been wholly responsible for this outcome. If we take the vulnerable group to represent 10% of those infected, it goes without saying that the immune system has successfully combatted disease without causing severe symptoms, collateral damage to the lungs, or even death, in 90% of cases of infection. Try finding a licensed pharmaceutical with that level of efficacy!

Citizen empowerment is the answer

With so many untested assumptions and so much uncertainty in the data and the human response to the social distancing measures with which we're being asked to engage, it's critical for us all to have a way forward.

We passionately believe the way forward is to ensure we are not disempowered by the top-down diktats from our governments. More than that, we need to become more empowered and following is a list of some of the key things we think might be helpful:

- 1. **Comply to try**. We suggest we all do what we can to follow government guidelines, including on hand washing and social distancing, for at least 30 days so that the impact of the social distancing measures can be assessed. If we don't comply, they could drag on longer.
- 2. **Normalise your life**. Try to keep as many parts of your life running as normal, even if you're forced to spend more time at home. Many of us can do a lot of work as well as engage socially online, bearing in mind social distancing
- 3. **Don't panic buy**. You will simply upset supply chains and make it more difficult to get the supplies you and others need at a later date
- 4. **Get outdoors**. Get as much time outside as you can trees and the great outdoors don't carry the coronavirus, people do
- 5. Hands off. Change the way you use your hands so you avoid direct physical contact not only with others (other than those you know are not infected because they've been around you and not others for 14 days or more) but with your mouth, nose and eyes. You can play games with friends and family and incur credit points for not being spotted touching these parts of our bodies barehanded!
- 6. Sleep easy. Get plenty of good quality sleep to help your immune system be primed for the days ahead. That means avoiding blue light from screens or reading news reports within an hour of going to bed and sleeping in complete darkness (see our 3 health hack videos on sleep: video 1, video 2 and video 3)

- 7. **Eat whole, natural, unprocessed or minimally processed food**. Don't live off canned and processed foods. Eat a fresh wholefood diet based on the ANH Food4Health guide
- 8. **Get your sunshine vitamin**. If you live in the northern hemisphere, the sun's too low this time of year to allow your skin to produce the vitamin D your immune system needs to function properly. See dosing and information in last week's article about priming your immune system as nature intended. And most will benefit from taking supplemental magnesium (at least at the recommended daily level of 375 mg/day) which many people are deficient in from their normal diets as it's required for vitamin D activation
- 9. Fill other nutrient gaps. If you think your diet might be deficient in vitamins A, D, E, C, B2, folate, B12, zinc, iron, copper and selenium, supplement with these as they are also critical to the function of both the innate and adaptive sides of your immune system. Then there's a range of amazing plant nutrients and compounds that have been shown to enhance or modulate immune function, some of which we introduced last week
- 10. Avoid buying into the fearmongering or negativity around Covid-19. While we, as citizens, haven't been offered the opportunity to exercise choice over our involvement in one of the greatest social, medical and economic experiments most of us are likely to engage in during our lifetimes, it's relatively easy to avoid infection. Also, for the majority of us, it's not difficult to maintain our immune systems so they are competent and primed in the event that we become infected. China is already out the other side it'll be our turn next.

Adapt - don't fight

Let's get on as best we can in the knowledge that Nature will take its course and we don't need to sit there, disempowered and paralysed, because we're up against this new virus. Viruses are not all bad *per se* - it's just when they're new to us our immune response might be over-amplified and that can cause us difficulties in the short-term. They're part and parcel of who we are - they're part of our microbiota. We've co-evolved alongside them throughout our million or so years history as a species and the arms race with which we all engage with our microbial foes helps us ultimately to strengthen our defences.

This newly human-adapted coronavirus, like others before it, will likely soon become just one of the many RNA viruses to which we sometimes succumb, probably more so in winter when our vitamin D levels are depleted. One for which the pharmaceutical and vaccine companies have yet to find an answer.

In the meantime, let's apply our focus to ensuring we can minimise our risk of infection and maximise our ability to resist serious disease through the optimal function of our own incredibly sophisticated immune systems that are in the process of learning how best to deal with this new threat. In the knowledge we have done this successfully many times over throughout our ancestral past.

Trying to do that successfully without destroying the social and economic fabric of our societies might ultimately present a greater challenge.

Covid-19: when the world went into lockdown

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"Unprecedented" appears to be the term of the moment, its frequency of use by citizens, governments, health authorities and businesses, probably itself being unprecedented.

Whether through the presence of a new virus, or, through our reaction to it, the situation the world faces is indeed unprecedented, as countries across the globe go into lockdown to prevent further spread of Covid-19 and reduce deaths. Stringent measures were announced in the UK by Prime Minister Boris Johnson on Monday night, while Indian Prime Minister Narendra imposed a nationwide total lockdown yesterday.

• Find related articles, information and videos in our Covid Zone

In France already draconian measures have been tightened even further with those who 'break the rules' subject to penalties. In Switzerland mobile phone data will be used to track individual's movements to decide whether further restrictions are required.

Following on from last week's science update, the ANH team has continued to monitor, assess, digest and analyse multiple streams of scientific and other information so we can bring you the most up-to date, relevant and accurate information on the current situation. Access to full scientific papers has been made easier by the decision of two of the largest publishers of peer-reviewed journals Springer and Elsevier to allow free access to articles relating to the pandemic.

One thing is clear, the situation is fast-paced and highly changeable, as different factions of society try to come to grips with the situation we find ourselves in, whether it's linked to our own health risks or those of our loved ones, or the impacts the lockdowns and prevailing uncertainty have on our livelihoods and futures.

Covid-19 symptoms

A question mark continues to sit over the proportion of people who might be asymptomatic or who have had such minor symptoms they've neither been tested nor have their symptoms been recorded by a medical doctor. The ongoing case analyses of confirmed cases by the World Health Organization (WHO) confirms that common symptoms of SARS-CoV-2 infection are a sore throat, high fever, headache, tiredness, dry cough, shortness of breath and breathing difficulty. Many patients are experiencing aches and pains as with any bad flu and some diarrhoea as well. These symptoms range in severity and are sometimes mild. Many people are recovering at home without the need for any specialist treatment. It's hard to say for sure, but it would seem that approximately 1 in 5 people become more seriously ill and require medical attention.

Diarrhoea is now being described as an early symptom of infection in a new paper published in the *American Journal of Gastroenterology*.

Losing sense of taste and smell (anosmia) can be another indicator of infection by the new coronavirus. In some cases this appears to be the only noticeable symptom of infection. The number of such 'hidden' carriers remains unknown and has been among the reasons being used to justify lockdowns. As with other respiratory viruses known to cause anosmia, the condition may persist long after infection has been eliminated.

A new app has been launched by UK-based Kings College London and Guy's and St Thomas' Biomedical Research Team to collect data allowing researchers to track the spread of COVID-19 and assess those most at risk. The app encourages users to share data whether you are well or ill. It will be available in the US from the 26th March.

'Test, test'* *(recall Dr Tedros Adhanom Ghebreyesus' statement, 16 March 2020)

High levels of testing in Iceland and the Italian city of Vò have shown that a high proportion of those tested showed no symptoms (asymptomatic), but were still carriers with the potential to infect others. A new modelling study from researchers at the University of Oxford suggests as much as 50% of the UK population has already been infected presenting a very different scenario to that of government advisors. Based on a 'susceptibility-infected-recovered-model' the researchers used data from the UK and Italy to build their model. The results of the study mean the UK population has already acquired substantial herd immunity through the unrecognised spread of the disease via asymptomatic carriers. This would also indicate the UK is experiencing peak infection now so potentially restrictions could be lifted far earlier than previously thought. Giving evidence to the UK's select committee on Science and Technology this week, Imperial College's Neil Ferguson revised predictions of 500,000 UK deaths from the virus to 20,000 given current restrictions on citizen's movements.

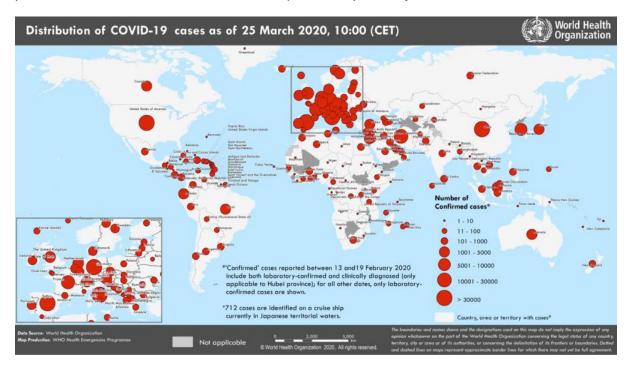
Given the possibility that a much higher proportion of the population have been asymptomatic and have acquired immunity (but not been tested), the currently widely reported fatality rates may be much higher than the real percentage. A new study of the Wuhan outbreak estimates the death rate was nearer 1.4%, which is substantially lower than previously thought.

The choice of denominator (the total number of cases of infection into which the fatalities are divided) is the key factor here. Even in the case of the influenza A pandemic of 2009 ('swine flu'), subsequent analyses of published estimates of case rate fatalities varied hugely – from less than 1 to more than 10,000 deaths per 100,000 cases or infections. This denominator may be comprised only of laboratory-confirmed cases, it may or may not include cases diagnosed by symptoms, and it usually avoids including estimates for the number likely to be asymptomatic.

Once antibody testing becomes widely available, we will begin to have a much better idea of the extent of unknown, unconfirmed and asymptomatic cases.

Different ways of looking at the same thing

Following are grabs from two of the most commonly used portals used to track the pandemic, from the WHO and Johns Hopkins, respectively.



Source: WHO Situation Report 65, 25 March 2020



Source: Johns Hopkins Coronavirus Resource Center, 25 March 2020

It's becoming increasingly clear to us that the graphical representations being used by the WHO (and used as a key authoritative source of information for the media) is grossly inadequate as any country simply gets marked with one large bubble. This way, cases in countries like the USA, Italy, Germany, Spain and China are all marked by the same

sized bubble. The Johns Hopkins data, by contrast, shows in much greater granular detail the geographic location of embryonic loci of infection. Based on the location and extent of these in the USA, as well as the intrinsic susceptibility of the US population (e.g. age, underlying conditions, ACE-inhibitor usage), the US could easily become the country in the world in which the impact of COVID-19 is felt most severely. In this context, it will be interesting to see if Donald Trump's 'back to work' plan is rolled out as quickly as the President would like.

Underlying conditions and drug use increase risk

In our science update last week, we explained the way the SARS-CoV-2 virus binds to ACE2 binding sites in the lungs. Many of those who have developed severe/fatal respiratory failure are taking angiotensin-converting enzyme inhibitors (ACEIs) or angiotensin receptor blockers (ARBs) to treat underlying health conditions such as cardiovascular disease, which increase the number of ACE2 receptors in the cardiopulmonary system. The increased numbers of ACE2 receptors created by such commonly prescribed medications have been found to put patients at far higher risk of becoming seriously ill following COVID-19 infection.

Healthcare pressure

Healthcare systems are being brought to their knees by the sudden spike of patients with Covid-19. With healthcare workers struggling under the onslaught of seriously ill patients compounded by a lack of suitable equipment.

As healthcare systems become overwhelmed scientists are turning their attention to repurposing drugs, rather than creating new compounds. The WHO has launched a global megatrial called SOLIDARITY to test the use of existing drugs already deployed against HIV and malaria plus a new antiviral created to combat Ebola. The drugs under investigation are remdesivir, chloroquine and hydroxychloroquine, ritonavir/lopinavir, ritonavir/lopinavir + interferon. The normal rules of randomised controlled trials will be suspended in favour of speed. Some scientists have heralded the anti-malarial drug choroquine (and its analogue hydroxychloroquine) as a 'breakthrough', subsequently referred to as a 'game-changer' 'with tremendous promise' by President Trump, in the fight against Covid-19, leading many to pin their hopes on them to treat coronavirus patients following publication of a cluster of positive studies. Like so many 'magic pills' sadly there's a sting in the tail. Globally many people suffer from an enzyme defect called G6PD, which can cause those given chloroquine to become seriously ill. Whilst chloroquine poisoning is commonplace in countries where malaria is endemic.

Hence the stark warnings from some scientists, their concerns arising from an evaluation of all the available evidence. It is clear that serious even lethal toxicity-related side effects could easily arise given the narrow margin between therapeutic and toxic dosages, and there is potential for compromising the all-important adaptive (cellular) immune response which leads to incomplete viral clearance.

Best defence is protection

Despite the apparent resolve by governments and health authorities to be almost mute on the subject, a robust immune system remains the best way we know to guard against serious illness following infection, while also providing immunity to the novel coronavirus. A new Chinese study uncovers further detail of the human immune response to SARS-CoV-2 as well as confirming the vital role a healthy immune system plays in combatting such viral infections. Coming as the northern hemisphere emerges from the winter months when vitamin D levels among so many are at their lowest, immunity will be compromised. Vitamin D deficiency is a known risk factor in the development of acute respiratory distress syndrome (ARDS) as a result of viral infection. ARDS is also the condition that is most likely to kill Covid-19 patients with serious illness. In this condition, the person's lungs fill with fluid and can no longer provide sufficient oxygen to the body's vital organs so organ failure and death result.

Big Tech gets a corona halo

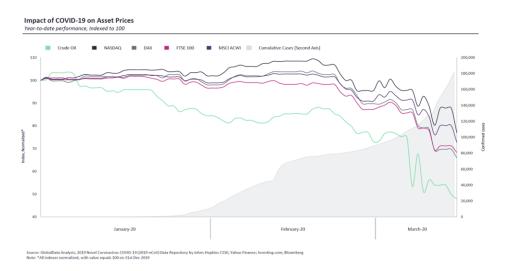
Big Tech companies are being praised for their efforts to counteract coronavirus 'fake' news and limit access to information deemed harmful. In a joint statement Facebook, Google, Twitter, Microsoft, YouTube and LinkedIn said, "We are working closely together on Covid-19 response efforts". Sadly, even high quality, valuable information relating to immune support is being targeted and downgraded in social media posts. This has been our experience and a reason why it's so important that you share this and other information you value, even if it's by email, word of mouth or other methods.

A natural winner

With the lockdowns implemented to reduce the spread of the virus comes indirect and positive benefits for the environment. Reductions in pollution, most notably nitrogen dioxide levels, are being seen in China, Italy, the UK and the US. However, experts are warning that the effects are temporary and will go back to pre-virus levels unless major changes are made to maintain the reductions in emissions. If nothing else, the pandemic gives us a useful insight into how changes to our behaviour can affect global emissions and climate change. It's also more than ironic that a health emergency has shown its potential to do more for the climate emergency than actions that were specifically targeting the climate emergency. One thing is sure. Life as we know it has changed forever. Many lessons need to be learnt from the crisis. From how healthcare is delivered, to the long-term financial impacts.

More unknowns

There is so much we still don't know, but may soon learn. Among these things is the medium- to longer-term impacts of social distancing, especially when we know social isolation may increase systemic inflammation (a risk factor for chronic diseases) and domestic violence. But, in contrast to these negative effects, there are also many positive social effects, including the huge upsurge in neighbourly and charitable behaviour. Perhaps the greatest concern in the minds of many will be the medium- to long-term impacts on the economy and livelihoods, as well as what this all means for democracy and individual freedom. While in lockdown, it might be useful for us to contemplate the social, economic and health implications that emerge when we consider the latest graphic from GlobalData's latest Executive Briefing Report on asset prices as measured by various internationally-recognised indices. The recession we could be heading towards, if things don't change soon, could well make the financial crisis of 2009 look like a minor hiccup that would have indirect social and health impacts that could greatly exceed those caused directly by Covid-19.



Gotya Gøtzsche!

Finally, we leave you (not for the first time) with some words from Professor Peter C. Gøtzsche, the Danish physician and medical researcher that was wrongly expelled from Cochrane, the evidence-based medicine organisation he co-founded. Among his 'sins' was evidencing that prescription medicines were the third leading killer in society and that organised crime exists within the pharmaceutical industry. He continues to argue that mass panic is unjustified. In his blog, Gøtzsche says:

"No such draconian measures were applied during the 2009 influenza pandemic. Consider also, that it is always winter somewhere, and we cannot close down the whole world permanently. So why now? Well, obviously, no one will ever get in trouble for measures that are too draconian. The epidemic will likely die out not so far from now, and then there will be a queue of people wanting to take credit for it."

Dr Eccles: strengthening resilience in the face of *ovid-19

Date:

2 April 2020

Harley street doctor and pharmacologist offers his views on enhanced prevention

When you need your electrics fixed, you ask an electrician, not a plumber. Same applies to health. When you want to know how to prevent or treat people at risk from a new coronavirus for which there are no drugs available, you don't ask medics, researchers or health authorities who've never done any work with agents that are readily available and are known to modulate immune responses.

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You ask someone who's worked with readily available natural agents – but also understands their mechanisms of action in the body, as well as those of any potential candidate drugs. Below, we bring you the views from such a person, both a medical doctor and a pharmacologist, Nyjon Eccles MBBS PhD, the Natural Doctor from Harley Street, London.

Last week, Nyjon, along with Professor Chris Elliott of Queen's University Belfast and director of the Institute for Global Food Security and ANH founder, Rob Verkerk PhD, participated in a podcast for New Food magazine. Both Chris and Rob sit on the magazine's advisory committee.

Listen or download New Food podcast

Nyjon has a PhD in pharmacology and has been a pioneer in the field of integrative and functional medicine. You'll find out more about him here. He is well qualified based on academic background and clinical experience to hold a view on how we might better protect ourselves during the Covid-19 pandemic.

Over to Nyjon.

STRENGTHENING RESILIENCE TO VIRAL THREATS: WITH PARTICULAR REFERENCE TO COVID-19



Dr Nyjon K Eccles BSc MBBS MRCP PhD, The Natural Doctor, Harley Street, London

Abstract

At this time there is no proven effective treatment for Covid-19. Historically, a viral pandemic has led doctors and scientists to focus on finding an effective anti-viral drug or an effective vaccine. Neither of these have been particularly fruitful. It seems this focus is not in the right place especially given the propensity for viral mutations.

The innate and adaptive immune system is a marvel of complex engineering and it is generally acknowledged that a robust

immune status will stand a person in good stead in the face of a viral threat. In this article. I discuss three natural, but scientifically validated ways, that the human immune system can be supported. I discuss the importance of Vitamin D as one of our best allies, how vitamin D deficiency has been shown to increase risk of ARDS, acute respiratory distress syndrome (the main complication of Covid-19 infection) and in the face of prevalent global deficiency of vitamin D (at least 70%), how this would naturally make many vulnerable, especially in the elderly, who are more commonly deficient. I then discuss the evidence for vitamin C effectiveness in treating viral infections, viral pneumonia and how science supports its use (it is NOT fake news as some would have us believe). I refer to the evidence that China has been using vitamin C in treatment and prevention in what seems their observed victory over Covid-19. Last, but not least I discuss another mineral, iodine, in which many of us are deficient but how there is evidence that this overlooked mineral is a powerful anti-viral and anti-microbial agent. In my discussion of these three, I refer to recommended doses that my colleagues should consider taking to protect themselves as they continue to battle Covid-19 in the front lines. These same doses that would not harm; rather may reduce risk of serious harm, in those taking them.

Introduction

The human immune system is a marvel of complexity and defends us against threats from our environment; both external and internal. It surveys and counters cancer cells and destroys viruses and bacteria that threaten us. For the most part, it will do this well if supported correctly by our lifestyle. Ageing and chronic disease is associated with reduced immune function but in these situations we don't have to be vulnerable.

We were not created with a vaccine deficiency or "anti-viral" medicine deficiency but we were created with innate and smart adaptive immune systems. Alas, modern medicine will often prioritise a "pharmaceutical solution" to a problem; ignoring the fact that a robust immune system can reduce our vulnerabilities. As a medical student, I was not taught the art of how to build the body's defence against disease, nor how I could effectively prevent illness in my patients; this, I had to learn myself by diligent study and by learning from other doctors who had taken a functional approach to health.

This article focusses on just a few simple, evidence-based things, that are potential game-changers in our fight against any viral threat, including Covid-19.

I have nothing to gain by putting this article out there. My motivation is to help, in hopefully a significant way, my fellow travellers in life; my fellow-doctors in the "Covid trenches" as well as everyone else. The advice I give here I practice myself and have shared it with all my family members in the hope that they will action this advice too; for their own good.

I am perturbed by the stories that I am hearing from doctor colleagues who are forced into the front-line of treating patients who have become ill with Covid-19, without any advice on how they might protect themselves internally as well as externally from attack. As I write this (30th March 2020) at least 50 doctors have died from Covid-19 in Italy and 10,000 Spanish healthcare professionals are reported to have been infected, following concerns over shortages of personal protection equipment (PPE).

I repeat – a robust immune system will be our best defence against this virus. I am hoping and praying that you will not take this advice lightly.

I would first like to talk about vitamin D; a hormone that we are supposed to produce from the action of sunlight on cholesterol under the skin. Many have overlooked how powerful an ally this molecule is in supporting our immunity and our defence against a multitude of diseases.

Vitamin D

I underline several of the actions of vitamin D that are perhaps most relevant to our defence against viruses.

Much of the following information on Vitamin D is taken from an article that I first wrote in 2012 "Vitamin D: An under-estimated ally". This article is available as a downloadable pdf from my website for those who would like to read more.

This article is focussed specifically on the role that Vitamin D plays in helping the immune system to function well.

Vitamin D is one of the fat soluble vitamins (e.g. A, D, E, K). There are two main forms of the vitamin: D2 (ergocalciferol) and D3 (cholecalciferol). Ultraviolet B (UVB 315 nm–280 nm) rays in sunlight will increase D3 levels. A light-skinned person will synthesize 20,000 IU (international units) of vitamin D in 20 minutes sunbathing on a beach. White skin, with less melanin, synthesizes vitamin D in sunlight six times faster than dark skin. This has allowed lighter skinned people to migrate to higher latitudes, populate Europe, Asia, and North America, and be able to make enough vitamin D to survive. The majority of the world's population now lives above latitude 35°N and is unable to synthesize vitamin D from sunlight for a period of time in winter owing to the angle of the sun.

Vitamin D is best known for its ability to prevent Rickets, a softening and bending of bones in children, first described in 1651; an example of a nutritionally-specific disease. It reached epidemic proportions following the industrial revolution, which began in the 1750s. In the 19th century, before the importance of exposing children to sunlight was recognized and that this led to vitamin D deficiency. The adult form is called Osteomalacia.

It has been mis-named a vitamin. Vitamin D acts as a steroid hormone. The body makes vitamin D from cholesterol through a process triggered by the action of the sun's ultraviolet B rays on the skin. Vitamin D3 is synthesized from cholesterol in the skin. The vitamin D binding protein transports the vitamin D3 to the liver where it undergoes change to 25(OH)D (the inactive form of vitamin D) and then to the kidneys where it is changed again to 1,25(OH)D, its active form (Brannon et al, 2008). This same enzyme that activates Vitamin D is also present in a variety of non-kidney sites, including bone, skin, colon, brain, and macrophages (white cells, critical to immune defence). This is likely to explain the far greater and broad-ranging effects of vitamin D that we have discovered in recent years. Furthermore, Vitamin D receptors are found in virtually all tissues and cells. Compared to the 1970's nine times more target organs are recognised for vitamin D.

The half-life of vitamin D in the liver is approximately 3 weeks, which underscores the need for frequent replenishment of the body's supply.

The vitamin D hormone system controls the expression of more than 2000 genes and the proteins they produce.

In many Countries there exists unrecognised inadequacy. The amount the skin can produce decreases linearly from age 20's (it will have decreased by 75% by age 70). Vitamin D level predicts performance in older people and of importance in this

discussion is how this may make the elderly more vulnerable to a multitude of diseases, including viral threat.

Epidemiological studies suggest that vitamin D reduces incidence of diabetes, rheumatoid arthritis, multiple sclerosis, <u>viral infection</u>, auto-immune disease and cancer. It leads to a significant reduction in all-cause mortality when supplemented.

Fatty fish (catfish, salmon, mackerel, sardines, tuna), mushrooms, eggs and meat are rich in D, as well as foods specifically fortified with D. Vitamin D is essential for the proper absorption of calcium and phosphate; explaining vitamin D's critical role in bone health. However, no dietary source for "The Sunshine Vitamin" even comes close to vitamin D levels made naturally from ultraviolet light B exposure.

An estimated 1 billion people worldwide, across all ethnicities and age groups, have a vitamin D deficiency. This is mostly attributable to people getting less sun exposure because of climate, lifestyle, and concerns about skin cancer. The Dietary Reference Intake (DRI) values for vitamin D, established in 1997 were initially established to prevent rickets and osteomalacia, but are now considered too low to prevent chronic disease (and for that matter to impact significantly on the immune system). Subtle symptoms of milder deficiency include loss of appetite, diarrhoea, insomnia, vision problems, and a burning sensation in the mouth and throat.

Seventy seven percent of Americans, 97 percent of black Americans and 97 percent of Canadians are vitamin D deficient, according to government data. This includes people living in sunny climates and athletes who spend lots of time outside. The vitamin D research community now recommends vitamin D blood levels of 40-60 ng/ml (that is 100-150 nmol/l); and most are well below this.

Obesity is linked with lower levels of Vitamin D with an inverse correlation between levels and degree of overweight. A study suggests that people who are obese may be less able to convert vitamin D into its hormonally active form (Wortsman et al, 2000).

As the body gets older, the skin loses its ability to convert sunshine into vitamin D. And there is evidence that children aren't getting enough of it. Infants generally aren't sunbathers, and breast milk alone won't provide sufficient levels.

With such a high prevalence of vitamin D deficiency, the Endocrine Society recommends that everyone at risk should be screened for vitamin D deficiency. Those especially at risk are infants and children (all ages), pregnant women, those who are over 65 and in community dwellings (without enough sunlight), darker skinned individuals and obese individuals. Their recommendations are for doses of 1,000 to 2,000 IU to achieve appropriate levels, with maximum levels of 10,000 IU per day. In my experience 4 to 5,000 IU of Vitamin D3 has gotten most people's vitamin D into the optimal range above 100 nmol/I (> 40ng/ml).

Vitamin D's reported mechanisms of action include preventing DNA breaks, cell cycle control, decreased proliferation of normal and abnormal cells, encouraging cells to a more differentiated state, enhancing cell communication, being <u>anti-inflammatory</u>, antioxidant and <u>immuno-modulatory</u> as well as anti-angiogenic (preventing new blood cell formation).

Vitamin D has also been found to enhance production of endogenous antibiotics (defensins).

I am pretty sure that we are not testing blood levels of people affected by Covid-19 but we should be given the information given below. Supplementing Vitamin D where levels are deficient or insufficient may prove a critical action. In my clinical experience 70% or more of people who attend my clinic (and every patient gets their Vitamin D measured) have insufficient or deficient levels of Vitamin D. This has been found in people who can afford private medicine and holidays in the sun. I suspect in the general population the figure is higher than 70%.

So, let's reiterate why this is vital from a Covid-19 perspective.

Evidence that Vitamin D can prevent viral infection

While there are no clinical trials investigating vitamin D for Covid-19 specifically, there is much data showing that vitamin D is an important component in the prevention and treatment of influenza (Schwalfenberg, 2015) and upper respiratory tract infections (Yamshchikov et al, 2009) and in reducing risk of ARDS (the main cause of mortality in Covid-19 infections).

Vitamin D deficiency is common in people with ARDS; the main cause of deaths from Covid19, and in fact studies show that vitamin D deficiency may contribute directly to ARDS (Eastly, 2016, Dancer et al, 2015).

Vitamin D deficiency is associated with an increased risk of intensive care admission and mortality in patients with pneumonia (Remmelts et al, 2012). Deficiency is common in critically ill patients and associated with adverse outcome (Parekh et al, 2013).

Recent data from an Austrian study in critically ill deficient patients suggests that when treatment with vitamin D is successful in raising levels >75 nmol/L there is a mortality benefit (Amrein et al, 2014).

Vitamin D may improve outcomes by reducing both local and systemic inflammatory responses as a result of modulating cytokine responses (Kempker et al, 2012).

The above data alone should have firmly grabbed our attention but other evidence also supports a role for Vitamin D as a critical protective molecule.

- Oregon State University scientists found vitamin D induces the production of cathelicidin, an anti-microbial peptide gene that helps serve as the first line of defense in the immune response against minor wounds, cuts, and both bacterial and viral infections
- Vitamin D-expressed genes instruct macrophages, the front-line defenders in the innate immune system, to make antimicrobial peptides, which are like antibiotics (Liu, 2006)
- In a Japanese randomized, controlled trial, children given a daily vitamin D supplement of 1,200 IU had a 40% lower rate of Influenza Type A compared with those given placebo; there was no significant difference in rates of influenza type B. (Gombart, 2009)

• A six-fold lowered risk of respiratory syncytial virus (RSV) in Vitamin D deficient infants has been observed. (Belderbos et al, 2011)

Whilst vitamin D is not an anti-viral molecule, it augments immune function, allowing the body to combat the virus more effectively (Lang & Aspinall, 2017). It also suppresses inflammatory processes (Gruber-Bzura, 2018).

A robust immune function is required for the body to combat the virus, but an overactivated immune system is also responsible for the cytokine storm that is seen in Covid-19 infection that can lead to death.

One hypothesis is that the seasonality of the flu is related to the fact that most people have lower vitamin D levels in the winter than in the summer.

Research published in 2009 suggests fatality rates during the 1918-1919 influenza pandemic were influenced by season, with greater numbers of people dying during the winter than the summer (Grant & Giovannucci, 2009).

A meta-analysis of 25 randomized controlled trials showed that <u>vitamin D</u> <u>supplementation helps protect against acute respiratory infections</u>. <u>Studies have also shown that there is an association between low vitamin D levels and susceptibility to viral infections such as influenza (Martineau et al, 2017).</u> This 2017 meta-analysis also reported from analysis of the 11,000 participants, that it was the daily or weekly supplementation of vitamin D that had the greatest protective effect in those with the lowest vitamin D levels (Medcram Medical Lectures, 2020), <u>cutting risk of respiratory infection by 50% (i.e. halving the risk).</u> The study was funded by British National Institute of Health and published in the British Medical Journal (BMJ). To repeat, <u>those with severe vitamin D deficiency who took a daily or weekly supplement cut their respiratory infection risk in half.</u> Those with higher baseline levels also lowered their risk, albeit to a lesser extent. The acute administration of high bolus doses of vitamin D, on the other hand, had no significant impact on infection risk.

Effective blood levels and doses

This information above would very much support the recommendation to maintain an optimal vitamin D level all year-round. According to data from GrassrootsHealth's D*Action studies, the optimal level for health and disease prevention appears to be between 60 nanograms per milliliter (ng/ml) and 80 ng/ml (150 nmol/l to 200 nmol/l), while the cut off for sufficiency appears to be around 40 ng/ml (100 nmol/l).

In one GrassrootsHealth analysis, those with a vitamin D level of at least 40 ng/ml (100 nmol/l) reduced their risk of colds by 15% and flu by 41%, compared to those with a level below 20 ng/ml.

Experts say that adequate levels of vitamin D would be achieved by 15 minutes of unfiltered sun two to three times weekly, depending on your skin type and the time of day. Arms and legs should be exposed, whilst still protecting the face.

The Endocrine Society and the International Osteoporosis Foundation, note that 30 ng/ml is necessary for optimal bone health.

The two forms of vitamin D used in supplements are D2 (ergocalciferol) and D3 (cholecalciferol). D3 is the preferred form, as it is chemically similar to the form of vitamin D produced by the body and is more effective than D2 at raising the blood concentration of vitamin D (D3 (cholecalciferol), the kind our skin makes, and vitamin D2 (ergocalciferol), a synthetic variant made by irradiating plants. Vitamin D2 is only 10–30% as effective in raising 25-hydroxyvitamin D blood levels compared to vitamin D3). Without sun exposure, to reach a level of 50 ng/ml (125 nmol/l) requires a 5,000 IU/day vitamin D supplement. This is certainly borne out by my own clinical experience with Vitamin D3 supplementation. Vitamin D3 should be the choice for oral supplementation of Vitamin D.

Some feel that Vitamin D intoxication can occur when serum levels are greater than 150 ng/ml. Symptoms of hypervitaminosis D include fatigue, nausea, vomiting, and weakness probably caused by the resultant hypocalcaemia. Taking Vitamin D3 together with vitamin K2 negates this risk (see later comments).

Current recommended daily vitamin D intake of 200 IU (international units) for those up to age 50; 400 IU for people 51 to70; and 600 IU for those over 70 are now deemed by most experts to be too low. Many experts say 2,000 IU of the vitamin may be optimal for preventing disease. Anthony W. Norman, a professor of biochemistry and biomedical sciences at the University of California, Riverside, who has been studying vitamin D for five decades recommends 2,000 to 4,000 IUs per day and says doctors are behind the times on research.

It is good practice if regular Vitamin D3 is being taken on a long-term basis to consider keeping a check on blood levels.

Research suggesting a protective role for vitamin D against non-bone-related disease is "compelling" even if it is not conclusive. Leading vitamin D experts have stated. <u>"We</u> won't know the true burden of chronic disease until we eradicate vitamin D deficiency."

As the number of positive effects of vitamin D on the body, as highlighted above, continue to be uncovered, the weight of circumstantial evidence would certainly support checking one's own levels particularly if sun exposure is not an option because of where you live.

The guidelines for intakes of Vitamin D in the range 400-800IU are directed towards maintaining bone health and are sufficient to prevent rickets and osteomalacia – but not other diseases or influenza. Without evidence to support it, the US Food and Nutrition Board arbitrarily set the safe upper limit for vitamin D consumption at 2,000 IU/day.

10,000 IU vitamin D supplement every day, month after month safely, with no evidence of adverse effect. (Veith,1999)

Vitamin D in dose (5,000 IU/day) prevents the build-up of calcium in blood vessels. (Watson et al, 1997).

The cost of taking a 5,000 IU supplement of vitamin D every day for a year is cheap. Not taking it may turn out to be far more expensive!

Based on all the above that demonstrates that Vitamin D has immune support benefits on the host and on the consensus of expert opinion, it seems prudent to recommend that a person takes 4 to 5,000IU per day of Vitamin D3. This should be combined with Vitamin K2 (250 mcg to 500mcg). The latter will prevent any "rogue" calcification of tissues other than bone (for more explanation on this, I refer to my previous article "Vitamin D3 and K2: Another Dynamic Duo!"

The potential benefits of doing this are highly likely to outweigh the risks of not doing it. I have many patients taking the above doses of Vitamin D3 and K2 and have been doing so without untoward effect for many years.

Vitamin C

We have known about Vitamin C since the 1930's. It was discovered by Nobel prize winner Albert Szent-Gyorgyi in 1937 and it became popularised by Linus Pauling.

My purpose here is not to write extensively about Vitamin C but to highlight what we know about it that makes it vital to the current discussion about Covid-19.

When one reads the book "Curing the Incurable. Vitamin C, Infectious Diseases, and Toxins." by Thomas Levi MD (2002), with its 1200 scientific references, one appreciates the weight of evidence for the very broad anti-viral effect of Vitamin C. Having read this book it left me thinking that "there seems to be no virus that has been able to survive it".

Here are some of the highlights of published research on Vitamin C from a "Covidangle".

- Vitamin C use as an anti-viral agent is not unproven; it has been used thus since the 1930's (Levy, 2002)
- Much evidence supports the enhanced recovery of patients with pneumonia by Vitamin C
- Vitamin C is already being used to prevent and treat Covid-19 in China and in Korea
- High dose intravenous vitamin C has been used successfully in treating Covid-19
- "Vitamin C (small or large dose) does no harm to people and is the one of the few, if not the only, agent that has a chance to prevent us from getting, and can treat, Covid-19 infection. When can we, medical doctors and scientists, put patients' lives first?" Richard Z. Cheng, MD, PhD, International Vitamin C China Epidemic Medical Support Team Leader
- The government of Shanghai, China has announced its official recommendation that Covid-19 should be treated with high amounts of intravenous vitamin C. (1)
 Dosage recommendations vary with severity of illness, from 50 to 200 milligrams per kilogram body weight per day to as much as 200 mg/kg/day
- Dr Andrew Weber, a New York Lung Specialist reports on the efficacy of using high dose intravenous vitamin C in the treatment of Covid-19
- One of the complications of Covid-19 infection is the ARDS (acute respiratory distress syndrome) that it can lead to. ARDS seems to be triggered by free radical oxidative stress and cytokine release that leads to inflammation in the delicate lung air sacs or alveoli (Fowler et al, 2017) Vitamin C is known to counter oxidative stress

- Large dose intravenous vitamin C (IVC) has been used clinically successfully in viral ARDS and also in influenza
- In a 2019 meta-analysis of 18 clinical studies Vitamin C was shown to shorten ICU stay in a total of 2,004 ICU patients (Hemila & Chalker, 2019)
- In meta-analyses intravenous (IV) high-dose vitamin C has been demonstrated to have significant benefits in the treatment of sepsis and septic shock (Li, 2018; Wang et al, 2019).

Based on all of the above evidence and based on the non-toxicity of Vitamin C (some may have diarrhoea from large doses), I recommend people consider taking 4 grams a day of Vitamin C (ascorbic acid). I would increase that dose to twice a day in the event of symptoms and in particular where these are being managed from home during self-isolation. Apart from loose stool there are no other apparent downsides to doing this and more than likely upsides. I have many patients who take this dose with no ill effect at all.

lodine

Lastly, in brief I would like to mention another common deficiency that we suffer in the West that may lead to increased vulnerability to infections.

Before the surge of pharmaceutical medicine many Physicians used iodine to treat a variety of ills. The Nobel laureate Dr. Albert Szent Györgyi (1893—1986), yes the same physician who discovered vitamin C, writes: "When I was a medical student, iodine in the form of potassium iodide was the universal medicine. Nobody knew what it did, but it did something and did something good. We students used to sum up the situation in this little rhyme:

If ye don't know where, what, and why Prescribe ye then K and I"

lodine deficiency now affects approximately 50% of Europe. It has many actions in addition to supporting the thyroid gland. These include it being anti-oxidant, <u>anti-inflammatory</u>, a protector of breast and ovary health and of pertinence here, <u>it is a potent anti-microbial</u>, <u>anti-fungal and anti-viral agent</u>. Furthermore, the prevalence of bromide and fluoride in the environment, which act as an iodine inhibitors, has likely exacerbated the common-place iodine deficiency.

"lodo-phobia" has arisen in medicine over use of iodine and that it may potentially upset the thyroid; but this is not borne out in practice. The Japanese regularly take in around 13mg of iodine in their daily diet without it causing trouble. This is way above the RDA for iodine (RDA: 50mcg daily for infants 0-12 months; 90mcg daily for 1-8 years; 120mcg daily for 9-13 years; 150mcg daily for 14-18 years. Adequate Intake (AI) for infants:110mcg daily for ages 0-6 months; 130mcg daily for 7-12 months. Tolerable Upper Intake Levels (UL): 200mcg/day for ages 1-3 years; 300mcg/day for 4-8 years; 600mcg/day for 9-13 years; 900mcg/day for 14-18 years (including pregnancy and lactation).

It was standard practice to give high doses of iodine for Graves' disease prior to thyroidectomy and no serious side effects were noticed (Pennington, 1990).

lodine has been used in various forms as an antiseptic for the skin, wounds, and mucous surfaces of the body. It has also been used to sterilize the air and inanimate objects such as catgut and surgical instruments.

As stated above, <u>iodine kills bacteria</u>, <u>viruses</u> (<u>Gershenfield</u>, 1977, <u>Reddish</u>, 1957), <u>fungi</u>, <u>protozoa</u>, <u>and even spores of bacteria and fungi</u>, including anthrax spores. Iodine has been used successfully against influenza, herpes, small pox, and chicken pox viruses (Gershenfield, 1977).

lodine in the blood is captured by many tissue sites and ends up in mucous secretions. The tissues include thyroid and salivary glands, nasal secretions, stomach, and lungs. Collectively, these tissues and mucous products contain free iodine which defends against invasion by bacteria and viruses (Brown-Grant, 1961, Derry, 2001). The salivary glands, nasal mucosa, and lungs all secrete mucous which contains iodine (Brown-Grant, 1961). The current recommended iodine intake by the WHO is 150 to 200 micrograms daily. This dose first started by David Marine in 1920 has successfully prevented goiters, cretinism, and mental retardation. Dietary iodine found in iodized salt is below the amounts needed to fill mucous defence roles. People wishing to boost their defence against infections should consider supplementing their diets with iodine.

When daily iodine dose is above 3 mg (Kelly, 1961) for over 2 weeks, the thyroid gland becomes saturated and no longer takes up much iodine (Wayne et al, 1964). Then, iodine goes to other sites named above and is excreted into the upper respiratory and gastrointestinal tract mucus. It seems logical that air borne viruses become stuck in mucus and killed by free iodine (Brown-Grant, 1961). Lugol's iodine solution was discovered by Henri Lugol, a Paris physician, more than 150 [21] years ago. It has been used therapeutically since then. Lugol's consists of 5% free iodine and 10% potassium iodide in water. Lugol's has a distinct advantage over most other iodine oral medications by having a high level of free iodine, which is the active ingredient that kills viruses (Carrol et al, 1955; Carroll, 1955; Gottardi, 1991).

Consensus from iodine experts is that the sicker the patient the more iodine they need with most average patients needing 25 to 50 mgs with 12 mg being a good maintenance dose depending on ones' location. In summary, iodine is another nutrient with anti-viral properties, that is likely to make those deficient in it to be more vulnerable to viral infection. It is prudent in the current circumstances therefore, to consider adding 12mg (i.e. 1 drop of 12% Lugol's iodine) to our daily defence against Covid-19. Again, I and many other physicians who recommend iodine at these doses (above the RDA) have done so without the observation of any untoward effects over many years of use.

As a final note, despite the evidence cited above many will still say there is no evidence to support the recommendations that I make or they will imply that these recommendations are associated with some unsubstantiated risk to health. Those who are not informed enough or have vested interests will always be around to try to suppress any view that counters the common narrative. The point is there is NO CURRENT TREATMENT for Covid-19 and if what I have suggested here gives people and my doctor-colleagues an edge against this virus in the absence of harm, then what is there to lose?

- Click here to download the reference list for Dr Eccles' article.
- Click here to download a PDF of Dr Eccles article.

C*v*d-19: it's not Russian roulette

Date:

2 April 2020

Content Sections

- Be empowered: you are not without hope
- Breaking down susceptibility
- How we can reduce our susceptibility?
- Six top tips for an immune A-game

Wherever you live in the world, government advice is to stay at home and do nothing during this time of pandemic. However, there's actually rather a lot that you can do for yourself and your family from home.

Our newest video in our Covid-19 series takes you through 4 main areas where your own actions can have significant impact to reduce your risk and susceptibility.

Be empowered: you are not without hope

As Adam Kucharski, associate professor at the London School of Hygiene & Tropical Medicine explains in his serendipitously-timed book, *The Rules of Contagion: Why Things Spread – and Why They Stop* (Wellcome, 2020), there are 4 key factors that drive the reproduction number (R_0 value). This is the all-important (but also problematic) statistic that tells you how many people a single infected person is likely to infect. Estimate from different studies vary greatly, ranging from around 1.5 to as high as 5, with more common estimates ranging from 2 to 3.5. If the value remains above 1, spread of the virus through the global population will likely continue – but as with all novel viruses, the R_0 value will decline with time as our immune systems adjust to its presence.

Dr Anthony Fauci and colleagues from the National Institute of Allergy and Infectious Diseases at the National Institutes of Health in the USA, leading the scientific strategy stateside, propose an R₀ of 2.2. He also proposes a true case rate fatality that might be considerably lower than 1%. He suggests this might put Covid-19 on par with severe seasonal influenza which has a fatality rate of around 0.1%.

The components feeding into an R₀ value are several:

- Duration of infection (i.e. how long are you spreading and shedding virus)
- Opportunity (i.e. where do you go)
- Transmission probability (i.e. what's the chance of you passing on infection), and
- Susceptibility (i.e. your underlying susceptibility).

Current government advice so far addresses the first three of these, but not susceptibility. This is likely because of the high level of individuality between us all that governs our personal susceptibility. From genes, to gender to our diets, lifestyles and the drugs we've been prescribed. With this kind of variation, it's hard to issue one-size-fits all public health messages. With this dearth of information are anxious fearful, disempowered citizens who don't realise that there are powerful self-care options to help reduce personal susceptibility and enhance underlying health - even if you fall into one of more of the very vulnerable groups.

Breaking down susceptibility

We've spoken in previous articles and videos in our Covid-19 zone about how stress, a bad diet and a lack of exercise negatively impacts your immune system at a time when you most need it to bring its A-game. This week we bring you key information emerging from the scientific pandemic literature about susceptibility. You're not likely to hear this information on the news any time soon and you certainly aren't likely to hear that there's anything you can do about reducing your susceptibility.

In short, the data are pointing to men being more susceptible than women. As vaccine researchers have long-known, men don't mount as strong an immune response. That's likely an evolutionary adaptation because men, unlike women, are not gifted with all the DNA (in their sperm) for their potential progeny at birth. In a detailed study on critically ill patients in UK intensive care units, 70% of the 775 patients involved were found to be men. While some studies from China showed a very similar tendency for severely ill patients to be mainly men (Lancet study, BMJ study) there are other studies that show a more equal distribution of men and women, such as a large study of Covid-19 patients in China, involving 1590, published in the European Respiratory Journal.

Those with hypertension and cardiovascular disease also fall into this highly susceptible category. As do those with metabolic dysregulation resulting in type 2 diabetes, obesity, metabolic syndrome and cardiometabolic syndrome. In our review of 11 key studies(* see below) looking at the relationship between underlying conditions and susceptibility, 4 diseases among patients are consistently the most common among those with the most severe symptoms, including death. These are cardiovascular disease, hypertension, diabetes (the majority of which are overweight or obese) and chronic respiratory disease. In relation to body weight, a UK study found that 72% of patients (n = 775) had a body mass index (BMI) in excess of 25.

All of these groups have one thing in common: they all suffer systemic inflammation.

Age is also a very important factor, because there is a functional decline in the immune system. But this isn't limited to your chronological age. Your metabolic and biological age is ultimately what's important as it reflects your epigenetic clock and the true state of your health. Based on the existing studies that have included reference to age, it is clear that older people - those over 50 - are considerably more susceptible than younger people. For example, the previously mentioned UK study (n =775) found a mean age of 60 years old, whilst an Italian study that included a hot spot of people in care homes, had a mean age of 78.5. While all studies clearly point to the inherent resilience of children to Covid-19, there are other studies that do include significant numbers of younger people, such as a Chinese study, with a median age of 41. While it is too early

to conclusively explain such variations, it seems likely that when younger people are affected, there are one or more factors expressed by those individuals that likely make them both more susceptible to the virus, as well as to chronic diseases as they age. There has been much made of the fact that those with a history of lung or respiratory diseases are also highly vulnerable.

The connection between all these high-risk susceptible groups is inflammation - which is the insidious underlying driver of nearly all chronic diseases, but which can also be very positively impacted by diet and lifestyle changes. Critically, those who suffer severe disease from Covid-19 are, in effect, hyper-inflamed, so any effort to reduce inflammation is likely very helpful.

How we can reduce our susceptibility?

Our latest video in our Covid-19 series walks you through four areas that contribute to your personal susceptibility: genes, physiology, behaviour and environment, but that are also highly modifiable by different methods of self-care.

Genes

Our genes contain our genetic code, our book of life, which also determines how our immune systems will function in response to external and internal triggers. However, even if you've been dealt a poor hand of genetic cards, our immune systems' function can be improved, but it may take a bit more work with more specific dedication. Immune resilience is greatly supported by eating a balanced and healthy diet, getting ample good quality sleep, exercising daily and managing stress. Whether you are male or female, please remember that while our genes load the gun, it's our environment that pulls the trigger, because our gene expression (how our genes interact with their environment), ultimately determines our level of health and resilience.

Physiology

There is plenty of rapidly emerging data that demonstrates that our underlying physiological state has a big bearing on the Covid-19 disease process. This in turn influences whether we might express severe, moderate, minor or even no symptoms of the infection. During this time of potential exposure when you want your immune function to be at its optimal, make a concerted effort to eliminate all added sugars and highly refined, starchy carbs from your diet. Reducing the amount of circulating sugar in your system and moving to a keto-adapted diet, as per ANH's Food4Health guide will promote metabolic flexibility and help you start burning fats for energy, rather than sugars. We're aware that through stress, anxiety, fear and also boredom, many are comfort eating all the wrong types of foods at the moment. However, increasing your level of healthy fats as you cut out starchy carbs and sugar will help you handle cravings and reach satiation more quickly.

Behaviour

The impact of our behaviours on risk and susceptibility go a lot further than handwashing and social distancing, which are also about our role as transmitters of Covid-19 to others. Behaviours such as smoking, drinking too much alcohol, getting less than 6-8 hours of quality sleep a night, letting your stress get on top of you and exposing yourself to lots of chemicals via processed foods, household cleaners and personal care products, can all impact your body's ability to mount an effective immune response. Add to this a lack of activity and movement, time spent outdoors and also time for self-reflection/'me time' and you can further compromise your health. If you can get outside, do - the benefits are not all psychological and emotional, nature brings us into contact with an array of beneficial microbes that support and assist our own microbiome, which is essential and integral to immune function.

Environment

In a health sense, the word environment refers to everything to which we're exposed, including the food we eat, the air we breathe, the water and fluids we drink, the products we put on our skin and the spaces around us, both in and outside our homes. Added together, these factors all have big impacts on your health and the way your immune system functions. Your immune system is your primary defence against the virus – and for most people, it works incredibly well most of the time. So well, that most of the time you're not even aware of how many pathogens you're being protected against.

Six top tips for an immune A-game

- Optimise our diets. Our Food4Health guide points you in the direction of a dietary and lifestyle approach that's both anti-inflammatory and one that helps you develop metabolic flexibility
- 2. **Fill any dietary gaps with key supplements**. Based on data from dietary and nutrient surveys, many people have inadequate vitamin D, vitamin A, zinc and magnesium status. Vitamin C is also key when it comes to protection against viruses.
- 3. **Drink hot fluids like herbal, immunity-enhancing teas throughout the day.** Hot drinks help to wash any virus particles caught on the mucosal surfaces of your mouth into your stomach acid and if herbal, also provide resources to help support your immune system.
- 4. Stay calm and manage your stress with techniques that work for you because anxiety is your immune system's enemy. From meditation and mindfulness, to exercise and activity, to family time or more self-reflective reevaluation of your life, lock down provides us a rare opportunity to stop and recalibrate. Try breathing techniques, yoga or meditation to give yourself peace of mind, get yourself grounded in nature, practice living in the moment and not the future. Rest, rejuvenate, find things to laugh about and explore some apps to help e.g. HRV or heart rate variability; meditation; sleep

- 5. **Get outdoors if you can**. Luckily for us in the UK we're still allowed to exercise outdoors once a day. Make the most of that time and take time to smell the roses...
- 6. Cut the chemicals! This recalibration time is perfect for reducing the number of harmful chemicals around you. Think household cleaners, garden products and personal care products like skin and hair care and make up. You don't need to fill your house with harsh disinfectants and anti-bacterials at this time simple soap and water is enough to kill the virus. So too is coconut oil mixed with a few drops of Lugol's lodine solution (tip: gently melt the coconut oil, add the iodine, mix and put into a clean jar to solidify again) used on hands instead of harsh sanitisers. Lastly, remember that processed and ultra-processed foods are usually loaded with non-nutritive nasties like additives, preservatives and colouring.

*11 key studies:

Study 1

Study 2

Study 3

Study 4

Study 5

Study 6

Study 7

Study 8

Study 9 Study 10

Study 11

Call for concerted action on Vitamin C in C*v*d crisis

Date:

2 April 2020

Content Sections

- Selective publicity
- "Focus on protecting susceptible individuals"
- Selective uptake
- Why vitamin C can save lives
- Direct report from China
- Low cost vitamin and mineral immune enhancement protocol
- Time for C-action

By Robert Verkerk PhD [1] and Dr Damien Downing MBBS MRSB [2]

- [1] Founder, executive and scientific director, ANH-Intl
- [2] President, British Society for Ecological Medicine

During lockdown, frontline health workers are among the most exposed to SARS-Cov-2 responsible for the Covid-19 pandemic. Adequate personal protective equipment (PPE) and testing both for presence of infection or antibodies following infection is critical. Governments, health authorities and supply chains are trying to address this, albeit often not fast enough.

In the meantime, the only tangible other means of defence for any person exposed to the virus, whether it's a healthcare professional or a patient, is the human immune system.

• ANH video – 'Adapt, Don't Fight' (how your immune system can save your life)

This isn't some kind of archaic system that plays second fiddle to not-yet-released high tech antiviral drugs or recombinant technology vaccines. It's the system that works to keep us alive every day of every week – and the one responsible for eliminating virus from the body among the majority of those who become infected with SARS-CoV-2.

It's neither scientifically rational nor ethical to deny treatment with long-established nutritional agents because there is no evidence from trials. It's actually mendacious, because there is no evidence for anything working – it's a new virus!

Find related articles, information and videos in our Covid Zone

So no surprise then that there weren't any trials to show if a global lockdown would sufficiently slow or stop transmission. But let's also not ignore the fact that the lockdowns were themselves initiated on the basis of mathematical models. Like all models, these are as good as the data fed into them. It's of public interest (although you'd never know given the scarcity of media reporting on the subject) that there is emerging evidence that these relied on sometimes exaggerated or dubious data. Needs must, we're told.

At the same time health authorities won't offer *any* public health advice geared towards helping citizens to enhance their immune system function. More than that, social media platforms are banning scientifically and medically valid posts aimed at helping the public to improve their immune system function. In their wisdom, social media platforms have decided they will be arbiters of scientific matters about which they have no background or expertise.

Selective publicity

Politicians and news channels were largely mute when the most senior scientist advising the White House in the US, Dr Anthony Fauci, suggested 6 days ago that the case fatality rate for Covid-19 might end up being on a par with a bout of severe seasonal influenza. His comments were made in a co-authored editorial in one of the world's most prestigious medical journals, the *New England Journal of Medicine*. They've never shut down the world's economies for flu, nor have they for tuberculosis, that causes on average over three times more deaths than influenza worldwide.

"Focus on protecting susceptible individuals"

They were also mute when one of the world's most respected disease prevention doctors and scientists, Prof John Ioannidis from Stanford, warned of policy being driven by reliance on fake news, withdrawn papers, exaggerated pandemic estimates, case rate fatality and community spread. This misinformation, says, Prof Ioannidis, has driven decisions for the extreme measures we now face. He states:

"Maintaining lockdowns for many months may have even worse consequences than an epidemic wave that runs an acute course. Focusing on protecting susceptible individuals may be preferable to maintaining country-wide lockdowns long-term."

When it comes to protecting the most susceptible, the deliberate suppression of potentially life-saving advice, even from doctors and researchers who have dedicated their lives to the field of nutritional medicine, is both scientifically negligent and immoral. Especially when there are cheap, low cost natural agents with undeniable evidence of both safety and efficacy for immune support readily available to the public.

The media have saturated the airwaves telling the masses about trials that are ongoing with various antiviral drugs – or repurposed drugs, such as the anti-malarials, chloroquine and hydrochloroquine.

Selective uptake

But there's been silence from both the media and most health authorities on a nutrient as accessible as vitamin C, despite abundant evidence of its capacity to treat and shorten periods of infection with a wide range of pathogens, including respiratory viruses. This is among the reasons China and the USA have been trialling vitamin C (see below) for Covid-19. It's also why the government of the Philippines is handing vitamin C out to schoolchildren.

With 40 years of clinical experience using nutritional and environmental medicine, and as President of the British Society of Ecological Medicine, I, Damien, have deep concerns over the absence of public health advice from UK and other health authorities on nutrient-based prevention and treatment strategies. I have addressed my concerns to Dr Richard Horton, editor of the *Lancet* journal, on Facebook and Twitter.

I will briefly set out the basis of the case, especially for vitamin C.



Why vitamin C can save lives

There isn't a virus for which vitamin C hasn't worked. Personally, I would stake my life on it delivering benefit significantly beyond not taking it – well, I suppose I am, carrying on working right now.



Dr Damien Downing MBBS MRSB

Intravenous vitamin C is already being employed in China against Covid-19. I get regular updates because I am part of the Medical and Scientific Advisory Board to the International Intravenous Vitamin C China Epidemic Medical Support Team. Its director is Richard Z. Cheng, MD, PhD; associate director is Hong Zhang, PhD. Among other team members are Qi Chen, PhD (Associate Professor, Kansas University Medical School); Jeanne Drisko, MD (Professor, University of Kansas Medical School); Thomas E. Levy, MD, JD; and Atsuo Yanagisawa, MD,

PhD. (Professor, Kyorin University, Tokyo). To read the treatment protocol information in English: (protocol in Chinese).

Direct report from China

Dr Richard Cheng, also Orthomolecular Medicine News Service (OMNS) Chinese edition editor, is issuing regular reports from China via his YouTube channel. This has included information about the first approved study using 12,000 to 24,000 mg/day of intravenous (IV) vitamin C. In his report, based on emerging evidence from the trial, Dr Cheng made a public call for immediate use of vitamin C for prevention of coronavirus (Covid-19).

A second clinical trial of intravenous vitamin C was announced in China on 13 February 2020. In relation to this second study, Dr Cheng said:

"They plan to give 6,000 mg/day and 12,000 mg/day per day for moderate and severe cases. We are also communicating with other hospitals about starting more intravenous vitamin C clinical studies. We would like to see oral vitamin C included in these studies, as the oral forms can be applied to more patients and at home."

Additional information can be found on the OMNS website.

On 21 February 2020, announcement was made of a third research trial now approved for IV vitamin C for Covid-19.

Dr. Cheng commented: "Vitamin C is very promising for prevention, and especially important to treat dying patients when there is no better treatment. Over 2,000 people have died of the Covid-19 outbreak and yet I have not seen or heard large dose intravenous vitamin C being used in any of the cases. The current sole focus on vaccine and specific antiviral drugs for epidemics is misplaced."

"Early and sufficiently large doses of intravenous vitamin C are critical. Vitamin C is not only a prototypical antioxidant, but also involved in virus killing and prevention of viral replication. The significance of large dose intravenous vitamin C is not just at antiviral level. It is acute respiratory distress syndrome (ARDS) that kills most people from coronaviral pandemics (SARS, MERS and now NCP). ARDS is a common final pathway leading to death."

"We therefore call for a worldwide discussion and debate on this topic."

Let's be clear what the data emerging from China and elsewhere shows; vitamin C, if used appropriately both orally and intravenously, depending on the condition of the individual, will save lives in this pandemic. Will it save yours? No idea, sorry. This kind of research is done on populations; you don't get to speak to individuals. It won't stop you spreading the virus either, so far as we know – and there's a lot we still don't know about it.

Low cost vitamin and mineral immune enhancement protocol

Based on available evidence and decades of clinical experience, I, Damien, also support the following minimum recommendations for inexpensive supplemental intakes for adults. For children, dosages can be reduced proportionally by weight relative to an adult's body weight (based on a 60 kg adult):

- Vitamin C: 3,000 milligrams (mg) (3 grams) (or more) daily, in divided doses. You might find it useful to add 5,000 milligrams (5 grams) of pure ascorbic acid powder to 1 to 1.5 litres of water and drink it throughout the day
- Vitamin D3: 2,000 International Units (IU) (50 micrograms) daily. Start with 5,000 IU (125 micrograms)/day for two weeks, then you can reduce to 2,000 IU/d)
- **Magnesium:** 400 mg daily (in citrate, malate, amino acid chelate, or chloride form)
- Zinc: 20 milligrams (mg) daily (e.g. in citrate, amino acid chelate, gluconate forms), away from cereals and other grains to avoid being bound (and so less absorbed) by phytate
- Selenium: 100 micrograms (mcg) (e.g. in methionine or yeast forms) daily

Time for C-action

Some of these nutrients are in increasingly short supply, including vitamin C. The hope is this is down to their widespread consumption by the public who are taking action to protect themselves. Global supply chains may be slow to respond to increased demand and it's imperative that individual countries increase their manufacturing capacity to meet the need.

We are working on various strategies aimed at ensuring governments and health authorities publicise emerging data from trials involving nutrients like vitamin C, that they provide public health advice on nutrient intakes for immune support, and they switch on additional manufacturing capacity locally.

We will keep you posted on these campaigns and how you might be able to support them.

Thank you.

New video: The biology of positivity - creating profound change from within

Date:

9 April 2020

The large, highly differentiated brain of *Homo sapiens sapiens* sets us apart from other mammals and has been the main reason we have been able to adapt, innovate and exploit such a diverse range of environments - often to our exclusive advantage. But having such a powerhouse of a creative brain also means that our thoughts, emotions and subconscious programming <u>exert powerful physiological effects</u> on our bodies. We can literally change our biology by changing the way we think and by altering the focus of our consciousness.

Finding yourself being persistently driven by emotions such as fear, anxiety, worry and panic will trigger your stress axis, engage your survival strategies of fight, flight or freeze and alter your blood chemistry. All good strategies for short-term deployment in crises to aid survival, but not for prolonged periods and certainly not when you need your immune system to be working optimally. Somewhat poignant given our current situation, the biochemical messages released within us during prolonged stress suppress the immune system leaving us with a heightened risk of viral and other infections.

Our health depends on our immunological, metabolic and psychological flexibility creating an interlinking circular flow. Each system is connected and each enhances the function of the other, but given the size and power of our brains - our thoughts and creative intentions are powerful enough to impact every cell in the body. We are anything but health victims because our thoughts hold such enormous power. No one can tell us how to think - the thoughts we choose are all our own. This is how small groups of people manage to make such enormous change.

Fear renders one powerless. However, knowledge and education are empowering. Let's all make a conscious decision to turn our thoughts in a positive direction and support ourselves and our wider community — our global family — as we return to vibrant, resilient, immunological, metabolic and physiological health.

As night turns to day, every cloud has a silver lining, every crisis brings a gift. Perhaps the gift of this pandemic is allowing us to re-think and re-create our health, our environmental impact, our single global family and the collective, connected, effort that we must all undertake to reach a post-pandemic world – whilst not forgetting to keep our wits about us and our health sovereignty, rights and freedoms intact!

Have we lost control to the State?

Date:

9 April 2020

Content Sections

- Power and control shift
- Dodgy data and power consolidation
- Covid-mediated legislative change
- Unlocking emergency powers
- What this means to us

By Rob Verkerk PhD, founder, executive & scientific director

Our species and societies have arrived at a crossroad – one that we've reached much more quickly courtesy of the new virus that has come to dominate so many of our lives.

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Power and control shift

What we haven't considered until now is how the unfolding Covid-19 pandemic is causing a seismic and very rapid change to our locus of control. This is a concept developed originally in psychology that talks to the extent to which we feel we have control over our lives. New bills are being developed and proposed by governments and elected representatives around the world to help deal with the new circumstances. Their intention is to provide a legislative structure that not only supports, but often also helps to enforce, changes to our lives that governments believe are necessary, based on the scientific advice they've received. The end game of these bills seems to be primarily to stop acute care facilities in hospitals being overrun by slowing transmission rates in communities. It's less about actually stopping people dying. The public is being conditioned to believe this won't happen until one or more approved drugs or vaccines are available.

These bills have so far had little pushback. There are probably several reasons for this. One, is that what is front and centre in the minds of so many, is our safety and health – and a common desire to prevent as many people becoming seriously ill or dying from Covid-19. There's also the fact that communications are being removed from websites and social media sites if they're critical or at odds with government policies. This has been particularly apparent when posts have suggested lockdowns aren't necessary and

natural immune enhancement combined with more testing (of virus presence and antibodies post-infection) might have sufficed.

The almost overnight arrival or unlocking of emergency government powers creates a sudden transition in our ability to self-determine our health journey. One in which many feel they have no option but to follow government policy. Non-compliance can put you at risk of being detained or prosecuted. The rationale is of course not hard to appreciate given the seriousness of the disease that can result in a small proportion of people infected.

What's harder to understand is that these changes were rolled out so quickly amidst considerable scientific uncertainty about the virus and how it behaves when it interacts with our species, but also around the containment and mitigation strategies with which we're now engaged.

While we know it's not quite Russian roulette, we still have relatively little understanding how and why SARS-CoV-2 affects different people so differently, how many people have been infected (including those with very mild or no symptoms), or how long antibodies triggered by infection will remain effective against re-infection. We also have never had experience of a full blown global response like this so we don't know how different societies can tolerate or comply with lockdowns, what the indirect impacts of social distancing strategies will be to different groups of people, or what the indirect consequences will be of diverting so much of the global healthcare resource to a single infectious disease.

Dodgy data and power consolidation

These and many aspects of our interactions with the virus are under continuous and ongoing study. More data are emerging every day but because academic peer-review has been shelved given the crisis, quality of studies isn't always high. One of the world's most prominent scientists and doctors, Stanford University's John loannidis gives examples of fake news in the mainstream media, withdrawn papers being used as the basis of fact, and exaggerated pandemic estimates, case rate fatalities and community spread data. He's gone on to not only suggest that lockdown policies are not evidence-based, but that there has been insufficient effort to consider the collateral damage to society and even health as a result of the myopic focus on Covid-19.

Kenneth Roth, head of Human Rights Watch says, "For authoritarian-minded leaders, the coronavirus crisis is offering a convenient pretext to silence critics and consolidate power."

He wasn't only referring to China. He goes on to say:

"Recognizing that the public is more willing to accept government power grabs in times of crisis, some leaders see the coronavirus as an opportunity not only to censor criticism but also to undermine checks and balances on their power. Much as the "war on terrorism" was used to justify certain long-lasting restrictions on civil liberties, so the fight against the coronavirus threatens longer-term damage to democratic rule."

Covid-mediated legislative change

Recommendations and guidance are one thing. Laws are another. Legal changes are being made in many countries and the crisis means that normal democratic vigilance has in many cases been put on the backburner. Interestingly, most countries already have legal provisions that can be used in the event that a national emergency has been declared.

For example, the US Congress is thought to have around a hundred laws that are unlocked once the President declares a state of emergency, as did Donald Trump on Friday 13 March.

A search of the independent US website GovTrack.us using 'coronavirus' as a keyword revealed 99 bills currently under consideration in Congress.

Some relevant bills or laws that have been, or are the process of being, enacted in other parts of the world include:

United Kingdom:

The 348-page Coronavirus Act 2020, that revokes the Health Protection (Coronavirus) Regulations 2020, was passed in the UK Parliament in just 4 days. Most of the detail is contained in the 29 schedules to the Act. Not all provisions apply equally in the different regions (England, Wales, Scotland and Northern Ireland).

Its key features include:

- A legal basis for the current 'lockdown' of citizens and businesses
- Management of food supply chain during the crisis
- Management of the deceased
- Suspension of the requirement to hold inquests
- Extension of time limits for which fingerprints and DNA profiles can be maintained by authorities
- Provisions for vaccination "of persons against any disease" (Scotland only)
- Detention of those who are infected or deemed likely to be infected
- Technical amendments needed to loosen up requirements and obligations around issues such as authorisations, vetting, home schooling
- Measures to facilitate boosting staff numbers for healthcare and social services
- Provisions for workers' rights and entitlements
- Powers to enforce social distancing
- Powers to facilitate remote operation of the court system
- Provisions for the emergency financial support measures
- Provisions for local authorities and in relation to business and residential tenancies.

France:

The new Decree 2020-290 ensures the following:

- Restriction or prohibition of the movement of people or vehicles
- Stopping people leaving their homes unless strictly necessary for family or health needs
- Imposing quarantine on infected or likely-to-be-infected people
- Moving and/or isolating infected people
- Ordering the temporary closure of establishments open to the public, including meeting places, except those that offer essential goods and services
- Limiting or banning public gatherings and meetings
- Ordering the requisitioning of goods necessary to fight the virus
- Taking temporary measures to control the prices of some necessary products
- Taking any measure necessary to provide medicine and drugs to treat the virus
- Taking by decree any other measure that would restrict commercial freedom
- Enabling police, guards and officers to record and punish infractions.

Ireland:

The Health (preservation and Protection and other Emergency Measures in the Public Interest) Act 2020, with many similar provisions, has been enacted in law in Ireland.

Unlocking emergency powers

The declared state of emergency has unlocked emergency powers in many other countries including Italy, Spain, Hungary, Australia, Thailand, and the Philippines.

What this means to us

Many people appear to accept the need for our current circumstances. However, with the censorship on free expression on the subject, it could equally be argued that the majority do not have available to them all the facts on which to draw balanced and informed views.

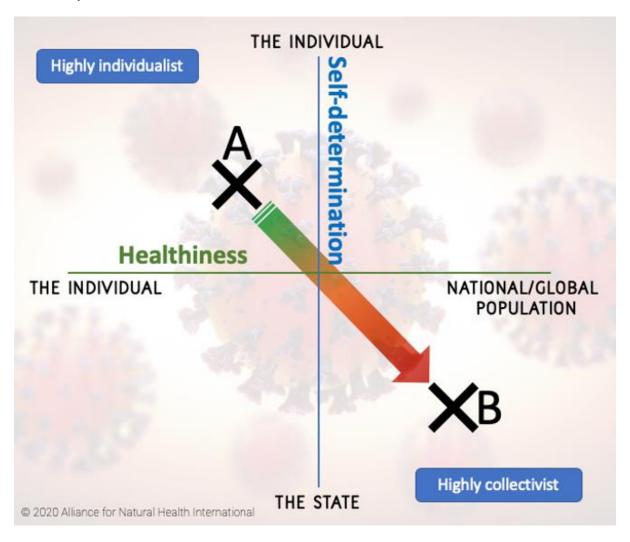
This is why we have seen fit to provide you with links to some of the emergency powers and new legislation that has been enacted so that you are in a better position to make up your own mind.

What is sure, however, is that while the state of the emergency exists, society has passed the baton to our authorities in terms of our locus of our control. Not only for our

health, but also in relation to our employment, our freedom of movement, and the education of our children. In so-called democratic free countries, all of these rights and privileges have been hard won over centuries.

It is surely of utmost importance to all of us that one new disease, that has ostensibly so far killed less than 100,000 people (= less than 7% of annual deaths from tuberculosis), creates such radical changes to our fundamental freedoms in under two months?

We have attempted to describe this transition in a diagram (below). It tries to show schematically the shift in our locus of control since the Covid-19 phenomenon emerged in January.



The shifting locus of control. Where point A represents a pre-Covid scenario in which healthiness among populations is considered best achieved by allowing individuals in society to self-determine their healthcare choices within partially regulated free market economies. Point B represents a hypothetical post-Covid scenario where it has been determined that the State should be primarily responsible for determining how citizens achieve high health status.

Everything is changing at such a rapid rate, one week seems a long time in our Covidafflicted new world. I won't therefore waste either your or my time trying to speculate what might happen in the future. And let us not disregard the fact that the enforced global pause may provide citizens, businesses, political leaders and others with a rare opportunity to proactively and positively rethink how we interact with both people and planet.

But I do think we need to be eyes wide open. Very wide open. This pandemic opens a unique opportunity for the collection of data on our DNA and our movements. We can be detained on a whim. It has the ability to decimate lives through the global economic recession that is now guaranteed. In countries with democratically elected governments, we have accepted a transfer of powers from the individual to the State with barely a look-in. Time to smell that coffee, green tea or whatever other plant-based pick-up you might fancy. But, please, let's stay alert. There is just too much at stake.

The Wild West of coronavirus testing

Date:

16 April 2020

Can we realistically expect to have reliable antigen and antibody tests any time soon?

Content Sections

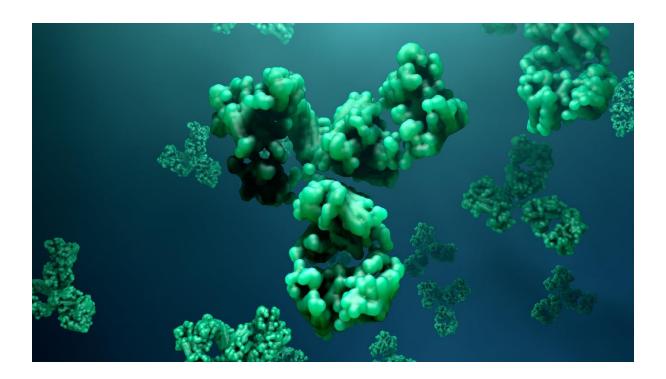
- Antigen or antibody testing what's the difference?
- Corona testing: the 'Wild West'
- The unpalatable truth

There has been much talk about diagnostic and antibody testing during this pandemic. Countries like South Korea and Germany have led the way by carrying out large scale 'test and trace' programmes. It appears to have paid off as the death rate has been significantly lower than countries like Italy, Spain and now the UK, where testing was not introduced at an early stage. Germany has also announced its large-scale antibody testing programme in order to get everyone back to work as quickly as possible and avoid the worst of the economic calamity unravelling in other countries. As lockdown fatigue sets in and unrest begins to develop, there's a widening view that antibody testing is one of the surest and quickest ways of lifting the current lockdowns so that economies can get back on track.

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However, the process is fraught with problems associated with accuracy, reliability and lack of regulation. US public health officials are warning of a testing "Wild West" that's causing confusion and could make the path to economic recovery much slower. In the UK, diagnostic coronavirus testing is being used for frontline workers and the vulnerable, but is still not at sufficient levels to be of proper value.

With regard to the much-awaited antibody tests, that confirm immunity of individuals or otherwise, Prof John Newton, of Public Health England, has declared that none of the tests trialled so far are accurate enough to be used. However, this comes on the back of the UK Government's embarrassment over the purchase of 3.5 million "game changer" antibody tests that are so inaccurate they are completely unusable.



Antigen or antibody testing - what's the difference?

Antigen:

An antigen is the substance that's capable of stimulating an immune response i.e. a virus or bacteria, or part thereof. Hence, the coronavirus antigen test is a diagnostic test used to detect the presence of the virus. The primary one that's being used during this pandemic to confirm whether an individual is infected with SARS-Cov-2 involves a reverse-transcriptase polymerase chain reaction (RT-PCR). PCR amplifies genetic sequences from the virus with the aim of typing it to the virus' RNA. Finding out if people have the infection, whether they are symptomatic or asymptomatic carriers, is particularly useful especially during the early stages of infection before antibodies have been created.

Research from China, suggests that one of the most common forms of PCR testing using throat swabs (particularly in mild cases) to detect Covid-19 produces 'false-negatives' up to 30% of the time. In this research, sputum testing had the highest accuracy followed by nasal swabs.

Whilst anecdotal, a UK citizen, animal rights activist and cancer survivor, Keith Mann, is trying to get this message out widely via email. Having contracted Covid-19 in mid-March his symptoms worsened enough for him to be hospitalised. On admittance, a chest X-ray showed infection and was ruled 'highly probable' for Covid-19. He was throat and nasally swab tested, put on oxygen and antibiotics and placed in isolation awaiting the results. The problem came when a nurse arrived without wearing any PPE, despite his symptoms, to deliver the 'good' news that the test was negative and he was being released to go home - only he was still so ill he couldn't breathe. Thankfully Mr Mann stood his ground and called for the consultant and demanded a second test. The results

of the second test were positive. But how many people less able than Mr Mann have been released to continue infecting others or worse, ended up with more serious symptoms without appropriate medical care?

Researchers in China, publishing in mid-March, with benefit of pandemic hindsight, state that, "...a single negative result of the test, particularly if it is based on an upper respiratory tract specimen, in highly suspected cases, does not exclude COVID-19. Repeat and multiple-site sampling and testing in combination with dynamic imaging changes in the chest are strongly recommended in progressive disease."

They go on to cite that the possible causes of false-negative results may be due to factors such as: "...the infected patient is at the early stage of disease with less viral load and below the threshold of detection; because of less or no significant respiratory symptoms, such as cough and sputum, there is rare virus elimination in the patient's upper respiratory tract; inappropriate sample collection, handling, shipping, and technical issues may also lead to abnormal results, which may be one of the causes of inconsistent results among different hospitals; in addition, a variety of RT-PCR assays have been developed in a short period of time during the epidemic of COVID-19, and the reagents may be immature with an uncertain diagnostic accuracy".

This is also illustrated poignantly by the Doctor who originally brought Covid-19 to the attention of the international community, and who repeatedly tested negative, but later died from the virus.

Antibody:

Antibody testing, relative to this pandemic, looks for the specific antibodies created by your body once you have been exposed to the SARS-Cov-2 virus. It's the test that everyone is eagerly awaiting given the ability to differentiate those with antibodies and those without. The premise being that if you have antibodies, you can go about your business as usual in the knowledge that you are protected from re-infection - at least until a significant mutation that might put us all back at ground zero again. Added to which, those with antibodies may well not require vaccination. Hence these tests are being seen as the panacea to get economies moving again.

Authorities in Germany, the UK, Italy and the US are considering issuing 'immunity certificates' for those who test positive for antibodies, although such a system comes with its own set of potential issues. Notwithstanding the creation of a two-tier system, we ask how authorities will deal with those who don't make antibodies or who may not have had exposure to the virus due to lockdowns? Such a scheme could be wide open to abuse and fraud as well. The answer is likely to be mandatory vaccination for all.

For more specific detail on antigen/PCR testing versus antibody testing, take a look at the video below from critical care specialist, Roger Seheult MD, of MedCram

Corona testing: the 'Wild West'

Far from being an exact science, both the diagnostic testing and the antibody testing, have been cobbled together in great haste by many companies scrambling to get a share of what could be a very lucrative market. There are 18 companies in South Korea alone. The US Centers for Disease Control (CDC) was initially trying to maintain the mandate for all the coronavirus testing, but it's proven too much of a challenge and the door has been opened to private companies. There are now 34 companies authorised on the US Food and Drug Administration (FDA) website to provide test kits. However, with the speed that tests are being brought to market a major concern is that appropriate regulation is lacking, as is sufficient accuracy and repeatability testing.

Despite the FDA setting out guidelines for manufacturers that demand a minimum 95% accuracy rating, it would appear that manufacturers are using 'contrived samples' to quantify their tests. These samples are made in a lab using coronavirus RNA in a medium that mimics nasal mucous and are not taken from actual patients. Adding another hurdle, in a statement to news portal, *ProPublica*, well recognised biomedical device and test manufacturer, Abbott, said it recommends samples should be refrigerated and tested within 72 hours. Such a recommendation could be impossible to undertake due to the huge backlogs reported by labs as tens of thousands of samples wait to be tested, yet have a critical impact on accuracy. In addition, as evidenced in the Chinese paper above, allegations of sample mishandling in labs leading to the corruption of test results have also been made.

Whether it's the test design, using old samples or sample mishandling, it's not surprising that we're seeing issues with accuracy — especially as different countries are using a variety of tests that aren't specified and which may have wildly different accuracy outcomes. All of which impact data outputs and call SARS-Cov-2 infection and death rates into question.

In terms of antibody testing, Prof John Bell of Oxford University, says there are currently 100 or more such tests kits from different suppliers available for identifying Covid-19 antibodies. Having already bought 3.5 million antibody tests and forgetting that 'try before you buy' is a good mantra for a reason, the UK Government is now reiterating how critical it is that each is checked for accuracy before making them available to the public. An antibody test must reliably not tell you are positive for anti-Covid antibodies (false positive) when you are not, or the risk is exposing yourself when you're not immune. Similarly, it is important that the test does not tell you that you are not immune when you actually are (false negative).

The unpalatable truth

This pandemic has hit with such suddenness that governments and health authorities have pretty much been caught with their pants down. As countries scramble to deal with the crisis, we're seeing very different responses - some clearly panic driven and underprepared (like the UK), others more reasoned and strategically considered (like Germany). What appears to be emerging is that we are in a quasi Third World War, albeit in a dramatically different form than its predecessors. China and the USA might be the arch rivals, but other countries seem to be scrabbling to exploit the situation and get a competitive advantage, economically, which is the likely reason why there's no sharing of best practice or best test data.

The economic pickings are rich if you get on top of the coronavirus as a country and get back to business as normal. The pickings are also rich if you're a testing company or pharmaceutical company competing to get your vaccine to the finish line first. Which is no doubt why we're seeing a first in the GlaxoSmithKline and Sanofi Pasteur collaboration to bring a vaccine to market.

As a citizen, you would be right to wonder where you fit in, as we are seeing loss of friends and families, loss of freedoms and loss of our livelihoods. The answer, in our view, is to maintain vigilance on further losses of rights and freedoms; demand the right to innovative therapeutics that have been shown to be efficacious in other countries e.g. intravenous vitamin C, anticoagulants, ozone and preventative immune enhancing protocols; keep up the pressure on antibody testing for all and campaign for low risk individuals to return to normal working practices.

Above all, we believe it's imperative that we maintain our health sovereignty and our economies, or risk being left at the mercy of governments and big corporates which increasingly reveal they are not acting in our best interests.

Getting (over) the (first) hump

Date:

16 April 2020

Is 'flattening the curve' really the right way to go and are there other options?

By Rob Verkerk PhD, founder, scientific and executive director

For all of you who've been diligently monitoring the various Covid trackers, you'll have noticed some very divergent patterns in terms of numbers of confirmed cases, new cases and trends. China appears to have the disease completely under control, although the accuracy of some of the data emerging from China has been challenged and a resurgence of the disease could easily occur in the future as it is highly unlikely that most of China's 1.4 billion population has so far acquired immunity.

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Others like South Korea, Australia and Norway, all with relatively small numbers of confirmed cases, are experiencing a flattening of their curves, while many more, such as Spain, Germany, Italy, Iran and Switzerland, are witnessing just the beginning of such a trend (Figure 1).

More disconcerting is of course the many countries that have yet to see any appreciable flattening. That includes populous countries like the USA, UK, Netherlands, Turkey, Brazil – along with many others (Figure 1). But with all this talk by governments and their scientific advisors of the need to 'flatten the curve', let's remember you're looking at the cumulative total of confirmed cases which requires there to be zero new cases to see a flat line, like China's currently (Figure 1).

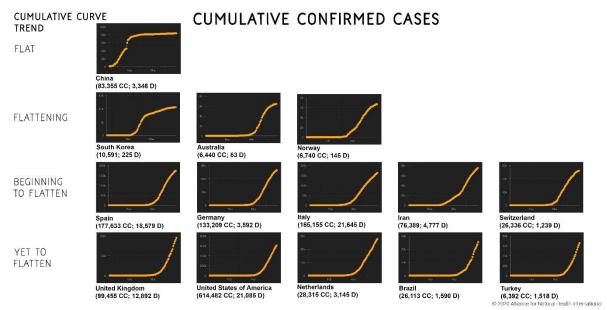


FIGURE 1. Different trends in the curves for confirmed cases among selected countries. Where CC = confirmed cases; D = deaths, based on data on 15 April 2020 from Johns Hopkins University of Medicine, Coronavirus Resource Center.

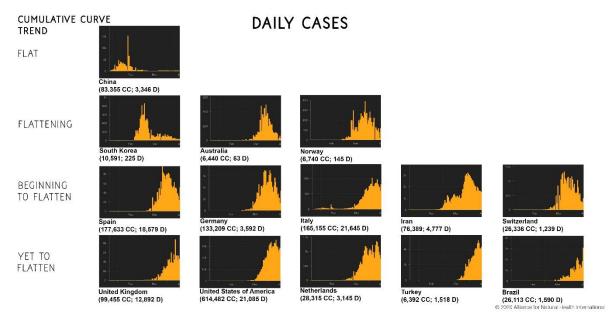


FIGURE 2. Different trends in the curves for confirmed cases among selected countries. Where CC = confirmed cases; D = deaths, based on data on 15 April 2020 from Johns Hopkins University of Medicine, Coronavirus Resource Center.

You get a better idea of what's happening at the most recent point in time with the overall epidemiology or viral spread in a given country by looking at the trends in daily occurrence of new cases. So when you look again at the same selected countries shown in Figure 1, you'll see that even those countries that appear not yet to have flattened the curve, like the UK and US, appear to be over the peak in number of new cases (Figure 2).

There are also many countries that have suffered very little in the way of Covid-related incidence and deaths – many of these being densely populated in warmer or tropical climates, such as Sierra Leone that was hit so hard by Ebola.

This begs several questions, such as: what caused infections rates to slow so markedly or for infections to hardly take off at all? Have the lockdowns and social distancing been the driving force behind declining new cases, or are other factors at play? And just how important are environmental factors?

The reality is that the scientific community does not have a solid view on these questions. But what is beginning to emerge is that social distancing and lockdowns might increase the risk of a rebound – and provide a stronger argument for the perceived need for a vaccine, for which there were 115 candidates in development as of 8 April.

Given the unique features of this disease, we get our most valuable lessons from looking at data for Covid-19, not other respiratory infections. Here, Japan and South Korea provide two of the best examples because the first infection surge in those countries appears to be well and truly over.

Flattening the curve prolongs the disease

Knut Wittkowski PhD, a renowned scientist and epidemiologist – previously the head of the Department of Biostatistics, Epidemiology, and Research Design at The Rockefeller University, New York – and currently CEO of Asdera LLC that's focused on discovery of novel treatment for complex diseases, has a particularly interesting take on it.

You can read the paper he's just published in MedRxIV or watch an interview of him below.

Among the key take homes are:

- The natural history of new infections such as the SARS-CoV-2 virus infection that causes Covid-19 means peak infection will occur quickly and in most countries would likely be over inside 90 days once naturally-acquired herd immunity through the majority of the population has been achieved – without national, untargeted lockdowns and social distancing
- Wittkowski qualifies this time frame in the following way, stating, "...that the SARS-CoV-2 data...also suggest that it takes at least a month from the first case entering the country (typically followed by others) for the epidemic to be detected, about three weeks for the number of cases to peak and a month for the epidemic to 'resolve'"
- This might result in 2% mortality among those infected, that would be able to be handled by a slight and temporary ramping up of critical care facilities
- Evidence from China and South Korea shows that the downturn in new cases started at least two weeks before lockdowns were enforced. This would suggest that the decline was a response to increased naturally-acquired immunity and not the lockdowns
- Lockdowns applied too early (e.g. many European countries, many states in the USA) with the intention of 'flattening the curve', well before peak infections are expected (e.g. UK, USA), prolong the infection and increase the likelihood of rebound in the future
- Wittkowski's real data informed model suggests that without lockdowns and social distancing, but including efforts to shield vulnerable and elderly populations, the Covid-19 epidemic would be over by mid-April (now) in Europe and beginning of May in the USA
- Wittkowski also upholds that it is likely that there is more than one strain of SARS-CoV-2 circulating, the second having considerably lower infectivity and lethality.

Is the cure worse than the disease?

This is the question that is on many of our minds. It's being increasingly asked by the public and even the media. Governments seem hazy in their responses and for many it seems that primary strategy is 'let's make it up as we go along'. It's always easier to be critical in hindsight, but a few home truths are becoming increasingly apparent:

- 1. Many governments have failed disastrously in the provision of adequate personal protective equipment (PPE) to those who need it most in the frontlines and this has created unnecessary spread of infection, sickness and death
- Quality control on antigen (swab) tests for presence of the virus and antibody (blood) tests for existing immunity has been incredibly badly managed in countries like the UK and USA. Either there has not been enough tests available or many have been inaccurate, delivering a high proportion of false positives or negatives
- 3. 50% survival rate in critical care, such as the UK intensive care units (ICUs) is both unacceptable and unnecessary
- 4. Very simplistic government messages aimed at maintaining lockdown have underestimated the public and failed to empower citizens to take responsibility for their health and improve the resilience of their immune systems, the single most important defence system each one of us has if infected by the virus
- 5. The absence of clear exit strategies from lockdowns by some governments, along with increased police enforcement, set the seeds for social unrest and uprising given the questionable net risk/benefit of national lockdowns and their huge direct and indirect, social, economic, and even health, consequences.

What should the Covid smorgasboard look like?

Many of us are becoming increasingly frustrated by the make-it-up-as-you-go-along strategy of governments.

There are a huge variety of things we could all be doing, and removing civil liberties and freedoms and imposing untargeted widescale lockdowns is only one of the options.

We've created a list below of a much wider range of options that we believe the public and parliaments, at least in so-called democratic countries, should have been engaged in exploring or trialling.

They are as follows:

- 1. Social distancing
- 2. National lockdown (domestic and commercial, non-essential services)
- 3. Selective lockdown (e.g. only vulnerable groups)

- 4. Provision of effective PPE to healthcare and essential service workers in high exposure/high risk situations
- 5. Antigen testing and confinement of infected individuals from frontline healthcare workers to general public
- 6. Antibody testing and resumption of normal activities of immune individuals from frontline healthcare workers to general public
- 7. Widescale antigen and antibody testing with relevant actions depending on results from frontline healthcare workers to general public
- 8. Antigen testing, combined with contact tracing [particularly difficult with respiratory viruses given extent of airborne transmission]
- 9. Effective approaches to immunity enhancement e.g. nutritional, therapeutic
- 10. Improved effectiveness of critical care approach and therapeutics (e.g. proning, timing of interventions, improved oxygenation, anti-inflammatories, anti-coagulants, antioxidants)
- 11. Shielding vulnerable populations (e.g. vulnerable and older individuals, care homes
- 12. Ecological control of disease (use of environmental and climatic factors and human behaviour to limit morbidity and mortality while maximising naturally-acquired herd immunity)
- 13. Traditional vaccines, using attenuated (inactivated) virus (not considered feasible given intended number of vaccine doses required)
- 14. Recombinant vaccines using genetically engineered protein fragments (plasmids) that encode for an antigen, combined with an adjuvant (e.g. an aluminium salt) that intensifies the immune response and consequent production of antibodies
- 15. Other vaccination technologies

Many of these options have not been adequately explored. There is an increasing emphasis by governments that the only way out of lockdown is mass vaccination. The public is being told very little about how the vaccines are being developed (Figure 3), or what the implications of their fast-tracking might be on safety or effectiveness.

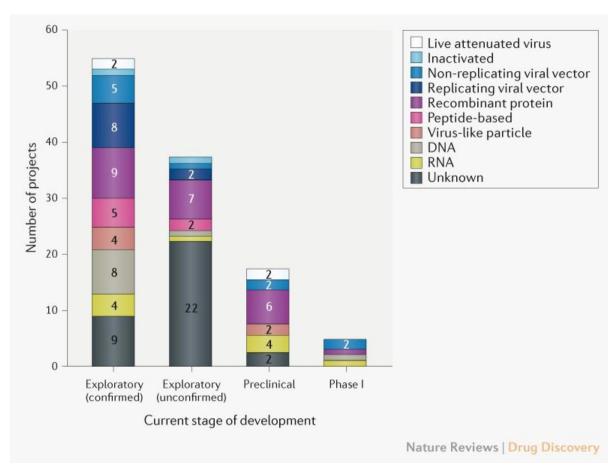


FIGURE 3. Pipeline of COVID-19 vaccine candidates by technology platform. Source: Thanh Le T, et al. The COVID-19 vaccine development landscape. Nat Rev Drug Discov. 2020 Apr 9. doi: 10.1038/d41573-020-00073-5.

They are certainly not being told that the vaccines currently being developed are predominantly the product of genetic engineering. There is no public discussion over the risks associated with such fast-tracking vaccines.

When applied previously to GSK's Pandemrix for the 2009 'swine flu' pandemic, a slew of damages that governments have consistently tried to cover up were left in its wake.

The public is also not being told that nationwide vaccination under national immunisation programmes provides legal protection to the vaccine makers in the event of no-fault vaccine-injury. This contrasts with regular therapeutic drugs for which the pharmaceutical industry remains liable in the event of litigation based on conclusive evidence of undisclosed harms.

At ANH-Intl, in evaluating all the available evidence, we believe adamantly we could be afforded a much quicker and less damaging route through this current pandemic that wouldn't involve causing such widespread collateral damage to societies and economies.

This would be a much more fluid system that would flex according to the needs of affected cities and towns. It would be country-specific and regional, not national or

international, built around the circumstances, biology and ecology of the infection in a given locality.

It would include real-world trials in which immune enhancement protocols were prioritised, alongside improved antigen and antibody testing and shielding of vulnerable populations. It would include changes in acute care management that took into account the views of those at the cutting edge of clinical care who have demonstrated high levels of success with innovative strategies. This would include routine use of high dose intravenous vitamin C in patients with severe disease. It would include nutrition and lifestyle based prevention strategies that have been demonstrated to enhance immune function. People would also be asked to send as much time outdoors as possible; not only are respiratory infections 'caught' much less frequently outdoors, exposure to sunlight will increase circulating levels of vitamin D. What evidence did northern hemisphere governments rely on when telling their public to "stay indoors" after a long winter?

Bottom line, if governments were to listen diligently and with open minds to some of the key voices we've included in our video (below) along with the views of the many others with valid knowledge and experience who are also not being adequately heard – the strategies being employed would change dramatically from those currently being enacted. Lives would be saved and the future would be far brighter. We would have adapted to a new virus – something we've done successfully many times before in our evolutionary history. As importantly, the civil liberties that our ancestors have fought to ensure over centuries in the so-called free world would remain with us.

From infectious to social uprisings?

The road we're on is undoubtedly a very dangerous one. The virus is likely the least of the dangers we currently face.

The arrest, bullying and albeit short detainment to a psychiatric ward of medical lawyer Beate Bahner in the southern German State of Baden-Württemberg serves as reminder of what can happen when government's disregard the rule of law under the pretext of this pandemic. Ms Bahner's supposed crime was organising a protest against the lockdown.

Civil unrest is building elsewhere, from Berlin to the USA, where protests have been witnessed in New York and Ohio, to name just two examples.



Last month, we urged our supporters that the key was to adapt, not fight. At that time we were only referring to dealing with the virus itself.

We now sense a different approach may be required to deal with the human, intergovernmental and governmental response to the virus. It seems more and more likely we will once again need to fight for the right to peacefully protest, to express ourselves freely and to care for our bodies in the manner we choose, even if that is by entirely natural means.

Natural bodies need natural agents

Date:

22 April 2020

In a bid to save lives, integrative doctors are using natural therapies that are barely on the mainstream list of potential therapeutic agents for Covid-19

Content Sections

- Vitamin D3 cholecalciferol
- Vitamin C
- Hydrogen peroxide
- Ozone therapy
- Hyperbaric oxygen
- lodine
- Lactoferrin
- Priority 1 saving lives?

When it comes to treating Covid-19 patients we're witnessing double standards. Researchers are tripping over themselves to explore new and existing drug therapies to find the magic bullet that will treat all and deal with the scourge of Covid-19. However, little or no attention is being paid to the potential of natural products and practices to both treat patients and improve immune resilience. Worse, there is widespread censorship occurring on information posted about potential natural treatments and preventative practices.

As it stands, in excess of 50 possible treatments are being studied, or slated for study, for efficacy in treating Covid-19 patients, however, no 'proven' therapies are considered to yet exist. Search the NIH clinical trials database and you'll find 745 (as of 21/04/20) trials registered each seeking the magic bullet for SARS-CoV-2. Of those, a paltry 28 (4%) are investigating natural health therapeutics such as vitamin C, vitamin D, zinc, Ayurveda, Traditional Chinese Medicine and hyperbaric oxygen therapy. But we say why wait for a research trial when there is clinical experience to rely on - past and present?

• Find related articles, information and videos in our Covid Zone

Last week the Infectious Diseases Society of America issued its Guidelines on the Treatment and Management of Patients with COVID-19. Unsurprisingly the guidelines are about the use of drugs to treat those hospitalised due to Covid-19 and strongly discourage the use of 'unproven drugs' due their potential to harm patients or be ineffective. Underpinning this warning is the much stronger message that the only way to deal with the situation and regain our freedom is to wait until a vaccine becomes available.

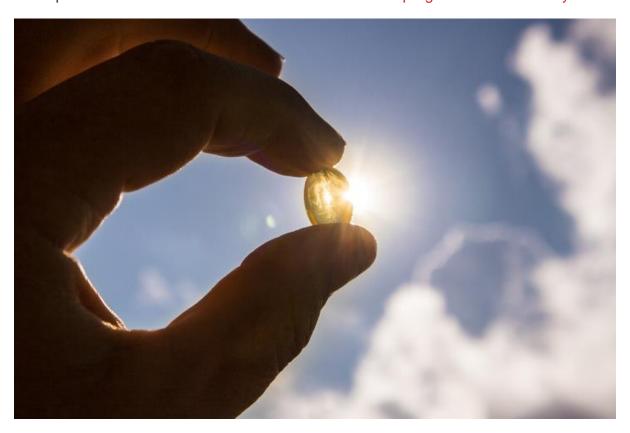
But what of the plethora of natural therapeutics with a long history of safe use and proven efficacy in dealing with viral infections, that are being used to great effect by a handful of doctors in countries without centralised health systems? We look at a few of the top non-patented therapeutics, their mechanisms and current clinical experience to offer you a bit more food for thought.

Please understand that the information below is not medical advice, nor are these clinical recommendations for SARS-CoV-2. We are sharing elements of best clinical practice from registered doctors using novel and natural therapeutic interventions during this pandemic as we believe there is a lot to be gained from clinical experience - and insightful knowledge of nature and human interactions with the microbial world. If you are in need of treatment for SARS-CoV-2 and are interested in anything you have read in this article, please discuss it with your medical health professional. Please also note that it may be possible to reach out to doctors via an online consultation if you are not seriously ill enough to require hospitalisation.

NATURAL THERAPEUTICS

Vitamin D3 - cholecalciferol

We've written about the essentiality of vitamin D for optimal immune function previously. However, it's included here again given the increasing recognition in the mainstream of the impact of low levels of vitamin D on covid-19 disease progression and severity.



It is also becoming increasingly apparent that black, Asian and minority ethnic people (BAME) are at higher risk of dying if they become infected with Covid-19. In the UK, the Government has launched an investigation as it has emerged that 70% of frontline medical staff who have died following contracting Covid-19 were BAME. Early evidence also shows that high rates of African Americans have been badly affected by Covid-19 too. In the UK, 34% of critically ill patients were BAME. It's thought that one of the factors contributing to the enhanced risk for BAME individuals is a low circulating level of vitamin D, particularly prevalent now at the end of the winter in the northern hemisphere. This coupled with obesity and metabolic dysregulation could well prove a lethal coronavirus triad.

Calls are being made to provide vitamin D3 (cholecalciferol) supplements to those at highest risk, such as frontline health care workers, paramedics and care staff in hospices, nursing homes and caring for the elderly. The Scottish government is one step ahead of England and Wales having already recommended that everyone takes a vitamin D supplement. However, we would argue that the recommended 10 mcg (400 IU) is woefully insufficient to return someone to immune-protecting adequacy.

Despite reports that Public Health England (PHE) will be updating its advice on vitamin D, its chief nutritionist is reported as saying that, "...there is not sufficient evidence to support recommending vitamin D for reducing the risk of Covid-19". Again, we would urge citizens to take matters into their own hands and start taking a daily preventative dose of 100 mcg (4,000 IU) vitamin D3 orally assuming no significant exposure to sunlight (80% of body, around 2 hours at this time of year, at latitudes similar to London). This dose has been consistently shown to deliver optimal circulating levels of 25-hydroxyvitamin D (25(OH)D) unless you are starting from a particularly low level.

Vitamin C

Vitamin C doesn't only prevent scurvy, it's also a potent modulator of both the innate and adaptive immune system and has a capacity to treat and shorten periods of infection with a wide range of pathogens, including respiratory viruses. This isn't new information. We've known about its importance as an antiviral agent since 1949 when Dr Fred Klenner published a report entitled, 'The Treatment of Poliomyelitis and Other Virus Diseases with Vitamin C'. Poliomyelitis is also a highly contagious disease caused by a virus that rendered many disabled for life, which makes these results all the more remarkable.

Linus Pauling, winner of two Nobel prizes and potentially the greatest chemist of the last century, claimed that vitamin C could cure infections, cancer and heart disease. He died having been labelled a quack, yet, many clinicians have gone on to successfully validate these claims. Studies on high dose vitamin C use have been published in the literature for over 50 years. Dr Thomas Levy and Dr Jeanne Drisko (also medical director ANH-USA) are two of the foremost clinicians at the forefront of vitamin C therapy.

Yet publicity about vitamin C treatment for Covid-19 patients — whether high dose oral or intravenous (IV), the latter licensed for medical use in many countries — is being classed as fake information by mainstream media and healthcare authorities. This despite it having been shown time and again to significantly reduce disease progression, time spent in hospital and improve recovery rates without permanent adverse effects.

Why? As unpalatable as this is, the simple reason is that vitamin C is cheap, it can't be patented and there's no profit in it for the drug companies.

The way vitamin C fights infection is fairly simple: infections and toxins cause inflammation and oxidative stress in the body. Electrons from vitamin C are then used by cells that have lost their electrons through the oxidation process, which in turn neutralises the free radical damage from harmful infectious agents. In nutritional doses, vitamin C acts as an antioxidant and can be taken safely to bowel tolerance (in divided doses until you get a loose bowel). When your body is fighting an infection you may find that you can absorb a lot more vitamin C than normal before hitting bowel tolerance.

In the case of SARS-CoV-2, the virus causes iron to be released from the haemoglobin in red blood cells which causes hypoxia as it reduces the oxygen-carrying capacity of red blood cells. This causes a lot of free iron ions to be freely circulating in the blood because the virus needs iron to replicate. However, these iron ions also create a lot of oxidative damage as well. This is how coronavirus then becomes a blood disease and why treatments like IV-C can deliver such beneficial results as they're delivered directly into the bloodstream.



High dose IV vitamin C (over 20 grams and up to 100 grams a day in daily or pulsed doses), unlike nutritional doses, becomes a pro-oxidant through producing hydrogen peroxide, and with the iron ions (the Fenton Reaction) become an effective killer of viruses and cancer tumours. Think of how hydrogen peroxide bubbles when you apply it to a cut. With vitamin C, the Fenton's Reaction makes it among the most powerful reactive oxidising agents known to science. Viruses can't withstand that reaction, which is why clinicians using it now during this pandemic are seeing rapid success with full recovery.

Unlike most mammals, humans cannot make vitamin C. When illness strikes our stores are rapidly depleted and the need for vitamin C increases exponentially. Oral supplementation with vitamin C has shown an ability to both prevent and treat respiratory and systemic infections, but a number of clinical studies are currently looking at the role of vitamin C in tackling Covid-19. Emerging data from China have shown success in treating patients, reducing severity of disease progression along with ICU and hospital stays. The Chinese medical authorities are also supplementing frontline staff to support their immune systems thanks to Dutch-based nutritional raw material manufacturer, DSM, which shipped 50 tonnes of vitamin C to Wuhan Province from its Jiangshan plant.

Hydrogen peroxide

In addition to the hydrogen peroxide created internally through the Fenton Reaction when delivering high dose IV-C, hydrogen peroxide can be used as a standalone treatment by infected people at home. Because the immune system also uses hydrogen peroxide to improve the ability of cells to resist viral infection, even small amounts can inactivate coronaviruses, including SARS and MERS that have higher virulence than SARS-CoV-2. Whilst the current SARS-CoV-2 infection has greater transmissibility than the deadly but not very contagious MERS coronavirus, integrative clinicians like Dr David Brownstein in the US have found the use of a nebuliser to be the most effective way to administer this non-toxic therapy to fight the infection.



Dr Brownstein and his clinical team have written extensively on their website about the innovative natural treatments they are using to great success on very ill Covid-19 patients. To date they have not lost a single patient (out of over 100), had any cases of secondary pneumonia or had to admit any to hospital. Treatments include high doses of vitamins A, C, D, iodine, nebulisation of hydrogen peroxide and ozone therapy, plus IV therapies when symptoms demanded it.

Dr Thomas Levy is quoted as saying that, "Effective hydrogen peroxide nebulization quite literally, 'chops the head off of the snake,' and the virus present elsewhere in the body can then readily be mopped up when the new virus influx has been terminated". Dr Levy's current hydrogen peroxide nebuliser protocol to treat Covid-19 infection was originally conceptualised by Charles Farr MD around 1990, but subsequently researched and prescribed by Dr Frank Shallenberger.

Ozone therapy

Ozone has been utilised and heavily studied for more than a century given its ability to disinfect, sterilise, deodorise, detoxify and bleach. Its effects are proven, consistent, safe and with minimal and preventable side effects. Its mechanism of action is by inactivation of bacteria, viruses, fungi, yeast and protozoa, stimulation of oxygen metabolism and activation of the immune system. Described as the most powerful oxidant to be found in nature, ozone costs pennies and has been proven to kill the SARS coronavirus, which is closely related to the new SARS-CoV-2.

A recent commentary in the *Journal of Infectious Disease and Epidemiology* puts forward the case for ozone treatment as a cheap and effective method. Ozone destroys viruses by diffusing through the protein coat into the nucleic acid core, resulting in damage of the viral RNA. At higher concentrations, ozone destroys the capsid or exterior protein shell by oxidation. Ozone can be administered via the use of injections, IVs or through using an ozone generator to breathe in the gas.

Aside from its use as a therapeutic agent, ozone could well be a viable method for cleansing public places (buses and trains) and crowded spaces without side effects or the use of toxic chemicals. As Prof Zhou Muzhi, Tokyo Keizai University and president of Cloud River Urban Research Institute, states in his comment to China.org.cn at the end of February, the question here is how to create ozone sensors that will deliver the right concentration of ozone for the right cost. He points out that our relationship to ozone is integral to life on this planet. Without the protection of the ozone layer, we would not find bacteria and viruses on Earth, but ozone also has the ability to kill them at the right concentrations.

Hyperbaric oxygen

People who die from SARS-CoV-2 generally die from hypoxemic respiratory failure, cytokine storm and associated organ failure. Hyperbaric oxygen (HBOT) chambers have been widely used to treat people with altitude and decompression sickness, namely high altitude mountain climbers and scuba divers. They allow patients to breathe 100% oxygen at a pressure greater than that found at sea level. This increases tissue

oxygenation by releasing the additional oxygen carried in solution, as against haemoglobin. As conventional medicine gains more understanding on why the use of ventilators too early might be causing more harm than good, alternative methods that improve blood oxygen saturation in patients' blood are being tested. This also includes proning and breathing techniques, where patients are laid on their front instead of their backs to free up the small capillaries in the lungs and aid breathing.

It's the vision of Cambridge life-support system specialist, Lungfish Dive Systems, to transform grounded airliners into makeshift hyperbaric oxygen chambers to prevent Covid patients from deteriorating to the point where they need invasive ventilation.

A number of trials have been registered to investigate the use of hyperbaric oxygen to deal with hypoxia in hospitalised patients.

lodine

lodine is so potent against all classes of pathogens: bacteria, viruses, moulds, yeasts and protozoa, that it's still used topically for operations and wound cleaning today. Iodine has been shown to be able to neutralise other coronaviruses in vitro and gargling with an iodine solution can reduce the prevalence of respiratory disease by up to 50%.

British GP and integrative physician Dr Sarah Myhill routinely recommends Lugol's liquid iodine as an integral element of her preventative protocol to reduce risk of infection.

Liquid iodine can be sniffed, applied topically and taken orally. It can also be nebulised with other liquids. For the internal use of iodine, dosages require the support of an iodine-literate health professional who can take your personal circumstances into account.

Lactoferrin

From an evolutionary perspective lactoferrin plays such a key important role in the functioning of the innate immune system, over 2 grams can be found in each litre of breast milk. It's an antimicrobial glycoprotein produced by neutrophils (a type of white blood cell) and exocrine glands (lactation, mucosa, saliva, sweat, etc). It's among the most potent non-inflammatory immune-active molecules that our bodies produces and is a strong inhibitor of pathogens, including DNA and RNA viruses. Lactoferrin is produced most prolifically during the initial (acute) stages of viral infection by preventing viruses from recognising and invading host cells, but we know it's production declines with age and this may be a factor in the susceptibility of the elderly with age.



Most importantly for coronavirus infections is lactoferrin's ability to bind iron in the body, which reduces the circulating iron ions and inhibits the ability of pathogens to multiply. The apolactoferrin form has the most powerful effects. It can be consumed as a supplement. It can also be produced in greater quantities by intense, high interval training, particularly involving the upper body.

Priority 1 - saving lives?

When considering plausibility of mechanisms, emerging evidence of treatment success and their low cost, it's remarkable that more natural therapies have not found their way into routine critical care for Covid-19 patients. That's of course until you recognise this isn't just about medicine. This is as much about the biomedical and economic model that has driven healthcare decision-making for over half a century.

Compare that with the high cost of new-to-nature antiviral drugs or the massive (but yet unknown) societal cost of genetically-engineered vaccines, the idea becomes even more preposterous.

Surely, if saving lives was the number one priority, given the virulence and transmissibility of SARS-CoV-2, we should be using all possible viable and cost-effective treatments regardless of politics, patents or potential profits? These are important questions to be put to governments and others in authority and the grassroots and integrative medical community need to vigorously reject the marginalisation of such therapies based on the worn rhetoric of 'fake news', 'misinformation' or insufficient scientific proof.

Return to our Covid Zone

Return to the homepage

Further reading with grateful thanks to Simon Best, editor Caduceus Magazine and Dr Richard Hobday

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Grant WB, Lahore H, McDonnell SL, Baggerly CA, French CB, Aliano JL and Bhattoa HP. Evidence vitamin D supplementation could prevent influenza and COVID-19 infections and deaths. *Nutrients*. 2020;12:4: 988.

McCartney D, Byrne D. Optimisation of vitamin D status for enhanced immuno-protection against Covid-19. *Ir Med J.* 2020;113(4):p58.

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Hobday RA. 10 Mar 2020. Coronavirus and the Sun: a Lesson from the 1918 Influenza Pandemic.

Hobday RA. 27 Mar 2020. Coronavirus and Open Windows: some Science from the Cold War.

Talking turkey over tea about lockdown

Date:

22 April 2020

Don Mei and Rob Verkerk speculate about lockdown and its implications

Content Sections

- Vaccines: Holy Grail or wholly risky?
- The logic of lockdown
- Lockdown at what cost?

By Rob Verkerk PhD, founder, scientific and executive director

Bill Gates said in a recent interview with Chris Wallace of Fox News, "It's fair to say things won't go back to truly normal until we have a vaccine that we've gotten out basically to the entire world."

Vaccines: Holy Grail or wholly risky?

A vaccine sounds plausible as the primary way out of lockdown – but only if it's assumed it will be both effective and safe. That's one very big gamble to take if mass vaccination of the world's population is your only exit strategy.

- Especially when you consider that vaccine makers have never before made a vaccine at scale that works against coronaviruses
- Or that vaccines are being fast-tracked at an unprecedented rate so will have escaped the usual safety and efficacy testing that normally takes at least 6 years
- Or that given the competition for vaccines with multiple candidates and vested interests, there will probably be multiple vaccines unleashed in different parts of the world, with varying safety and efficacy profiles
- Or that those vaccines that make it commercially will likely rely on new platforms capable of delivering at scale, involving genetic engineering, that have never been used before
- Or that the people who are most susceptible are older people whose immune systems have become less effective with age (immunosenescence) or that those with serious underlying diseases typically suffer systemic inflammation ('inflammaging') which includes compromised immune function
- Or, even, that previous attempts to develop vaccines for coronaviruses have led to disturbing side effects. Check out Covid Reference v3 (page 93-100) just out yesterday if you want more information on this.

The logic of lockdown

We're only just beginning to get some sense of the collateral damage being caused by 'complete lockdowns', the idea stemming from the primitive approach to the reduction of contagion that was used to protect societies from infectious diseases like the plague during the Middle Ages. It's not all bad though. 'King Lear', regarded as one of Shakespeare's greatest works, was ostensibly penned during lockdown while the plague wreaked havoc.

In pondering the scientific basis of lockdowns, Report 13 (see page 2) by Professor Ian Ferguson's Imperial College COVID-19 Response Team, the group that provided much of the modelling data used to justify lockdowns, is a worthy read. Ferguson's models suggest that between 7 and 43 million individuals are likely to have been infected with SARS-CoV-2 up to 28th March, this representing between 2% and 11.4% of these countries' total population.

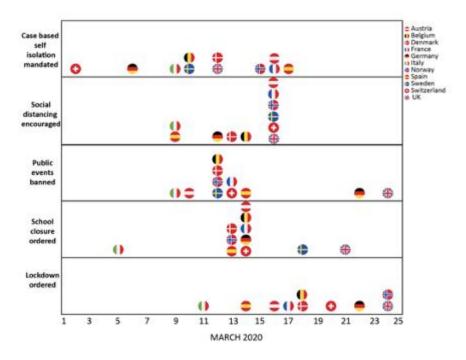


FIGURE. Staged lockdown procedures mandated by governments in 11 European countries during March 2020 (Source: Report 13, Imperial College COVID-19 Response Team).

Getting your numbers from a model is one thing - but surely we should now be in a position to have reliable numbers from the real world? It's stunning to us that there is still so much uncertainty around the denominator – the total number who have been infected – both symptomatically and asymptomatically. Equally, we can't even be sure of death rates, given the blurring between people who died of, or with, Covid-19.

In a world where precision medicine is meant to be *de rigeur* – with billions diverted to help deal with the virus – it is incomprehensible that we still know so little. More than that, the conclusions of Ferguson's group's Report 13 (see page 2), need to be assimilated. I paraphrase them as follows: *We're not really sure if the lockdowns are working. We've based all our modelling that persuaded most countries to lockdown on*

data from China which was at a more advanced stage of the epidemic than European countries and the USA. "It is therefore critical" that lockdowns are maintained so we can confirm whether we were right in our advice to lockdown and whether lockdowns actually do contribute to the slowing of transmission.

While work continues frenetically on vaccines, views even among experts are inconsistent. Particularly at odds with each other are the views of vaccine developers, such as those under development at Imperial College and Oxford University, versus those of mucosal immunologists. Professor Robin Shattock at Imperial College who is one of the first out of the blocks with a candidate synthetic vaccine gave the impression, in an interview with BBC Radio 4 earlier today, that the whole development process is relatively straight forward, and that safety risks for those who volunteer for trials that are planned to start in the UK in June would not be a significant issue. Interestingly, he also indicated concern that the infection wave might be largely over quite soon making it more difficult to trial the vaccine in the UK.

By contrast, German mucosal immunologists Bernd Sebastian Kamps, Christian Hoffmann and other colleagues in Germany, state in the third edition (p. 95) of their Covid Reference: "Unfortunately there is some data hinting at the possibility that the development of a safe vaccine against COVID-19 might be unusually difficult."

Are they expecting us to be their guinea pigs so these scientific factions can work out who's right?

Lockdown at what cost?

Stripping millions of people of their fundamental rights and civil liberties, destroying economies and livelihoods and censoring free speech is a most unusual way of validating mathematical models created by a university research group.

Should we blindly accept the 'flatten the curve' mantra, or, based on uncertain evidence, accept the wearing of face masks so that authorities will have greater reason to force Bill Gates' ID2020 chips and agenda on us so they'll know everyone's identity and vaccination history?

It's the confusion around these kinds of issues that triggered tea guru Don Mei from Mei Leaf in London to have a socially distanced tea-drinking conversation with me on the 'logic of lockdown'. Don let the camera roll and while sipping tea, we speculated on this issue late on Monday afternoon.

You can watch our discussion below, or listen to it as a podcast.

Watch the video

Thinking and saving lives outside the box

Date:

22 April 2020

What dynamics attract mainstream medical interests to patented approaches while rejecting natural approaches

Content Sections

- Variation in outcomes
- Patented synthetic versus unpatented natural
- Outside the box

It's a common view that the 'complete lockdown' many of us are still enduring was our only option. There's very little focus on what might have been - or even on what might still be, in terms of how we exit from lockdown. What the natural course of the disease would have been without full lockdown? Especially if we'd elected to pump way more resources into testing as well as focusing on shielding vulnerable older populations – leaving the rest of society to get on with life.

Tomas Peuyo's article that espouses a 'hammer and dance' strategy has had 40 million views, has been translated into 30 different languages, and forms the basis of a petition to the White House. Pueyo's 'hammer' is the non-pharmaceutical lockdown measures we've recently become so familiar with, while the 'dance' refers to the longer-term strategies for managing the disease, notably vaccines.

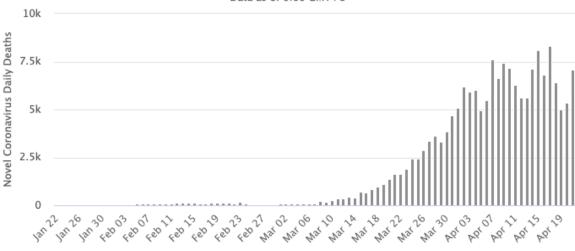
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There's little talk of another hammer – which might include better ways of managing severe disease among the small proportion affected in this way, while simultaneously preventing critical care facilities from being overrun. This would likely still include selective deployment of non-pharmaceutical measures such as social distancing and shielding of vulnerable populations.

If you could substantially reduce the number of deaths among that very small proportion of those infected with SARS-CoV-2 who become seriously ill in critical care units in hospitals, we could all go back to life as usual once this first wave of the pandemic has passed. The evidence (below) points to the fact that most of the world is already over the hump (see Figure below).

Daily Deaths

Deaths per Day Data as of 0:00 GMT+8



Daily death rate from Covid-19 (as of 22 April 2020). Source: Worldometer

It's a big ask of course – and there's no doubt that critical care doctors are doing their best within the bounds of their resources, knowledge base, experience and permitted codes of practice. It's also the first time for many that they're dealing with a novel disease that can be particularly ravaging among the elderly and those with underlying diseases.

But are citizens infected with Covid-19 and suffering severe disease getting the best possible care and treatments?

Variation in outcomes

What is emerging is that there are considerable variations both between different countries and between different combinations of strategies in critical care facilities. It's not within our remit here to discuss all of the options available, but it is of great importance that there is wild variation between survival rates in different countries and critical care units. This can be down to many factors, including different strains (there are currently at least 3), different population susceptibilities and different exposure levels, to mention just three variables. UK intensive care units don't currently seem to be the safest places to be sent with serious Covid-19 illness. The UK's Intensive Care National Audit and Research Centre (ICNARC) continues to report that only about half those entering critical care come out alive (see ICNARC report, 17 April 2020). Three quarters have a BMI of 25 or more and around the same proportion are male. There is no push from the UK government to help people, especially men, to lose weight or reduce their risk of hypertension or metabolic diseases - that could reduce their susceptibility dramatically. By comparison, in a study of patients admitted to critical care units in Hong Kong, only 22% died. What's more – the majority of the literature emerging on novel therapeutics involves re-purposing existing therapeutic agents (e.g. hydroxychloroquine, chloroquine, corticosteroids) or looking at novel therapeutic agents (remdesivir, favipiravir, lopinavir) or vaccines. This bias appears to be driven more by the business model that can exploit the Covid-19 phenomenon than the genuine needs and welfare of citizens.

Patented synthetic versus unpatented natural

Herein lies one of the most fundamental challenges: the rivalry between patented therapeutic approaches and use of unpatented natural agents that have demonstrated high levels of success in the hands of those clinicians who have used them to help save lives. With a novel viral disease with a capacity to kill significant numbers, positive results derived from the 'art' of medicine as well as clinical experience, knowledge and expertise are hugely significant. Embracing approaches borne out of such knowledge and experience casts into the wind the evidence-based medicine model that most doctors have been taught to uphold throughout their careers: that you need highly powered, multi-centre randomised clinical trials, and ideally meta-analyses of these, before you can determine the best therapeutic strategy.

Outside the box

But when doctors are faced with doing the best for their patients, especially if not constrained by the system in which they work as is the case with privately-funded, integrative medicine doctors, a different process can take precedence.

For these doctors, there's generally a deep understanding of a known or likely mechanism for why an agent might work which triggers its use in the first place. There's usually also experience with similar diseases with related modes of action. Then, when a doctor or group of doctors are able to demonstrate outcomes that appear to stop patients with severe disease from dying, the word gets out (unless it's interfered with through censorship). Like most doctors, they are enthusiastic fans of the Hippocratic Oath, and they believe there's just not enough time to wait for randomised clinical trials to be conducted before they deploy what they consider to be safe and medically plausible therapies. Looking at the mainstream end of critical care, this very approach has led to a recognition that mechanical ventilators may not be the saviour they were first thought to be in critical care. This is because Covid-19 patients respond very differently to those with non-Covid viral pneumonia and the majority of mechanically ventilated Covid-19 patients tend to die (88% in a JAMA published study of hospitalised patients in the New York City Area). Conversely – there are interesting data showing the importance of other agents and approaches that don't involve patented medicines that are at risk of being demoted in value - simply because they are not patented and therefore not supported by commercial interests. That is the way the biomedical model has worked for the last 60 or so years and this needs to be recognised at a time when people – sometimes including our loved ones – might be dying unnecessarily.

In another article published today, we take a closer look at some of the natural treatments marginalised by mainstream medical interests that brave, forward-thinking doctors are using to help save lives.

Dissent in the ranks

Date:

29 April 2020

Increasing censorship of dissenting voices makes rational debate ever more difficult

For more and more people, the logic and apparent science being used to justify extreme lockdown and social distancing measures is making less and less sense.

For weeks, the public was told the aim was to 'flatten the curve' to avoid critical care facilities in hospitals from being overrun. In most countries now, the curves have flattened. Very few critical care facilities were ever overrun – and what's more, many hospitals were deserted, having most of their routine work cancelled, the consequences of which we're yet to fully come to grips with.

Some countries like Sweden that endured lighter measures, didn't suffer worse outcomes, suggesting that the natural history of the disease and natural immunity may have been as important if not more important in flattening the curve than complete lockdowns.

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Non-mainstream UK media channel UnHerd <u>interviewed</u> the ex-head of the European Centre for Disease Control, Swedish professor Johan Giesecke, only to follow it up with Imperial College's Professor Neil Ferguson. The fundamental differences in the views of both epidemiologists were palpable – all good fodder for a news channel. But also a reminder why governments seem so unclear about which measures work or how to exit from the various degrees of lockdown.

Over the last couple of weeks, we've seen unprecedented censorship of free expression on major social media platforms, with presentations by people like Dr Rashid
Buttar being regularly banned, only to be re-posted by followers before being censored again.

We've witnessed the establishment of a crowd-funded new media platform, the Digital Freedom Platform, free from censorship on <u>London Real</u>, the brainchild of ex-banker turned journalist, <u>Brian Rose</u>.

We've seen doctors and nurses speak out, questioning the rationale of the measures and protocols they're being asked to follow.

And, very significantly, a key legal challenge has been launched in Ireland, arguing the lockdown measures and potential for mandatory vaccines are unconstitutional.

Following are just a few of these dissenting voices - we're aware there are many more:

Drs Dan Erickson and Artin Massihi from Accelerated Urgent Care, California, USA

- press conference (6:09) Broadcast date: 22 April 2020

Link to full conference

Prof Knut M Wittkowski PhD, Epidemiologist, USA (1:04:25)

Publication date: 28 April 2020

Prof Johan Giesecke, Sweden (34:53) Why lockdowns are the wrong policy

Publication date: 17 April 2020

Gemma O'Doherty and John Waters at The High Court Dublin, Ireland (3:24)

Broadcast date: 21 April 2020

Sara - Nurse/Practitioner Whistleblower, USA (10:25)

Publication date: 26 April 2020

Podcast - Cheryl Comley, Washington Post, USA (33:03) Government Gone Wild

It's not just COVID-19 that is bringing about a government that's gone wild with the dictatorial style of leadership -- though the coronavirus is leading to some serious constitutional dings. But in Texas, the Supreme Court has a case of eye-opening proportions that's seeing a fit and proper biological dad having to fight for custody of his little girl -- because another guy who used to live with the girl feels like he's a dad. It's Real Dad vs Fake Dad, and Jeremy Newman with the Texas Home School Coalition has the shocking story.

Find related articles, information and videos in our Covid Zone

Lessons from the outdoors

Date:

29 April 2020

A reminder that the solution isn't always a new technology: Nature has most of the answers

Content Sections

- What on Earth...
- Everything's on pause...
- Four things you benefit from when you spend time outdoors
- How lockdown is improving the quality of our environment

Before Covid-19 entered our vocabulary, we were surfing on the crest of a wave in our understanding of human health and its intimate connection with the natural world. We had already strayed from the idea that our genome was a fixed blueprint, one in which our environment, both internally and externally, decides what tune our genome will play. It is our environment that controls how our genes are expressed, and it's gene expression, ultimately, that determines our health.

What on Earth...

Then in comes Covid-19 and all seems forgotten. The new measures seem intended to make us feel it's outside where the danger lurks – that the only safe havens are our homes. We're taught to become fearful of this new coronavirus – that venturing outside will invite danger, whether or not we keep our distance from others.

None of that makes any sense scientifically. It's as if we've thrown the science books and those decades of learning away, while we're meant to blindly accept governments and health authorities at their word, that all the Covid-19 measures that we we're being forced to incorporate into our lives are driven by science.

Find related articles, information and videos in our Covid Zone

In the pre-Covid era, we had entered the world of precision and personalised medicine. The work on the gut microbiota and microbiome spawned a new understanding of the seminal importance of our relationship with the microbes within us and around us. Epigenetics was maturing as a science and we had come to learn just how important our environment is to our overall state of health and wellbeing, and we were moving towards understanding the need for systems-based and sustainable approaches to health care. As we at ANH-Intl have long upheld, it is a universal ecological understanding of human health that will contribute to major improvements in healthspan going forwards.

Everything's on pause...

But in so many ways, the emergency measures declared since the discovery of Covid-19 have forced us backwards. At a time when antimicrobial resistance has reared its head as one of the most significant problems facing healthcare, health authorities have engendered more fear of the microbial world. All of this drives wider use of disinfectants around homes and outdoor spaces. Less time with each other and our loved ones, facing job losses, financial ruin and unprecedented levels of disease-inducing stress. And the spectre of sidelining all the other diseases with which the healthcare system had previously been so busy handling, the impact of which will become clear in the months ahead. Let's get a grip – and remind ourselves that it's time to adapt to this new virus and get on with life. Let's move forward, informed by our greatest teacher: **nature**.

Four things you benefit from when you spend time outdoors

- Vitamin D by exposing your body to sunlight you increase your circulating levels
 of 25(OH)D that converts to the active form, 1,25-dihydroxyvitamin D3 which is
 critical to immune system function
- By taking prolonged rhythmic exercise outdoors (e.g. walking, cycling, gentle
 jogging), the body upregulates production of endocannabinoids and these bind to
 cannabinoid receptor 2 (CB2) that enhances immune tolerance
- Being outdoors allows us to be exposed to microbial diversity with which we've had
 exposure through the majority of our evolution, that enhances our immune
 resilience. This mechanism is referred to as the 'old friends mechanism' and is
 increasingly considered by scientists a better reflection of what happens than the
 'hygiene hypothesis'
- Being outdoors allows us peace of mind. Scientists are applying themselves now to understanding how reduced work pressure for some during the lockdown has facilitated more time in nature benefiting especially those living in heavily crowded urban areas. Time in nature is known to benefit mental health
- Long-term exposure to unpolluted air reduces our susceptibility to Covid-19, the reverse, obviously, also being true. A number of studies have shown clear correlations between high air pollution levels and Covid disease. This includes studies in the USA and China.

How lockdown is improving the quality of our environment

There are many things we can learn from nature, including learning what happens when we interfere with it less, as has been the case during the global lockdown.

Three interesting facts:

- China's carbon dioxide emissions have reduced by one half, and the pandemic is set to cause the largest ever fall in carbon dioxide emissions
- The Sentinel-5P satellite sent back some fascinating images showing the reduction in nitrogen dioxide (NO2) air pollutant levels above Europe, China and Italy during the pandemic
- A few may have been lucky enough to see goats roaming Welsh streets!

The 10-point vaccine transparency approach

Date:

29 April 2020

ANH together with the British Society for Ecological Medicine calls on UK government to heed vaccine transparency

Content Sections

 Open letter to the UK Secretary of State for Health and Social Care, Matt Hancock MP

We're told repeatedly by our governments that we'll only be allowed to emerge from various degrees of restriction to our freedoms once a vaccine is ready. That might take 12 to 18 months. We're being given the impression it's a straightforward process, that's why it can be fast-tracked at a rate that surpasses any other vaccine ever produced. Hindsight's a fine thing, but surely we need to learn from what went wrong last time round - when vaccines were produced for the last pandemic, the influenza A/H1N1 'swine flu' virus back in 2009/10?

The solution has to be vaccine transparency. And we need to change the narrative from the World Health Organization (WHO)'s 'vaccine hesitancy', that the WHO rates as among the 10 greatest threats to global health, to vaccine transparency.

• Find related articles, information and videos in our Covid Zone

So today, in conjunction with our medical doctor colleagues at the British Society for Ecological Medicine, we've sent an open letter to Matt Hancock, the UK Secretary of State for Health and Social Care calling on a new public narrative around vaccines. This narrative is about transparency, something that's been sorely missing through the development and roll-out of a number of recent vaccines.

Download Open Letter to Matt Hancock that includes the 10-point vaccine transparency approach (the full letter can be found in text below)

The taboo that has been created around even debating vaccination is unacceptable in a world that is rushing ahead with the development of global vaccines for Covid-19, often relying on untried or embryonic technology platforms.

Instead of pitching the blame at those citizens who choose to not give their consent for their own or their children's vaccination, the powers-that-be must recognise their own role in contributing to this situation through the withholding of data and information, as well as inadequate safety testing.

Transparency must occur in multiple areas: clinical trial designs, the results from trials, raw data from trials to allow independent analysis, clarification around vaccine injury payments in the event of no-fault injuries, eligibility criteria for such payments, and,

among other things, details of government indemnities, where applicable, for vaccine manufacturers.

Download our vaccine transparency manifesto flyers - UK / International

The aim is to avoid the mistakes of the past in which sponsorship bias, withholding of data by health authorities, incomplete communication of information to the public and the academic community, among other shortcomings, has led to unnecessary vaccine injury and public distrust of vaccines.

Members of the public or academics who seek answers to questions around vaccine safety have been routinely vilified and labelled 'anti-vaxxers' and their communications are censored on social media.

If we are to establish a 'new normal', as our politicians seem intent to do, this approach is not tenable. Lack of transparency around the development and testing of Covid-19 vaccines will lead to further divisions in communities, at a time when division will only exacerbate the challenges facing societies since the pandemic arose. It will give governments more reason to deny citizens fundamental human rights and freedoms, as well as increase the risk of martial law being imposed.

The narrative around vaccines must fundamentally change. We must transition away from coercive public policy driven by vaccine protagonists that projects a view of the unassailable safety and effectiveness of vaccines. Doing so only misleads the public over the quality and certainty of the science on which mass vaccination programmes are justified, and denies the public the information needed for properly informed consent.

We call on our friends and colleagues in other parts of the world to also pressure their governments to heed vaccine transparency, using whatever parts of our letter to Matt Hancock that may be relevant.

Open letter to the UK Secretary of State for Health and Social Care, Matt Hancock MP

Open letter to the Rt Hon Matt Hancock MP [By email and hard copy]

The Rt Hon Matt Hancock MP

Secretary of State for Health and Social Care House of Commons London, SW1A 0AA

29 April 2020

Dear Secretary of State

RE THE CRITICAL NEED FOR TRANSPARENCY AROUND COVID-19 VACCINES

As a non-profit organisation representing diverse interests in natural and sustainable health, and a medical association of doctors who practice ecological (including nutritional and environmental) medicine, we hereby request that the Department of Health, the Joint Committee on Vaccination and Immunisation (JVCI), the UK Vaccine Network, Public Health England and the Medicines and Healthcare products Regulatory Agency (MHRA) maintain a policy of full transparency around the development, testing and roll-out of vaccines targeting Covid-19.

The UK Government, other governments and health authorities, including the World Health Organization, have repeatedly made clear concerns over vaccine hesitancy and the potential impact on public health.

Two major drivers of vaccine hesitancy include:

• Low levels of trust in the medical science behind vaccination safety and effectiveness, pharmaceutical companies who produce these vaccines, and government health agencies who promote vaccination (Xu et al, Health Comm. 2020; Apr 19: 1-14). Trust is readily eroded by misleading claims issued by health authorities which consistently refer to vaccines as 'safe' when it is clear that adverse events occur at varying, albeit low, frequencies. To-date, in the UK, around 1000 claims have been paid out to those who have been severely disabled (from over 6,000 claims) after establishing proof of causation through the Vaccine Damage Payment Act 1979. Furthermore, public trust in a pandemic vaccine will have been adversely affected by claims that vaccines targeting the influenza A/H1N1 'swine flu' pandemic of 2009 had been "thoroughly tested" when this was more recently found to be false (Doshi P. BMJ 2018; 362: k3948);

Insufficient communication of relevant information, including trial designs and results by health authorities and vaccine manufacturers. Such inadequacies have been revealed around HPV vaccine trials (Doshi et al. BMJ Evid Based Med. 2020; pii: bmjebm-2019-111331) as part of the Restoring Invisible and Abandoned Trials initiative (RIAT) and in retrospective analysis of information and events surrounding the roll out of vaccines during the last pandemic (influenza A/H1N1, 'swine flu') in 2009 (Stephen W. BMJ2018; 362: k3948).

Health authorities, as vaccine protagonists, must therefore take some responsibility for their role in creating an environment that fosters distrust and hesitancy over vaccination rather than always blaming citizens or scientists for being irrational when they express concerns about vaccine testing or safety. Coercive public policy on vaccination, coupled with the categorisation of comments by citizens, doctors and others that question vaccine safety as 'fake news', which then often leads to censorship, are therefore counter-productive.

Informed risk/utility decisions around mass vaccination require increasing public engagement (Williamson & Glaab. *BMC Med Ethics*. 2018; 19(1): 84) and benefit from clear disclosure of sponsorship bias and the capacity for re-analysis of raw data by independent researchers (Jefferson T. *J R Soc Med.* 2020; 113(4): 148-157). Full disclosure of results from clinical trials, including provision of raw data, is vital given data on fast-tracked vaccines will inevitably be uncertain and incomplete to some degree. It is important that the extent of such shortcomings are communicated to the public.

It is therefore in the public interest to ensure that all relevant data that could feed into properly informed decisions are placed in the academic and public domains. Public confidence in vaccination can only be re-established if there is much greater transparency and sharing of data than has been the case historically (Godlee F. *BMJ* 2018; 363: k4152). This is more relevant than ever with the prospect of Covid-19 vaccines, given their unprecedented rate of development.

Key areas for vaccine transparency

Having consulted with medical doctors, other health professionals, research scientists, lawyers and citizens in our various networks, we consider it imperative that the following information is released for public scrutiny prior to commercial release of any Covid-19 vaccines:

- 1. Full disclosure of all raw data from safety studies of commercial Covid-19 vaccines. Disclosure of raw data allows independent researchers to analyse data and draw conclusions independently of health authorities, regulators and vaccine manufacturers. Such transparency and data sharing are essential if the aim is to establish confidence in mass immunisation using a novel vaccine developed in a fraction of the time typical of previous vaccines;
- 2. Transparency in relation to safety and efficacy studies. Safety studies for any vaccine that is fast-tracked (6-18 months) prior to approval will be compromised as compared with those for which more time (several years) has been allowed for safety studies and regulatory approval. If the Government is planning to encourage vaccination, it is crucial that it is clear about the limitations in safety and efficacy studies supporting public roll-out as compared with those required for normal licensing of vaccines. Without such knowledge, it is neither possible for citizens to balance risk versus utility, nor can they determine "...if the safety of the product is

not such as persons generally are entitled to expect" (Consumer Protection Act 1987);

- 3. Transparency over the type of platform used for commercial vaccines. Currently there are several different platforms being investigated for candidate vaccines for Covid-19 and it appears that the most likely (and well funded) options involve platforms that have never been previously used on a global scale (Amanat & Krammer. *Immunity.* 2020; 52(4): 583-589). It is imperative that there is clear communication to the public over the nature of the platform(s) being used for Covid-19 vaccines prior to their commercial release, as well as the extent of their previous use, if relevant, for pre-existing commercial vaccines;
- 4. Conduct and transparency of studies to elucidate any risks associated with adjuvants as distinct from antigens. Given that commercial vaccines for Covid-19 are likely to be adjuvanted, it is essential that the safety of the adjuvanted vaccines are compared with non-adjuvanted vaccines and saline controls. Adjuvants may trigger specific side effects in susceptible individuals, which may include those with underlying conditions, including autoimmune diseases (e.g. Watad A, et al. Front Endocrinol (Lausanne). 2017; 7: 150);
- 5. Transparency in relation to vaccine composition. There is a significant public lack of confidence in the purity and composition of vaccines. It is essential that the detailed composition of Covid-19 vaccines are declared, this going beyond simply specifying added ingredients. It is also imperative that any impurities are also declared given some of these have the potential to trigger adverse reactions. Given there is a strong move towards transparency in labelling in the food sector, itself supported by the Food Standards Agency and Department of Health, it is even more important that such transparency occurs with vaccines given they are administered systemically;
- 6. Full disclosure of cases and potential cases of vaccine injury. Recent history of UK government communication around legal cases linked to vaccine injury caused by Pandemrix® and seasonal flu vaccines discovered during trials or post-marketing surveillance has been grossly inadequate. This inadequacy has only been revealed through multiple freedom of information requests under the Freedom of Information Act. Only a handful of cases have been made public, while many others have received Vaccine Damage Payments after establishing proof of vaccine causation but without any public communication of the cases or the nature of the injuries (see special report in Independent, 18 April). This non-disclosure does not afford the public a balanced view of the risks associated with a given vaccine, nor does it allow them to determine if their own health condition might make them more or less susceptible to adverse reactions;
- 7. The Government must clarify eligibility and criteria for no-fault vaccine injury payments for Covid-19 vaccines. We have noted that the Government no longer considers citizens eligible for vaccine injury payments in the event of proven damage caused by a "pandemic influenza virus". This exclusion was made only after the Government recognised from post-marketing surveillance that narcolepsy was a significant, albeit uncommon, autoimmune side effect of Pandemrix®. The Government must ensure that vaccine injury payments will be made to individuals injured by any approved Covid-19 vaccines, while also clarifying the level of proof required to establish causation and the statutory time limit for making such claims in relation to Covid-19 vaccines, prior to their administration to the public;

- 8. The Government must clarify indemnity offered to vaccine manufacturers. In a reply made by the Department of Health to a freedom of information request (Your Ref: DE-1029593), it was stated that in relation to GlaxoSmithKline's Pandemrix®, Baxter International's Celvapan® and Sanofi Pasteur's Liquid Smallpox Vaccine, "The Authority shall fully and completely indemnify the Contractor against all claims, proceedings, actions, legal suits, damages, legal costs and expenses and any other liabilities in respect of any death or personal injury arising from the Authority's use of the Goods." The indemnity, if applicable to Covid-19 vaccines, must be made public prior to the commercial release of vaccines because, ultimately, the financial burden of such indemnity lies with the taxpayer;
- 9. The public must be informed of the extent of naturally-acquired immunity prior to public release of Covid-19 vaccines. In order to balance risk and utility, the public must be made aware of the extent of population herd immunity, which will necessitate carefully conducted, stratified, random sampling of the UK population and testing with a validated serological (antibody) test. We are aware that the Department of Health is evaluating such tests, and it is of paramount importance that comprehensive, periodic evaluation of population immunity is conducted to determine the persistence of such immunity. This would be greatly facilitated by quarterly testing of randomised, stratified samples of the national population and would not necessitate 'universal' testing of all individuals that has been correctly declared as not feasible. The public should also have ready access to validated antibody tests so that individuals can assess their own state of immunity prior to giving consent for vaccination;
- 10. Parliament must be engaged to ensure due democratic process if the Government is planning to consider making Covid-19 vaccines mandatory. While the Public Health (Control of Disease) Act 1984 technically allows for the mandatory treatment of persons who are, or may be, infected, the decision to apply these emergency measures to Covid-19, when it has not been applied to any previous infectious disease, is a matter of great public importance. It is therefore critical that due democratic process is followed so that the will of the people can be factored into any such decision.

As Secretary of State for Health and Social Care, we are extremely aware of how hard you and your team have been working in an effort to protect the public interest during the current pandemic. However, it is crucially important that in the drive to provide one or more vaccines to enhance the population's immunity to SARS-CoV-2, corners are not cut that expose the population to unnecessary risks, especially if these are undisclosed.

We look forward to receiving information about your Department's approach to transparency of information and data surrounding Covid-19 vaccine trials, including post-marketing surveillance once initiated. We especially request your response to specific points set out in the ten discrete areas we have highlighted above.

We greatly look forward to hearing from you, or a member of your Departmental team, at your earliest convenience. Our respective emails are given below.

Yours sincerely,

Robert Verkerk MSc DIC PhD FACN Executive and scientific director Alliance for Natural Health International www.anhinternational.org

Dr Damien Downing MBBS MSB President British Society for Ecological Medicine www.bsem.org.uk

Download Open Letter to Matt Hancock that includes the 10-point vaccine transparency plan

Call to action – help create the new vaccine narrative

Date:

7 May 2020

Help vaccine developers and governments to understand why vaccine transparency is a necessity if they want to deal with vaccine hesitancy

Content Sections

- Flyers hot off the virtual press
- Do just two things that could change our futures for the better
- Why transparency?
- Act now!

Last week, along with our colleagues, the medical doctors at the British Society for Ecological Medicine, we sent an open letter to UK Secretary of State for Health, Matt Hancock MP. We are calling for a new narrative on vaccines – one that is essential for properly informed consent once a vaccine becomes available.

For too long the public has been blamed for vaccine hesitancy, that the World Health Organization rates as one of the top 10 global health threats. This is not only unfair, it incorrectly apportions blame on the public when the real driver of vaccine hesitancy is distrust through lack of transparency by vaccine makers, regulatory agencies, the World Health Organization, and others.

Flyers hot off the virtual press

Today we release two flyers as PDFs for forwarding or printing – one for a UK audience – the other an international version for use in all other countries.

The flyers are especially designed to get the debate moving to the political table, as this is as much about politics and economics as it is about health.

Given that vaccines targeting Covid-19 are under incredibly rapid and intense development and are planned for release on the public at an unprecedented rate, before adequate safety testing can be done, this is a very urgent call to action.

>>> Download UK flyer as PDF

>>> Download international flyer as PDF

Do just two things that could change our futures for the better

To get traction we're asking you to do two things with a minimum of delay. As you'll read below, things are happening so fast, there's no time to waste:

- 1. Share this call to action along with the flyers as widely as you can. Bear in mind that social media portals and websites are being heavily censored with content restricted when it's issued from non-official health authorities and non-government sources if it relates to vaccines. That is regardless of the quality or nature of the content. It therefore represents a serious limitation of freedom of expression and a barrier to informed consent. This censorship means it's particularly important to share the direct link to this information, which you can find here
- 2. Pass on the flyers and this call to action to your elected representatives so that you can make use of your democratic voice and ensure public concerns are properly heard. In most countries there are websites to help you find your elected representatives. If you don't already know them, here are a few:

UK: Find your MP

Germany: Deutscher Bundestag

France: Rechercher votre député

Sweden: Ledamöter & partier

Ireland: Dáil Éireann and Seanad Éireann

United States: Find Your Representatives

Canada: Current Members of Parliament

Australia: Contacting Senators and Members

Why transparency?

The best defence any of us have around any uncertain medical intervention which will come with benefits and risks is knowledge. That comes through the provision and use of information. With knowledge comes our ability to give properly informed consent. Efficacy studies need to have sufficient statistical power to be able to show the public that vaccination provides better and safer outcomes than allowing the disease in question to progress through the population naturally. Even with measles, these comparative data are not yet clear. Informed consent in most countries is a legal and ethical requirement for any medical treatment, and vaccination by injection represents an invasive medical treatment.

With recent vaccines like the two HPV vaccines Gardasil and Cervarix (released 2006/7), and Pandemrix for influenza A/H1N1 ('swine flu') (released 2009/10), it's taken many years to discover the extent to which key information was withheld from independent researchers and the public. This information included concealing known adverse effects and failure to publicise vaccine injury. We include references to specific papers in the scientific literature that detail previous non-transparency with these vaccines in our letter to UK Health Secretary, Matt Hancock.

Act now!

Getting this information out is something we can't afford to delay.

Four important reasons for your need to act quickly – ideally this week or next – are:

- Patients including the elderly and frontline healthcare workers are already being recruited for trials. Subjects, trialists and regulatory authorities need to make sure all relevant data are put in the public domain so it can be evaluated independently
- 2. The participants in these trials are acting as guinea pigs for the public. They are going in blind, with no information on the safety profile of the experimental vaccines. Vaccines for RNA viruses like SARS-CoV-2 using the kinds of technologies employed by the frontrunners have never been created before at scale. Any safety issue found in one study needs to be communicated as quickly as possible to those involved with other trials. This is an ethical imperative
- 3. Leading vaccine scientists like Dr Shino Jiang have issued warnings, saying in March 2020 in the prestigious journal *Nature*, "My worry is that this could mean a vaccine is administered before its efficacy and safety have been fully evaluated in animal models or clinical trials". Governments, health authorities and vaccine developers don't appear to be listening so the public and onside politicians must make them hear
- 4. Vaccine development is happening at such a rapid rate there is a genuine vaccine race ongoing with over 100 contenders vying to win the prize: sign off by the World Health Organization, and roll-out following deals with the largest vaccine companies in the world. There may be different vaccines released in different countries, but there's only room for a few. These vaccine developers must know sooner rather than later that the public around the world will not accept the withholding of data and information.

If vaccine makers and governments want the public to trust their vaccines, they must understand that transparency is a necessity, not an option. Please share widely. Thank you.

Humble, heroic, multi-faceted vitamin C

Date:

7 May 2020

Why there's never been a better time to use this 4-in-1, unpatented natural agent

Vitamin C has been making quite a comeback recently. For a humble water-soluble vitamin that many associate with oranges and pretty much take for granted, it's certainly attracting new interest. And for very good reason. Far from being a one trick pony, vitamin C, like so many nutrients, is multi-action and punches well above its humble weight in terms of health benefits. While it's essential so is needed for our survival, its relevance with the current Covid-19 epidemic gives it hero status amongst vitamins!

We humans have lost the ability to make vitamin C in our bodies in an evolutionary mutation to ensure our survival. It's thought that as vitamin C is able to block the fatstoring metabolic effects of fructose and also lower uric acid (which is also a powerful extracellular antioxidant), the genetic mutations in L-gulono lactone oxidase and uricase gave us a survival advantage.

However, as our early diets contained large amounts of vitamin C there was no concern for health even though our ancestors had to deal with life-threatening infectious disease assaults. Today is a different story in terms of our vitamin C status. Vitamin C is so vital to the body that we can recycle and concentrate the amount needed in particular parts of the body. This really becomes important when dealing with acute infection or sepsis.

Too many people today are existing in a very vitamin C depleted state, then suffering low-grade systemic inflammation arising from metabolic dysfunction (like most people with underlying diseases). It's particularly important now to recognise the importance of this situation as it's linked to a greater risk of severe Covid symptoms. If you are low in vitamin C and you've got low-grade systemic inflammation (i.e. you're chronically diseased like most over-65s), you've got a big disadvantage before you even start. If you are then low in vitamin D and A and minerals like zinc, magnesium and selenium, your immune system is even further handicapped.

The good news is there are now a number of promising trials being conducted using vitamin C, including one big multi-centre trial. The REMAP-CAP trial features some big name doctors and scientists who might give some real traction to increased use of intravenous vitamin C in critical care facilities assuming positive results.

Making sure you have enough vitamin C in your diet and through oral supplementation is very important. Not just to prevent scurvy, but to ensure that you can power your immune cells (like natural killer cells, macrophages, neutrophils and lymphocytes), but also to make enough nitric oxide to keep your blood flowing, your blood pressure normal and preventing clotting. Ascorbic acid (vitamin C) is also needed to make glutathione, one of our most important antioxidants, critical for immune function, which in turn is needed to make lymphocytes. When you don't have enough glutathione in the body your numbers of lymphocytes can drop dramatically in a matter of days.

Based on the work on vitamin C and sepsis by Professor Paul Marik and others, and supported by the increasing body of encouraging work coming out of the early trials on vitamin C and Covid, there's now a really good reason to take vitamin C very seriously as both a preventative and a therapeutic agent to protect us from the new coronavirus.

This week we bring you two videos

The first is an interview by ANH's Mel Aldridge with renowned British health journalist and author, Jerome Burne, talking about why you should have two C's on your mind at the moment - vitamin C and the coronavirus. You can also read Jerome Burne's latest blog, 'Big Vote of Confidence in Vitamin C as Viral Fighter. Now Being Tested' (5 May 2020) on his blog site, Health Insights UK.

And the second is a short video looking at vitamin C's multi-action mechanism and why you want to make sure you have sufficient levels, particularly at this time.

https://youtu.be/93BAfBzKz3A

https://youtu.be/sSznkbrZlOg

Three numbers that may mislead

Date:

7 May 2020

What does or doesn't lie behind the Ferguson's model, R numbers and mortality data?

Content Sections

- Misleading numbers #1: Ferguson's model outputs
- Misleading numbers #2: R numbers
- Misleading numbers #3: excess deaths
- Closing remarks

Rob Verkerk PhD, founder, executive and scientific director, ANH-Intl

In the minds of many, the value of mathematical models in our everyday lives may have been tarnished forever. That's assuming you believe that the models used by Prof Neil Ferguson at Imperial College London (my own academic *almer mater* for a decade) to justify lockdowns have over-estimated the threat of Covid-19 to health. Or they should not have been blindly followed by governments when they never even tried to factor in the scale of collateral damage that the lockdowns would cause indirectly to health, to livelihoods or to economies.

We are told over and over again by our governments that their decisions are being driven by science. If there is one thing we can be sure of, they're not talking about good science. That is because the science around a brand new disease is an incredibly long way from being settled, and all the normal safeguards that try to objectify science such as the peer review process have largely been side-lined in the rush to publish papers on Covid-19. We also now all inhabit a world where objective, independent scientific research has never been so deeply distorted by vested interests.

Find related articles, information and videos in our Covid Zone

To provide a few insights into this extreme uncertainty that affects nearly everyone of us to the core, I will discuss below three different kinds of numbers that are being sold to us as if they were immoveable facts – truths even – based on robust scientific consensus.

Misleading numbers #1: Ferguson's model outputs

The mathematical model that Ferguson and colleagues used to inform the UK and US lockdowns couldn't come close to representing a real system. It relies on the same base code as the previously criticised models that mis-estimated the impact of foot-and-mouth disease in 2001 (resulting in the unnecessary cull of 6 million cattle, sheep and pigs) and massively over-estimated the impact of avian influenza in 2005 and swine flu in 2009/10.

Where to start? Ferguson's Covid-19 model didn't factor in environmental factors that are known to be critical, because next-to-nothing was known about how temperature and humidity might affect transmission, indoors or outdoors – although it's known to be very important with all respiratory viruses. They didn't factor in any variation in how the human immune system would interact with the virus and how this would affect the dynamics of transmission. It assumed only 3 groups of people – those who are entirely susceptible, those who are infected, and those who either recover or die. Ferguson and colleagues assumed no ability to affect mortality through appropriate treatment in critical care, or different qualities of treatment in different centres or countries they studied. They certainly knew very little about how different governments, industries and social groups would react if lockdowns were accepted.

It was Ferguson's group, the Imperial College COVID-19 Response Team, through one of its non-peer reviewed reports (dated 16 March) that suggested 510,000 Brits and 2.2 million Americans would die if no lockdown occurred. This report is widely credited with initiating global lockdowns and that's how,courtesy of the British tabloids, Ferguson acquired the name 'Professor Lockdown'. In a subsequent report (dated 30 March) advice was given to 10 other European countries, as well as the UK.

This was instrumental in feeding into the World Health Organization's (WHO) advice to its 150 member countries around the world.

Governments might have been especially cautious given Ferguson's history with overestimates. The irony of 'Professor Lockdown's' resignation from the UK government's key advisory group because he's had to admit to breaking social distancing rules to meet his married lover isn't lost on us. The disgrace merited a new name from the tabloids; the 'Bonking Boffin'.

It's of course not mathematical modelling itself that's at fault. It's down to what assumptions underpin the model, which ones are ignored or not factored in, and then which data are selected, estimated or invented to feed into it. Modelling studies have been used for over 50 years to help us better understand the function of a whole variety of complex systems, whether natural or artificial ones, in fields as diverse as environmental, agricultural, engineering, social and political sciences. They can be very helpful when built and used appropriately.

In a world in which scientific research is so heavily distorted by funding sources, it's also crucial to know the funding sources. Any check of Neil Ferguson's papers in PubMed (example 1, example 2, example 3), will reveal a long-standing pattern of funding by the Bill and Melinda Gates Foundation. Gates also appears to be the second biggest

donor to Imperial College after the Wellcome Trust, having gifted \$185 million since 2006 (based on preliminary data collated by Dr Vipul Naik).

It doesn't stop there. The Gates Foundation happens to be the second largest funder of the World Health Organization, sandwiched between the biggest donor (the USA, currently withholding payment) and the UK. No surprises that the Gates Foundation even pays media groups, such as *The Guardian* newspaper, to make sure its messages are communicated to what are considered influential, target audiences.

One particularly devastating deconstruction of the deficiencies of the Imperial College model that's just been published on the Lockdown Sceptics website comes from an ex-Google, senior software engineer by the name of Sue Denim. Denim concludes, "All papers based on this code should be retracted immediately. Imperial's modelling efforts should be reset with a new team that isn't under Professor Ferguson, and which has a commitment to replicable results with published code from day one."

Yet, perversely, the public gets blamed for being ignorant if it questions the advice of Gates funded institutions, given genuine and justifiable concerns over the independence and quality of the work and advice stemming from it.

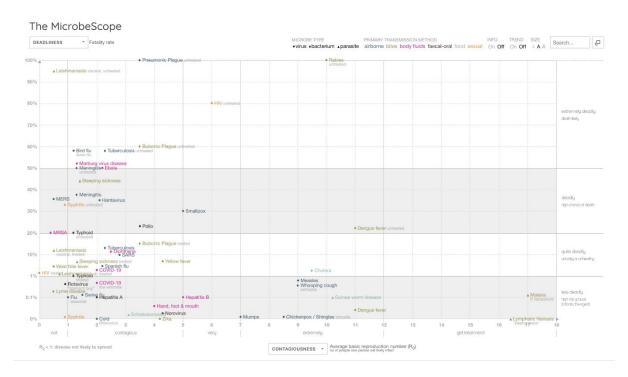
Misleading numbers #2: R numbers

When it was discovered that SARS-CoV-2 had the potential to go pandemic in February, there wasn't much in the way of empirical data to put into models. There were limited data from China, but no one was quite sure whether or not to trust them, Ferguson included. And given we're talking here about the basic reproduction number – or R number (the number of people one person is likely to infect) – we knew that if it exceeded 2 with people going about their normal business (as it appeared to even by the end of January), the virus had the transmission potential to go exponential – like many other pathogens.

But potential is one thing - actuality is another. Like the population dynamics of most animals, predators and pathogens in most systems, that generally doesn't happen. Checks and balances get in the way. Much the same reason a pair of houseflies, that have the reproductive capacity to create sufficient progeny in one year to create a layer across the surface of the Earth one metre deep – don't actually get close to achieving their reproductive potential.

The world has now become obsessed with this R number that few knew about until a a couple of months ago. Staged lifting of lockdowns, social distancing and related measures will be based on the behaviour of this number. We're meant to simply accept this, it seems. Complete lockdown in the UK is currently predicted to have reduced the R_t value from around 2.5 to 3 before lockdown to the current Imperial College estimated level of 0.7 that was apparently hit on 23 March.

The Financial Times reminds us that the "R number.....will determine when lockdown lifts". Let's remind ourselves of this folly by looking again at the MicrobeScope (that we also took a screen grab from when we started our weekly discourse on Covid in March).



MicrobeScope: comparing contagiousness (R number) with deadliness.

Source: Information is Beautiful (screengrab: 7 May 2020)

If measles and whooping cough have R numbers of 9, why don't we lockdown for them? Because we have vaccines for these diseases? Well, dengue has an R number of 11...what about that, and it doesn't have a vaccine. Ah.... it doesn't affect people in rich countries, and they are anyway working on a vaccine for it. If you hadn't guessed, Gates is funding it.

The point is, you can't look at an R number without at the very least considering its capacity to harm or kill (deadliness) (as per the MicrobeScope graphic above). And what is the evidence base for your R number when you have such limited capacity to determine the extent of past infection in different populations, given the limitations or availability (including massive geographic variation) of accurate antigen and antibody testing?

What about the measure of deadliness? That's obviously based on case rate fatality, but what's your denominator? Is it the people thought, known or suspected to be infected? Or is it the whole population in a country or city when you don't know infection rates? Ferguson's team, publishing in *The Lancet Infectious Diseases* puts the case fatality ratio at 1.4%. But this is data again from a model, not real life – and it's based on data from 24 deaths (yes, just 24!) in Mainland China. The paper also reports between 8 to 28% mortality rate for hospitalised patients in China. One wonders if Prof Ferguson hesitates to think why the mortality data coming out of UK hospitals has been consistently hovering around 50% since the start of the pandemic, as reported by ICNARC (latest report 1 May; 49% dead at end of critical care, 51% discharged).

[Updated 12 May 2020] Another potentially misleading element of looking blindly at the R number may be an effect described in statistics as Simpson's paradox. This paradox suggests that an effect that is noticed when you look at individual sets of data can be

lost when you look at the data as whole - in aggregated form. In an enlightening article by Tom Chivers in UnHerd, Prof John Edmunds from the London Hospital for Tropical Medicine suggests Simpson's paradox may be at work when we see an upward shift in the R number that is influenced by a separate epidemic in care homes and hospitals despite a reduction in transmission rates in the community caused by lockdown. The increase in R number might seem like things are getting worse in the community at large, when this is not the case. It would therefore be wrong to reimpose lockdown for the whole community when this subset of data did not contribute to the increase in R.

What about the numerator (the number who've died)? Is it appropriate to use reported Covid-19 deaths collated by governments when methods of recording these deaths are fuzzy to say the least (e.g. CDC protocol), they vary greatly between countries and regions, and, in some countries such as the USA, doctors are financially incentivised to classify deaths of those found or suspected to be linked to Covid-19 as deaths caused by the coronavirus?

It is remarkable in our view that throughout this pandemic, in terms of what has been learned about the disease and how to manage it in critical care, NHS doctors as a whole (on average) have not been able (allowed?) to save more lives as time has progressed, with the survival rate in intensive care having around the 50% mark (based on ICNARC reports, most recent; 1 May). This may have something to do with large variations in outcome between different critical care facilities as well as the relatively high proportion of patients that are put on mechanical ventilators. As of 1 May: 70% of all patients (n=5139) were intubated with advanced respiratory support, and of these 62% died. The continued prevalence of use of ventilators is surprising considering how long the scientific community has known that mechanical ventilation seems more likely to contribute to death in the case of Covid-19. Boris Johnson likely owes his life to the NHS doctors who decided to not intubate him.

In short, currently neither for contagiousness nor for deadliness do we have a reliable evidence base. The numbers are as good as fictitious and cannot be determined as fact. Why then do governments act on them as if they were facts?

What if it turns out, as some research suggests, that very large numbers of people have already been infected, most asymptomatically? The R numbers would have to be adjusted upward. Would that make things worse for all of us? No, it would change nothing if we found the R number was actually 5. Ultimately what makes a difference to us is if we get very sick or die. So a mild, highly contagious disease isn't a problem. And while it's a challenge and a burden for hospitals if some people need to be hospitalised, the proportion of lives saved in hospital settings is a strong predictor of deadliness. The fact that this varies so much in different parts of the world draws attention to the great variation in critical care being delivered. There may also be other factors such as differing levels of nutritional status, underlying conditions and even different virulence linked to different SARS-CoV-2 strains.

If you obsess about the R number and use it as your key metric, you then also choose to ignore the considerable body of research of the effect of social distancing on stopping the spread of respiratory viruses. That includes a Cochrane Review of 67 studies published in 2011 that concluded "There was limited evidence that social distancing was effective, especially if related to the risk of exposure."

Misleading numbers #3: excess deaths

As we've said from our first articles on Covid-19 in March, context is everything. The mainstream media don't seem that interested, presumably because scary numbers sell content and gratify advertisers and donors.

But when we listen to daily death tolls, these are meaningless if we don't put them into context, because – believe it or not – people die all the time. It's one of the few facts we can be sure of in this increasingly uncertain world.

As I've tried to show above, we have an issue with the quality of many of the numbers being thrown at us around Covid-19. Presently it looks like, in the main, the deaths that are reported by national and global agencies each day, that the media throw out to us on their daily news bulletins, are likely over-estimates as far as Covid-19 being the cause. That's because deaths of those found or suspected to be related to Covid-19, or where Covid-19 pneumonia may have contributed to deaths that were likely to occur soon, are being treated in most parts of the world as ones *caused by* Covid-19. The UK Office of National Statistics is clear that Covid-19 deaths it reports are those that simply "mention" Covid-19. This blurring is a misattribution of cause of death.

But let's just put this misattribution aside for now and treat officially reported deaths as if they were genuinely caused by SARS-CoV-2.

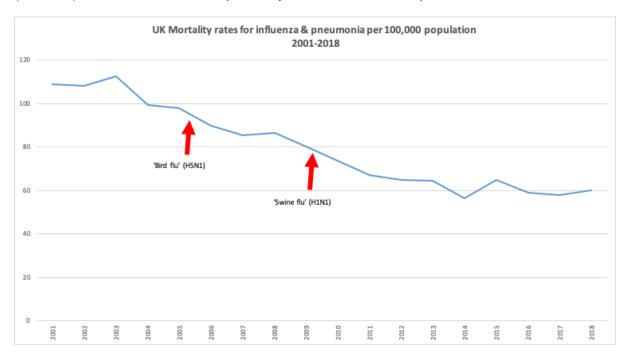
Following is today's update from the European Centre of Disease Prevention and Control (ECDC).

EU/EEA and the UK	Sum of Cases	Sum of Deaths	Reported cases per 100 000 population	Reported deaths per 100 000 population
Spain	220325	25857	471.5	55.3
Italy	214457	29684	354.9	49.1
United_Kingdom	201201	30076	302.6	45.2
Germany	166091	7119	200.3	8.6
France	137150	25809	204.7	38.5
Belgium	50781	8339	444.6	73.0
Netherlands	41319	5204	239.8	30.2
Portugal	26182	1089	254.6	10.6
Sweden	23918	2941	234.9	28.9
Ireland	22248	1375	458.4	28.3
Austria	15651	608	176.9	6.9
Poland	14740	733	38.8	1.9
Romania	14107	858	72.4	4.4
Denmark	9983	506	172.2	8.7
Czechia	7974	262	75.0	2.5
Norway	7953	209	149.7	3.9
Finland	5573	252	101.0	4.6
Luxembourg	3851	98	633.7	16.1
Hungary	3150	383	32.2	3.9
Greece	2663	147	24.8	1.4

Covid-19 situation update summary table for top 20 EU/EEA and the UK (7 May 2020). Source: ECDC

Taking the UK figure of mortality which has now topped 30,000 as a worse case scenario, adding an additional to 50% to this figure to make 45,000 by the end of year based on the fact the infection wave is largely over, we might generously estimate 68 per 100,000 deaths by the end of the year.

That would put it smack in the lower end of the ball park for a typical bad year of flu and pneumonia deaths that range from around 60 per 100,000 in 2018 to just under 110 per 100,000 in 2001. Neither 'pandemics' of avian influenza (A/H5N1) nor 'swine flu' (A/H1N1) in 2005 and 2009 respectively caused a marked spike.



Source: Office for National Statistics

Let's then look at a larger scale, and consider excess deaths, the number of additional deaths that would normally be expected to occur. Excess mortality data have been collated for the 24 countries that make up the EuroMOMO data sets, these in turn being derived from official national mortality statistics, so they will include the blurred mortality numbers we've discussed above. The excess mortality data you see below are usefully stratified for age and show clear spikes linked to Covid-related deaths at present (extreme right side of graphs), but only in the 15 to 64, and the 65+ age categories (note the y-axis scales are different).



Pooled number of deaths by age group. Source: EuroMOMO

From week 10 of 2020 to the current week 18, there is an excess in deaths across all 24 EuroMOMO countries of almost 150,000 (~80% of which are over 65 years of age). That equates to around an excess mortality that equates to roughly 30 deaths per 100,000 population that represents the EuroMOMO countries' ~500 million population. That's still within the range for a bad flu season and when that incidence is added to the 2018 influenza and pneumonia deaths in the UK (above), it still doesn't exceed the deaths from the same causes in 2001.

We will never have the data that will be able to compare what might have happened had we not locked down, and no doubt there will be those who go back to Ferguson's and others' dizzying projections.

Any loss of life is always unfortunate, but it makes a great deal of difference to the function of societies and economies if a respiratory virus takes out younger rather than older individuals. This one clearly prefers older, sicker people with less robust or failing immune systems. That makes it even more astonishing that so little emphasis is being placed on improving the immune and related functions among those who are most vulnerable. Shielding these populations is of course critical given their susceptibility.

These figures cannot yet account for the excess mortality that will come about because healthcare systems that were previously already overburdened with slow-killing chronic diseases dispensed of many of these patients to deal with an out-of-the-blue infectious disease. This indirect cost will be something we will have to come to terms with over time – and there will no doubt be many lessons will eventually be learned from the inability of those who took charge and made rash decisions without sufficient due diligence or consideration of context or implications.

Our work is only possible with your continued support and kind donations.

Closing remarks

These three sets of numbers that are affecting policy decisions; from models, R numbers and mortality rates, clearly need to be looked at very carefully.

What's interesting is you don't need to jiggle and fiddle with them to make them look less scary than the way they are typically portrayed. You just need to see them in context with each other and with other official data – ignoring even that the raw data may be over-estimated or under-estimated to make them look worse than they actually are.

All of this while we ignore what might have happened had we allowed this new virus, with relatively low level contagiousness and deadliness, sweep across the world, causing or contributing to death in a small number as so many diseases do, but building immunity in the vast majority exposed.

Governments are placing a lot of emphasis still on antigen tests to confirm infection. That's good if you want to attribute Covid-19 as the cause of death simply when someone's infected with it. But it's the antibody tests that will really tell us just how much of the population, in different parts of the world, and regions of each country, have quietly built up immunity to SARS-CoV-2. We have to ask ourselves whether some have an agenda that is not intent on prioritising determining the extent of naturally-acquired immunity as this will lessen the perceived value of vaccines.

It was thus determined that we'd be locked indoors and we must listen to Bill Gates telling us that we won't truly be freed until everyone's been vaccinated (please respond to our call to action).

The rest will become history. And it's for us to create the future we want, not to be dictated to by those who have an agenda that's not in the public interest.

Why is success in critical care being ignored?

Date:

14 May 2020

Exploring the limited data from critical care around the world suggests so much more could be done to save lives

Content Sections

- Is there flex in critical care protocols?
- Survival outcomes that shouldn't be ignored
- What do the data say?
- Falling on deaf ears

After around 8 weeks in lockdown and 3 months since the spectre of Covid-19 loomed large in our media headlines, why is it that a team of frontline critical (intensive) care doctors in the USA who have delivered close to 100% survival with their unique protocol being roundly ignored? Wouldn't you think that hospitals and governments would be biting their hands off to get a hold of their protocol? Or clamouring for more information and training to understand why their own outcomes from standard care fall so far short, delivering around just 50% survival in most critical care settings?

We certainly would, which is why we've dug a little deeper into the available critical care data for this article.

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It's now very clear that the outcomes among the very seriously ill patients in critical care units (also referred to as ICU [intensive care units]/ITU [intensive therapy units] in the UK) are being used to inform lockdown (or lock up!) strategy and keep the fear levels sufficiently high to ensure citizen compliance.

Is there flex in critical care protocols?

Limited published data would suggest that critical medical care in many parts of the world is not flexing sufficiently to encompass treatment options to deliver the best possible outcomes, especially where these involve novel protocols and especially natural therapeutic agents. But why not? After all, this is the digital age where physical distance or time zone differences no longer present barriers to communication. The media is certainly sharing horror stories globally, many of which centre around the dire outcomes of the critically ill filling up the ICUs.

It's impossible to over-estimate how important outcomes in these critical care settings are. High levels of success would significantly reduce the pain and suffering for the diseased, their families and their loved ones. It would also change greatly our perception of the threat posed by the disease.

To expedite research around this new infection, the obstacle course posed by the peer review process to scientific publication has been removed. Yet, despite many front line doctors using different protocols to the standard, conventional care, to great success (aka. better survival) their data are not being received where it counts. We all need to be asking why. After all, people are dying. How would it make relatives feel if it was found that their loved one had died needlessly just because the doctors who were having greatest success were not being listened to and their innovative protocols had been systematically ignored?

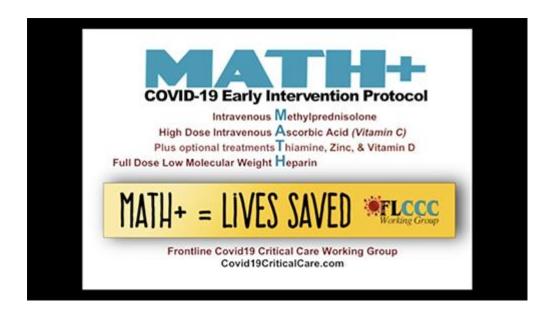
Survival outcomes that shouldn't be ignored

Dr Pierre Kory, and his colleagues in the Front Line Critical Care Working Group (FLCCC) are certainly demonstrating outcomes that shouldn't be ignored, but are.

Dr Kory stated in the US Homeland Security Committee Round Table on Covid-19 last week, that their protocol has gone to the White House on 4 occasions, they have a website, have been widely interviewed for videos as well as print, yet no one in authority has tried to make contact. Worse, he states that they are being pushed back continually by the US Centers for Disease Control (CDC) and the National Institute for Health (NIH).

It's no wonder he sounds so impassioned. Can you imagine how difficult it is for a team of experienced critical care doctors to see outcomes change dramatically from the normal standard of care to 98% survival with their MATH+ protocol, yet no one seems interested? Having now treated 100 critically ill patients, they report that they have only lost two people, both who were over 80 years of age with advanced chronic conditions. The rest were discharged in good general health after short hospital stays and none were ventilator dependent.

Surely that's news that every hospital would be all over and we'd be seeing changes to the standard of care? Yet nothing of the kind appears to be happening. Instead Kory and his seven colleagues are being effectively stonewalled whilst more people die.



What do the data say?

The first thing to say is that data comparisons are in any event very difficult owing to different resources available, different patient characteristics and vulnerabilities, ages and ethnicities etc. Additionally, only around 12 studies from critical care facilities are published and only 3 of these, one from China, one from the ICUs of the Lombardy region of Italy and the comprehensive data from ICNARC in the UK involve over 1000 patients. Of these large studies, the Chinese and UK data suggests survival rates of almost exactly 50% and the Lombardy study stands out with its significantly higher survival at 75%.

Four studies from the US are all small and one involves the report of the total number of cases treated by a team of clinical care doctors working in different facilities, but using the FLCCC Working Group MATH+ protocol, which as we've described above, has only disclosed 2 deaths in 100 patients. This is the real stand out figure. Another US study from Boston showed 83% survival and an earlier study from Washington State showed the lowest survival rate of just 33%, but over 70% of these were mechanically ventilated and the study was small.

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Another feature of these data is the lack of consistency in reporting techniques which significantly lowers the ability for different critical care doctors to learn rapidly from each other, despite the inevitable variation in resources and patient profiles. And of course, the other real stand out, as mentioned, are the results from the FLCCC Working Group. The numbers may be small, but they nevertheless exceed considerably two of the US studies (one published in *JAMA*, the other in *NEJM*) and it could be considered a form of medical negligence that health authorities such as the NIH and CDC in the US have ignored their persistent efforts to communicate their findings and protocols.

Table 1. Summary data from key studies or reports from critical care facilities treating Covid-19 patients.

Study location	No of patients	% mortality	% Male/ Female	Treatments
Single hospital in Wuhan, China	52	62	67/33	High flow nasal cannula mechnica prone position Extracorporeal men oxygenation renal replacement the vasoconstrivtie agents antiviral agents glucocorticoids
				Link to source
Chinese CDC data	2087	49	ND	ND
uata				Link to source
Sichuan province data, China	81	12	63/37	Respiratory support Parenteral nutroposition blood transfsion Lopinav Abidol Ribavirin nebulised recominterfereon a2b Thymosin a Immumethylprnisolone antibiotics analysedatives
				Link to source
Washington State only, USA	21	67	52/48	Ventilation used for 15 px, all had developed severe ARDS in 72 hrs. 2 remained critically ill. 9.5% dischar
				Link to source
9 Seattle-based hospitals, USA	24	50	63/37	75% needed ventilation, 17 also had needed vasopressors. 50% died betw 12 survived - 5 went home, 4 went t and 3 stayed on ventilation. Most coadmittance to ICU was hypoxaemic failure.
				Link to source
USA	100	2	ND	Corticosteroids (methylprednisolono blood thinners (heparin)
				Link to source
Boston, USA	66	17	65/35	ND
				Link to source
Country wide, Canada	868		65/35	ICU: 106 aged 80+; 458 60-79; 273

				Link to source
England,	5139	49	71/29	ND
Wales, NI				Link to source
England,	6143	47	71/29	ND
Wales, NI				Link to source
ICUs of	1591	25	82/18	ND
Lombardy Region, Italy				Link to source
Swedish ICUs	1784	ND	74/26	ND
country wide				Link to source

ND - no data

Falling on deaf ears

Why won't health authorities and governments listen to expert front line critical care doctors who are getting well above average results?

Why are all of the ongoing and repeated attempts by many groups, organisations (ours included), doctors, health professionals and citizens to get health authorities and governments to look at the evidence behind novel and natural protocols for immune support and treatment consistently falling on deaf ears?

And, why is there such widespread censorship of anything but the party line by online platforms which lack sufficient expertise to adjudicate on matters of science and medicine?

The public-facing narrative continues to profess that there is nothing you can do to support your immune system, there is nothing in the natural arsenal for Covid-19 (apart from a gnat's dose of vitamin D perhaps), social distancing must be maintained at all times and that the only cure for this terrifying infection will magically come from a vaccine created at warp speed.

When you add these untruths to the plans being rolled out for ramping up citizen surveillance through test, track and trace, the erosion of our rights and freedoms through the emergency coronavirus legislation, the destruction of economies and the forced reliance of so many on the state for survival handouts, you realise how much we might lose whilst much of the world cowers behind closed doors in fear.

We are paying the piper with our lives and our livelihoods. For more on 'the piper' or pipers... see our latest video from Rob Verkerk PhD.

Never have so few controlled the lives of so many

Date:

14 May 2020

Comments:

19

Video: Rob Verkerk PhD expresses deep concerns over incestuous circle that controls global Covid strategy

Content Sections

Video Transcript

As we discover that more and more aspects of government advice and policy don't appear to be rooted in solid science, we've started to question from where this science originates. Our investigations have taken us on a somewhat circular journey, suggesting that an unexpectedly small group appear to be controlling our destiny. The common link between the control centres, architects and scientists that are informing global Covid policy appears to be the Bill and Melinda Gates Foundation.

Our founder, Rob Verkerk PhD expresses his concerns in a 20 minute video below. For those who prefer to read a transcript, you'll find it below the video.

Find related articles, information and videos in our Covid Zone

Given the current extreme level of censorship of all content that doesn't concur with the mainstream narrative, we ask that you share this widely. Thank you.

Video Transcript

Never have so few controlled the lives of so many

We're calling on people here to start a process of critical thinking. Those of us living in democracies must start to question and challenge the approach our governments are taking during this Covid crisis. In our view we must particularly question the transparency of the science being used to underpin the decisions and measures taken.

That's because there's a lot happening that doesn't fit with the science – at least what we think of as good, objective science.

We're being told over and over that all decisions being made by governments that are driving lockdowns, social distancing and the development of drugs and vaccines for Covid-19 are being driven by science.

But it depends on how you define science – and how you define bias or corruption in the scientific process.

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Good science – that's always been central to our mission at the Alliance for Natural Health – is all about how you evaluate evidence from objective observation, measurement and experimentation to better understand the world around us. That science can then be applied in many different ways. Sometimes that might be to help businesses reap just rewards for the goods and services they provide. But when it comes to science around Covid, I think most of us would expect the science to be used to maximise benefits – not for special interests – but for the public.

During this Covid pandemic – we're seeing many examples of decisions being made ostensibly on the basis of science that don't appear to be in the public interest. That also don't appear either objective or independent of vested interests.

There's a concern that billionaires – including Bill Gates but also some 200 others that have contributed to Gates and Warren Buffet's Giving Pledge that was kicked off in 2010 – now pose a threat to transparent science and even democracy – all under the shroud of what looks like philanthropy.

The decision to initiate a global lockdown because Covid-19 was declared a pandemic by the World Health Organization and now, the obsessive reliance on R numbers to determine how lockdowns should be eased – that we wrote about last week – are just 2 examples of decisions that are difficult to argue were made on the basis of robust science.

Another screaming example of not being informed by science is the lack of emphasis being placed by governments on understanding the natural history of the disease – what would have happened if we'd not locked down?

Why do we hear so little about what's going on Taiwan? As of today there are 440 cases and 7 deaths reported. Remember this for later: Taiwan's not a member of the World Health Organization.

Or South Korea – with its extensive test, track and trace system and a case fatality rate of just 0.6% - about 5 times less than the case fatality rate being bandied about the World Health Organization. Or Japan with less than 700 reported deaths so far. None of these 3 countries went into full lockdowns – yet over this side of the world we hear very little about how they achieved their successes. Social customs and good IT clearly both helped.

When the decision to go into near complete global lockdown was made in March, the best science looking at the effect of lockdowns for infections caused by respiratory viruses already showed us they don't really work.

The biggest review of studies trying to understand the effects of social distancing on interrupting or reducing the spread of respiratory viruses – by Cochrane – including 67 randomised controlled trials or observational studies – all the available, relevant evidence – said there's not much benefit. Yet we rushed ahead – the public believing it was the right thing – and our only option.

What about the idea of letting healthy people get on with their lives and just shielding the groups we know are vulnerable? Or offering support or advice to help people improve their immune function to reduce the severity of disease?

No – still now, advice like this is being censored online because it doesn't fit with the mainstream narrative.

Looking at the emerging data on strong correlations between vitamin D deficiency and severe symptoms, why isn't everyone being recommended to take the high doses of vitamin D required to normalise or even optimise circulating levels.

Why is youtube banning videos that discuss the importance of vitamin C which is proven to be one of the most effective solutions for sepsis when delivered intravenously – especially given we know sepsis is one of the reasons critically ill people can die with Covid? The same applies to improving zinc status.

The longer you look for reasons why things are happening the way they are – the more you realise that the narrative is being controlled by a small number of people and organisations, as well as researchers and institutions – all funded from the same, so-called 'independent' sources.

Independence here becomes something of a moot point. Are we talking independent from governments, or are we talking about independence from say massive funding sources like the Bill and Melinda Gates Foundation?

Let's now look at some of the main players:

The Global Preparedness Monitoring Board (GPMB) is the control centre. It's fully attached to the World Health Organization – but it's absolutely not independent of the WHO. Bill and Melinda Gates are presently the largest funder of the WHO and the Gates Foundation has become its largest funder as Trump has presently frozen the \$400 million due from the US this year – it being historically the biggest donor. The UK is next in line.

Big names like Dr Anthony Fauci from the US Institute for Allergy and Infectious Diseases that's controlling the US response is on the board. As is Dr Chris Elias from the Gates Foundation and Jeremy Farrar from the Wellcome Trust – two organisations that have been at the forefront of pushing for vaccine solutions to health challenges.

It was of course Fauci who famously predicted in January 2017 there'd be a surprise outbreak during Trump's administration. How could he be so sure?

[Fauci stated: "If there's one message that I want to leave with you today based on my experience, it is that there is no question that there will be a challenge to the coming administration in the arena of infectious diseases."]

Anyway, back to GPMB. The GPMB is, as I said earlier, like the conductor of the orchestra. It coordinates political leaders and policy makers – it's the reason that most countries in the world have reacted in the same way with lockdowns. They parrot the narrative in much the same way too.

[Video: European Commission hosts Coronavirus Global Response International pledging event]

Next in line we have the **Coalition for Epidemic Preparedness Innovations or CEPI**. It describes itself as a public-private partnership and a roundtable of independent institutions in seeing vaccines deployed in the event of a global pandemic – the WHO's disease 'X' scenario – a pandemic disease caused by a pathogen for which there is no pre-existing therapeutic agent or vaccine.

Covid-19 fits the bill for a 'disease X' – perfectly timed some might say.

Video: WHO discusses Disease X

The Gates Foundation is one of CEPI's founding backers.

This is what CEPI's head Richard Hatchett had to say about it: "We can be sure that another epidemic is on the horizon. It is not a case of if, but when. We need to be prepared. We need to invest in platform technologies that can be used to quickly respond to the emergence of a pathogen with epidemic potential."

When CEPI was launched in 2017, Bill Gates was interviewed by London's Financial Times. He said he hoped to "cut the time between identifying and deploying a vaccine from as many as 10 years today to less than 12 months" "If we can't get it under a year we'd be disappointed."

Why so quick? To save lives and get the global economy back into action? Or because they know these new-to-human coronaviruses – like SARS and MERS before it – have a

habit of petering out naturally – just after interacting with the human immune system. And without a vaccine.

Head of CEPI, Richard Hatchett – wrote this in the New England Journal of Medicine published on 30 March 2020:

"Vaccines for the severe acute respiratory syndrome (SARS), Ebola, and Zika did not follow a similar path. The SARS and Zika epidemics ended before vaccine development was complete, and federal funding agencies reallocated funds that had been committed to vaccine development, leaving manufacturers with financial losses and setting back other vaccine-development programs."

Then you have the Bill and Melinda Gates Foundation itself.

It was 2010 when Gates pledged a \$10 billion spend on vaccines. That 10 years is up and like any businessman, he probably wants to see results on his 'return on investment'.

We might then ask – what forum's do these individuals and organisations use to decide our fate? Well they do have meetings. The last one we know about was called Event 201 – in October 2019 just around the time SARS-CoV2 started transmitting human to human.

Where did it get its name or at least it's number: 201? They decided that there've been a growing number of epidemics in recent years – totally around 200. So the next big one would be number 201.

During the meeting they ran a simulation – believe it or not – for a coronavirus. One that would take off in South America, not China. One that jumped to humans from pigs – not from an as yet unidentified source as in the real thing.

The event was hosted at Johns Hopkins in partnership with the Bill and Melinda Gates Foundation and the World Economic Forum. Johns Hopkins unsurprisingly is also funded by the Gates Foundation. There are 189 grants from the Gates Foundation listed on the Gates Foundation website.

And Johns Hopkins has become a major reporting portal for the pandemic.

In fact – in case anyone might think the whole thing was something of a war game to prepare for the Covid-19 – Johns Hopkins has issued a statement:

"In October 2019, the Johns Hopkins Center for Health Security hosted a pandemic tabletop exercise called Event 201 with partners, the World Economic Forum and the Bill & Melinda Gates Foundation. Recently, the Center for Health Security has received questions about whether that pandemic exercise predicted the current novel coronavirus outbreak in China. To be clear, the Center for Health Security and partners did not make a prediction during our tabletop exercise. For the scenario, we modeled a fictional coronavirus pandemic, but we explicitly stated that it was not a prediction. Instead, the exercise served to highlight preparedness and response challenges that would likely arise in a very severe pandemic. We are not now predicting that the nCoV-2019 outbreak will kill 65 million people. Although our tabletop exercise included a mock novel coronavirus, the inputs we used for modeling the potential impact of that fictional virus are not similar to nCoV-2019."

As a collator of data from the WHO, the European Centre for Disease Prevention and Control and others – the Johns Hopkins Coronavirus Resource Center has become one of the key places that helps the media to fan the flames of fear around the pandemic and its impact – and the public becomes a passive and incompletely informed recipient of the information.

They compare the death rates with confirmed cases, which often gives you typically a figure of between 5 and 15% case rate fatality. But remember – you get these big percentages only when you use confirmed cases as your denominator. If we knew the real denominator and the number of people in each country and region who've never reported symptoms because they were so mild as well as those who'd never had any symptoms – the asymptomatic – and there are some suggestions this number might be large - we would have a very different figure. And that would dramatically dilute the public view of the deadliness of this pandemic.

But if you're in the business of trying to develop a vaccine in record time, before the thing peters out because of its interactions with lots of healthy humans, maybe that's not in your interest.

Among Event 201's recommendations in October 2019, just before the virus was detected in Wuhan was

"Governments should provide more resources and support for the development and surge manufacturing of vaccines, therapeutics, and diagnostics that will be needed during a severe pandemic."

That's exactly what was parroted at the EU's global funding pledging event so it's a reasonable assumption the parties at Event 201 created the narrative.

The timing couldn't have been any better.

It's clear that Gates is all over this current agenda – as some might say – he's done well for a software developer – especially now that he's a key player on the mainstage of global healthcare. Because he's been prosecuted in the late 90s for breach of anti-trust laws with Microsoft by illegally maintaining a monopoly that blocked competition.

Therefore you have to consider the possibility that the Gates Foundation's motives might not be entirely philanthropic. Having said that – a Google search of the "philanthropic Gates" brings up nearly 5,000 hits – so it's clear someone's working the PR rather well in a backroom.

The fact that cannot be denied is that there is a small cluster of people and organisations – most being funded by the Gates Foundation - that are making very important decisions that not only affect us and our future – but likely also our children's futures. That shouldn't sit easily with any of us – and you don't need to be a conspiracy theorist to be concerned about this. Being a historian or just someone concerned with social justice is enough.

We need to be asking how independent is independent? What do we mean by independence – independent of who? We need to ask, who's set to gain, who's set to lose, and who's set to pay for all of this?

We need to ask - how democratised is the science? We need to ask why are doctors like Drs Kory and Marik's Frontline Covid-19 Critical Care Working Group, whose protocol is saving 90% or more of patients in critical care facilities in the US compared with around 50% with standard care, being stonewalled by the National Institutes of Health?

With all the resources being thrown at vaccines – is there going to be the appetite to systematically and accurately study the extent of naturally-acquired herd immunity? What happens if such studies were to find a vaccine isn't then needed – can we trust the transparency of findings of this kind given the huge pressure coming from those vested in vaccine technologies?

What if we were to find that well over half the global population has already been exposed to the virus – most people having barely noticed the infection? Would there be a *mea culpa* from those in charge, recognition that they perhaps over-reacted, that all this control and planned surveillance of the population wasn't required anymore.

Or are we already in too deep to be able to climb out?

Are most of us so blinded by fear about the virus that we're not able to properly understand the way in which enforced surveillance coupled with artificial intelligence could destroy most of the things we value as independent, free-thinking humans. Keep an eye on the likes of Eric Schmidt in New York who's fast-tracking a socially distanced, Al future for New Yorkers – and that's just the starter.

For us, transparency is the only way forward. We need to demand it on all fronts – whether it's giving us the data that allows us to appreciate the real risks of the virus, who's expected to pay for all of this – or what the data are to ensure the most fast-tracked vaccines in history are actually necessary and if they are deemed so, that they're safe before they're unleashed on citizens around the world.

Find out more about our vaccine transparency manifesto, created with the British Society for Ecological medicine, in the links below.

And finally – here's our plea – let's push our governments to ensure transparency every step of the way. Currently we're a long way off – and to get there we need people power and political pressure.

Thank you.

Global Covid status, tests, masks and the sunshine vitamin

Date:

21 May 2020

Insights on some of the key issues filling our airwaves

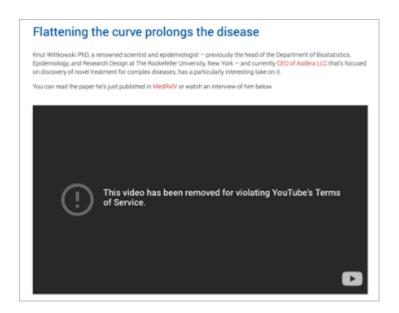
Content Sections

- Global status of reported Covid mortality
- Testing, testing, testing
- To mask or not to mask, that is the question?
- Vitamin wake-up!
- Two historian's perspectives

Global status of reported Covid mortality

The World Health Organization (WHO), governments, the media and social media platforms have worked hand in hand to instil fear into citizens to maximise compliance with stringent and sometimes damaging strategies to counter the new coronavirus. Coordinating responses and messaging along with brutal censorship of those daring to disagree with the 'party' line.

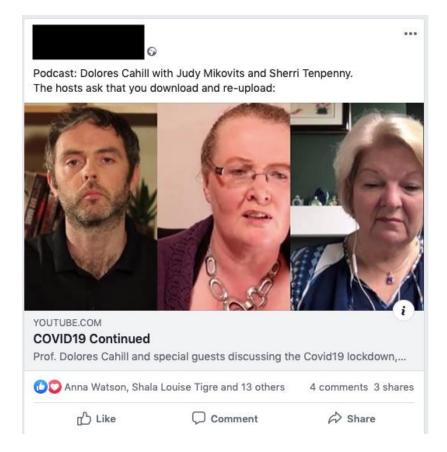
Many will have become familiar with disappearing content on websites and social media streams. Below is an example of content removed from You Tube and in turn our website yesterday for "violating YouTube's Terms and Services". That's what happens when censorship is controlled by private technology companies that now function as public utility services but choose to make their own, myopic, big business serving decisions to censor that they think constitutes harmful or misleading content. So much for freedom of expression and civil liberties in the so-called free world. It's also why we're rebuilding our own content on BitChute.



Familiar YouTube message on ANH-Intl website communicating the removal of a video of an interview with scientist and epidemiologist Knut Wittkowski PhD who questioned the need for lockdowns. Source: ANH International

• Find related articles, information and videos in our Covid Zone

Ironically, the over-zealous censorship of free expression has now created the perfect conditions for such dissention to grow and develop. It's almost become a game. Express dissenting views, have them removed and wait for people to reshare, then they're removed again – and so goes the cycle.

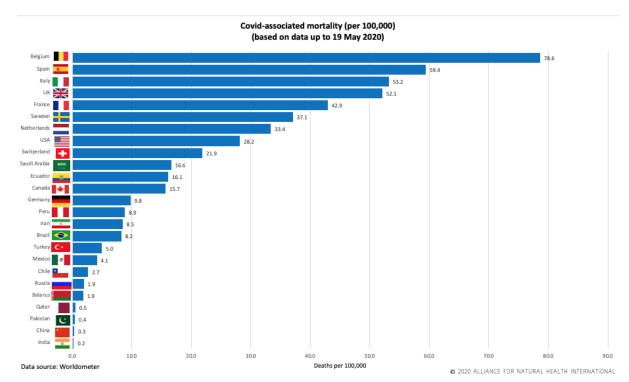


One of many examples of censored podcasts – this one with Prof Dolores Cahill, Judy Mikovits PhD and Sherri Tenpenny

We're told repeatedly governments are following 'the science' to justify lockdowns as being the only way to prevent hospitals being overburdened with catastrophic loss of life. But when you look at reported mortality rates (themselves varying country to country in how data are collected) you start to see a trend that doesn't show pronounced benefits of lockdowns.

Below we've graphed the 25 countries with the highest rates of confirmed cases and then calculated the mortality rates per 100,000 population – which is a standard measure used for disease incidence. If you then look at a typical winter season in which combined deaths from pneumonia and influenza often hit in excess of 20 deaths per 100,000 inhabitants in a bad flu season, you'll notice that only 9 countries in the world currently exceed this. That's akin to saying the vast majority of countries have yet to experience mortality akin to a bad flu season.

But what you'll also perhaps notice is that hard lockdowns don't consistently produce low mortalities as might be expected – assuming you believe that lockdown is the most effective non-pharmaceutical intervention. In fact, there is no real relationship, with some countries that have had minimal lockdowns and no school closures having low mortality rates. The reasons why certain countries face much higher mortalities are likely highly complex and will include the age structure and health status of the population, the ability to shield vulnerable populations in care homes, the extent of natural immunity in the population, the timing of restrictions in relation to the arrival of the virus in a given country – and many other factors. What's also becoming clearer is that most countries – irrespective of how they have reacted, are going through a classic 60 to 90 day cycle of elevated disease – the very pattern that most new epidemics of respiratory viruses undergo. It is simply the natural history of the disease.



Covid associated mortality (per 100,000) (based on data up to 19 May 2020). Source: Worldometer

The 24/7 barrage of fear-inciting mainstream media coverage appears to have achieved its aim of making people terrified of the virus but we're yet to count the toll on the economy and people's health in general.

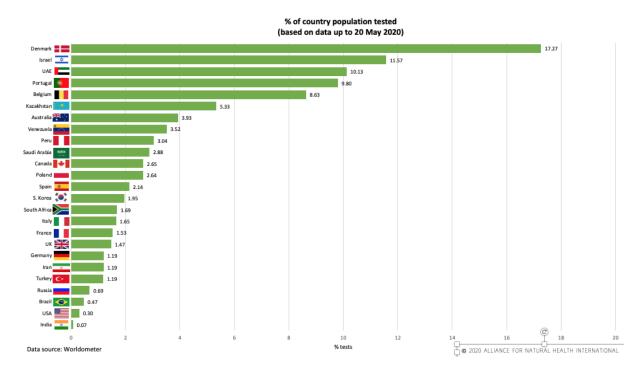
Testing, testing, testing

Even before it declared a pandemic the World Health Organization (WHO) was clear that testing strategies should be adopted "...to monitor transmission intensity" and that "Countries should prepare laboratory capacity to manage large-scale testing". What's happened in the real world has varied widely beween countries.

While countries report their testing progress to the WHO, they often do this in different ways. There are also many ways in which test numbers are artificially elevated. We've heard in the UK, for example, that it's normal procedure when a single individual has had 3 tests to confirm presence of the disease using three different methods (e.g. salivary, pharyngeal and nasal), this is counted as 3 tests despite it delivering only one result – positive or negative.

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The following figure shows the testing prevalence as a percentage of country populations in the 25 countries with the greatest number of reported tests. Here the relationship appears to be a little clearer – but not wholly consistent – with many countries that have tested higher numbers of their populations doing relatively better at minimising mortality. Belgium is an obvious outlier.



% of country population test (based on data up to 20 May 2020). Source: Worldometer

But what tests are we talking about, or, more accurately, are *they* talking about? Nearly all the publicly available data pertains only to antigen tests – the tests that tell you if currently *have* the disease, not antibody tests that tell you if you *have had* the disease and now likely carry immunity.

Confusion abounds both in the community but even among health professionals and policy makers over the type of test that should be used. There are also major questions over the reliability of the commonly used RT-PCR antigen tests. The roll-out of antibody tests, such as the new Roche antibody test or the Abbott antibody test look promising. Until you find the near-100% reliability that's been cited by the manufacture has, as David Crowe revealed in an interview with health journalist and ANH friend Jerome Burne, a somewhat rickety undercarriage.

Another issue is who pays? Presently antibody tests are mainly available for limited research purposes or for those who can afford to pay privately. The efficacy of many are unknown with only a handful being awarded a CE Mark. Concerns are being expressed as to whether getting a positive result may make people less compliant with control measures.

To mask or not to mask, that is the question?

Current evidence suggests the main transmission route for Covid-19 is via respiratory droplets. However, there are conflicting opinions as to whether or not face masks provide suitable protection against coronavirus transmission. An increasing number of countries such as Venezuela, the Czech Republic, Austria, Turkey, Germany, Spain and France are now mandating the wearing of masks in various settings, with some also imposing fines for those caught not wearing one.

The evidence for masks as a means of protecting others is definitely inconsistent and sometime even contradictory. But as Zoe Harcombe PhD's review of the evidence shows, there is an arguable balance of evidence tipped in favour of mask use in certain environments, particularly if there is a higher or unknown risk. In our view, this doesn't apply around children and schools – this being the subject of our video piece also released today on why and how schools should reopen.

For many the wearing of a mask provides a way of dealing with an unknown 'enemy' and its associated hazards and risks. Something that provides a sense of confidence that allows them to feel in control, a symbol that shows they are protected while at the same time providing protection to others. Given the inconsistencies and somewhat weak scientific evidence, balanced against individual needs, concerns, vulnerabilities and exposure risks, we are in favour of choice for masks and other face coverings rather than compulsion. A recent modelling study suggests the benefits of wearing a face mask will be enhanced when used in conjunction with other non-pharmaceutical measures and use is universal (within nations). This kind of research will increase the likelihood of mask use being mandated in certain situations and given that masks make facial recognition more difficult, prepare to see this packaged alongside a drive for greater digital surveillance say via mobile phones.



An increasingly common pastime for furloughed workers.

There are also risks to the wearing of masks. Exhaled air can go into your eyes when wearing a mask, which can encourage you to touch your eyes potentially introducing the virus to your system. They can also make breathing more difficult, reducing the amount of oxygen available. Wearing a mask can induce anxiety in the wearer, which in turn can affect breathing patterns. When a mask becomes damp it increases the dampness in mucosal surfaces allowing greater opportunities for viral entry to the epidermis and subsequent viral replication. This in turn can increase the viral load a person is exposed to increasing their risk of becoming infected. It may also induce a false sense of security encouraging people to reduce hand-washing and other infection control measures.

The World Health Organization (WHO) advises "the use of a mask alone is insufficient to provide an adequate level of protection, and other measures should also be adopted".

When using a mask it's essential to use the correct techniques to put it on and take it off. Don't touch a mask when wearing one and change single-use masks regularly or wash them frequently. The type and fit of a mask matters as well. One study found that whilst a surgical mask was 3 times more effective in blocking transmission than a homemade mask, using a homemade mask is better than no mask.

But, in recognition of the questionable evidence base, Dr Martin Marshall, Chair of the Royal College of General Practitioners (RCGP) in the UK said there's no "...evidence to support wearing a mask if you're basically fit and well".

Vitamin wake-up!

Our final update is on the mainstream media waking up to the importance of vitamins. That's because the circumstantial evidence, as this *Lancet Diabetes* & *Endocrinology* piece suggests, has become overwhelming: those with very low vitamin D status have the most severe outcomes.

It's also a reminder of the might and the messaging control exerted by the mainstream media and tech giants. Hundreds of quality posts on vitamins and their role in treatment or prevention, including our own, have suffered censorship at the hands of social media platforms when they were much more evidence-based than the lightweight recognition now being offered by mainstream media sources. But now the mainstream can express their views that vitamin D should probably be taken by everyone, low vitamin D status having found a place as a risk factor alongside obesity, type 2 diabetes and skin colour (the susceptibility of people from black and ethnic minority (BAME) backgrounds is of course in part related to vitamin D status).

Examples include articles in *The Times*, the *Spectator* and *The Independent*.

Some of the recent science includes:

- The role of vitamin D in the prevention of coronavirus disease 2019 infection and mortality
- The possible role of vitamin D in suppressing cytokine storm and associated mortality in COVID-19 patients
- Potential Role of Vitamin D in the Elderly to Resist COVID-19 and to Slow Progression of Parkinson's Disease
- Rheumatologists' Perspective on Coronavirus Disease 19 (COVID-19) and Potential Therapeutic Targets
- A Comprehensive Literature Review on the Clinical Presentation, and Management of the Pandemic Coronavirus Disease 2019 (COVID-19)
- Lungs as Target of COVID-19 Infection: Protective Common Molecular Mechanisms of Vitamin D and Melatonin as a New Potential Synergistic Treatment
- Optimal Nutritional Status for a Well-Functioning Immune System Is an Important Factor to Protect Against Viral Infections

Even a SAGE advisor is now saying people need to expose themselves to sunlight to build vitamin D status – that's after the public was previously advised to stay indoors. Ummm.

There are many issues here. How much body exposure, for how long, what effects might sunscreens or your skin colour have?

Sadly the government advice on vitamin D consumption flies in the face of the scientific evidence. The recommendation is for just 10 micrograms per day (400 international units). However, it is well known that individual requirements vary hugely - depending on such things as genetics (e.g. genetic variations affecting vitamin D receptors) and

physiology. The only robust measure of status involves measuring circulating levels of the precursor, 25-hydroxyvitamin D, of the active form, 1,25 dihydroxy vitamin D, which is a hormone, the precursor to all our steroid pathways as well as being an anti-inflammatory agent and immune modulating factor.

Forty-eight of the world's leading vitamin D researchers agree that the optimal blood level for 25-hydroxyvitamin D is between 100 and 150 nmol/L (40 to 60 ng/ml). Vitamin D tests are widely available online and can be determined from a finger-prick/blood spot test.

To achieve these levels, for most adults this requires daily consumption of at least 10 ten times the recommendation given by governments - i.e. 100 micrograms (4000 IU) daily, in the absence of significant sun exposure.

Two historian's perspectives

We hear a lot of different perspectives on the Covid crisis from the scientific, political and economic community. Less so from historians. But surely a historical perspective is useful, given the long history over which humans have dealt with epidemics and infectious diseases?

We've selected two interesting interviews form leading historians. One being David Starkey, the other Prof Niall Ferguson (NOT the epidemiologist, note spelling of first name!).

Very interesting and relevant perspectives in our view.

https://youtu.be/8S8Js-tEmlg

https://youtu.be/KsmmCjxQz6w

Should schools reopen?

Date:

21 May 2020

Our latest Coronacast – with Rob Verkerk PhD

Content Sections

- Video transcript
- What this video is about
- Science dive
- Expert view
- Misrepresented German viral load study
- What about Kawasaki-like syndrome?
- Leading UK paediatricians provide guidance
- Other countries?
- ANH proposed school reopening strategy
- Concluding remarks

Video transcript

Hello – my name's Rob Verkerk – I'm the founder, executive and scientific director at the Alliance for Natural Health International – and I'm here for another ANH coronacast – this one focusing on the hot topic of whether and how schools might or should reopen.

I speak to you not only as a sustainability scientist – but also as a parent. My oldest is a surgeon in the UK's NHS and has had to deal first hand with some of the complications from severe disease and ventilator support. My youngest two are still at home, doing their best to do distance learning, in many ways having to learn ways of learning that we'd previously thought were challenging even for first year undergraduates. Now we expect it of primary school kids. Yes, so I declare my interest too as a concerned parent.

Find related articles, information and videos in our Covid Zone

What this video is about

In this video, we're going to be looking at

- the state of the science,
- what children's and teachers' susceptibilities to covid disease might be
- if kids really are the super spreaders the media makes them out to be
- if teachers and schools are justified in their claims that schools will become death camps if they're re-opened
- if school re-openings could contribute to another wave of infection and finally
- what kinds of strategies based on the existing scientific evidence should be put in place to protect children, teachers, other staff and the community at large when schools are re-opened.

Science dive

Ok – so let's dive into the key science. First thing to note is that it isn't going to be the deepest dive – that's because the science is somewhat thin on the ground. This of course breeds uncertainty and it's also interesting given this situation that some elements of this limited science have been picked up by the media and been badly misrepresented. That's all well and good if the idea is to instil fear in the public – which it seems is exactly what the UK SAGE group – that's the scientific advisory group for emergencies that advises the UK government has been doing. Here's a leaked copy of the minutes from one of the key advisory groups – the so called Independent Scientific Pandemic Influenza Group on Behaviours or SPI-B – that itself feeds into SAGE from late March. It shows clearly a calculated approach to combine persuasion, coercion and other tricks widely used by unscrupulous ad agencies and totalitarian governments to instil fear in the public to make us, the public, malleable and responsive to government policy – however weak the science it was based on.

The media have been deliberately engaged as propaganda agents for this purpose – so no wonder censorship of any dissenting voices has been running rampant.

This might be all very well and good when you're trying to push people into lockdown – not so good when you're through the main wave of infection as we now are and trying get kids back to school and people back to work.

Now the UK government especially faces a very reticent response from many teachers, schools and governing boards – as has become more and more commonplace the government position is often bumbling, contradictory and undecided.

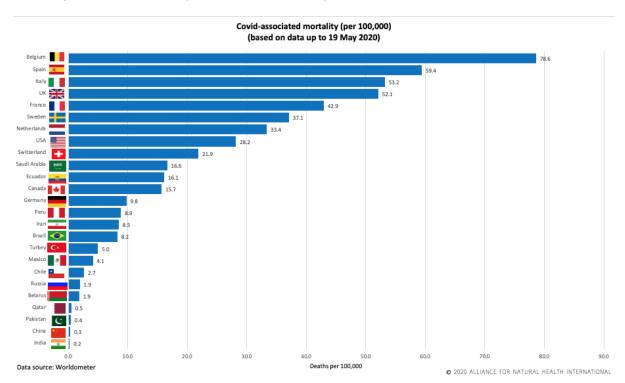
BBC News: Schools safe to reopen, Michael Gove insists

The Mirror: Ministers have 'no idea' if reopening schools will cause second coronavirus peak

The Independent: 'I don't know': Plans to reopen English schools next month up in the air after minister admits growing revolt

With a trail of mistakes behind it – it probably wants to limit further mistakes. One way through this is to do what the Swedes, Danes, Fins and many others have done – open schools or in some cases have never closed them. Use all of the science to make the most informed choices that minimises the net impacts on society.

And it's interesting if you look at the latest figures on mortality rates per 100,000 population across the 25 countries in the world with the highest incidence of case rates as we show here there's no evidence that those who left schools open had the highest incidences of serious disease. In fact, quite to the contrary. All four countries that hit mortality rates of over 50 per 100,000 – the top 4 on the chart – all closed their schools.



Expert view

So let's look at what paediatric or child health doctors and researchers have to say. Here we find it hard to disagree with the views of Drs Alisdair Munro and Saul Faust who piggyback between the University Hospital Southampton NHS Foundation Trust and the University of Southampton. They have no competing interests – their funding coming from the UK's central research funds through the National Institute for Health Research. No hint of any Gates Foundation money there then.

They make it very clear that it's time for the kids to get back to school. Here's a few extracts from their article published on 5th of May.

If, as for influenza, children are the primary drivers of household SARS- CoV-2 transmission, then silent spread from children who did not alert anyone to their infection could be a serious driver of community transmission. On this presumption but without

evidence, school closures were implemented almost ubiquitously around the world to try and halt the potential spread of disease despite early modelling that suggested this would have less impact than most other non- pharmacological interventions.

Munro and Faust make the point that the original idea of closing schools came about because it was assumed – which turned out to be a wrong assumption - that kids were super spreaders, just as they can be with other respiratory viruses – especially flu. We now know that's just not the case.

They then go on to summarise the available evidence concluding that kids have very much less serious disease than adults representing less than 2% and sometimes less than 1% of those infected. Most are either asymptomatic or suffer mild symptoms and nearly all make a full recovery. In actual fact other respiratory viruses like flu and certainly RSV – respiratory syncytial virus – hit kids a lot harder than covid – and schools have never been closed for these viruses.

Evidence is therefore emerging that children could be significantly less likely to become infected than adults. On the other hand, children could have a more transient upper respiratory infection with minimal viral shedding, or the less likely scenario of showing minimal symptoms despite significant viral shedding. A further key question is the ability of infected chil-dren to spread SARS- CoV-2. A collection of international family clusters found that children were not likely to be the index case in households, only being responsible for around 10% of clusters. Data from Guangzhou have supported this, finding an even lower rate of children as index cases in households at 5%.

Another key point that emerges when you look at the balance of evidence is that children are much less likely to spread infection – based on studies of familial clusters from China and Italy.

Everyone's now very familiar with the fact that there are a particular cluster of symptoms including hypertension, type 2 diabetes, obesity and a history of lung disease that make adults very vulnerable. There's no similar clear picture with children. That even goes for kids who are clearly immune compromised – or immunosuppressed even by drugs. It suggests there's something else going on with children – and that might be down to their lively innate immune systems that make it harder for the virus to get a foothold and it then means they don't suffer all the issues of a delayed over response or cytokine storm from the adaptive immune system that's linked to most of the cases of severe disease in adults.

Understandably – that means that a lot of paediatric doctors are actually not so much concerned about the virus – they're more concerned about the disadvantage that will face so-called vulnerable children if they're not allowed to return to school as against healthy kids who can.

Many paediatric specialists are concerned that a blanket assumption that immunesuppressed children of any kind are all at increased risk will cause consider-able longterm educational and social harm to these children. At the current time, children do not appear to be super spreaders.

Munro and Faust don't beat around the bush. They make a direct call on governments worldwide – based on the available science – to allow **ALL CHILDREN** back to school, regardless of comorbidities.

Governments worldwide should allow all children back to school regardless of comorbidities. Detailed surveillance will be needed to confirm the safety of this approach, despite recent analysis demonstrating the ineffectiveness of school closures in the recent past. The media highlight of a possible rare new Kawasaki-like vasculitis that may or may not be due to SARS- CoV2 does not change the fact that severe COVID-19 is as rare as many other serious infection syndromes in children that do not cause schools to be closed.

Well we agree with them.

The reality is there's been a misguided reaction from either misrepresented science or early studies that have now been disproven that continues to bolster a view among teachers, their unions and governing boards that it's way too early and way too dangerous to reopen schools.

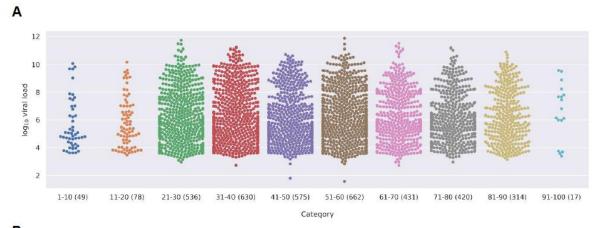
Misrepresented German viral load study

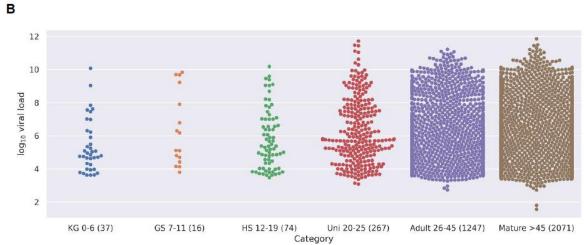
One piece of influential research – a German study – misplaced as its conclusions are – is that children can have the same viral load as adults. The conclusions make it abundantly clear that the viral loads of the very young – the under 10s don't differ significantly from adults.

The problem is that the data in the paper don't reflect the authors' conclusions. There are some real issues with this study – which hasn't undergone peer review, like so much many of the studies being published in journals during this crisis. What the authors are looking at are statistical artefacts in their analysis where the variance appears to cancel out differences. But there's a problem with their methodology.

If you look at the raw data you'll see huge differences in viral load that fit much better with the balance of evidence – not that the media has taken much notice. After all, why would you want to quell the fear when you've been asked to work with governments to maintain it.

You'll see much lower viral loads in the 1 to 10s and 10 to 20s compared with the adults groups. You also see it by schooling or social group in Graph B – the kindergarten kids on the left side, as well as grade school and even high schools kids show much lower viral loads than the adults over 26 on the right side. Iin the final figures in the paper that show from top left, younger adults from 26 to 45 years old, through to grade school kids aged 7 to 11, high school kids aged 12-19, kindergarten kids aged 0 to 6, mature – the over 45s and then university students from 20 to 25. Check out the y-axis scales and note the huge differences in viral loads in the young adults, top left, and mature over 45s, bottom left – compared with everything else.





Based on this paper that was used by the media to push the idea that kids have the same viral load – it would be safe to say theirs is around one-third of a typical adult. Not only that the current data – based on the other studies showing they are rarely the index cases that initiate clusters of infection – shows they are much less likely to transmit the virus.

What about Kawasaki-like syndrome?

What about the Kawasaki-like hyper-inflammatory syndrome that's now hit the media and got the schools so agitated about going back?

The first thing to say is the science is not fully resolved around this – it's a newly identified syndrome and it was in fact a UK study that created a national alert.

From the emerging evidence it appears that a very small number of children are at risk of a Kawasaki-like hyperinflammatory response syndrome that appears associated with covid infection. Common symptoms are abdominal pain, diarrhoea, gastrointestinal symptoms and a persistent fever. Since the UK raised the alarm bell it's also been noted in China, the US and Italy.

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In very rare cases it can lead to multi-system organ failure – but even the WHO considers the rare condition to be treatable with parenteral immunoglobulin and steroids.

Interestingly - a study on Kawasaki disease itself from 2015 showed that 99% had low levels – less than 75 mmol/L, or 30 ng/mL in US money, of circulating hydroxy vitamin D compared with 79% in controls. More than that, those who had very severe symptoms including developing coronary artery abnormalities had severely low levels between 12 and 38 mmol/L – that's 5 and 15 ng/mL in US units.

Sadly the government advice on vitamin D consumption also flies in the face of the scientific evidence. They're saying you need just 10 micrograms per day – that's just 400 international units. But what we really know about vitamin D is that individual requirements are linked to differences in metabolism – remember vitamin D – in its active forms 1,25 dihydroxy vitamin D, is a hormone and precursor to all our steroid pathways as well as being an anti-inflammatory agent and immune modulating factor. Over 3 years of evidence shows us that intakes don't correlate well with circulating levels of the active vitamin. Measuring your circulating levels of 25-hydoxyvitamin D and metabolites is a much better way of doing this and for kids over 1 you need to be in the ballpark of 50 micrograms or 2000 international units daily to make sure you hit the sweet spot - 100-150 nmol/L or 40-60 ng/ml in US units - in terms of your circulating levels – and that's even if your requirement is higher for genetic or physiological reasons – and assuming there's no significant sun exposure. You can double this or more for adults – based on body volume.

Do You Know Your Vitamin D Level?

Find out with our home test kit.

Research has demonstrated many health benefits of higher vitamin D levels. What do scientists say is the target amount? 48 world-wide vitamin D researchers agree it is 40-60 ng/ml (100-150 nmol/L). Determine your level today

It's then particularly interesting that the kids suffering the most serious Kawasaki shock-like symptoms are those who suffer the greatest physical challenges and require the most technological support and probably spend the least time outdoors – and may not consume a lot of the foods like oily fish, egg yolks or mushrooms that are natural but limited sources of oral vitamin D.

Leading UK paediatricians provide guidance

So what does the UK's most important medical college for paediatricians – the Royal College of Paediatrics and Child Health – (RCPCH) probably the very group of medics with the greatest insights on children's health – say about all of this.

The RCPCH has put together a comprehensive summary document that should really be the key guidance documents that schools refer to. In our view it reflects the balance of evidence around covid impacts on childrens' health and risks to others really well.

The 101 from this document looks something like this:

- Very low incidence of Covid-19
- Critical illness and death very rare

- When present, mild symptoms or asymptomatic
- Common symptoms cough and fever
- Acquire infection less easily than adults
- Low transmission potential
- Viral shedding for 6-22 days (median 12 days)
- Vulnerabilities unclear

The incidence of Covid-19 symptoms is very low – less than 2% of all cases, and even less among the youngest groups. Kids very rarely get seriously ill or and it's extremely unusual for them to die – and generally only when there are other, serious complications. This risk is actually quite a lot less than with some other respiratory viruses such as RSV that's never caused school closures. When kids ecome infected, based on testing – most of the time they either get mild symptoms – mainly coughs and fever – or they're entirely free of symptoms. They not only get infected less than adults – just as importantly – they also pass on infection less easily to adults, as shown by how uncommonly they have been found to be index cases in clusters identified through test, track and tracing schemes. Viral shedding duration is also important if quarantines are going to be considered. The range varies considerably between 6 to 22 days with average or median of 12 days.

Finally the picture on children's vulnerabilities is definitely unclear – and contrasts greatly with what we know about adults and the well-known comorbidities that greatly increase their susceptibility. The very few kids who have been most severely affected have been those with very complex conditions, including disabilities and genetic abnormalities that require them to be dependent on long-term technological support.

What's more of a surprise is the evidence shows kids who are even immunosuppressed – either as a result of disease or immunosuppressant drugs – are not more susceptible. But the RCPCH still concludes the risks even to the most vulnerable groups isn't any greater than any other respiratory viruses.

So how does all this science inform decisions to move forward – to proceed with opening schools – or hold off until later?

We absolutely concur with the findings of the Royal Society of Paediatrics and Child Health. They point to an evidence summary that's very useful on a really great and important website run by a bunch of Australian and UK paediatricians called Don't Forget the Bubbles. The Covid Resources is especially useful when it comes to kids...

In it you'll find a page that summarises all the relevant evidence relating to kids and Covid-19. There's nearly 200 papers referenced there – and these are the people saying it's time for kids to go back to school. So please listen, dear governments, teachers' unions, school governing boards and parents.

Or if you don't choose to listen – please don't profess to be guided by the science.

Other countries?

In fact a quick squiz at what's being going on in Sweden is very informative.

No school closures ever occurred for primary and junior school kids and there is no evidence at all for any increase in community infections linked to children based on test, track and tracing. That's very useful evidence that fits well with what we know about how the virus behaves around children.

It's a bit too early to tell from the data from Germany and of course the 70 cases in France have hit the news big time and got everyone panicking again

It's hit the same old, well-worn fear button in the minds of many – teachers, governors, unions and parents alike.

But when you drill down into the data it doesn't wash with the overall trends.

Here we see very clearly that when you look at the 22 EU countries that have been reopening schools there has been no spike. None.

In fact if you go back to looking at EuroMOMO data – you'll see very clear evidence that excess mortalities in children have never spiked – and in fact in of all the 24 European EuroMomo countries including the UK, there's been lower incidences of death – note the dark blue lines for 2020 in the 0 to 4 years and 5 to 14 year old categories – as compared with 2018 and 2019, since the covid crisis began.

I want to just finish off by offering some views on how we think – again informed by the science – including an assessment of risks and benefits – kids can be brought to schools, safely.

For a bit of context on this point – and you may have noticed we're great fans of context at ANH – the World Economic Forum estimated a few days ago that there are around 1.5 billion kids facing some kind of restriction to their learning at school because of Covid-19 and 60% of these live in countries with partial or full lockdowns.

It's such a big issue – because we're playing here with the generations who will in the not too distant future be running the show here on planet Earth.

ANH proposed school reopening strategy

Cutting to the chase, here's our summary position on some of the main areas we think should be on the top of any list of strategies for school re-opening – and that's based on our detailed assessment of the current scientific evidence:

- Staged school reopening youngest ages, smaller schools first
- Infra-red temperature recording at least twice a day at school (e.g. start and finish)
- Regular, supervised handwashing with regular soap
- Staff trained to identify and report symptoms
- Test, track and tracing system must be in place
- Quarantining following identified cases and exposures
- Antibody testing offered to staff who have previously experienced Covid-like symptoms

- No distancing in classes, but additional time spent outdoors (normal activities)
- Staff considered vulnerable should avoid returning to schools
- Mask use by staff optional, although visors that don't interfere with non-verbal communication are preferable
- Advice given to parents on maintaining or improving immune resilience

It makes sense to stage the opening of schools starting with the youngest kids who have least risk from the coronavirus – the kindergartens and primary schools – first, as well as smaller schools. This means that in the event of an infection cluster developing, it's going to be smaller than in a large school. It's a bit like putting your child who you've just taught into a new swimming pool for the first time. You'd choose the shallow end – rather than forcing them to jump into the deep end. As important as any risks from the virus, is building confidence among the staff, parents and wider community – and that's also a bit like learning to swim again.

Then – let's not get hung up about temperature measurement. With today's non-invasive infra-red thermometers – there's no contact, there's no associated surveillance. It just makes everyone feel safer if we know that all the kids coming into the school gate don't have one of the main symptoms of infection in kids – fever. If you do find fever – you kick off the test, track and trace system that should be run by local councils. Temperature recordings could also be done at the end of the day.

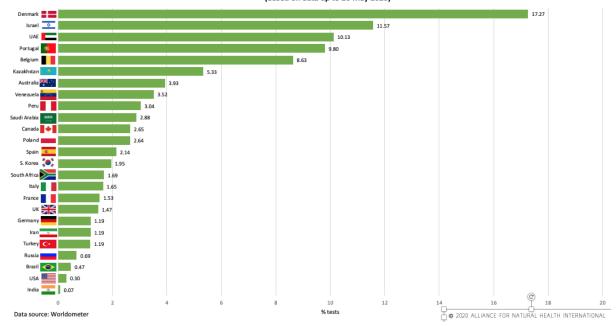
Regular handwashing has obviously got to be on the agenda. But that doesn't mean over doing it or using toxic antibacterial agents that damage kids' sensitive skins or give them rashes and other dermatological problems.

You need the staff to know how to spot symptoms and report them – and you also need a fully operational test, track and trace system – as used so effectively in countries like Taiwan, South Korea and closer to home in Denmark and Finland. In the UK this has been a long time coming and we're still not there - but we're told it's imminent.

If you're going to have a track and trace system – you also need to have a quarantine system. In our view quarantining the small number of people who might initiate further transmission in the community is way preferable to locking down the whole of society or disadvantaging those kids who don't have the space or environment to work effectively from home.

Back to testing – with all this talk about testing – and the huge numbers of tests that are being conducted around the world – let's remember the vast majority of these are antigen tests that tell you only if you have the disease, not if you've had the disease. That's all very well and good if you're looking at the early stages of an epidemic or pandemic or if you're using it to track and trace new cases.

% of country population tested (based on data up to 20 May 2020)



But now – as we're well along the infection curve and down the other side – we really need to see antibody testing ramping up – and not just being made available privately for those with the money to part with a couple of hundred or more pounds or dollars.

Knowing you've had the infection in the past – or not as the case may be – is really important to getting people back to work – as well as building confidence. It's maybe not all governments' highest priority if they're hedging their bets on letting us all free when a vaccine finally comes on tap – but for the rest of us it's a really important way of determining if you've got immunity. In our view it should be available to all staff in schools – and the use of antibody tests could be a vital tool in rebuilding confidence and dispelling fear in the community – fear that was deliberately engendered by those responsible for public health strategy.

Now – we're going into probably the most controversial area. We're advocating for no social distancing in classes. Just normal school. And we're not the only ones

We're thrilled to see the Us for Them campaign building in the UK that's saying social distancing in schools and nurseries is not OK. Let's see that #NotOk hashtag come alive – it will have to compete with the #schoolsreopen that's being pushed very hard by those who have an irrational fear of the virus generated by the government and pro-vaccine propaganda machines.

Talk to primary school teachers and educators – talk to behavioural psychologists. Talk to therapists who deal with children or adults who've not had the chance of close bonding with those around them. We have.

The only way to look at this is by weighing up risks and benefits that affect all those affected, from their different backgrounds, ethnicities and cultures, taking into account the even greater social and educational inequities that impact the most socially disadvantaged.

Then you have to accept – based on the science – that the risks to kids themselves are comparable or even less than other respiratory viruses for which we haven't enforced social distancing or school closures. If you're going to implement social distancing and put pupils into bubbles, and force them to sit 2 metres apart in classrooms and avoid any form of contact – there has to be a very good scientific reason to do this. And those reasons simply don't exist.

You've got to also consider the impacts of social distancing and related measures to the learning and developmental process. Plus there are other measures to guard against any shift of infection back into the community – which the science is telling us is highly unlikely in any event – like test, track and trace systems. So why do we need to so severely disrupt the learning environment?

OK, then there's the potential risk to adult staff – but the plus side is the science here shows we know a lot about the vulnerabilities among adults. So if we have shielding for vulnerable staff members in place – with those staff who're considered vulnerable not returning to school while there's virus in the community or at least avoiding any proximity with others who might be infected – the risk to adults can quite easily be mitigated without massive disruption to the kids themselves.

While we're talking adults – I'll add that that we're not great fans of masks for the general population given the variable science on their benefits outside a critical care environment. That applies even to N95 respirators or surgical masks in schools. You've got the problems with resourcing, of disposal and the risks of contamination. You increase the risks for users who in this case are more vulnerable to covid than those they seek to protect – the kids. The fact is the actual risk profile in schools is low because kids appear to not be good spreaders. And then you've got the fact masks have a big impact on the ability of young children especially to read non-verbal, facial communication.

For anyone interested in this I suggest you have a read of Dani Hall's great blog called the Smile Behind the Mask on Don't Forget the Bubbles.

There's a lot that can be done for those who choose to use some sort of protection – and yes, we think it should be optional not compulsory. Visors make a whole lot more sense than masks especially around young children if some kind of transmission protection is considered necessary given the most common form of transmission involves droplets from spluttering as people speak with each other.



bubble

Source: Smile Behind the Mask

So check out how a young kid might respond to someone with a visor as compared with someone with a mask.



Source: Northjersey.com





And I just want to finish up on one more point – one that's been roundly ignored by governments. What we do to help people – both kids and school staff – to optimise their immune resilience. It's far too big an issue to cover in this video so let's look at this as

more a placeholder given there's a lot on our website about this and you'll find links to this below.

But helping kids to reduce any excess weight, to be very active, spending lots of time outdoors getting themselves in the dirt so they can develop their all-important external and internal microbiomes, eating balanced, varied healthy nutrient-dense diets along the lines of our Food4Health guide, taking additional vitamin D if they're not in the sun, keeping vitamin C, zinc and other nutrients topped up, all of it is crucial.

In the Philippines they even dish out vitamin C to the kids at school. And let's not ignore the fact that with it's nearly 110 million strong population it's only reported around 850 deaths from Covid-19.

Another point is that we know that kids come into this world with a powerful innate immune system that's the first response side of our immune system that's the body's first attempt to deal with any invading pathogen – suggests keeping your and children's innate immune systems primed is pretty important.

Concluding remarks

So that's our take, based on all of the existing, albeit sometimes limited or incomplete science – on why and how we think schools should reopen.

You'll find a lot more information on our website – all of the content including articles, videos and weekly updates on the science and media around covid – curated in one place at covidzone.org.

Our main website is anhinternational.org

Thanks for watching – and if you like what you've heard or seen, please subscribe to our censored **Youtube** and uncensored **BitChute** channels – and greatly look forward to seeing you next time.

>>>Return to ANH's Covid Zone

Remdesivir – out of the ashes but no miracle cure

Date:

28 May 2020

How did Gilead's Remdesivir go from failure to a 'miracle' drug for Covid-19?

Content Sections

- • If at first you don't succeed...
- Overegging results
- • If the trial fails, 'fix' it
- Patents before patients

The pandemic that's swept the globe in recent months has left many in fear for their lives as citizens are told there are no treatments for this particular coronavirus. In the stampede to trial new treatments the normal scientific protocols and timelines required to prove safety and efficacy have been swept aside.

If at first you don't succeed...

Over the last 24 hours, the international airwaves have been filled with rejoicing over the first US and UK approved experimental drug, remdesivir, for intravenous treatment of serious Covid-19 disease in hospitalised patients. The adenosine analogue, originally developed to combat Ebola, didn't perform favourably in clinical trials compared with other therapeutic approaches. Pharmaceutical company, Gilead Sciences, attempted to recycle it to treat SARS and MERS, but once again any benefits were marginal at best. Fast forward to January 2020 when Gilead took the opportunity of throwing its hat into the ring to reposition the drug for use against the emerging coronavirus, partnering once again with Dr Anthony Fauci's US National Institute of Allergy and Infectious Disease (NIAID).

Overegging results

The first trial for remdesivir as a treatment for SARS-CoV-2 took place in Hubei, China. This was a randomised placebo-controlled multi-centre trial across ten hospitals with 158 patients receiving the drug and another 78 a placebo. In a blow to Gilead's hopes, the trial concluded that remdesivir "... was not associated with statistically significant benefits" sending Gilead's stock sliding. Undeterred, the company brushed the results aside saying the numbers studied were too low preventing it from being able to come to statistically meaningful conclusions.

In February 2020, Gilead announced additional trials as part of its quest to get their product approved. Gilead would be running two phase III trials under the name SIMPLE with the other to be carried out by the NIAID.

At the end of April, Gilead released a statement boasting the NIAID trial had met its unspecified primary endpoint, based on interim results, sending stocks and hopes soaring. It turns out that the end point was shortening the average duration of disease from 15 days to 11 days in hospitalised patients. Mortality rate in the trials dropped slightly from 11.6% to 8%. In an undoubted effort to generate PR for remdesivir, Dr Fauci claimed the results were "highly significant if you look at the time to recovery".

Gilead also released top-line results for one of its phase III SIMPLE trials comparing duration of dosing and showed a 5-day course of remdesivir had the same efficacy and short-term safety profile as a 10-day course.

But crucially, in Gilead's press release of 1 May when it celebrated the approval by the US Food & Drug Administration (FDA) of remdesivir for emergency use among hospitalised patients, Gilead cited: "Remdesivir is an investigational drug that has not been approved by the FDA for any use. It is not yet known if remdesivir is safe and effective for the treatment of COVID-19."

If the trial fails, 'fix' it

But all was not as it seemed. In early April, Gilead changed the primary endpoints for both of its trials to focus on trying to improve its results. The company also added a cohort of mechanically ventilated patients (not previously included) and enrolled more patients.

As indicated above, the interim data from the NIAID trial showed an average improvement in recovery time of just 4 days (11 days vs 15 days).

The NIAID then made the difficult decision to stop the study given evidence of marginal benefit for those receiving treatment. This raised ethical issues around withholding remdesivir treatment from seriously ill patients who had been assigned to the placebo group. This, in turn, prevented researchers from collecting further meaningful data.

The study has now been published in the *New England Journal of Medicine*. Assessing viral load, which surely should be a primary outcome for a trial involving an antiviral drug, does not appear to have been an integral part of any of the studies. The data that are available does not suggest a reduction in viral load suggesting that outside the lab and in the real world, the proposed mechanism of interrupting viral RNA replication might be modest at best.

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	work				

Patents before patients

As always - the world of Pharma isn't always (or often) about doing the best for patients. There are plenty of interests involved. The Chinese government-owned Institute of Virology in Wuhan, close to the original epicentre of the pandemic, filed for a patent on 21 January. A Chinese manufacturer BrightGene has announced that it has started mass production of remdesivir. A global war over intellectual property and marketing rights looks increasingly likely - all the while taking the focus off providing the best possible solutions for those most severely affected by the new coronavirus. Especially given there are unpatented nutrients like vitamin C that may fare much better than remdesivir in a side by side comparison.

In an open letter at the beginning of April, Gilead Chairman and CEO Daniel O'Day announced the company would be donating its existing supplies of 1.5 million doses of remdesivir for compassionate use, expanded access and clinical trials. Sounds very charitable, but one wonders what the expiration dates of these stock are. As with the charitable deeds of so many corporates, there's an underlying profit driver: Gilead is estimated to achieve sales of \$1.1 billion of the drug this year, \$3.2 billion next year, and \$2.5 billion in 2022.

Gilead can now benefit from owning the rights to an experimental drug that ostensibly 'works'. Shortly after the announcement of the interim results of the NIAID trial, remdesivir was given emergency use authorisation for the treatment of Covid-19 by the US Food and Drug Administration (FDA). The Japanese Ministry of Health, Labour and Welfare granted regulatory approval at the beginning of May. UK critical care doctors will also get the opportunity to use remdesivir on a limited number of patients. Matt Hancock, the UK Health Minister, chimed in, over-optimistically, claiming the limited use of remdesivir for UK patients was "the biggest step forward yet" as the UK became the latest country to announce approval of the drug. We'll be interested to see data that supports such claims.

Enthusiasm for the drug is likely to continue as more and more countries rush to approve its use, but only time will tell just how effective and safe this new drug is for hospitalised, seriously ill patients. What we know for sure, it's no miracle cure.

Social distancing in schools?

Date:

28 May 2020

Rob Verkerk PhD discusses the safe reopening of schools, without social distancing, with Christine Brett from the Us For Them campaign

ANH Founder, Rob Verkerk PhD, had a 20-minute, socially-distanced Skype chat with Christine Brett who's in the front lines of getting UK kids back to school - naturally and normally, without the massive disruption, psychological damage and reduced quality of education that would be caused by social distancing and related measures.

That's before you look at the potentially huge, multi-dimensional impact on often very under-resourced, time-challenged teachers. Where is the risk/benefit assessment that takes into account all of the negative potential impacts of imposing social distancing in children's main learning environment? There isn't one.

Check out the 18-minute interview below.

>>> Download PDF of guidance document: Immune Support Protocols to Support a Return to School

For those who'd rather read than watch, we also, separately, asked Christine some key questions about the Us For Them campaign that profiled Rob's coronacast from last week on school closures and reopening.

Interview

1. What made you come together to create the Us For Them campaign? Who are you - when did your campaign kick off, who are the team members behind it? What are your drivers? Tell us a bit about yourselves.

The three of us met on social media just a week ago, we bonded over concern that the welfare of the children wasn't being considered in the debate about schools opening. No-one in a position that traditionally advocates for children is speaking out so we feel that we have no option but to ask the question about whether the harm from proposed measures has actually been considered. We want schools to reopen but with sensible infection control and without social distancing measures BETWEEN children which we feel is extreme and highly damaging to their wellbeing.

2. You're calling on immediate school reopening and then a proportionate approach to using the government's 5 point guidelines that includes things like more frequent hand washing, minimising contact with those who're unwell and good respiratory hygiene based on 'catch it, bin it, kill it', and then finally, the change of classroom layouts and timetables that's particularly controversial. The first question I want to ask about this hierarchy is what do you mean by a proportionate approach - who decides and how might this work practically in say a nursery or primary school?

We understand that children can't go back to school in the same way that they left. However, we need to remember that the most important aspect in controlling the virus and preventing transmission is that children who are unwell stay away from school. After that there are some sensible hygiene precautions such as washing hands regularly and sneezing into a tissue or elbow, that can be taken along with regular cleaning of settings to prevent transmission. The measures can be adopted without detrimental effect to children.

3. Back to the government's hierarchy, the wording of the final point "minimising contact and mixing by altering, as much as possible, the environment (such as classroom layout) and timetables (such as staggered break times)" is a little odd in that the focus seems to be on disrupting kids learning environment as much as possible, not trying to minimise risk to kids. What's your take on the actual wording - and could it be altered to make it clearer as to its intent and could this make things clearer, easier and less disruptive for children, teaching staff and school administrators?

It is not clear how far the benefit from this last measure of minimizing contact between healthy children justifies the considerable harm that it will do. Children are social beings and need to play and interact to develop. What does it mean to be isolated in a group? This means no team sports, no drama plays, nor group work, no connection. We do not believe that there should be any social distancing between children in schools. Children have already been negatively affected by the closure and the proposed measures for school openings will further compound and extend that damage. The measures proposed are making it more difficult for children to readjust to coming back to school after an extended period of absence.

4. What's the Us For Them take on the actual risks to children - and can you define these risks, because they're certainly not limited to risks of disease from the virus, are they? Could you give us a kind of top line view on what you think the risks might be especially on wellbeing and educational development if there was no social distancing versus risks with social distancing as planned with pupil bubbles, minimised mixing of groups and so on?

We know that the risks from the virus in children are thankfully very low. However, the focus has been on risk of virus in schools, with no discussion about the risk of social distancing itself for children. There are decades of research that show you cannot enforce social distancing in a fundamentally social species without serious negative consequences. We know from the research that the need for social support is greatest in times of adverse situations and events such as the current pandemic. Children who are socially isolated tend to perform worse at school, suffer more from emotional and mental health issues as well as being more likely to be obese and susceptible to addiction. Of course, vulnerable people who are at higher risk should be protected but we should not

put healthy children at risk of impaired social development and mental health issues, in order to reduce the spread of a disease that mainly causes direct harm to adults.

5. Why do you think all this is happening - has the nanny state just gone mad, is it a misunderstanding of the science, have we become too reliant on siloed scientific evidence so we've lost our ability to look at the big picture - or could there be, dare I say it, a more sinister objective? What d'you think is actually going on - because a lot of people out there seem to have this same question running around in their minds.

We realise that people are scared. Focus has been on parental reluctance to return children to school; but in fact some do not want their children to return because they fear damage from the measures. I think parents are so scared that they are not being able to accurately assess the risk to their children and they are struggling to understand the relative risks of physical safety and psychological well-being that will be damaged by these measures. The virus is only one risk that children face but our focus on that risk is overshadowing the need to protect children's overall wellbeing.

6. If there's one thing you'd like to see the government agree in the next 30 days linked to your campaign, what would this be?

We are calling on the government to open schools for all pupils without social distancing measures between children; so no bubbles and normal interaction with sports, drama, regular playtime. The Royal College of Paediatricians and Child Health in the response to schools reopening states that, "The concerns and voices of all concerned, including those of children and young people, should be heard respectfully. The discussion of risk cannot only be about the risks of COVID-19." We believe this discussion of risk must now also balance the risk to children of detrimental social distancing measures proposed .

7. Final question - how can people get involved and show their support?

Please sign and share our petition at www.usforthem.co.uk to stand up for your child and protect their future development. On our website you will also find template letters to send to your MP and your headteacher. We are a small team and so are looking for anyone especially with campaigning, PR or expertise in educational psychology to help us highlight that social distancing in schools is #NotOK

Immune support protocols to support a return to school

Date:

28 May 2020

ANH pairs up with the British Society for Ecological Medicine to offer a low-cost, 3-micronutrient protocol alongside our food plan to help kids return to school safely

Content Sections

- Nutritional immune support guidance
- Supplemental recommendations
- Value for money





In conjunction with the British Society for Ecological Medicine, the main medical doctors' association practising nutritional and environmental (i.e. ecological) medicine, we've produced immune support guidance specifically for children, teachers and families as kids prepare to return to school.

>>> Download PDF of guidance document: Immune Support Protocols to Support a Return to School

>>> Download 1 page print- and share-friendly flyer: Nutritional Protocols for Healthy Immune Systems at School

Multiple sources of evidence suggest that there is no justification for ongoing school closures during the tail of the present Covid-19 pandemic wave. This includes a detailed summary of evidence on the transmission potential and susceptibility of children and other groups to severe disease undertaken by the Royal College of Paediatrics and Child Health,[1] and a major review of the effects of school closures on Covid-19 disease risk and mortality which concluded the evidence of benefit was at best marginal and only when school closures coincided with the peak of infection.[2] Additionally there are genuine concerns that long-term social distancing if applied to reopened schools could lead to significant psychological and emotional harm and damage to children.[3]

UK government guidance for protective measures in education and childcare settings currently proposes a 5 level hierarchy in which efforts are made to minimise contact and mixing "as much as possible....by altering....the environment (such as classroom layout) and timetables (such as staggered break times)."[4]

• Find related articles, information and videos in our Covid Zone

Based on the lack of evidence of benefit of such social distancing and the risk of harms, the Alliance for Natural Health (ANH) International and the British Society for Ecological Medicine support the reopening of schools with resumption of normal mixing.

However, we advocate a number of additional precautions be taken to minimise risks to staff and children, as well as to guard against any risk of uncontrolled community infection. These include:

- 1. Staff training to help identify Covid-19 symptoms and initiate test, track and trace programme
- 2. Shielding of vulnerable adults and children to minimise SARS-CoV-2 infection risk
- 3. Provision of guidance for immune support for children, the families of children returning to school and staff.

The present briefing document provides guidance for immune support for both children and adults.

The ANH proposed on 21 May[5] an 11-step strategy for school reopening which is summarised in a 2-page sharable infographic.[6] The ANH is fully in support of the proportionate approach to school reopening as proposed by the Us For Them campaign[7] which attempts to balance the risks and benefits of different options while supporting social justice and equity among children.

The present guidance should be considered in the context of the latest UK government guidance for parents and carers in relation to the reopening of schools.[8]

Nutritional immune support guidance

The key elements of any immune support approach should involve three main considerations:

- 1. Maintaining a healthy internal environment of the body including appropriate nutrition and adequate hydration
- 2. Maintaining a healthy external environment including minimising unnecessary negative stress, healthy social environments and minimising exposure to environmental chemicals
- 3. Engaging in healthy behaviours –including adequate and regular outdoor physical activity and adequate sleep quality and quantity.

The present guidance concerns itself primarily with nutritional support. The ANH provides guidance on healthy eating both for children and adults, in its Food4Kids[9] and Food4Health[10] guides, respectively. There is a an adapted version of the adult guide for vegans.[11] This guidance seeks to maintain healthy weight, metabolic and immune function by ensuring reduced intakes of common food allergens, the consumption of diverse, nutrient-dense diets with a minimum of added sugars and highly processed foods, enhancing metabolic flexibility and minimising addiction to processed foods.[12]

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Given the importance of specific micronutrients in maintaining innate immunity and widespread sub-optimal levels of key micronutrients as demonstrated through the rolling UK National Diet and Nutrition Survey,[13] daily supplemental intakes of three micronutrients is strongly recommended to enhance prevention for children and adults in schools and other educational settings where social distancing is not practiced or may be difficult to enforce.

Supplemental recommendations

The following daily dosages for food supplements are recommended for each of the respective age groups. These doses have been increased over those previously recommended by the BSEM given additional experience and research results relating to Covid-19. We suggest that many people find the most practical way of consuming these doses is by addition of ascorbic acid to water and then drinking the 'vitamin C water' in divided doses (on its own or in more water) throughout the day and evening (see notes below table).

>>> Download PDF of guidance document: Immune Support Protocols to Support a Return to School

Micronutrient	Daily dosage of food supplements					
	Children (4-6 years)	Children (7-10 years)	Children (10-17 years)	Adults over)		
Vitamin D	20-25 micrograms (800-1000 IU)	25 micrograms (1000 IU)	50 micrograms (2000 IU)	100 mi IU)		
Vitamin C*	2,500 milligrams (half a rounded	5,000 milligrams (1 rounded teaspoon of	7,500 milligrams (1.5 rounded teaspoons of	10,000 rounde		

teaspoon of pure ascorbic acid) daily in divided doses

pure ascorbic acid) daily in divided doses pure ascorbic acid) daily in divided doses

pure as in divid

25 mill

Zinc†

10 milligrams

10 milligrams

15 milligrams

*Vitamin C (ascorbic acid) should be taken throughout the day and evening to maintain blood levels. The daily dose of powder can easily be dissolved in warm water which can then be chilled, diluted to taste and taken throughout the day, in divided doses. It can also be taken in tablet or capsule form, for instance in 500 mg and/or 1000mg capsules several times a day. Note: Too much vitamin C may give you loose bowels. This is not an adverse effect but rather a sign that you have taken enough and can reduce the dose slightly.

† Zinc supplements (e.g. citrate, monomethionine forms) should preferably be consumed with main meals that do not contain cereals or grains given these can reduce zinc absorption. Alternatively, zinc gluconate may be consumed between meals in lozenges.

Value for money

Given most countries won't sanction handing out vitamins and minerals to children at the expense of the public purse, we did some UK-specific research on how much it might cost parents to give their kids and themselves what we regard as the three most important micronutrient supplements for immune system support and covid prevention. We looked at products containing vitamins C and D and zinc, selling in three outlet types: major multiples, health stores and online.

The results showed that vitamin C could be purchased per 500 mg dose unit for as little as 2.5 pence, vitamin D for 1.7 pence per 25 mcg (1000 IU) dose unit and zinc for just 0.8 pence per 10 mg dose unit. However the quality between the various products varies hugely. Our advice is to try to take the most natural forms of the supplements, avoid the less well absorbed forms of minerals (e.g. zinc oxide), and consume the least or no non-nutritive additives.

You can download our Excel spreadsheet that includes our analysis. It has three tabs that allow you to access selected vitamin C, vitamin D and zinc containing products, including a list of all the ingredients. We have also provided in the spreadsheet our subjective analysis of the quality of the products based on nutrients forms and composition, using a 3-step grading system from good, to intermediate, to not recommended, especially for children.

You'll note that based on our own subjective assessment of quality based on label claimed composition, the lowest quality products were by and large found in the major multiples, with the highest quality products being found in health stores - and, in among the Wild West of the internet, also online.

However, you look at it, these three micronutrients can provide very low cost prevention in the face of concerns over SARS-CoV-2 infection.

>>> For more information, search our website, that of the British Society for Ecological Medicine, and our portal, Covid Zone, that curates all relevant content on Covid-19.

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The R number – what we're not being told

Date:

3 June 2020

Why government over-reliance on the R number might things worse

Content Sections

- Video Transcript
- What is the R number?
- • Why is the R number viewed as being so important?
- Why is the R number not relevant to lockdown?
- What other metrics could we use?
- What next?

In this week's Coronacast, our founder Rob Verkerk PhD, explains why we think the UK and other governments who are using the 'R number' – the reproductive rate of SARS-CoV-2 – as a key measure to decide when and how to ease lockdowns are on the wrong track.

Worse than that; how relying on the R number will reduce herd immunity and may put more people at risk directly and indirectly.

For those, who'd prefer to read a transcript, you'll find this below the video.

Please share our content widely as this is the main mechanism available to us to extend reach given the censorship and restrictions imposed by social media platforms. Thank you.

Video Transcript

Over the last couple of weeks, we've seen governments and news outlets become more and more obsessive about the "R-number." In this video we explain why we believe *R* numbers are not the right metric to base lockdown policies and decisions on – and why you shouldn't let them frighten you.

What is the R number?

The 'R' in the term 'R number' stands for 'reproductive'. The R zero is used in epidemiology as an estimate of the 'basic reproductive rate' of infectious diseases. That's simply the number of people expected to be infected by one person in a

population that's entirely susceptible – one that's never been exposed to the pathogen in question before.

For SARS-CoV-2 most estimates of the $R_{\rm o}$ range between 2.2 and 3. By comparison with other infectious diseases that means Covid-19 is moderately infectious or contagious, not highly contagious as we're often told. That puts it smack in the same ballpark, in terms of contagiousness, as the common cold – also caused by a coronavirus, as well as Hepatitis A. It also makes it around 4 to 6 times less contagious than measles or mumps.

• Find related articles, information and videos in our Covid Zone

By comparison, the Spanish flu pandemic in 1918 killed a staggering 50 million when the global population was estimated to be just 1.8 billion – in other words 2.7% of the world's population at the time. It killed so much more indiscriminately, also taking out young and healthy people. Yet it had a lower R_0 value than Covid-19 – around 1.8 as against one that exceeds 2 for Covid in a susceptible population.

In reality, the transmissibility means very little on its own when you don't also consider the risk of infection – the deadliness or mortality rate caused by the disease.

So while the R number gives you a measure of the transmission potential – the infectivity or degree of contagion of a pathogen, there are many other factors that affect it in the real world – in a pandemic like the one we're dealing with now.

These include:

- latency the time period between catching the infection and it manifesting as disease;
- our behaviour;
- government policies on lockdown;
- · the length of time viral shedding occurs in those infected;
- exposure of viral particles to ultraviolet light and sunlight when in droplets aerosols or surfaces;
- the weather and environmental conditions generally, and;
- the proportion of a population that might already have immunity.

Why is the R number viewed as being so important?

So while the R number is a very important way of understanding the transmission potential of a disease organism in the early part of an epidemic or pandemic, as more people are exposed to the disease and more people become immune, epidemiologists need to look not at the basic reproductive rate but at the effective reproductive rate. That's shortened to the $R_{\rm e}$ or $R_{\rm f}$. This takes into account all of the factors we listed above – and if the $R_{\rm f}$ can be held below 1, the disease will dwindle and eventually peter out. Over 1 it goes the other way. But again – we shouldn't just accept the notion of

eradicating a disease at all costs – without carefully weighing up the societal cost of trying to do this – as well as what the alternatives might be.

Why is the R number not relevant to lockdown?

High *R* numbers in themselves are obviously no reason to lock down societies. That's why we don't do it for measles or mumps. It's the *consequences* of infection – particularly the risk of death – combined with its transmissibility – that determine the overall risk to the population.

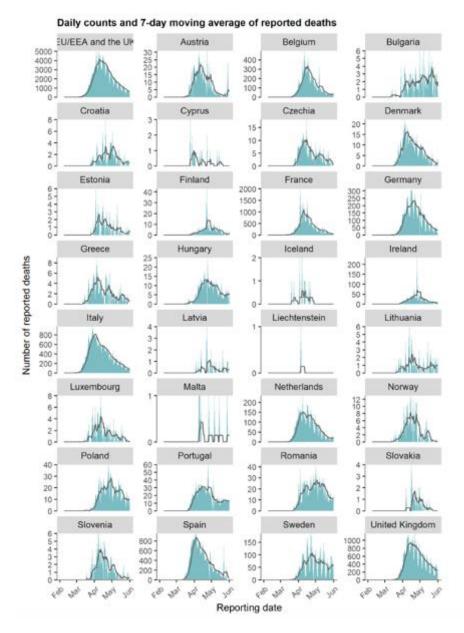
The trouble here is that we actually don't have any high quality evidence or data that tell us the true deadliness of this coronavirus. Every day we hear broadcasts of the fatality rates associated with Covid, but these data aren't realistic measures of the deadliness of the virus. That's because the normal work of pathologists has been sidelined because of the perceived risk of infection.

But it's worse than that. Before the Covid pandemic, when someone who was fatally ill with say cancer or heart disease went on to die because in their terminal state they weren't able to cope with a respiratory infection such as flu or pneumonia, the cause of death was generally given as the primary underlying disease – the cancer or heart disease. That's because flu or respiratory diseases aren't regarded as notifiable diseases and it's recognised that it was the underlying disease that made the person so vulnerable in the face of the infection.

But with the arrival of Covid, the list of notifiable diseases has been amended to include Covid-19. This change in the way causes of death are recorded without any opportunity for any proper investigation by pathologists has a huge impact on people's and government's sense of the deadliness of the disease – and it's actually a serious misrepresentation of reality.

On top of that, it's even more difficult to do country to country comparisons as different countries record deaths in different ways. Sometimes deaths are only recorded as Covid deaths if the death is associated with a lab confirmed case — other times if there's been no testing — just having a report of some of the key symptoms makes it count as a Covid death. In the UK, for example, as of 1 June, deaths linked to Covid that are confirmed by commercial labs, not just government labs, have just been added to the Covid death toll.

Let's have a look here at the death counts in a range of different European countries, as collated by the European Centre for Disease Prevention and Control – the ECDC.



Source: European Centre for Disease Prevention & Control (ECDC) - Covid-19 surveillance report Week 21, 2020

In green you'll see the daily counts – and then the smoother black lines show the weekly moving average of reported deaths across the different countries.

You'll see that in most countries with significant numbers of cases – which is shown in the vertical axis – there's a clear, typical three month cycle for the epidemic wave, and that's regardless of the degree of the lockdown measures. You'll see a little upward blip in Sweden that's generating a lot of media hype at the moment – but remember that's coming from relatively small numbers when compared with the UK.

What other metrics could we use?

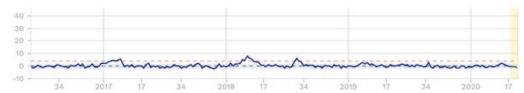
So we've got to accept that there are just no reliable data on how many deaths are caused directly by Covid.

So how else can we look at the deadliness part of the equation? What many of us are agreed on is that data on 'excess mortality' are one of the fairest ways of looking at the true risk of death caused both directly and indirectly since the virus came on the scene at the start of the year. Excess mortality tells us the number of additional deaths in a given time period compared against the number that would be expected to die in previous years. Therefore it doesn't depend on how Covid-19 deaths are reported – or even whether or not they're misreported. It depends simply on knowing how many people have died, and of course that's something there can be very little argument about.

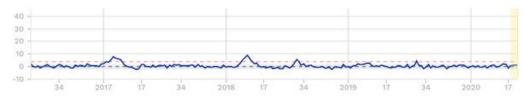
Excess mortality data from EuroMOMO that collates official figures from 24 European countries shows that even in the worst hit part of the world – Europe – some countries – namely Denmark, Estonia, Finland, Germany, Greece, Hungary, Luxembourg and Norway have experienced no excess mortality at all.



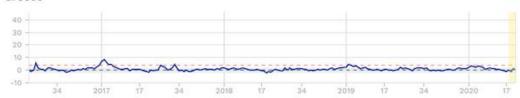
Germany (Berlin)



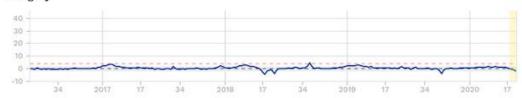
Germany (Hesse)



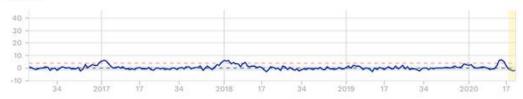
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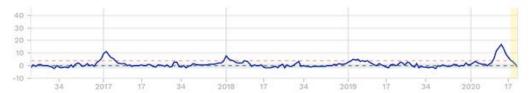
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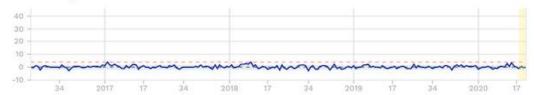
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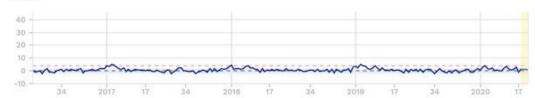
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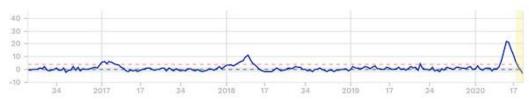
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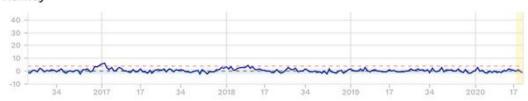
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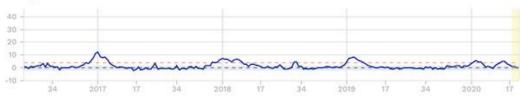
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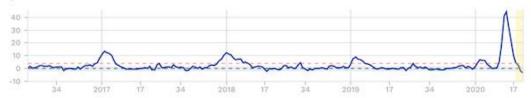
Norway

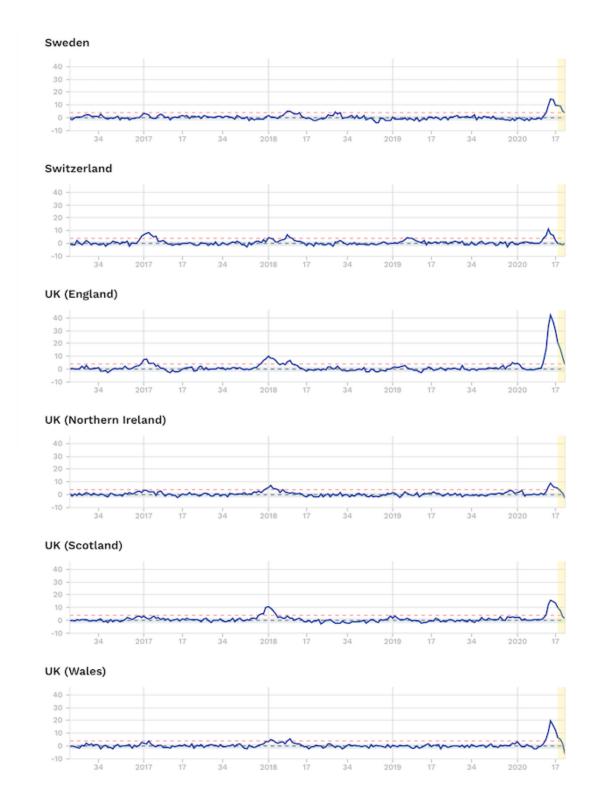


Portugal



Spain





Source: EuroMOMO. Note Z-scores are a statistical measure that allows the comparison of mortality patterns between different populations over time. The unit of measurement is the standard deviation. Find out more.

Others, like Ireland, Portugal, Sweden – without its full lockdown – and also Switzerland, Northern, Ireland and Scotland, have only experienced small increases.

England and Spain – with high, but nevertheless short-lived peaks in excess mortality, are actually the only two real outliers. And it's still unclear what all the contributory causes might have been. But we know, for example, that London and New York's tragic death tolls were made worse by these being the two cities with the two busiest airports in the world. That would have undoubtedly contributed to more index cases at the early part of the epidemic for which a grave price was paid later.

Our work is only possible with your continued support and kind donations.

But the lack of adequate shielding of older, vulnerable people especially in care homes was undoubtedly another key factor, as was the underlying vulnerability of infected populations.

What next?

It's still not clear how much these trajectories are related to the extent of lockdowns or just the natural history of the disease. The patterns would suggest that lockdowns are not as important as health authorities and governments would have us believe.

There is also no doubt that a really important way of reducing the R_t number – the effective reproductive rate – is by increasing the immunity of the population. Yes – that's herd immunity – something that was talked about a lot at the start of the pandemic – but less so now, as universities, governments and vaccine makers scrabble to create Covid vaccines. The reality is there is no vaccine today and there's also no guarantee that there will be one that both works and is safe. So what are we waiting for?

You might then ask: How can we increase herd immunity safely? Frankly – the way it's happened over and over again throughout our evolution. That means being exposed to the virus, not hiding from it. But because research over the last few months has shown clearly who is likely to be most at risk, the key is to ensure that those who are exposed are the most resilient. That particularly means the young and healthy – and it's the reason we've been arguing for a reopening of schools. But it also means that the most vulnerable need to be shielded, especially if the virulence of the virus increases later in the year.

While this is widely recognised, if we obsess over the trajectory of the R number what we'll do is actually reduce the number of healthy people who are infected meaning that we'll likely increase, not reduce, the risks of a second wave of infection later in the year.

History tells us that epidemics caused by respiratory viruses come in waves – and the key factors that cause the waves to wax and wane are factors like exposure to people, environmental factors like warmer weather and changes of seasons, and of course the changing and more often than not declining virulence of the pathogen itself.

So – contrary what we're hearing from governments at the moment – if the R number goes up in a relatively resilient, non-susceptible population, it's actually a good thing not a bad thing.

That means, in the real world, if we've effectively shielded the vulnerable sectors of the population, why are we being asked to keep such a close eye on any increases in the R number and then being told to expect a tightening of lockdowns? Locking us down again

because healthy people have become infected makes no sense – it's part of the solution not part of the problem.

Research over the last few months has shown very clearly the pattern of comorbidities in adults, especially older adults, that makes some people susceptible to severe disease. That includes being overweight, having metabolic diseases like type 2 diabetes, hypertension, cancer, or a history of lung or kidney disease.

So let's quit obsessing about R numbers as the primary way of deciding by how much lockdowns can be eased or should be tightened. Instead, we've got to look at the big picture of what's really going on.

That means carefully weighing up the wider consequences – not just in terms of the direct effects of the disease but also the indirect health, social and economic consequences of the measures we're being forced or asked to take by our governments.

In many countries, we're in grave danger of moving ever closer to a police state, one in which populations are controlled by government authorities who justify their actions supposedly on the basis of science. Well – R numbers in isolation – don't tell us anything about the risk of the disease so it's utter nonsense – and therefore bad science – to let this number on its own determine whether healthy people can gather in larger groups – or for that matter – go to the beach.

If we're to help co-create a more sustainable future in which we retain the rights and privileges that many before us have fought so hard to gain, without widening further the social, economic and even political inequalities that have plagued so many societies, we need to see a big change in the criteria being used to determine the extent by which governments control and limit the freedoms of their populations.

You can find out below how to get this video to your elected representative.

UK: Find your MP

Germany: Deutscher Bundestag

France: Rechercher votre député

Sweden: Ledamöter & partier

Ireland: Dáil Éireann and Seanad Éireann

United States: Find Your Representatives

Canada: Current Members of Parliament

Australia: Contacting Senators and Member

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Vaccine transparency – more needed now than ever

Date:

3 June 2020

Why we can no longer accept being told what's in our food but not what's in our vaccines

We know many of our readers and supporters are as keen as we are to see what we term 'vaccine transparency.' We know this because we witnessed unprecedented traffic on our website and sharing of posts and videos after we sent an open letter to the UK Health Secretary, Matt Hancock MP, on 20th April calling for a new public narrative around vaccines based in transparency. In our view, we need as a society to break through the taboo surrounding the mere mention of vaccines if we're to have confidence over the safety and effectiveness of the new vaccines under development for Covid-19. We also need transparency if we're to ensure properly informed consent – this being a frequently overlooked legal requirement in many countries.

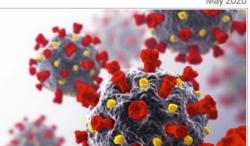
It's both frustrating and unsurprising to have to tell you that to-date there's been a resounding silence from Mr Hancock's office. But we're now moving to sending weekly reminders and getting ready to make a complete nuisance of ourselves until we hear something. If you would also like to add your voice to ours, British citizens should ask their elected MP or MSP to support the 10-point Vaccine Transparency Manifesto co-developed with the British Society for Ecological Medicine. We've also got an international version of the manifesto that can be sent to elected representatives.

VACCINE TRANSPARENCY

Manifesto







We are all looking forward to exiting from lockdowns and being able to avoid distancing and other measures imposed as a result of the Covid-19 pandemic. Many consider a vaccine the surest option, but that is conditional on vaccines being found both effective and safe.

The timetable currently being considered by governments and health authorities does not allow sufficient time for the phased evaluation process normally used by regulatory agencies to evaluate effectiveness and safety, that typically includes animal studies (multiple species) and both preclinical and clinical trials.

This means that post-marketing surveillance will provide key information on longer-term safety, with our populations in effect being the 'guinea pigs'. It is also likely that the vaccine manufacturers will be indemnified by governments in the event of any vaccine-induced injury.

The main safeguard for the public will therefore be transparency, something that was lacking through the development of several recent vaccines (e.g., Pandemrix®, Cervarix®, Gardasil®).

PUBLIC SAFETY, THE DEMOCRATIC PROCESS AND FULLY INFORMED CONSENT MUST NOT BE SIDELINED IN THE HASTE TO GET AN INCOMPLETELY DEVELOPED VACCINE TO MARKET.

ASK YOUR MP OR MSP TO SUPPORT THE VACCINE TRANSPARENCY MANIFESTO

Find your MP in UK: https:// members.parliament.uk/

THE 10-POINT VACCINE TRANSPARENCY MANIFESTO

- 1. Full disclosure of raw data from studies and trials to allow independent analysis
- 2. Full transparency in relation to safety and efficacy trials
- 3. Full transparency over the vaccine platform(s) and technology used for commercial vaccines
- 4. Conduct of comprehensive studies evaluating the independent risks from adjuvants (additives)
- 5. Full disclosure of vaccine composition in commercial formulations
- 6. Full transparency of all adverse event data in all studies and post-marketing surveillance
- 7. Clarification of eligibility and criteria for no-fault vaccine injury payments or compensation
- 8. Clarification of nature and extent of government indemnity of manufacturers in the event of vaccine injury
- Public dissemination of extent of naturally-acquired (herd) immunity prior to vaccine roll-out and individual consent
- 10. Involvement of elected representatives in due democratic process should mandatory vaccination be contemplated by authorities

FIND OUT MORE

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A joint initiative of the Alliance for Natural Health International and the British Society for Ecological Medicine.

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>>> Download international version of ANH/BSEM Vaccine Transparency Manifesto

Interestingly, the one ray of light is that Mr Hancock hasn't been shy about using the word 'transparency' of late. Not in conjunction with coronavirus vaccines, but applied to the current hot topic of the test and trace system. Note the omission of the word 'track' in that line up as the UK Government scramble to maintain some semblance of authority given the utter disaster that is the promised "world-beating test, track and trace" system. Having been caught metaphorically with his pants down from overblowing testing figures, Mr Hancock has been pledging more transparency regarding testing figures from now on. We need to be ready to tell him to ensure transparency on vaccines as well given vaccine makers are movin closer to rolling out wider testing and commercial vaccines. For the record, no government has ever been transparent on vaccines up until now given the tight indemnity relationship that exists with the pharmaceutical industry. So it's a big ask, but nonetheless one that's critically important.

Why the need for transparency?

Developing a vaccine for SARS-CoV-2 is turning into somewhat of a race. The World Health Organization reports that over 100 vaccines are currently under investigation with 10 vaccines having started clinical evaluation to tackle covid-19 using a variety of vaccine technologies. The speed and urgency is understandable, but don't be fooled that it's all about saving lives. Estimates of the number of doses involved are in the hundreds of millions initially, scaling up into the billions. That's a pretty penny in profits if you're one of the winners of the race.

In a sporting race you have referees, judges and scientific testing to help keep it clean and ensure a safe and level playing field for competitors. But our concern is that developing vaccines at warp speed in order to win the race will increase the chances that corners will be cut. The checks and balances that would normally be part of usual vaccine development are more likely to be pushed aside in the haste to bring a product to market. Hence, we're calling for full transparency in clinical trial designs, the results from trials, raw data from trials to allow independent analysis, clarification around vaccine injury payments in the event of no-fault injuries, eligibility criteria for such payments, and, among other things, details of government indemnities, where applicable, for vaccine manufacturers.

>>> Find out more about ANH and BSEM's Vaccine Transparency Manifesto

Early results from trials are starting to be announced in the media, but most reports focus on the warp speed of progress. Indeed, Mene Pangalos, Executive Vice President, BioPharmaceuticals R&D, AstraZeneca comments:

"We are so proud to be collaborating with the University of Oxford to accelerate the development and globalisation of this potential new vaccine against COVID-19 infection. The **speed** at which this new vaccine has **advanced into late-stage clinical trials** is testament to Oxford's ground-breaking scientific research. We will do everything in our power to engage with governments, multilateral organisations and partners around the world to **increase production** and distribution and ensure **rapid**, fair and equitable distribution of a globally accessible vaccine." [Ed. bold is our emphasis.]

Covid vaccines - time for vigilance all round

It won't be long before the days of vaccines bound for global release being based on live attenuated inactivated viruses grown on chicken eggs are gone. That's how over 80% of influenza vaccines are still produced – and it's the method that's been used for a host of vaccines for over 80 years.

But with the arrival of the current pandemic, it's looking ever less likely that these more conventional approaches to vaccine manufacture will be shelved. They're not quick enough, not cost-effective enough – and they don't involve a whole new level of biotechnology replete with endless opportunities for new patents.

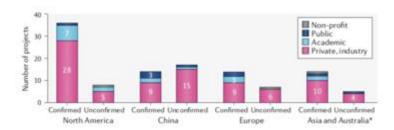
The next-generation vaccine developers just needed to know the genetic sequence of SARS-CoV-2 to get themselves out of the starting blocks. That happened in January and by 16 March – at record-breaking speed – vaccines were already being tested in animal studies and human trials. Novel recombinant or gene editing technologies are now looking like very likely candidates for commercial Covid vaccines, including one from Imperial College that codes for our muscle cells to make copies of the gene sequences found in the spike protein of SARS-CoV-2.

Most of these new vaccine prototypes have never been used commercially, are synthetic and genetically engineered. Just as laws exist in many countries to tell the population about genetic modifications to our foods, it's perverse that health authorities don't see the need to apply similar or even higher standards to medicines that bypass our digestive tract – the primary system that has existed since the dawn of our evolution to help determine how we respond to compounds from the outside world. That's why we're calling for vaccine transparency.

>>> Find out more about ANH's vaccine transparency manifesto

From the time the genetic sequence was available, the race was on to try and make vaccines quick enough to be able to test enough people before it waned – just like SARS and MERS before it. Unlike most sporting events around the word, as you read this, the vaccine race is still very much on.

Almost half of the vaccine development activity is occurring in North America with vaccines also being developed in China, Europe and Asia/Australia.



Source: Le TT et al. Nature Reviews/Drug Discovery 2020; 19: 305-6.

Among the candidate platforms being used for Covid vaccine prototypes are:

- Protein subunit vaccines introduces a synthetic antigen to the immune system without using viral particles
- Self-amplifying RNA vaccines the vaccine uses genetically engineered instructions to make muscle cells create the 'spike' protein of the coronavirus in order to provoke an immune response
- Non-replicating viral vector vaccines use other viruses to carry weakened parts of the coronavirus to institute an immune reaction
- Inactivated vaccines contains a dead or weakened strain of the virus to give the immune system advance warning so it is better prepared when it comes face to face with the actual disease.

Early results are beginning to be announced, but they're not as reassuring as we assume the makers expected. The vaccines being developed by Oxford University/AstraZeneca, Moderna in partnership with the NIH, Pfizer/BioNTech and Inovio have already entered into human trials.

Both Oxford University and Moderna have reported positive preliminary results which hit the news.

What Moderna carefully downplayed was that three (yes, that's 20%) of the 15 participants in the high dose cohort suffered a "serious adverse event" within 43 days of the second dose. Moderna hasn't shared its data at this point so it's not clear whether the reported responses will be enough to protect people from becoming infected. Nor has it clarified the nature of the serious adverse events. Again – this is why transparency is so vital.

>>> Find out more about ANH's Vaccine Transparency Manifesto

Scientists at Oxford reported that rhesus macaque monkeys exposed to the virus following vaccination continued to be healthy 28 days later. However, all of the vaccinated monkeys became infected by the challenge raising concerns that vaccinated people could still spread the virus.

Adjuvants

What's already emerged from the first published Phase 1 trial is that older people with weaker immune systems don't experience the same immunogenic response as younger healthier people with stronger immune systems. That's to be expected and is the same phenomenon experienced with flu vaccines. The solution used by GSK and other vaccine makers is usually to add adjuvants to the vaccine that trigger the immune system into responding more intensely to the presented antigen, whether synthetic or natural. It's a process referred to as immunopotentiation but the exact mechanisms at work are poorly understood.

The difficulty the independent (non-vaccine industry funded) research community has had in understanding the effects, and especially evaluating any potential harms, linked to adjuvanted vaccines is dissociating the effects of the antigen (the 'active ingredient') and those of the adjuvants, such as the widely used aluminium containing ones. That's because many vaccine manufacturers incompletely report data showing comparisons with controls, and they also may vary their controls, depending on the vaccine. They

may, for example, include just the aluminium adjuvant or a saline control. Or the exact composition of the aluminium product is not reported in the trial registry and these can have profoundly different effects.

These kinds of reporting problems have been especially highlighted with the relatively recent HPV vaccine and has stimulated the Restoring Invisible and Abandoned Trials initiative (RIAT).

None of this is acceptable, especially given the inherent risks of using aluminium adjuvants given their neurotoxic profile – along with emerging evidence that serious nervous system disorders may result in susceptible populations from exposure to aluminium-adjuvanted vaccines. Once again, transparency, we would argue is the way forward to help address uncertainties and increase understanding and weighing up of the risk/harm profile by regulators, the medical community and the public alike.

Other ingredients and contaminants

Another issue that must be addressed in a bid to ensure transparency is full disclosure of other ingredients and the presence of any contaminants. Such transparency is already a requirement of food law in most countries – although typically not with alcoholic beverages – and there is at least as good a reason to ensure it applies to medicines, including vaccines.

Along with the relevant antigen and adjuvant, vaccines may also contain preservatives, stabilisers, emulsifiers and human DNA, along with trace substances from the manufacturing process such as antibiotics or formaldehyde. If they are present, the recipient should be informed prior to consent being given.

There may also be unintended components in vaccines - contaminants. These may arise as byproducts of manufacture. There are no specific, publicly available thresholds for contaminants in vaccines as there are for foods. The WHO has seen fit to draw up guidelines and thresholds for contaminants in drinking water – but it hasn't done this for vaccines.

Viruses for vaccines have typically been grown (cultured) using human or animal cell lines. Four of today's vaccines, namely varicella, rubella, hepatitis A and one of the rabies vaccines, rely on cell lines that originate from lung cells taken from aborted foetuses in the 1960s. Apparently even the Catholic Church is okay with this.

They can also be grown using animal cell strains from monkeys, chickens and dogs and more recently Chinese hamsters, but there's no requirement for vegans and vegetarians to be alerted to this fact. Most who might actually be concerned presumably don't know, such is the lack of transparency.

Then you have the thorny issue, that's almost as lively as the debate around vaccines and autism, linked to the introduction of infectious retroviruses that have come from animal cells lines that then find their way into vaccines and subsequently to the human recipients. There has been a huge effort to denounce the occurrence of retroviruses in vaccines and biological products (including blood used in transfusions), but few labs have the capacity to accurately detect retroviruses such as XMRV (the novel human retrovirus xenotropic murine leukemia virus-related virus), that was first detected in

prostate cancer patients in 2006 and is now widely dispersed on at least two continents (Europe and North America). Dr Judy Mikovits and Kent Heckenlively provide a detailed and disturbing analysis of how widescale XMRV and other retrovirus contamination may have occurred through the use of animal tissues in vaccine research and development in their recently published book *The Plague of Corruption: Restoring Faith in the Promise of Science* that has become an #1 on Amazon Charts, a New York Times Bestseller and a USA Today Bestseller. Those wanting a different view may wish to read the 2010 Frontiers in Microbiology review on the subject by Antoinette van der Kuyl and colleagues from the University of Amsterdam.

The CORVELVA association (Veneto Regional Coordination for the Freedom of Vaccinations) has been investigating the contamination of vaccines and has unearthed more disturbing evidence in the process.

Paul Offit: Covid vaccine skeptic?

Director of the Vaccine Education Center, Children's Hospital of Philadelphia and a paediatrician, Prof Paul Offit, has been a vociferous vaccine advocate for many years. He's been involved in vaccine development and used relentlessly as a spokesperson for the vaccine industry, which makes Prof Offit's recent comments all the more interesting. Streamed live on Monday 1st June on JAMA Network, in an interview with JAMA editor in chief, Howard Bauchner MD, Prof Offit said that, "...half the vaccines out there don't clearly have immunological correlates for protection", going on to add, "... as is true for anything you put in your body you should be sceptical, I'm going to be sceptical about these [coronavirus] vaccines when they come out. I want to see the data, everybody should want to see the data".

Yes, Prof Offit, we all want to see the data, which is why we need a new vaccine narrative that's based in full transparency and properly informed consent.

Unmasking mask science

Date:

11 June 2020

What we're not being told about the downsides of wearing face coverings

Should I, shouldn't I; should we, shouldn't we? Will they increase or reduce my risk? Am I duty bound to protect others, or could it increase the risk of others being infected, or make myself more susceptible? Or, even if the science on benefits is too flimsy to know one way or another, maybe I should wear one anyway as an act of solidarity in society's war against the new enemy? Yes - you've guessed it - we're talking masks.

These are just a few of the questions running around many people's minds when it comes to the voluntary wearing of masks. In some countries and environments in which a face covering of some sort is required in community settings by law, some are choosing to not venture out much at all - creating new and unknown indirect social and health consequences. For a quick heads up, the science isn't certain or robust enough to provide definitive answers to any of these questions — that's part of the reason there's such a variety of opinions.

Given we're continuing to scour the literature as it emerges on a wide range of issues around Covid and the predicament we find ourselves in more generally, Rob Verkerk PhD, ANH founder and multi-disciplinary sustainability scientist, and Meleni Aldridge, ANH executive coordinator, also a functional medicine and clinical psychoneuroimmunology (cPNI) practitioner, dive into the uncertain waters surrounding masks in the following discussion in our office. For those who prefer to read rather than view, you'll find below our our top-line perspectives on masks and face coverings delivered as answers to 10 questions on some of the most studied or relevant aspects of mask wearing when it comes to protecting ourselves and our communities from respiratory viruses and SARS-CoV-2 in particular.

1. Are some masks or face coverings more effective than others?

Yes. There are basically two categories of mask (or respirator) that are commercially available for protection against airborne viruses present in aerosol droplets – medical masks and non-medical ones. Most are disposable, some types are designed to be reusable after washing or sterilisation. The non-medical ones essentially aim to reduce inhalation of particulates such as dust or aerosols and are classified according to European Standards in 3 different grades, namely FFP1, FFP2 and FFP3. Only FFP2 and FFP3 masks have some, albeit limited ability, to protect against airborne viruses and bacteria. Masks that bear the standard N95, N99 or N100 are compliant with US standards issued by the National Institute for Occupational Safety and Health (NIOSH), in that they filter out (95%, 99% and 100% of airborne particles). N95 respirators, for which there has been extremely high demand since the arrival of the pandemic, provide more or less equivalent filtration capacity to masks classified as FFP2 in Europe or

KN95 in China. Owing to the need to ensure adequate supplies of masks that meet FFP2 and N95 standards or higher, for frontline healthcare workers, many governments have proposed that the public and others outside of healthcare or care home settings use cloth or home-made face coverings. There are very limited data verifying effectiveness of such masks or coverings and it can reasonably be assumed that effectiveness will vary greatly depending on their construction and state.

>>> World Health Organization (WHO) guidance on wearing medical and non-medical masks

>>> UK government mandates face masks on public transport from 15 June 2020

>>> US Centers for Disease Control (CDC) recommendations for use of N95 respirators (not by the general public)

2. Should masks be worn by frontline healthcare workers?

Yes. While there is balance of evidence in favour of reducing transmission rates among frontline healthcare workers who are likely to be exposed to higher loads of virus, there is evidence of medical (N95-type) masks reducing air exchange, suggesting caution should be exercised. One study showed that N95 masks increased emergency medicine doctor's fatigue levels and decreased the quality and life-saving potential of chest compression in simulated cardiopulmonary resuscitation (CPR). More recent research found over 80% of healthcare workers studied developed headaches which affected their performance at work whilst wearing N95 masks.

3. Should masks or face coverings be worn in community settings?

The results from studies are inconclusive, a view supported by scientific advice to the UK government. A review published in February that considered six randomised controlled trials over 9,000 people found no evidence that either N95 or surgical masks lowered the risk of laboratory-confirmed influenza. The authors therefore said N95 respirators should not be recommended for use by the general public to reduce flu risk – and protect against flu viruses, which are generally thought to transmit more easily than SARS-CoV-2. The European Centre for Disease Control and Prevention (ECDC) suggested in its guidance in April that face masks might be of benefit in busy, closed places and concluded, in the absence of evidence one way or another that the "... use of face masks in the community should be considered only as a complementary measure and not as a replacement for established preventive measures, for example physical distancing, respiratory etiquette, meticulous hand hygiene and avoiding touching the face, nose, eyes and mouth".

In the real world, there are concerns that transmission risks may increase as people are more likely to touch masks and their faces, increasing risks of transmitting virus particles both to themselves and to others. There's little or no benefit of their use in uncrowded outdoor spaces where people are able to practice considerably more than 2 metres of social distancing. For many, the wearing of masks is a display of public spiritedness and solidarity showing they care about others around them and that they are providing protection against infection. However, in our view this is a feeling that is certainly open to exploitation if people are made to feel guilty about not wearing a face covering. Amplified by a paper published this week based on a modelling framework, that baldly states: "A key message from our analyses to aid the widespread adoption of facemasks would be: 'my mask protects you, your mask protects me'".

Wearing a mask may also confer a sense of security that allows people to go out and about again as lockdowns are lifted with less fear. Despite their popularity during the 1918 flu epidemic many questions were raised over their effectiveness. The difficulty of getting people to follow basic hygiene protocols let alone wearing masks properly was highlighted during that epidemic. Despite all our developments in modern hygiene how diligent will people be today?

4. What can be done to ease the shortage of masks for frontline workers?

Demand for masks and respirators for frontline workers has led to global shortages and expectations that masks may be reused and/or worn for extended periods of time. Using dry heat of 70°C for one hour effectively decontaminated N95 respirators, while heating or the gentle application of surface disinfectant sprays was found to effectively disinfect a range of masks with little damage thus extending their life and the number of times they could be used. In the US, the Boston Children's Hospital created a do-it-yourself reusable respirator with N100 filtration using an anaesthesia mask, inline ventilator filter and elastic straps. The makeshift respirator can be decontaminated by either washing it with soap and water or disinfectant. The authors caution that the facemask is not approved by NIOSH, but suggest during a crisis when face masks are in short supply such an option may be a viable alternative.

5. Do masks or face coverings protect those in proximity of the wearer?

Probably, but only if the mask or covering is relatively fresh, and mainly in the event of aerosols being generated during coughing or sneezing or when speaking. Previous studies indicate that a range of masks provide some protection against infection. Medical masks provided the highest protection with homemade cloth masks providing the least protection. A review of randomised controlled trials found respirators to be the most effective protection for healthcare workers when worn continuously throughout a shift and that mask use by people without symptoms of infection could provide protection to others.

6. Does the wearer benefit?

Yes, probably marginally, in best case scenarios. Facial coverings or masks may provide limited protection against the inhalation of infectious droplets from others, although evidence in this area is weak and sometimes inconclusive. Much depends on the quality of the mask, its filtration capacity, particularly given the extremely small, sub-nano size of SARS-CoV-2 particles, its fit, how long its worn for, and what the concentration of viral particles is to which it's been exposed.

7. Are there any side effects for the wearer from wearing masks or coverings?

Yes – many as you may have seen discussed in our video above. Surgical masks of the N95 and FFP2 standard reduce airflow and so increase breathing resistance. A study of 14 adult volunteers in Singapore published in the Annals of Occupational Hygiene found that N95 respirators caused 122% and 126% increases in inhalation and exhalation resistance, respectively, with an average 37% reduction in air exchange volume. Another 2011 study showed that medical, surgical and dental masks typically cause a small but significant increase in core temperature that may cause discomfort and adversely affect behaviour. Their use in surgery has been found to reduce blood oxygen saturation; the longer the use, the greater the reduction. Such changes in blood oxygen concentration in haemoglobin could have negative effects on cardiovascular, psychological and motor function along with a reduction in immune system function, putting the user at greater risk of contracting covid.

We have tested various masks in our own office and measured blood oxygen saturation levels using a pulse oximeter whilst wearing and without. Typically finding a 1-4% reduction after a mask has been used for over an hour, depending on the individual and the type of mask used. We also noted that our pulse rates increased by 10-20 beats per minute to compensate for the resistance and reduction in air exchange, which places stress on the body. Masks have been found to significantly increase the risk of headaches in healthcare workers — one of our team suffered similarly after wearing a mask for over an hour.

For healthy individuals under 70, blood oxygen saturation levels vary between 95% - 100%. As we age, levels tend to decrease to around 93% to 95%. Individuals suffering from COPD can experience levels as low as 88-92%. However, once your oxygen saturation drops below 90% you risk becoming hypoxic, which poses a significant risk to health. Individuals infected with the SARS-CoV-2 virus are at higher risk of silent hypoxia, a condition, which potentially could unknowingly be exacerbated by wearing a mask.

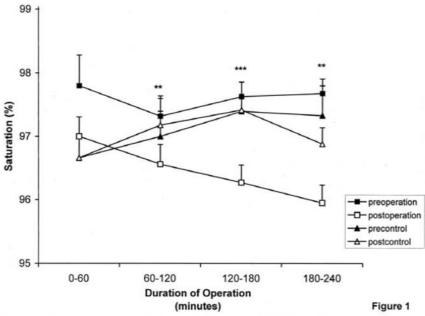


Figure 1. The changes in the oxygen saturation of hemoglobin by the duration of surgical operations. Data are expressed as mean \pm S.E.M. of n surgical operations. There were statistically significant differences only between preoperational and post operational values. ** p < 0.001, *** p < 0.0001

Source: Beder A et al. Preliminary report on surgical mask induced deoxygenation during major surgery. Neurocirugia (Astur). 2008;19(2):121-126.

As masks become damp during prolonged usage, they can become a reservoir for a range of different pathogens. Breathing more deeply could result in bacteria and viruses being drawn more deeply into the lungs thereby increasing the risk of becoming more seriously ill.

8. Are there any benefits in mandating the wearing of masks or face coverings in community settings?

In our view, no. The mandating of mask wearing has its roots in fears over transmission of the virus from asymptomatic carriers. However, this transmission route has been plunged into debate by the head of the World Health Organization's emerging diseases and zoonosis unit, Dr Maria Van Kerkhove during a recent press briefing. The science is unclear in this area with research ongoing.

Masks available to the general public tend not to fit well, aren't worn or disposed of correctly, with the benefits of homemade face coverings being difficult to quantify. People wearing masks tend to fiddle with them and then touch their faces more – a habit that is associated with increased infection and transmission potential. If face coverings are mandated, it will require diligent adherence to basic hygiene procedures such as hand washing or use of hand sanitisers to ensure that they do not exacerbate transmission.

9. Is there a scientific argument to make the wearing of masks or face coverings in community settings compulsory?

We think not. Think about an older person who has low oxygen saturation by virtue of her age and additionally has a lung disease such as COPD. That would typically give a blood oxygen saturation level (SpO2) of around 90% which is borderline hypoxic. If this person was forced to wear a mask to take a bus or train ride to do her weekly shopping, the resultant drop in SpO2 could endanger her life or those of others – not from the virus but from hypoxia. It would also increase her vulnerability in the event of being infected.

It also appears that the deaf or hard of hearing that need to lip read to communicate have been completely overlooked. Additionally, the ensuing social isolation from losing an essential element of communication - non-verbal somatic cues from seeing each other's faces. This is a particularly important element of a child's development as our neural networks are keyed into facial expressions and somatic cues to convey safety and security, as well as emotional learning. It's not just about the prevention of transmission, we also have to take into account human physiology and behaviour and the impact to mental health from further social isolation.

10. How does mask wearing compare with other non-pharmaceutical measures as a means of reducing transmission risk?

In a recent media briefing the Director general of the WHO stated, "...masks on their own will not protect you from covid-19". Masks do not replace basic hygiene measures such as handwashing and physical distancing. We agree.

A crash course in resilience: the video

Date:

16 July 2020

Find out in 5 minutes what you need to do and what your government hasn't told you

Content Sections

- Watch, learn and share
- About the video
- COVID-19: the multi-lateral stressor
- The crash course we've been on for decades
- How can we build resilience?
- Why the silence on resilience?

We've been on a collision course for around 20,000 years. The crash occurred at the start of 2020 – and it's still ongoing. The casualty in the crash is human resilience. The consequence is that a not particularly virulent and only moderately contagious virus has wrought havoc upon us. Building resilience in our populations and ensuring our countries are run by enlightened people capable of making smart decisions in this time of crisis would be a huge asset in our emergence from the wreckage.

But it appears most of us can no longer rely on governments to make smart decisions. Most are too deeply intertwined with the corporates whose products have contributed to our loss of resilience, whether it's junk, low fat, refined carb-based foods, overprescribed drugs or digital tech that's turned us into couch potatoes.

So we've made a short video that gives you a whistle stop, crash course through our last 20,000 years of history, looking at key events that impacted our resilience as well as previous pandemics.

Our hunter gatherer ancestors, armed with the thrifty genotype that we still carry with us today, may not have had long lives. But on the whole they had bucket loads of resilience or at least plenty of opportunity to rebuild it following episodes of resilience-busting stress.

So please take a look at our new video – and SHARE, SHARE, SHARE. Please help us get the word out to others that building resilience is our key defence, not only against coronaviruses, but also to help us cope better with the 'new normals' that are being hashed out by governments that have the potential to cause untold damage to individual and societal health, rights and freedoms.

We're told that science is driving government decisions, but how much is there to underpin what we're being forced to do. Here's a summary:

- Social distancing conflicting science over benefits in many situations, no benefits in more confined indoor spaces with poor ventilation – widely mandated by governments.
- Lockdowns conflicting evidence over benefits, causes serious damage to society and economies – widely mandated by governments.
- Mask wearing conflicting science over benefits in most situations, may induce harms to users, may increase transmission through contact of damp masks – widely mandated by governments.
- **Vaccines** no evidence yet the current candidate vaccines will be safe or effective *widely promoted by governments*.
- Resilience immune and psychological resilience are the only things that have been conclusively shown by science to protect us from immune challenges and stress – no or minimal guidance from governments!

>>> Find out more in ANH-Intl's Covid Zone

Watch, learn and share

This is a true multi-media experience. If you've got a set of headphones please put them on to savour the full experience. Hold tight, your crash course takes just 5 minutes!

About the video

The majority of people in the world – it would seem – are gagging for a vaccine. A magic bullet – or injection – that we're told could release us from the social and economic nightmare brought about by our response to a novel coronavirus, SARS-CoV-2. One enacted by governments, mostly with no recourse to public viewpoints or the democratic process. The public's minds are being conditioned by sophisticated media messaging to expect that the liquid injected into their bloodstream will have the capacity to single-handedly rob the virus of any ability to cause harm to our bodies.

The reality is something different. If one or more of the current vaccine candidates ends up working, something that is as yet an unknown, it will be our immune systems that deliver the real goods – the antibodies that inactivate the virus. Contrary to what the public is often told, uncertainty over both efficacy and safety is high, especially given the most hurried development and evaluation of a vaccine the world has yet known. We'll apparently get some data on safety from the earliest prototypes that are already in trials later this year, but assuming there's enough of the virus still knocking about through this coming northern hemisphere winter, some data on the effectiveness against real world infection might be noisily fed into the public domain next year at the earliest. However slim the purported benefit as declared by a Gates Foundation and pharmafunded system that cannot be trusted to deliver transparent science, there will undoubtedly be people lining up regardless of the quality or certainty of the results, such is the power of the propaganda machine.

For a vaccine to 'work' – or for us to survive infection in the absence of an effective vaccine with nothing worse than mild disease – depends on how well our immune

system functions when challenged by the real virus or a copy of a snippet from its spike protein. That's a function of our immune system and general resilience. So what is resilience? It's a term, first developed to describe psychological resilience; the ability of a person to bounce back from adversity, stress or trauma. It is now also used to look at other aspects of our function, not just our psychological responses. Therefore, we now can think about physiological resilience, and that will include our ability to respond to physical stress, chemical or EMF exposures, or even poor diets, eating patterns and habits. The stressor can take a multitude of different forms and may include our social or familial environments, including our inability to be nurtured by them if we're isolated, our employment, or lack of it, and our financial status.

COVID-19: the multi-lateral stressor

The current Covid-19 pandemic opens up an array of new stressors that a study by the Mental Health Foundation suggests will generate an unprecedented array of mental health problems. The research community that has long existed in silos, is not well equipped to deal with the trans-disciplinary nature of the problem so is urgently calling on prioritisation of a new research approach for mental health science.

The pandemic has created something that's so much more than a mere immune challenge. The human response to the virus, more than the direct effect of the virus itself, has decimated societies and economies. It has affected almost every aspect of human activity and recovery will inevitably take years. Some may face the consequences of what has happened in 2020 for the rest of their lives.

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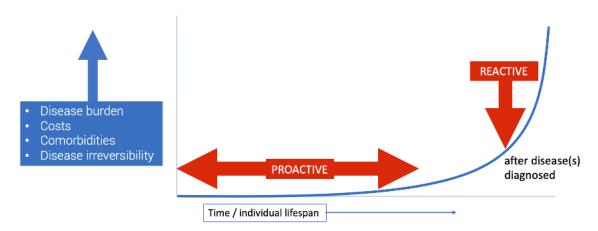
Close on half a million people have died with the virus so far. We don't know how many deaths have been caused directly by the virus, although we do know that in the vast majority of cases severe disease and deaths are associated with comorbidities which reduce physiological resilience, in part because the immune response is less well modulated.

Only in retrospect will we be able to judge how appropriately or inappropriately we acted. We're deeply concerned that, unless there's a 180 degree turnaround sometime soon, the failure by governments and the mainstream medical community to address physiological resilience in the general population will one day be seen as one of the biggest failings of the Covid-19 pandemic era.

So here's an important, potentially life-saving message: whatever you do, and whatever the universities and pharmaceutical companies dream up between them, focusing on developing resilience should be somewhere near the top of your list of health priorities for the coming year.

Yet we're hearing virtually nothing in the way of public health advice in this area – from any government, anywhere in the world. Part of the reason for this is that the biomedical model is not set up to create health or resilience in the population. It is not proactive. Instead, it's set up to treat or manage disease; it's reactive (see Figure below). The need to create health throughout the lifespan of an individual – and to be able to do this

outside the normal structures of the existing healthcare system, namely hospitals and clinics, is a central notion in our blueprint for health system sustainability.



If the management of our health is to become sustainable, we must transition from a solely reactive model of healthcare to one that is also proactive, as proposed in the ANH-Intl blueprint.

The crash course we've been on for decades

The public has been fed information via the media that says that certain people – those with underlying illnesses such as hypertension, type 2 diabetes and lung disease – are especially vulnerable to severe covid disease. They say very little or nothing about how those who're presently free from these diseases might stay free from them. Also, while we're so completely focused on this pandemic – how much time do we spend considering how we might respond, physiologically, psychologically, psycho-socially, politically, economically and in other ways, if we were confronted with another virus, one more virulent and contagious than SARS-CoV-2? Yes, it doesn't bear thinking about.

Rather than give you more words to read, we decided to create an infographic that depicts this crash course. In essence, it's one in which the effects of a relatively innocuous virus has demonstrated its capacity to cause global mayhem – because we are insufficiently adapted to our modern world. It is also because the actions that were taken by governments and businesses were deemed to be of benefit by those interests that usurp most power in today's deeply anthropocentric and often narcissistic world. Our thrifty, hunter-gatherer genotype doesn't cope well with the onslaught of processed foods, physical inactivity, social disconnection, chemical pollution, information and digital overload, disturbed circadian cycles, and chronic, seemingly never-ending, stress.

How can we build resilience?

Resilience requires that multiple systems within what we call our 'ecological terrain' are working optimally. Our blueprint identifies 12 domains that, when the function of each is optimised, allows us to achieve optimal resilience. There is no one-size-fits-all. We are

all individuals, with unique genotypes, each of which has been marked epigenetically according to the lives and environments we have experienced. These epimarks dictate which of our genes are silenced and which are expressed – and, if so, by how much. Our gene expression pattern at any given point in time, determines our health and resilience, as well as our propensity for particular types of disease.

Dietary, lifestyle, behaviour and environmental changes provide the most potent ways available to us that allow us to change our pattern of gene expression. As much as pharmaceutical and vaccine interests might wish us to think differently, these kinds of changes are by far the most important preventive defences we have against this new coronavirus or any future infectious agent. They always have been and they always will be.

>>> Find out more about ANH-Intl's blueprint for health system sustainability

Why the silence on resilience?

There is a simple answer to this question. The business model that has driven the shape and form of healthcare over the last 7 decades has to a large extent been one built on selling novel, new-to-nature compounds and technologies that are amenable to patents.

One industry alone cannot engage in health creation – so it's been given a wide birth by pharma. Vaccination, on the other hand, particularly if indemnified by governments in the event of no-fault injury caused to those vaccinated, is a much more economically attractive proposition than creating what Leroy Hood PhD calls 'scientific wellness'. However, as we propose in our blueprint, communities have the ability to build the physiological resilience of their populations, especially if they have a common language. Our blueprint outlines such a language as well as the practicalities of how this might be done, built around function and a systems view of human, other animal, plant and microbial life.

So let's understand what's happening and get on with the job of preventing further collisions like that of Covid-19 that result from our inadequate adaptation to the contemporary world. We need to adapt better ourselves, but equally, we must adapt the political and economic systems that presently exert so much control – often not in a good way – over both people and planet.

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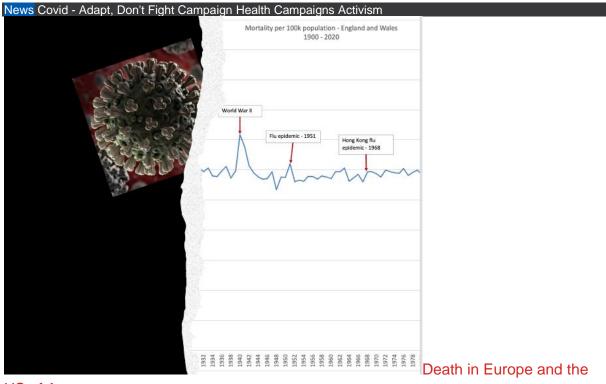
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'Promising' and 'safe' Moderna vaccine trial causes severe adverse events

Date:

16 July 2020

Moderna's trial results are misreported in New England Journal of Medicine and by media

Content Sections

- About the trial
- How was immunity affected?
- The safety claim is plain wrong
- Moderna's 'get rich quick' scheme

By Rob Verkerk PhD, founder, executive and scientific director, ANH-Intl

Moderna – the biotech company behind one of the vaccines most favoured for commercialisation for Covid-19 prevention – has published a preliminary report on its first vaccine trial in the *New England Journal of Medicine* (NEJM). The trial was led by Dr Anthony Fauci at the US National Institutes of Health (NIH). The world's media is claiming the results as "promising", and the results pave the way to go straight to Phase III trials involving 30,000 Americans. Warp speed development, it seems, means skipping intermediate-sized, Phase II trials.

USA Today's coverage is typical. The headline says the vaccine "appears safe" and the article states that Moderna's chief medical officer says "all indications are [the vaccine] will be safe and effective".

But the hype is misleading. The abstract of the report in the NEJM states that 21% of subjects suffered "one or more severe adverse events" at the highest dose tested. Let's be clear – every single person on the highest, and even on the preferred intermediate dose, suffered some kind of adverse reaction. But perhaps the authors and media deemed it was OK to ignore the results from the highest (250 μ g) of the three doses tested because they're dropping that in subsequent trials. This aside, what's crucially relevant is that 80% of the tiny subset of subjects (just 14) still experienced moderately severe adverse reactions at the middle dose (100 μ g) that is the one mooted for commercialisation. Yes, that's 4 out of 5.

In case you thought it was just media spin, it's interesting that even the vaccine safety section in the report claims: "No serious adverse events were noted" implying this was for the whole trial. This is a play with words, because serious isn't among the three rating categories for adverse events that the World Health Organization proposes: namely mild, moderate and severe (but not serious). If a reaction is severe and is viewed as "self-liming", so doesn't persist longer than a few days or longer than

the trial, it's not considered serious. Even though just one severe event linked say to a neurotoxin can trigger a response in the body that might have life-long consequences. But clearly, it's not something the 33 authors from the mRNA-1273 Study Group are concerned about - and presumably being able to say they didn't note "serious adverse events" rather than having to admit 21% suffered "severe" adverse events (at the highest dose tested) makes for positive publicity when released on the world's media.

VACCINE SAFETY

No serious adverse events were noted, and no prespecified trial halting rules were met. As noted above, one participant in the 25- μ g group was withdrawn because of an unsolicited adverse event, transient urticaria, judged to be related to the first vaccination.

Extract from the NEJM report containing the bold and incorrect claim that "no serious adverse events were noted" when 21% of the subjects vaccinated at the highest dose suffered severe adverse events.

About the trial

Moderna's preliminary results were based on its genetically engineered mRNA vaccine (code named mRNA-1273) in this Phase I trial. It was the first to be completed in the USA, and involved just 45 subjects (between 18 and 55 years of age), divided into three groups of 15, each group receiving two inoculations, one month apart, each at three dose levels, 25 μ g, 100 μ g and 250 μ g. The results were clearly planned to be published in the US's leading medical journal to create maximum impact – and it puts a marker in the sand for the ensuing battle between the Oxford vaccine that's already been tested on 14,000 people, the results of which will be published in the UK's leading medical journal, *The Lancet*, on 20 July. That's before China gets in on the act. It's a little reminiscent of the US vs Russian race to the moon, or the Beatles vs the Beach Boys. But this time there's a lot more at stake.

How was immunity affected?

All three doses raised antibodies and T-cell responses but there are insufficient data from this very small study to determine if the observed responses at the preferred middle dose would translate to persistent or even effective immunity in the real world, especially among older people. Therefore any claim that this preliminary report offers evidence of effectiveness is misleading at the very least. 'Promising' is better but that should relate only to effectiveness, and not safety, as I explain below.

The fact that the results show a T-cell response in addition to antibody response is important, given that the most effective immunity involves a double act between the humoral antibody response and the cell-mediated killer T-cell response. With SARS-CoV-2, the T-cell response might be particularly important because raised antibodies are likely to be relatively short-lived. A dive into the more detailed but very limited data shows that the T-cell response wasn't balanced. The CD4-expressing T-helper 1 (Th-1)

cells that activate the killer CD8+ lymphocytes were definitely upregulated, but there was no discernible effect on the T-helper 2 (Th-2) cells. As we know that in naturally-acquired infections only around half the T-cell responses are directed at the spike protein (the only antigenic sequence used in the mRNA vaccine), the other 50% being directed at the rest of the proteins on the viral coating, it's unclear what these results will mean in practice. Let's remember too, that not a single test subject exceeded 55 and the main severe disease burden is among the over-65s, the very group that also suffer a more compromised immune response (immunosenescence).

Bottom line – it is hugely premature to make any claims of effectiveness when there has been no attempt to challenge vaccinated subjects with SARS-CoV-2 in real world settings.

The safety claim is plain wrong

Let's now delve further into what the trial tells us about safety. The highest dose yielded 21% (3 out of 14) severe systemic adverse events, with 64% being 'just' moderate. In fact, at this highest dose, 100% of subjects experienced an adverse event. But given the authors have decided to opt for the middle dose (100 μ g) for the next trial, let's look a little closer at these results which can be found in the supplementary data that provides a greater level of, but not nearly enough, detail (see Appendix to this story for summary results of adverse events). At this dose, a whopping 80% suffered moderately severe adverse events, and 20% mild – still 100% suffered adverse events. Yet, the vaccine is described to, and by the world's media, as safe. When you look at the categories of adverse effect for a Phase 1 trial, they are so generalised that they tell you nothing about what might really be going on in a vaccinated person. For example, whether there might be increased risks of cardiovascular events in vaccinated people who already have heart disease, or whether longer-term conditions such as neurological disorders or autoimmune diseases could be triggered.

Moderna's 'get rich quick' scheme

Moderna is the leader of the pack for the US vaccine race. The name (originally modeRNA Therapeutics) came from its focus on mRNA biotech. It's got Fauci and Gates as backers – as well as being the 'prodigal son' of the USA's vaccine catalyst machine, Operation Warp Speed. But Moderna has yet to produce a single commercial vaccine, the company having only been established in 2010, rebranding in 2016. This doesn't stop it being NASDAQ listed, and this latest piece of manipulated news has already sent its stock prices soaring.

Investors, and the public, might do well to listen to the cautionary words of the world's most successful vaccine manufacturer, Chair and CEO of Merck, Ken Frazier. He gives some idea of how difficult it is to produce a safe and effective vaccine when he said in an interview with Harvard Business School earlier this week:

"Let me just give you one data point. In the last quarter century, there have only been seven, truly new vaccines introduced globally at the clinical practice... Merck has four, the rest of the world has three."

Frazier went on to say: "I think when people tell the public that there's going to be a vaccine by the end of 2020... they do a grave disservice to the public."

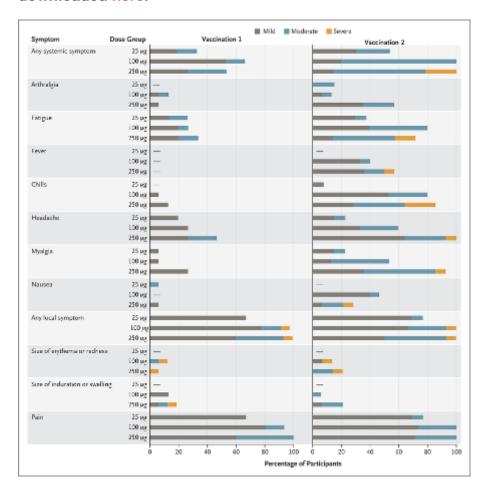
The vaccine war is well and truly on. The next big move will be when the Oxford vaccine results are published on 20 July.

Will the communication of those results be as misleading? Time will tell.

- >>> Find out about our Vaccine Transparency Manifesto
- >>> Go to ANH-Intl Covid Zone
- >>> Back to homepage

Appendix

Table 1. Summary findings on adverse events from the NEJM paper (n = 14 or 15 per dose group). Supplementary data from which this summary is derived can be downloaded here.



Covid vaccines – like apples and oranges

Date:

22 July 2020

Despite claims of transparency, we show you adverse event data are hidden in a black box

Content Sections

- Cooperation? Competition? Or war?
- Which data are hidden?
- The contenders
- Transparency, or no trust
- Take action NOW!

By Robert Verkerk PhD, founder, executive & scientific director

The vaccine race is well and truly on as you'll see from the Milken Institute's Covid-19 Treatment and Vaccine tracker. But it could just as easily be described as a vaccine war – with the US having accused China of cyber-based espionage for stealing secrets from US vaccine companies that might give Chinese efforts an advantage. Hidden away in the 130-page supplementary appendix published in *The Lancet* alongside the Oxford/AstraZeneca Phase 1/2 trial, the British team have definitely got it in for the US team at Moderna/NIAID, stating: "Subunit vaccines [like Moderna's] usually require the use of adjuvants and whilst DNA and RNA vaccines can offer manufacturing advantages, they are often poorly immunogenic requiring multiple doses, which is highly undesirable in the context of a pandemic." [see Section 3.5 of supplementary appendix, p. 72]

Cooperation? Competition? Or war?

So much for the \$18 billion global cooperation effort on vaccines, supposedly led by the World Health Organization (WHO) and Gates' brainchild, the Coalition for Epidemic Preparedness Innovations (CEPI), that Gates threw nearly \$100 million at in 2017.

The idea, agreed at an extraordinary virtual summit of the G20 on the 26th March, was that there would be no 'profiteering' over vaccines. The US Food and Drug Administration (FDA) has also widely claimed its commitment to full transparency, including around clinical trials and data. Recognising reports that the US President has pressurised the FDA to cut corners on vaccine development and deployment, a US House of Representatives Oversight Committee has demanded transparency to allow independent scientific review of vaccine safety and effectiveness.

As we start to digest the flurry of Phase 1 and 2 clinical trial reports coming out in some of the world's most prestigious journals, we've been increasingly shocked. It's a million

miles from the kind of transparency we believe is in the public interest that we outline in our Vaccine Transparency Manifesto.

Which data are hidden?

Here are our three top concerns:

- Data disclosure is definitely not transparent. Even in the case of the Oxford/AstraZeneca vaccine trial with its 130 pages of supplementary data, there are huge holes in the data – including about which subjects suffered which adverse reactions, and no breakdown of the adverse reaction data for the biggest groups tested.
- 2. The trial designs are not standardised. Take the two non-replicating viral vector vaccines, the Chinese CanSino Biologics/Beijing Institute for Technology one and the Oxford/AstraZeneca one. Both trials are published in the same journal, *The Lancet*, one of the world's most prestigious medical journals. The CanSino one is double blind, the Oxford one single blind. Adverse events for the two trials cover entirely different time periods: 14 days for the CanSino vaccine, and solicited adverse event reports in the first 7 days following vaccination in the case of the Oxford vaccine and 28 days for unsolicited reactions. Apples and oranges.
- 3. Prestigious journals have dropped their standards for research reporting. Tell us how *The Lancet* allows the Methods in the CanSino trial to mention that the control involves only the adjuvant, yet fails to mention what it is even broadly speaking, assuming some might argue for confidentiality to protect intellectual property. Wasn't this all meant to be for the greater good, and open book? Why wasn't the detailed data for the CanSino trial published in the *The Lancet*, when in the same journal, the Oxford trial included 130 pages of supplementary data? But in this, why is the detailed breakdown of adverse event reactions for the most important Group 2/4 plain missing? Why is it we can't work out which subjects suffered from multiple adverse reactions?



Many vaccine candidates are

already in manufacture preparing for roll-out in early 2021 if given green light by regulators.

The contenders

The World Health Organization (WHO) tells us there are 24 candidate vaccines currently being evaluated clinically in humans. In case you thought the pipeline might be a little light, the WHO assures us there are a further 142 candidate vaccines in pre-clinical evaluation.

The contenders for commercial vaccines are publishing their preliminary data, and there's huge political and public pressure for one or more of these to be rolled out by the end of this or early next. Among those at the front of the pack are the following 5:

- Moderna/National Institute of Allergy mRNA-1273. We reported on this one last week. The work is being coordinated by Dr Anthony Fauci, head of the National Institute of Health's National Institute of Allergy and Infectious Diseases. It's a genetically engineered mRNA vaccine that's delivered using a lipid nano particle (LNP) encapsulation system. The mRNA is encoded to instruct the muscle cells of the vaccinated person to express a stabilised form of the virus spike protein. It effectively turns your muscles into a vaccine factory and from there it triggers a humoral (antibody) and cell-mediated (T-cell) response. As we reported, even in a very small trial of just 45 people, it produced significant and severe side effects in some and moderately severe adverse reactions in 80% of those vaccinated.
- Oxford-AstraZeneca vaccine. This is a non-replicating viral vector vaccine. It's based on a synthetic, genetically engineered chimpanzee adenovirus. Once injected, the synthetic code causes the vaccinated person's body to produce the coronavirus spike protein. That in turn triggers the immune system, both the humoral (antibody) and cell-mediated (T-cell) side. A booster dose is required to trigger sufficient immune response to be potentially useful in the real world. The team at the Jenner Institute had already been working on finding relatively innocuous viruses that could act as vectors for Ebola, so they could quickly redirect their efforts to Covid-19 in January. Some argue that the Oxford vaccine is presently leading the vaccine race.

While the trial results were promising from an immunogenicity viewpoint, the median age of the healthy participants was only 35, so we still don't know much about how it might work on older people, including with comorbidities, who suffer the most serious cases of disease. Nor do we know much about how it affects those of non-white ethnicity, given 91% of subjects were white. The vaccine is non-adjuvanted which is a plus in terms of side effects, but the vaccine still showed more adverse reactions than the comparators, either Pfizer's Nimenrix or GSK's Menveo vaccines, both targeting meningitis (MenACWY). We also cannot deduce from the non-transparent data which subjects suffered different combinations of adverse events, and detailed adverse event data relates only to the initial Group 1 (n= 88) trial that also tested the effects of paracetamol. Surprisingly there were no comprehensive data on the Group 2/4 in which 489 volunteers were vaccinated with the genetically engineered chimpanzee virus vector. In short, the data are insufficient to allow independent evaluation of safety.

• CanSino Biologics/Beijing Institute of Technology. Like the Oxford-AstraZeneca vaccine, this one is also based on a non-replicating viral vector vaccine. This time, the vector is a weakened, replication-defective human adenovirus (type 5) that causes the 'common cold' and does contain an adjuvant. Like Moderna, CanSino

has never produced a vaccine before, but it's very well funded and has the might of the Chinese government behind it. The project, as well as executives at CanSino, have strong ties with Canada. We know the vaccine is adjuvanted because the recently published *Lancet* paper with preliminary results of its double, not single, blind trials, tells us this much in its methods, the control being the same as the treatment (i.e. just so-called excipients) minus the genetically engineered sub-unit of the viral vector. But incredibly in our view, the Lancet paper omits to tell us what the adjuvant is. Is it an aluminium salt? Possibly, but we don't know. The immune response looks good at face value, but it's impossible to compare with other vaccines as no assessments are comparable. As far as adverse events are concerned, 9% suffered severe ones at the highest dose, 1% at the lower dose. Given that immunogenicity was comparable, they're now going for the lower dose in the Phase 3 trial. Putting that in perspective, assuming a country the size of the UK, even the lower dose, if exposed to 70% of the UK population, would elicit 466,550 severe adverse events based on these preliminary results. That's over one and a half times more than have been confirmed infected by Covid-19 in the UK to-date.

- Pfizer-BioNtech's BNT162b vaccine. Don't discount this one using the same lipid nano particle (LNP) platform as Moderna, with the world's largest pharma company, Pfizer, in the mix for manufacturing and roll-out. Initial results are cited as promising in terms of immunogenicity and "lack of adverse events. The UK has ordered 30 million doses of one of two of the mRNA vaccines, whichever works best. But that's dwarfed by a patriotic US order of 600 million doses.
- **Zydus Cadila ZyCoV-D vaccine.** Another candidate we should all keep our eyes on is the all-Indian vaccine project, based on a plasmid DNA vaccine. Details are sketchy, but apparently preclinicals yielded a strong immune response.

Transparency, or no trust

We're moving rapidly towards a significant crossroads - one we can't afford to be sleeping at the wheel at when we arrive. Those who believe (and right now, it's about belief and not scientific evidence) that vaccines are our only way out of this pandemic and into some semblance of normality, better soon realise that transparency is going to be a prerequisite. Many who have been denigrated as 'anti-vaxxers' or vaccine hesitants are simply those wanting more information, those who are concerned about the abominable lack of transparency around vaccine development and trials, or are parents or family members of those who have been vaccine-injured.

Hidden by a PR-machine intent on preparing people to roll up their sleeves is another critically important issue no one seems to be talking about. Where was the public debate on genetically engineered vaccines? Europeans have long been opposed to consuming genetically engineered foods – and many US states fought hard to force companies to label products containing genetically modified ingredients, albeit often unsuccessfully given the might of the pro-GMO lobby.

But at least foods are filtered through the digestive tract, including our very sophisticated intestinal mucosa and gut microbiome. Vaccines, including any adjuvants, other excipients and any free-loading contaminants bypass this sensing system. Many of the genetically engineered vaccines now heading the vaccine race do things we recently reserved for science fiction. They get our bodies to become the vaccine factories, having

received information to do this from instructions issued by synthetic genetically coded material.

If you're OK with all of this, that's fine. But we believe you should be told and given all available information about the known risks and benefits, as well as about the composition of the medical treatment you're being subjected to - before it's given. That's what medical consent is about - and it's written into the rule book of every supposedly civilised nation, yet so often flouted in the case of vaccination.

We owe it to future generations to push the authorities to ensure we're all provided with all the information we need to make an informed choice prior to being exposed to such an unproven medical procedure that breaks all the laws of nature that have preceded us for around four and half billion years. This issue will come to a head if the G20 countries get to produce their desired new, chip-enabled, machine-readable immunisation record that will be as important as your passport if you want to move from your country of residence.

Take action NOW!

Find out more about our Vaccine Transparency Manifesto and tell your elected representative why it's so important for all of our futures by downloading the UK or international flyer below.

>>> Download UK flyer as PDF

>>> Download international flyer as PDF

Swiss Policy Research - Facts about covid-19

Date:

29 July 2020

Fully referenced expert facts to assist realistic risk assessment

We consider this article from Swiss Policy Research to be of extreme importance so are publishing the overview, but please do click here to access the full text.

Facts about Covid-19

Overview

- According to the <u>latest immunological studies</u>, the overall lethality of Covid-19 (IFR) is about 0.1% and thus in the range of a severe influenza (flu). For people at high risk or high exposure (including health care workers), <u>early or prophylactic</u> <u>treatment</u> is essential.
- 2. In countries like the US, the UK, and also Sweden (without a lockdown), overall mortality since the beginning of the year <u>is in the range of</u> a strong influenza season; in countries like Germany, Austria and Switzerland, overall mortality is in the range of a mild influenza season.
- 3. Even in global "hotspots", the risk of death for the general population of school and working age is typically in the range of <u>a daily car ride to work</u>. The risk was initially overestimated because many people with only mild or no symptoms were not taken into account.
- 4. Up to 80% of all test-positive persons <u>remain symptom-free</u>. Even among 70-79 year olds, <u>about 60%</u> remain symptom-free. About 95% of all people develop at most <u>moderate symptoms</u>.
- 5. Up to 60% of all persons may already have a certain cellular background immunity to the new coronavirus due to contact with previous coronaviruses (i.e. common cold viruses). The initial assumption that there was no immunity against the new coronavirus was not correct.
- The median age of the deceased in most countries (including Italy) is over 80 years (e.g. 86 years in Sweden) and only about 4% of the deceased had no serious preconditions. The age and risk profile of deaths thus essentially corresponds to normal mortality.
- 7. In many countries, up to two thirds of all extra deaths occurred in nursing homes, which do not benefit from a general lockdown. Moreover, in many cases it is not clear whether these people really died from Covid-19 or from weeks of extreme stress and isolation.

- 8. Up to 30% of all additional deaths may have been caused <u>not by Covid-19</u>, but by the effects of the <u>lockdown</u>, <u>panic and fear</u>. For example, the treatment of heart attacks and strokes <u>decreased</u>by up to 60% because many patients no longer dared to go to hospital.
- 9. Even in so-called "Covid-19 deaths" it is often not clear whether they died *from* or *with*coronavirus (i.e. from underlying diseases) or if they were counted as "presumed cases" and not tested at all. However, official figures usually do not reflect this distinction.
- 10. Many media reports of young and healthy people dying from Covid-19 turned out to be false: many of these young people either <u>did not die</u> from Covid-19, they had already been <u>seriously ill</u>(e.g. from undiagnosed leukaemia), or they were in fact <u>109 instead of 9</u> years old. The claimed increase in Kawasaki disease in children also turned out <u>to be false</u>.
- 11. Strong increases in regional mortality can occur if there is a <u>collapse in the care of</u> <u>the elderly and sick</u> as a result of infection or panic, or if there are additional risk factors such as <u>severe air pollution</u>. Questionable <u>regulations</u> for dealing with the deceased sometimes led to <u>additional bottlenecks</u> in funeral or cremation services.
- 12. In countries such as Italy and Spain, and to some extent the UK and the US, hospital overloads due to strong flu waves <u>are not unusual</u>. Moreover, this year up to 15% of health care workers were <u>put into quarantine</u>, even if they developed no symptoms.
- 13. The often shown exponential curves of "corona cases" are misleading, as the number of tests also increased exponentially. In most countries, the ratio of positive tests to tests overall (i.e. the positivity rate) remained constant at 5% to 25% or increased only slightly. In many countries, the peak of the spread was already reached well before the lockdown.
- 14. Countries *without* lockdowns, such as <u>Japan</u>, <u>South Korea</u>, <u>Belarus</u> and <u>Sweden</u>, have <u>not experienced</u> a more negative course of events than many other countries. Sweden was even <u>praised</u> by the WHO and now benefits from <u>higher</u> <u>immunity</u> compared to lockdown countries. 75% of Swedish deaths <u>happened</u> <u>in</u> nursing facilities that weren't protected fast enough.
- 15. The fear of a shortage of ventilators was <u>unjustified</u>. According to lung specialists, the invasive ventilation (intubation) of Covid-19 patients, which is partly done <u>out of fear</u> of spreading the virus, is in fact often <u>counterproductive</u> and damaging to the lungs.
- 16. Various studies <u>have shown that</u> the main routes of transmission of the virus are neither long-range aerosols (i.e. tiny particles *floating* in the air) <u>nor smear infections</u> (i.e. on surfaces), but *direct* contact and *droplets* produced when coughing or sneezing.
- 17. The effectiveness of face masks in *healthy* and *asymptomatic* individuals <u>remains</u> <u>questionable</u>. Experts warn that such masks may interfere with normal breathing and may become <u>"germ carriers"</u>. Leading doctors called them a "media hype" and "ridiculous".
- 18. Many clinics in Europe and the US remained <u>strongly underutilized</u> or <u>almost empty</u> during the Covid-19 peak and in some cases had to <u>send staff home</u>. Millions of surgeries and therapies were <u>cancelled</u>, including many cancer screenings and organ transplants.

- 19. Several media were caught <u>trying to dramatize</u> the situation in hospitals, sometimes even with <u>manipulative</u> images and videos. In general, the <u>unprofessional</u> <u>reporting</u> of many media maximized fear and panic in the population.
- 20. The virus test kits used internationally are <u>prone to errors</u> and can produce false positive and false negative results. Moreover, the official virus test was <u>not clinically validated</u> due to time pressure and may sometimes react positive to other common coronaviruses.
- 21. Numerous <u>internationally renowned experts</u> in the fields of virology, immunology and epidemiology consider the measures taken to be <u>counterproductive</u> and recommend rapid <u>natural immunization</u> of the general population and protection of risk groups.
- 22. At no time was there <u>a medical reason</u> for the closure of schools, as the risk of disease and transmission in children is <u>extremely low</u>. There is also <u>no medical reason</u> for small classes, masks or 'social distancing' rules in schools.
- 23. The claim that only (severe) Covid-19 but not influenza may cause venous thrombosis and pulmonary (lung) embolism is not true, as it has been known for 50 years that severe influenza greatly increases the risk of thrombosis and embolism, too.
- 24. Several medical experts <u>described</u> express coronavirus vaccines as <u>unnecessary</u> or even <u>dangerous</u>. Indeed, the vaccine against the <u>so-called</u> <u>swine flu</u> of 2009, for example, led to cases of <u>severe neurological damage</u> and lawsuits in the millions. In the testing of new coronavirus vaccines, too, serious <u>complications</u> and <u>failures</u> have already been reported.
- 25. A global respiratory disease pandemic can indeed extend over <u>several seasons</u>, but many studies of a "second wave" are based on <u>very unrealistic assumptions</u>, such as a constant risk of illness and death across all age groups.
- 26. In places like New York City, nurses described an oftentimes <u>fatal medical mismanagement</u> of Covid patients due to questionable <u>financial incentives</u> or inappropriate medical protocols. On the other hand, *early treatment* with zinc and HCQ turned out <u>to be effective</u> after all.
- 27. The number of people suffering from unemployment, <u>depressions</u> and domestic violence as a result of the measures has reached <u>historic record levels</u>. Several experts predict that the measures will claim <u>far more lives</u> than the virus itself. According to the UN <u>1.6 billion people</u> around the world are at immediate risk of losing their livelihood.
- 28. NSA whistleblower Edward Snowden warned that the "corona crisis" will be used for the <u>permanent expansion</u> of global surveillance. Renowned virologist Pablo Goldschmidt <u>spoke of</u> a "global media terror" and "totalitarian measures". Leading British virologist Professor John Oxford <u>spoke of</u> a "media epidemic".
- 29. More than 600 scientists <u>have warned of</u> an "unprecedented surveillance of society" through problematic apps for "contact tracing". In some countries, such "contact tracing" is carried out directly <u>by the secret service</u>. In several parts of the world, the population is being <u>monitored by drones</u> and facing serious police overreach during lockdowns.
- 30. A 2019 WHO study on public health measures against pandemic influenza found that from a medical perspective, "contact tracing" is "not recommended in any circumstances". Nevertheless, contact tracing apps have already become partially mandatory in several countries.

Gates on Covid Vaccines: the video

Date:

29 July 2020

Comments:

8

Look, listen and learn from Bill Gates' insights on the Covid vaccines

Encouraging thought and inviting debate is a central tenet of ANH's mission because of its ability to stimulate changes where they may be necessary. We find it deeply thought-provoking that this is the first time in human history that the wealth of one human has so controlled the destiny and nature of the healthcare response to a single disease or a pandemic. That person needs little introduction, being a pioneer of the personal computer revolution of the '70s and '80s and having no medical or scientific background. Your views are important to us, so the comment box is always open below the article.

William Henry Gates III could be regarded as the architect of the 'grand solution', one that was inevitably going to centrally involve vaccines even before the current pandemic was declared, such was his investment and commitment to this one biomedical technology.

While there is an increasing sense among many that the dangers posed by the coronavirus have been greatly overblown, as set out by Swiss Policy Research, there is an even bigger push, supported by the mainstream media, warning of further devastation by the virus as we approach the northern hemisphere winter.

Some of the vaccines that are likely to be rolled out by the end of this year or early next have already been made. They await the green light from government regulators, and it's no secret that their makers are buffered in the knowledge that governments (via taxpayers) will indemnify them against any no-fault vaccine injuries. Last week we reported on the findings of some of the early Phase 1 and 2 trials. As you may have gathered, the notion of having a 'magic bullet' in the form of a safe and effective vaccine looks ever less likely.

We thought it appropriate this week to bring you commentary from Bill Gates himself. With so much at stake, amidst so much scientific uncertainty and deeply polarised opinions, we could do worse than look into Bill Gates' eyes, listen carefully to the words he speaks and read his body language.

We urge you to do just that by listening and watching this week's video. We ask that if you think others would benefit from doing the same, please share it widely. Thank you.

https://youtu.be/PI95pEvBkuE

: Pandemic-induced emotional trauma — a lasting legacy for ourselves and our children?

Date:

5 August 2020

Join Meleni Aldridge and certified functional medicine practitioner, Leonie Ash, discussing how stress and trauma become silent health assasins and how to recognise and undo the effects

The draconian restrictions imposed upon citizens in the wake of the covid-19 pandemic has plunged vast numbers of adults and children into an emotional crisis that isn't of their making. The physiological effects arising from the social, economic, medical and moral impacts are likely to be long-lasting, even permanent if specific actions aren't undertaken to recognise and restore health resilience.

Join integrative medicine practitioner and ANH-Intl's executive coordinator, Meleni Aldridge, as she discusses this critical issue with certified functional medicine practitioner, Leonie Ash.

Leonie is certified with the Institute for Functional Medicine. She's been a nutritional therapist since the mid 90's and specialises in stress and trauma-related conditions. Her journey has taken her through many different modalities and disciplines, but she now focuses on Human Givens, a bio-psycho-social approach to counselling and psychotherapy, and functional medicine. Like many successful health professionals, Leonie's experience is informed from her own personal journey out of early childhood trauma and it's upstream health impacts.

Last year Leonie won the coveted Delegate's Choice Poster award at the Institute for Functional Medicine's 2019 Annual Conference for her work showing how to break the triad of physical, mental-emotional and social ill health arising out of childhood trauma.

>>> Watch on You Tube.

>>> Listen to the podcast

>>> If you would like to contact Leonie Ash please email us at info@anhinternational.org.

https://youtu.be/_5980StrUvE

Devastating lockdown consequences

Date:

5 August 2020

Comments:

5

Can we afford another one?

With veiled threats of a second lockdown being mooted globally to deal with a second wave of coronavirus, we take a look at some of the more devastating, even irreversible, effects of the first one. Whether the threats are solely to ensure a compliant population or intended, can we really sustain the social and economic impacts of another one?

It would seem the answer to that question is a resounding NO! from a growing number of citizens globally.

Around the world this past weekend citizens have been protesting against the loss of personal freedoms, rights and economic pain as a result of draconian coronavirus restrictions. In Berlin an estimated (by the organisers) 800,000 to 1.3 million people joined forces to challenge the German Government's restrictions with many chanting 'We are free people'. Although the mainstream media is claiming only 17 - 20K, which amounts to around a 50-fold variance.

Thousands of protesters in London chanted 'Freedom' as they came together for a 14th protest. Further protests are being organised around the UK by StandUpX who describe themselves as "A community of people protesting and standing up for our rights across England!". In Serbia people gathered for the fifth night in a row to protest against measures brought in to contain covid-19. Past protests have also taken place across the US, Canada, Israel and Australia as citizens seek to reclaim their civil liberties and shrug off the mantel of state control that has descended on the so-called free and democratic world during the past 5 months.

Interestingly, in the UK there has been very little coverage by the mainstream media on the protests in London or Berlin on Saturday, so we've included live stream footage from personal Facebook pages in the video below.

>>> Given how widespread the censorship is now, we ask you to please share this video on your social media feeds.

>>> View on You Tube

https://youtu.be/ZRSsVMN0xaA

Covid deception unravelled

Date:

12 August 2020

Comments:

3

Join Rob Verkerk PhD and Meleni Aldridge for the first in their new series of Forest Chats as they discuss the data you're not being told on the news

This latest video – the first of our new Forest Chats series — really needs no detailed introduction. It 'does what it says on the tin'!

Join Rob and Meleni as they discuss a few key areas with the greatest discrepancies between the actual data and what the mainstream media keeps pumping out. We hope it helps answer a few questions, fill in some information gaps and more importantly, allay some fears, particularly for those that may not be fully plugged into the alternative news network.

Please do share widely and help us get around the censorship that's rife on social media in this 'new throttled-back normal'...

https://youtu.be/_6q5kJbhQYw

Immune resilience - adapt, don't fight!

Date:

20 August 2020

Our greatest protection against a wide range of pathogens including SARS-Cov-2 that causes covid-19, remains our immune system and it's robustness and resilience to meet whatever challenge we face.

Content Sections

- 'Adapt, Don't Fight' (how your immune system can save your life)
- Build your immune resilience as nature intended
- C*v*d-19: it's not Russian roulette
- Natural immunity support

Citizens have been terrified into believing the virus responsible for covid-19 will kill everyone and that there is nothing available to protect us. Widespread censorship is challenging our right to freedom of speech and the ability to share potentially life-saving information because it recommends the use of natural nutrients to support immune resilience. Mercola.com has been the latest victim of a high-profile attack by the US Center for Science in the Public Interest (CSPI) as part of efforts to shut it down. You only have to follow the money and see the same handful of bad actors to understand why.

We've been told that we can't get back to 'normal' until there is a vaccine. Our only means of protection in the meantime, a flimsy piece of cloth designed to silence our voices or distancing and isolating ourselves, which in turn does untold damage to our ability to withstand illness. Nothing could be further from the truth. The key to dealing with covid-19 already exists and it isn't a drug nor a vaccine. It's our own inbuilt protection system that for millennia has evolved to counter the multitude of pathogens humankind has encountered, and survived, throughout our history. It's why we're still here on this beautiful Planet with the multitude of bacteria and viruses that live here too.

Governments and health authorities have been resolutely mute on the power of our immune system to adapt to and protect us against, new pathogens in recent months. With schools reopening and the northern hemisphere entering autumn and winter it is more important than ever that we nurture our immune systems so they can do the job they were designed for effectively and efficiently.

In May we collaborated with doctors from the British Society for Ecological Medicine to produce immune support guidance specifically for children, teachers and families as kids prepared to return to school. This advice remains the same today and is applicable to everyone aged 4 years and above. Click here to download a copy of the protocol.

Because this information is so important and being so heavily censored, we're taking the opportunity of *Throwback Thursday* to share some key information about the steps we can all take to support our natural immunity, starting today.

As a starting point we invite you to download our new erecipe book containing immune supporting recipes designed to be shared with friends and family amid laughter and love - an essential part of our health and wellbeing and a ky part of promoting a strong and resilient immune system.

'Adapt, Don't Fight' (how your immune system can save your life)

https://youtu.be/QKscYcgTIDU

Build your immune resilience - as nature intended

Maintaining health also means maintaining the right balance between host and pathogens.

We attempt to do this unconsciously on a daily basis given the sheer number of microbes we're exposed to from the air we breathe, the food we eat, the ground we walk on and the things we touch. A large majority of these microbes are friendly, beneficial even, but some most definitely are not if they start developing in significant numbers. Sorting friend from foe is exactly what our immune systems are there to do. Our innate and adaptive immune responses evolve during our lifetime. Constantly learning and adding more information to the 'memory banks' so that the right weapons can be manufactured in time to destroy whichever foe has been identified before it can destroy us. Our gut microbiome plays an integral and essential role in maintaining proper immune defence and essentially governs immune resilience.

Read more...

C*v*d-19: it's not Russian roulette

Wherever you live in the world, government advice is to stay at home and do nothing during this time of pandemic. However, there's actually rather a lot that you can do for yourself and your family from home.

Our newest video in our Covid-19 series takes you through 4 main areas where your own actions can have significant impact to reduce your risk and susceptibility.

Be empowered: you are not without hope

As Adam Kucharski, associate professor at the London School of Hygiene & Tropical Medicine explains in his serendipitously-timed book, *The Rules of Contagion: Why Things Spread – and Why They Stop* (Wellcome, 2020), there are 4 key factors that drive the reproduction number (R_0 value). This is the all-important (but also problematic) statistic that tells you how many people a single infected person is likely to infect. Estimate from different studies vary greatly, ranging from around 1.5 to as high as 5, with more common estimates ranging from 2 to 3.5. If the value remains above 1, spread of the virus through the global population will likely continue – but as with all novel viruses, the R_0 value will decline with time as our immune systems adjust to its presence.

Dr Anthony Fauci and colleagues from the National Institute of Allergy and Infectious Diseases at the National Institutes of Health in the USA, leading the scientific strategy stateside, propose an R_{\circ} of 2.2. He also proposes a true case rate fatality that might be considerably lower than 1%. He suggests this might put Covid-19 on par with severe seasonal influenza which has a fatality rate of around 0.1%.

Read more...

Natural immunity support

Natural bodies need natural agents

When it comes to treating Covid-19 patients we're witnessing double standards. Researchers are tripping over themselves to explore new and existing drug therapies to find the magic bullet that will treat all and deal with the scourge of Covid-19. However, little or no attention is being paid to the potential of natural products and practices to both treat patients and improve immune resilience. Worse, there is widespread censorship occurring on information posted about potential natural treatments and preventative practices.

As it stands, in excess of 50 possible treatments are being studied, or slated for study, for efficacy in treating Covid-19 patients, however, no 'proven' therapies are considered to yet exist. Search the NIH clinical trials database and you'll find 745 (as of 21/04/20) trials registered each seeking the magic bullet for SARS-CoV-2. Of those, a paltry 28 (4%) are investigating natural health therapeutics such as vitamin C, vitamin D, zinc, Ayurveda, Traditional Chinese Medicine and hyperbaric oxygen therapy. But we say why wait for a research trial when there is clinical experience to rely on - past and present?

Read more...

Dr Eccles: strengthening resilience in the face of *ovid-19

When you need your electrics fixed, you ask an electrician, not a plumber. Same applies to health. When you want to know how to prevent or treat people at risk from a new coronavirus for which there are no drugs available, you don't ask medics, researchers or health authorities who've never done any work with agents that are readily available and are known to modulate immune responses.

You ask someone who's worked with readily available natural agents – but also understands their mechanisms of action in the body, as well as those of any potential candidate drugs. Below, we bring you the views from such a person, both a medical doctor and a pharmacologist, Nyjon Eccles MBBS PhD, the Natural Doctor from Harley Street, London.

Last week, Nyjon, along with Professor Chris Elliott of Queen's University Belfast and director of the Institute for Global Food Security and ANH founder, Rob Verkerk PhD, participated in a podcast for New Food magazine. Both Chris and Rob sit on the magazine's advisory committee.

Read more...

Humble, Heroic vitamin C

https://youtu.be/93BAfBzKz3A

The Big 6 areas of Covid misinformation

Date:

27 August 2020

Rob Verkerk PhD identifies six of the biggest areas of misinformation delivered by the mainstream media.

There's an increasing divide between how Covid-19 related news and information is being reported by governments, health authorities and the mainstream media on one hand, and alternative media and independent expert commentators on the other.

This is particularly the case on matters of science. The resultant public uncertainty is fuelling ever more polarised public viewpoints in relation to what should and shouldn't be done because of, or inspite of, the pandemic.

In this week's coronacast, ANH founder Rob Verkerk PhD identifies what we consider to be six of the biggest areas of misinformation we face daily through the narrative offered by the mainstream media.

A transcript of the coronacast is available below for your convenience.

Video Transcript

It's clear there's an increasing divide between how the Covid phenomenon is being reported on by governments and the mainstream media on the one hand, and by alternative media on the other. But there's also a growing divide in how the science is being reported – this uncertainty fuelling an ever more polarised view on covid and how what societies should and shouldn't do because of, or in spite of, this so-called pandemic. In this video, we're going to look at 6 really key areas that are particularly rife sources of misinformation – this misinformation emanating from governments, health authorities or the mainstream media.

1. Direct mortality from Covid-19. We still don't know how many have died from Covid - only how many have died with Covid mentioned on the death certificate, whether or not this was the result of a positive test. Last week in the UK – even based on these dodgy data, Office of National Statistics data tell us that Covid-associated deaths make up just 16% of those from other respiratory diseases and the number is getting smaller each week. As of week 25, mid-June, deaths from respiratory diseases overtook those where Covid was associated. Healthcare professionals are already noting an increase in respiratory infections, some linking this to increased mask wearing. Let's not forget lockdowns were meant to stop healthcare services being overrun. They were never overrun and there's now talk of more lockdowns – and, again, healthcare services are a million miles from being overrun by covid-related illnesses. So why not business as usual? Why do we need a new normal with all that it entails – when the scientific evidence overwhelmingly suggests it's time to revert to the old normal.

- 2. Indirect mortality. We know already more people have died as a consequence of the collateral damage caused by government covid policies than those who've died with not because of covid. That's only set to get worse if we don't soon revert to the old normal. These are policies that have been determined and organised in countries with supposedly democratic regimes without any recourse to the public's views or opinions. Mental health problems, suicides and a rash of other diseases that aren't getting the attention they need are being exacerbated by the top-down, totalitarian policies that are destroying lives and livelihoods with untold consequences, many of which won't become apparent for months or even years.
- 3. Everyone knows there's two types of test: antigen or PCR tests that use a nose and throat swab – that tell you whether you have the virus; and serologic antibody tests of blood samples – that tell you whether you've been infected. Unfortunately neither are accurate. PCR tests simply identify a particular genetic sequence that's common to the spike protein of the SARS-CoV-2 virus. It doesn't tell you if you're currently infected – hence the 50% plus reported levels of false positives. It also doesn't tell you anything about the virus being the cause of any respiratory disease. As for the antibody tests – these are notoriously inaccurate, especially in women or those who haven't had severe disease - which is the majority. There are different classes of antibodies and most tests just measure one of these, most often just IgG. We now know another part of our immune system, the T-cell response, can remain elevated after infection for longer than antibodies and you can't really get to the bottom of a population's immunity without thorough testing of all antibodies and Tcell responses. And that's just not being prioritised. That leaves us to speculate that that's probably because there's little interest from those driving the agenda to understand the level of naturally-acquired herd immunity as that'll reduce people's desire to be vaccinated when vaccines eventually get rolled out.
- 4. **Treatment**. The UK government has funded trials like RECOVERY that show that one-third of deaths linked to covid can be averted if you use the anti-inflammatory corticosteroid, dexamethasone. Then you've got other protocols involving steroids, anti-inflammatories and natural agents like zinc such as the MATH+ protocol that's been shown to be extremely effective in preventing deaths when delivered early enough. Yet none of these treatments get formal acknowledgment by health authorities probably because such acknowledgement of effectiveness prevents the vaccine manufacturers from being indemnified by governments or should I say the taxpayer in the event of vaccine injury. Governments have been almost unified in refusing to tell people to eat healthy diets or take simple and cheap supplements like vitamin D or herbal products that reduce inflammation in the body. More and more people are waking up to the fact this decision to avoid talking about natural immunity is really much more about getting people prepared for a vaccine.
- 5. **Masks**. Why do we need to wear masks or face coverings in public settings? There's no scientific evidence to support it so do governments who enforce the use of face coverings in public settings claim to be led by science? If it's not science driving these decisions what is it? Could it be more about power and control? Is this some kind of a divide and conquer strategy that's causing a split in society between the obedient and the disobedient? It's early days in understanding just how many health and social problems could result from mandating use of face coverings so it's very relevant that we're already seeing evidence of increases in oral infections, skin infections and bacterial pneumonia in those wearing face coverings for long periods each day.
- 6. **Vaccines**. The UK is the second biggest funder of the World Health Organization (WHO) and one of the leading funders of a vaccine solution can it afford to fail?

Why hasn't the government told the public all previous efforts to develop a coronavirus vaccine in humans have failed, that the companies making the vaccines are indemnified by governments who're paid by us, the taxpayers? Or that the candidate vaccines all rely on genetic engineering technologies that have never been used at scale before? Why are we putting all our eggs in the vaccine basket - when all the scientific evidence tells us people who look after their immune system either show no symptoms of disease at all after becoming infected - or suffer only mild symptoms no worse than a cold or flu?

So there we have it – the Big 6 areas of covid misinformation as they currently stand. The data that informs each one of these areas are changing all the time but what's been fairly consistent is that the general view being dished out by governments and health authorities hasn't represented the scientific facts accurately. Next week we're going to be releasing a piece in which we fact check the fact checkers – this new and rapidly growing group of often anonymous individuals who're working tirelessly to marginalise any information that doesn't fit with the agreed narrative – one that we and many other scientifically based organisations and groups agree is seriously misinformed.

Our most powerful weapon against misinformation – from wherever it comes – is good science. That's been central to our own mission at ANH since we set up over 18 years ago.

Please help those around you to understand just how insidious the misinformation is — by sharing this video with those you care about and those in your networks. Please also don't forget to subscribe to our YouTube channel if you want to see and share more videos from us. Thank you.

Are governments playing with fire?

Date:

2 September 2020

9 government policies that could help avert mass social upheaval

Welcome to our eighth coronacast.

In it, our founder, executive and scientific director, Rob Verkerk PhD, highlights 9 things we think governments should do now if they're serious about averting mass social upheaval - the consequences of which could dwarf any direct effects of the coronavirus itself.

The coronacast is around 10 minutes in length and you'll find a full transcript of it beneath the video. - https://youtu.be/HjBqXyPCP2w

TRANSCRIPT

Welcome to this week's coronacast – the eighth in our series.

Let me ask you this: did you ever think as the clocks turned to begin this New Year the freedoms our forebears had worked so hard to win, including through the last two World Wars, would be lost in a matter of months?

This weekend, political activist Piers Corbyn, the brother of former UK Labour party leader Jeremy, who organised an anti-lockdown rally in Central London was issued with a £10,000 fine. When the right to peaceful assembly has been curtailed by emergency, broad-ranging and unspecified powers granted to governments without agreement of the electorate, you know our fundamental rights have been withdrawn.

The most disturbing thing about the last few months hasn't been the arrival of a new and somewhat peculiar viral pathogen that for the vast majority of people causes few if any symptoms. Instead, it's been the human reaction to it.

That's not meant to belittle the fact that around 5% of those infected by the virus suffer serious respiratory disease that appears to be on par with flu or pneumonia – all of which can be fatal in those who are least able to mount an appropriate immune response.

If your health function is good – as in the majority – we think a much bigger threat to you – to all of us – is the gamut of human and particularly government mandated responses to the virus. The central impact of these actions is on businesses, livelihoods and economies. And it's of course businesses and economies that provide the livelihoods that allow societies to function.

What we've got to take on board in considering all the options is the very tight and well proven correlation between socio-economic status and health. To us, when you recognise the fundamental importance of these social and economic determinants of health, it's remarkable that so many have just gone along with it all – buying into the narrative handed to them by the media and governments. Perhaps that's beginning to change with the number of protests that are

going on around the world. What's just as interesting is how the media are either downplaying these protests or pretending they're only fringe events being run and supported by wackos.

So many have simply taken on board the idea that without a vaccine the only options available to us are national lockdowns, furlough schemes and school closures. It's as if so many just can't see or don't want to look at the 'car crash' that'll inevitably be felt on health and everything else, the full extent of which we'll probably only come to fully appreciate in the years ahead. There's no doubt as we move towards the possibility of further local lockdowns and knee-jerk reactions to rising R numbers in the absence of hospitals being overrun with covid patients – that the protests could create a deep and dangerous divide in societies.

But it isn't too late – it's never too late. So let's now look at the 9 things we believe governments should do NOW to avert mass social upheaval which could have disastrous health, social and economic consequences.

1) STOP MAKING PEOPLE SCARED!

Governments, health authorities and the media should stop engendering fear of the virus and help people to understand its impacts in the context of other respiratory diseases. That means they must report on deaths caused by Covid accurately and put them in the context of other diseases and causes of death, not consider them in isolation. They also need to be clear about communicating evidence of the reducing virulence of the virus – something that's thought to happen with all new viruses that are adapting to their new hosts

2) RESTORE THE DEMOCRATIC PROCESS.

The exercising of authoritarian or even totalitarian powers, based on weak or absent scientific evidence, that destroys businesses, livelihoods and ravages people's freedoms is a recipe for social upheaval that could destroy the fabric of society. When the right to peaceful assembly means paying a fine of £10,000 or facing imprisonment, you know it's gone too far. It's time to get the democratic process back on track and ensure governments, as the executive authority, exercise the will of the people who voted them in.

3) RESTORE NORMAL SOCIETAL FUNCTION.

We've got to see governments try their best to restore the normal function of society as far as possible – by encouraging healthy people to resume all normal activities. You only have to look at the data from countries like Sweden that engaged in a partial or light lockdown. They may have seen a little upturn in cases through increased testing but critically they now face no elevated hospitalisations. The overall impact of coronavirus – especially the collateral damage – has been so much lower because of the light lockdown and almost business as usual approach. It shows clearly that lockdowns and business closures serve no purpose in helping us adapt to the new virus and simply create a rash of additional problems.

4) ABOLISH LOCAL LOCKDOWNS AND SOCIAL DISTANCING.

Governments need now to abolish social distancing policies and other measures because all they do is serve to delay transmission among healthy people so that naturally-acquired immunity is delayed more – all just increasing the chances of second waves.

5) ABOLISH COMPULSORY USE OF MASKS AND FACE COVERINGS.

Governments also need to abolish the mandatory use of masks and other face coverings in public settings and in schools as there is no scientific basis for their use – something we've shown in more detail in a separate video.

6) ENHANCE NATURAL IMMUNITY.

We need to see government programmes that prioritise the enhancement of people's natural immunity. That means supporting and encouraging healthy, immune enhancing, anti-inflammatory diets as well as the use of proven supplements such as vitamin C, vitamin D and zinc. At the moment, public health messaging in this area pays little more than lip service to these ideas and certainly doesn't get near recommending the use of cheap simple supplements like Vitamins C, D or zinc.

7) SHIELD VULNERABLE POPULATIONS.

Most people already know their risks, but these are of course greatest for those with one or more comorbidities. That includes people with metabolic diseases like type 2 diabetes and obesity, as well as those with heart disease or lung disease.

8) STOP TESTING.

Possibly most controversially of all, we argue that national antigen and antibody testing programmes for the virus should now be shelved as they are both inaccurate and incredibly wasteful of limited resources – ones that we the taxpayer will ultimately have to pay for.

They also serve to maintain people's focus on just one disease pathogen, that's a minor player in the scheme of our overall risks in life – and they take the focus off the real problems which are caused by government responses to the virus as well as – in a proportion of our society, particularly those in more deprived areas - a lack of immune resilience making people not just susceptible to this disease but a rash of other respiratory infections caused by viruses and bacteria. And of course these health inequalities are just getting wider and wider as government mandated actions continue to hit the most deprived hardest.

9) ENSURE VACCINE TRANSPARENCY.

While so much of the government and public health effort is looking to the promise of a vaccine, we are a long way from knowing if the new genetically engineered platforms being used for most Covid vaccines will be safe or deliver lasting immunity. While governments claim the trials of the vaccines that are being developed at warp speed are transparent, the first results published in leading journals like the New England Journal of Medicine and the Lancet are far from transparent. Side effects and harms are also very real. Transparency also requires that the medical need for a vaccine is there – which means the real risks of infection, including considering if virulence is waning over time, must be considered alongside the risks of any harms caused by the vaccine.

Oh – and we've added one more thing – a 10th point. This last point's not for governments, it's for you.

10) PLEASE SHARE THIS VIDEO.

With the censorship of information that runs against the mainstream narrative and with increasing activity from biased fact-checking websites and organisations, there's never been a more important time to share information that you believe accurately reflects the current state of play. Please share this video with your MP or other elected representatives, as well as with your friends, family, colleagues and others in your networks.

So – let's adapt, not fight – and please consider subscribing to our YouTube channel that has a wealth of information and playlists that will help to empower you.

You'll also find loads of information that will help to support your choice to manage your health first and foremost by natural means – working with nature, rather than against it.

See you next time.

Who's fact checking the 'Fact Checkers'?

Date:

2 September 2020

Comments:

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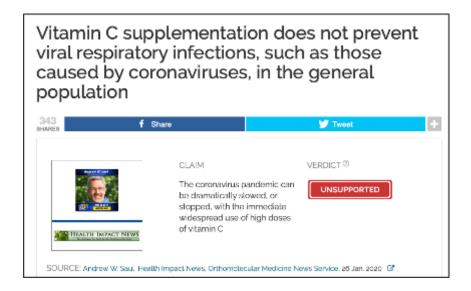
ANH-Intl investigates the fact-checkers and exposes conflicts of interest and disinformation

Content Sections

- Checking the Fact Checkers
- Case study on vitamin C rebuttal
- Here are some facts that might save your life or that of a loved one
- Take-homes

By Robert Verkerk PhD, founder, executive & scientific director and Melissa Smith, outreach & communications officer

Vitamin C is not an effective treatment for SARS-CoV-2, the virus responsible for covid-19. How do we know this? The 'fact-checkers' that now police our online world tell us so. In this new world order, if the information being shared on social media doesn't meet the mainstream narrative, it's declared fake and must be debunked. Regardless of whether or not it's plausible, possible, true or false, the 'fact-checkers' find many ways to twist the information to meet the required narrative. By maintaining the illusion that there's no effective way to treat Covid-19, the path is clear for people to line up with their sleeves rolled up when the novel Covid vaccines inevitably get green-lighted by the regulators and pushed to the masses, no doubt with the help of Google, Facebook and the rest of them.



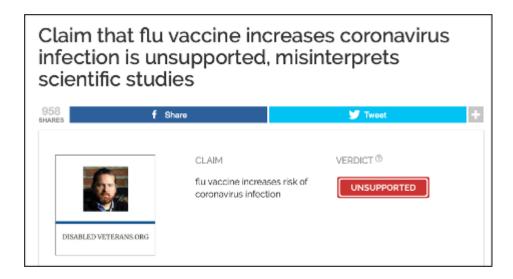
Source: Health Feedback

In recent years, there's been a global explosion of independent 'fact-checkers' across more than 50 countries spanning every continent. As the coronavirus pandemic unfolded, many existing 'fact-checkers' that had been focusing on 'fake news' in other areas, became overnight Covid-19 experts, and began to enthusiastically debunk individuals and websites espousing natural health options. Routinely cast as being neutral and free from bias, most 'fact checking' services are, in fact (excuse the pun), being bought and paid for by those seeking to dismiss claims that challenge the status quo.

What our investigation has revealed is that most of the people doing the fact checking are journalists, who you'd imagine are patently unqualified to put themselves forward as experts in the field of an international healthcare emergency caused by a newly-emerged virus.

It's previously been claimed that there is no editorial oversight of 'fact checkers' at Snopes - one of 'the original' fact checkers - and that standard journalistic procedures (let alone scientific ones) aren't followed when checking whether claims are true or false. In a recent case, Facebook 'fact checkers' labelled information from an anti-abortion group as false. When challenged, the labels were removed and Mark Zuckerberg later admitted there 'clearly was bias' in the censorship. When you need to do more than a simple debunking job, there are science-based fact checkers to draw on too - such as HealthFeedback (see below). They do things like go after peer reviewed journal articles and scientific discourse that doesn't fit with the mainstream narrative. Here's one example: HealthFeedback responds to posts on

Facebook, DisabledVeterans.org and GreeMedinfo, claiming they are 'Unsupported'. The source is an interpretation by a retired US paediatrician published as a Rapid Response in the *BMJ* that expresses concern about possible negative interactions between flu jabs and coronavirus infection. Among the primary sources mentioned are articles published in the journals *Vaccine* and *Clinical Infectious Diseases*. Clearly, this kind of scientific debate - that could hardly be more topical as we move towards the flu season and the possibility of a quadruple whammy of flu jabs, Covid jabs and infection with flu and covid viruses - is not good for business.

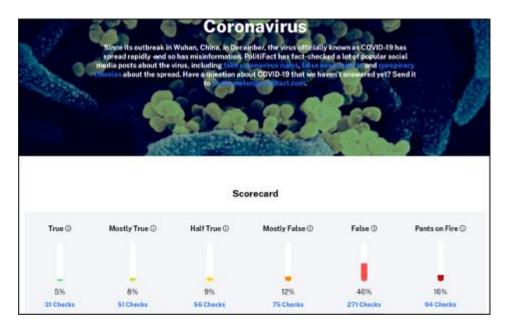


Source: Health Feedback

It doesn't stop at 'fact-checking'. Google is ramping up its support of First Draft, set up to teach citizens how to identify and combat online misinformation.

So concerned about the exponential rise in online censorship and the defamation of their work by Facebook and associated pseudo-fact-checking organisations and websites, The Children's Health Defense has filed a lawsuit against Facebook, Mark Zuckerberg and three 'fact-checking' agencies.

Just how effective 'fact-checking' actually is in changing people's opinions remains open to discussion. Some researchers have questioned the value of fact-checking 'misinformation' by big media organisations as it has the potential to spread the information to those who otherwise wouldn't have seen it.



Source: Politifact

Checking the Fact Checkers

In our investigation, we've dug into some the better-known 'fact-checkers' out there with the aim of seeing just how independent or otherwise they really are. They all claim to be transparent in their funding, but transparency doesn't mean you're immune from conflicts of interest. In many cases, the funders tell you immediately what kind of bias you might expect. Only one of the organisations, Infotagion, states that the source information for their checks comes from the World Health Organization or governments.

Most fact checking organisations are members of the International Fact-Checking Network set up by the Poynter Institute for Media Studies. Amongst its funders are the Bill & Melinda Gates Foundation and Google, along with Omidyar Network.

Here's our shortlist of some of the most influential 'fact-checking' sites.

Health Feedback

Health Feedback is part of Science Feedback. A not-for-profit organisation that says it verifies "...the credibility of influential claims and media coverage that claims to be scientific". Its fact checkers are scientists who they say "...sort fact from fiction in health and media coverage". Its list of funders includes Facebook and the Credibility Coalition whose funders also include Google, Twitter and Facebook.

Politifact

Best known for its political oversight, Politfact has turned its attention to the pandemic in 2020. It's mainly funded by the Poynter Institute whose funders include Facebook and Google. Its team of fact checkers are comprised of journalists and journalism students.

Snopes

Started in 1994 by David Mikkelson Snopes is one of the first fact checking organisations. When it comes to funding, it claims "We are almost entirely funded through programmatic digital advertising sales, paid memberships, direct contributions, and merchandise sales." However, Facebook is listed as a funder in previous years. 'Fact' checking is carried out by its team of journalists.

NewsGuard

NewsGuard is a for-profit organisation originally set up to rate websites trustworthiness in the form of 'nutrition' labels. It too has turned its attention to the coronavirus pandemic in 2020. It's revenue "...comes from Internet Service Providers, browsers, search engines and social platforms paying to use NewsGuard's ratings and Nutrition Labels in the news feeds and search results that they provide to their customers.". They also use journalists to award website nutrition labels and undertake fact checking.

Full Fact

Full Fact is a UK based registered charity whose funders include Facebook, Google and Luminate (which was founded by Pierre Omidyar, the founder of ebay). They state they're "...independent of government, political parties and the media". Its fact-checkers are predominantly from a journalistic background.

FactCheck.org

US based FactCheck.org's main focus has been the political forum, but like other 'fact-checking' organisations, it has now entered the coronavirus misinformation arena. This has led it to accepting funding from both Facebook & Google to cover Covid in 2020. Its 'fact' checkers are predominantly journalists.

Infotagion

This new kid on the block, based in the UK, was created specifically to combat coronavirus misinformation, by UK Member of Parliament, Damian Collins. Funded mainly by a variety of policitians worldwide, they do not share who is undertaking the fact checking. They are the only organisation that declare they fact check against information provided by the World Health Organization along with UK and other official government advice.

To give you an insight into how they work, we provide for you, below, a case study - one involving the highly controversial vitamin C, as found in oranges.

Case study on vitamin C rebuttal

For our case study, we use a FactCheck.org rebuttal of the usefulness of vitamin C in Covid – because it's par for the course of the debunking jobs all so-called 'fact checkers' have done on the use of vitamins C and D, or minerals like zinc, in Covid-19.

The rebuttal denigrates a simple, low cost vitamin, that's also licensed as a medicine when used intravenously, that has a long but nonetheless troubled history of publicity around its use against viral infections. Its main problem is likely that the molecule itself can't be patented; it's been around much longer than humans and humans just can't live without it, hence its essentiality as a nutrient.

But in megadoses, it has different effects on the body, ones that are now accepted as useful in fields as varied as cancer treatment and the treatment of sepsis. In fact (in the true sense), it is the appreciation of this body of work that's provided the scientific rational for using or trialling vitamin C for prevention and treatment of Covid-19. This is supported by its proven role in immune health, its ability to kill infected cells and inactivate viruses through the production of extracellular hydrogen peroxide, through its inflammatory effects and its ability to act both as a pro-oxidant and an antioxidant. Regulation of these mechanisms is at the core of what is required to mitigate damage from the cytokine storm that is associated with severe Covid-disease and associated mortality.

https://youtu.be/ F ZZvdHqPM



Intravenous vitamin C - a taboo subject for many governments and health authorities

In a 'fact-check' debunking effort, there are typically 6 steps, as shown in our case study:

Step 1: Name and shame, while avoiding the science

FactCheck.org appears to try to get away with writing off vitamin C by ensuring its rebuttal of the vitamin's potential use was published in February – at a time when Covid had barely arrived in the USA. The attack is pointed at social media posts from Andrew Saul from the Orthomolecular Medicine News Service (OMNS), which has a respectable editorial board. It contains no meaningful scientific discourse about the role of vitamin C either for treatment or prevention of Covid-19 disease. It also doesn't comment on a number of helpful articles about the use of vitamin C (and other nutrients) in the management of severe respiratory diseases caused by viruses. Or ones written by eminent physicians or researchers on protocols intended to help make immune systems more capable of handling infection by SARS-CoV-2 like this or this. OMNS derives its information from published science, as well as being informed by the decades worth of clinical experience it has, and has had, access to through its network of orthomolecular doctors and practitioners. Even as far as journalistic standards go, the side swipe at OMNS could hardly be described as balanced.

Step 2: Use a non-scientist to write the article

FactCheck.org challenges Vitamin C's usefulness primarily in Part 3 of Fact Check's series on "Fake Coronavirus Cures", the title giving a clue to the conclusion. It's written by Fact Check staff writer Saranac Hale Spencer who it appears has a degree in philosophy, not science, has reported on political issues as a journalist for around a decade and has been writing for FactCheck.org since 2017.



Source: FactCheck.org

Step 3: Make the title count – let it do the debunking for you

The subject line coined for this 12 February piece is "Vitamin C isn't a shield". A shield is a most common marketing representation for immune defense and is widely used by the pharmaceutical industry on licensed products. What's disingenuous about this choice of wording, especially when coupled with the series title "Fake Coronavirus Cures" is that even now – seven months on – there is no single product that has been agreed by scientific consensus to be a 'shield' for the immune system to protect against Covid-19. That's why lockdowns and social distancing are still being used by governments. The author knows this, stating in another article written 4 months later after the vitamin C rebuttal when debunking the uselessness of masks in public settings, "In the absence of a cure or vaccine for COVID-19...".

Step 4: Avoid a discussion of evidence or science at all costs

What's most astonishing about this debunking job is that there's no real science in it whatsoever (perhaps not surprising given it's written by a philosophy grad with a background in political journalism?) The most sciency bit just points you to the opinion of the very US authority that has been deep in with the drug companies for years – the Centers for Disease Control (CDC). In turn, it simply references the well established evidence of vitamin C reducing the severity and duration of the common cold. At a time when almost no one had Covid-19 in the USA so you could hardly expect data relating to the humble vitamin to be available. One comprehensive US study published in *Clinical Infectious Diseases* in 2000 found that 34% of hospitalised patients with common cold were infected with human coronaviruses, the assumed cause of the illnesses. So in that light, looking for treatments that improve common cold doesn't seem such a bad place to start.

Hale Spencer's swipe at the OMNS is interesting as she uses no evidence to back up her view. Presumably making slanders including to anti-vac sentiments is sufficient.

For the next part of this case study, we need to divert briefly from vitamin C to see how governments handled another new disease – bird flu, back in 2005.

Step 5: Don't learn the lessons of history

This little snippet from history serves the purpose of explaining how the mainstream narrative may have little to do with science - and a lot to do with the cosy relationship

between governments and drug companies.

Back then (in 2005), lack of evidence of efficacy didn't stop governments like that of George W Bush stockpiling anti-viral drugs like Tamiflu and Relenza for bird flu (influenza A (H5N1), based on advice from the US National Institutes of Health (NIH), with no evidence it would save lives. Just months later, there was growing evidence that resistance to Tamiflu would be a major issue. That didn't stop government's stockpiling. Nor were governments or the anti-viral drug maker, Hoffman LaRoche, transparent about the common, debilitating side effects of the drug. In January this year, a US law firm initiated a case against Roche alleging it knew that its product wouldn't work in the event of a flu pandemic. It made a cool \$1.5 billion out of sales to the US government, apparently fraudulently. The courts have yet to decide – but let us, in the current pandemic, be more mindful than ever before of how pharmaceutical interests can exploit pandemics for their exclusive benefit – and not that of societies, or taxpayers. No surprise that FactCheck.org has nothing to say about Roche misleading governments, the public or taxpayers.

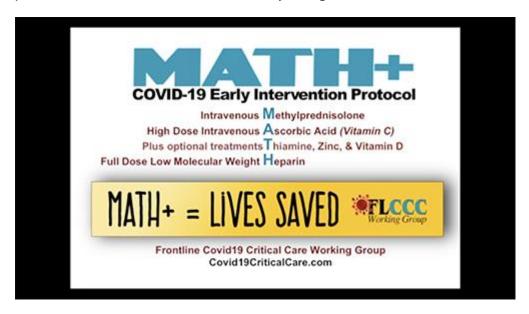
Step 6: Ignore information that might save lives if it doesn't suit your paymasters

Stunningly – there's been no FactCheck.org update on vitamin C despite all the interest among critical care doctors. Clearly the February debunking piece continues to serve its purpose. No consideration was given, for example, to Dr Richard Cheng's first communications of evidence of clinical success in China, along with a plausible basis for its use, coupled with minimal side effects. Or that the use of intravenous vitamin C was clearly of sufficient interest to the critical care community by April for an article to be published in the journal Critical Care on a planned placebo-controlled Chinese trial using high dose (24g/d) intravenous vitamin C. The results of this trial are expected in September, although Dr Cheng stated in OMNS on 16 August that the authors are having great difficulty finding a journal that will publish their findings. FactCheck.org also makes no mention that there are 13 other trials on vitamin C in relation to Covid-19 reported on the NIH site Clinical Trials, gov that are currently actively recruiting or preparing to recruit Covid-19 patients. And of course no mention of the UK trial about which UK health journalist Jerome Burne reports, after interviewing the lead researcher involved. The trial shows that where rather low doses of intravenous vitamin C have been used in Covid patients in a UK intensive care unit, deaths were among the lowest in the country - 8% below average at 34%.

One of the most stunning things about this pseudo-fact-checked world in which we now live, one in which any idea that is not consistent with a specifically engineered narrative coming out of the mainstream, is that it feels unmoved to communicate information that might save lives - if the information may harm certain business interests. It's a simple formula, we presume, in which business interests are put in front of the those of people, and that presumably explains how we've moved into a world where it is accepted that prescription medicines are among the leading killers in society.

The plight of the US critical care doctors who are saving lives day in day out is a case in point. Take their detailed MATH+ protocol for prevention and treatment of Covid-19 at the different stages of infection – that they have now no option but to release on the

Internet, both through the East Virginia Medical School at which lead clinician Prof Paul Marik is based, and a website for other frontline doctors who've co-developed the protocol with Marik and are successfully using it in their own facilities.



FactCheck.org is mute on the fact that these doctors are being stonewalled by the NIH and other US health agencies. That's because vitamin C, along with vitamin D, zinc, melatonin and other nutrients are central to their protocols – all of which have apparently saved almost every life to which they have been administered.

Here are some facts that might save your life or that of a loved one

Since you won't get life-saving information from FactCheck.org – and you may find the in-depth protocol too complex as it's designed for emergency medics, here's Prof Paul Marik's life-saving summary. It evolved from the work he did to develop a protocol using vitamin C and steroid combination therapy for sepsis, which has clear similarities to severe infections with SARS-CoV-2.

Take-homes

Covid is a new and complex disease that's appeared in a world in which science is twisted in a direction that generally suits those with the deepest pockets. So-called 'fact-checking', it turns out, isn't really fact checking at all. It's a process that's moderated largely by journalists and other non-scientists who, frankly, couldn't be expected to come to grips with the uncertain, continually changing evidence and science around Covid-19 disease, or the effectiveness or otherwise of strategies that aim to deal with it.

When incredibly profitable private companies like Google and Facebook who benefit from pseudo-fact-checking actually fund these services, using non-scientists to provide views on complex, uncertain and rapidly evolving science, it becomes a clear conflict of interest. One that everyone appears silent on for the time being.

Our take-homes are as follows:

- 1. Don't trust the fact checkers if you want facts
- 2. Be aware that important missing facts are rife on 'fact checking' sites, including ones that might save your life
- 3. Recognise that a lot of information on Covid-19 is not as black and white as some people and organisations like to make out. There is huge uncertainty over it, and the evidence is a moving feast. Also, complex diseases often require complex protocols, so just because one trial says one nutrient (or drug) doesn't work in isolation, it doesn't mean it doesn't work in combination therapy.
- 4. Follow the money understand who benefits from the rapidly expanding, pseudofact-checking racket, with many organisations having a clear conflicts of interest with the 'fact checkers' on which they rely
- 5. Build your knowledge and understanding around Covid-19 by harvesting, deliberating and interrogating information from multiple websites and other information sources, especially those that are based on known facts, existing evidence, plausible rationales yes, science.

On this final point, we find it interesting that our views, as expressed on the numerous articles on our website including in our Covid Zone, tend to share a lot in common with other scientists, including, to name just two, Prof Carl Heneghan from the Centre for Evidence-based Medicine at Oxford University, and Nobel laureate Prof Michael Levitt from Stanford who expresses his views and analysis regularly on Twitter.

'Good science', one of our two guiding principles over the last 18 years (the other is 'good law') is, it seems, not that popular these days.

Profiteering from the pandemic

Date:

10 September 2020

How Covid-19 has made the richest even richer whilst the lives of so many lie in tatters

Content Sections

- The new seat of power
- And the rich get even richer...

The events of the last 6 months have devastated many countries' economies and shattered the lives of millions. Yet a privileged few have seen their already inflated incomes balloon by as much as 30% since March.

The so-called 'Oligarch Dozen' - America's top 12 billionaires - have between them reportedly seen an increase of around 40% or \$283 billion USD since the pandemic exploded in March 2020.

The new seat of power

In this day and age where money and power are synonymous, you need look no further for the new seat of global economic and political power. Sometimes also referred to as the 'Despotic Dozen', these 12 now own \$1 TRILLION in total wealth – more than the GDP of Belgium and Austria combined. That's some force to be reckoned with.

It's been a fabulous year for the "Oligarchic Dozen" https://t.co/SMRMOHEbKP pic.twitter.com/JhcznGqq6l

— Shawn Langlois (@slangwise) August 18, 2020

In June, the US Federal Reserve chief, Jerome Powell said at a press conference, "This is the biggest economic shock, in the US and in the world, really, in living memory. We went from the lowest level of unemployment in 50 years to the highest level in close to 90 years, and we did it in two months." The Fed expects the US economy to contract by a whopping \$6.5 trillion USD this year.

Back in April, Bank of England policy maker, Jan Vlieghe, warned that the UK is suffering its fastest and deepest slump in "possibly several centuries". Reuters reports that the financial health of British households slumped in August at a faster pace than July. With the end of the furlough scheme on the horizon at the end of October, things are set to only get worse. The UK has also seen its biggest drop in job security since 2011, with businesses having laid off around 700,000 staff and many more job losses to come.

And the rich get even richer...

Yet billionaire wealth is expanding exponentially. The US' 467 billionaires' wealth is alleged to have increased by over \$730 billion since March. Malaysia has seen its 5th billionaire created out of profits from making rubber gloves through the pandemic and the fortunes of Latin America's 73 billionaires has ostensibly surged by \$48.2 billion USD whilst the countries in the region have buckled. The UK is no different, seeing the value of fortunes for 53 of the UK's billionaires leaping by £26.3 billion to approximately £211 billion over the past six months.

The rich really do get richer. But under the current circumstances with the ever-widening gulf in social, economic and health inequalities it feels obscene and almost, dare we say it, even planned. It's of course not the money itself that's the issue. If the money was put to good use, it would be a different thing. It's when the money is used to control people in ways that strip them of rights and freedoms that puts noses out of joint, ours included.

Maybe out of growing awareness of the Oligarch or Despotic Dozen something better will rise from their ashes. Maybe recognition of the need for a new and improved form of corporate social responsibility (CSR) that's all about purpose and making the world a better place - and not just for a very elite, crony, few.

Is there a waning pandemic behind the 'casedemic'

Date:

10 September 2020

Content Sections

- Transitioning from being disease-centric to case-centric
- Look ⊙_■○ at the data
- Waning pandemic?
- Age drift
- Wrap up

By Rob Verkerk PhD, founder, executive & scientific director

Transitioning from being disease-centric to case-centric

You'd have to have been avoiding the airwaves if you hadn't heard you should be preparing for a rise in community infection of SARS-CoV-2. Governments are preparing us for more lockdowns and other restrictions on our freedoms in an effort to reduce transmission. Infections in some parts of some countries, including the UK, do indeed appear to be increasing, but how much has this got to do with the amount of testing going on? It's something of a no brainer: test more, and you'll find more cases.

What if the infections are not causing significant, or any, disease in the majority of those infected? Do we really need to impose restrictions that shut down economies again - wrecking livelihoods, businesses and our ability to function as the social animals we are?

Have you also noticed the mainstream media has largely stopped reporting on COVID deaths on the evening news? The whole mainstream narrative is moving away from publicising the serious effects of infection – in other words serious or critical COVID-19 disease – to talking about the changes, especially the rise, in the number of cases. The pandemic appears to have morphed into a casedemic and few are talking about it

The cases being reported aren't cases of disease, where symptoms have been reported. These are cases of infection as measured by PCR tests, which in turn have uncertain levels of accuracy. Remember this: SARS-CoV-2 infection, including when it is erroneously reported from a false positive in a PCR test, does not equal COVID-19 disease. However, the mainstream media and even governments seem very happy to conflate the two.

In trying to justify the accuracy of antigen tests, government authorities and medical device companies selling tests often refer to figures citing the sensitivity or specificity of tests that are often 90% or higher. However, studies evaluating the specificity of tests show marked differences between studies and between the source of specimens, with throat swabs in one study showing only 32% specificity for throat swabs against 63% of nasal swabs.

Real-world test results for false positives (where an uninfected person is erroneously given a positive result) and false negatives (where an infected person is erroneously given a negative result) are also all over the place. Various studies have found such errors for either false positives or negatives to be highly variable, sometimes exceeding 50%.

Look ⊙_o at the data

To get a handle on what's going on, we've pulled figures together (using Worldometer as our source data) from 8 countries: England and Wales (combined), the USA, Brazil, Sweden, Finland and Italy. We looked at numbers of cases of infection, the number of tests performed and mortality rates (Figs 1A-1G below). Remember that mortality, if caused primarily by SARS-CoV-2 infection, would typically be delayed by about one month from detection of infection by PCR testing. PCR tests for those who go on to suffer severe disease is most likely to occur when symptoms of COVID-19 are expressed. These 8 countries administered various degrees of restrictions, Sweden having the lightest restrictions, having not closed schools and most businesses including restaurants and cafés. The pandemic wave hit Brazil in the southern hemisphere later and President Bolsonaro's management of restrictions was what could be described as complacent.

We've plotted three variables on each, namely numbers of cases (of infection), numbers of deaths and numbers of tests (Figs 1A-1G). You can see in all cases except Sweden (Fig 1C) and Finland (Fig 1D), the number of cases is roughly proportional with the amount of testing performed. If it were exactly proportional, it would mean there is a net zero increase in cases (i.e. no increase, but also not a decline).

If the numbers tested and the number found to be infected actually diverge, as appears to be happening over the last 3 weeks in Sweden, it tells you something quite different: that community rates of infection are going down. That's the best news you can have – and might, if you were an optimistic type, be considered an early signal of the end of the primary pandemic wave. If this is the case, it's very likely a result of higher levels of community infection and subsequent naturally-acquired immunity.

More time is needed to be sure, of course. All very interesting when Sweden was for many weeks in the international 'naughty corner' for not playing by the World Health Organization (WHO) rules with a full-blown lockdown and social distancing policies in public places.

Of the figures below, Finland (Fig 1E) is a kind of in-betweener. The numbers were low to begin with (note y-axis scales), but we can see what appears to be the beginning of a levelling out of cases despite increased testing. That's also good news, but not quite as good as that afforded to light-lockdown Sweden.

Waning pandemic?

News of Spain's 'out of control' infection has hit the news, with the *Financial Times* (FT) headline today exclaiming "*Covid: why Spain is hit worse than the rest of Europe*". But that's only when you look at the 'casedemic' rather than the mortality induced by the pandemic (Fig 1E). While there is a slight upturn, only time will tell if it kicks up markedly. That might depend on what age groups are infected. But clearly the FT is worried, positing: "*The big question is why things have gone so wrong*".

The answer, in part, appears in the FT's own article, issued by María Jesús Montero, a government minister and spokesperson. She noted that roughly half the current cases were asymptomatic and that hospitalisations and deaths were far below their March-April levels. The average age of those infected has dropped from 59 at the peak of the initial infection wave in March, to 38 years now. That's caused those who prefer to remain fearful of SARS-CoV-2 to rail against young people getting together for summer parties – as young Spaniards and tourists in Spain like to do over July and August. Turns out, this might be just what the doctor (should have) ordered.

These changes in the nature and consequences of infection are all important indicators of what appears to be a significant change in the progression of the pandemic. They suggest we might be witnessing, in some parts, the tail of the main pandemic wave. Will it just peter out like the very closely related SARS(1) and MERS before it? We don't know. Maybe. The infection of course moves, so even in the USA, there has been a delay in the arrival of the first pandemic wave in the southern states making some think it was a second wave. The hallmarks of the pandemic might now be looking more like lower virulence (risk of serious disease and death) and younger people being infected. These might be good signs, not bad ones. Something to be rejoicing about, not fearful about. Maybe.

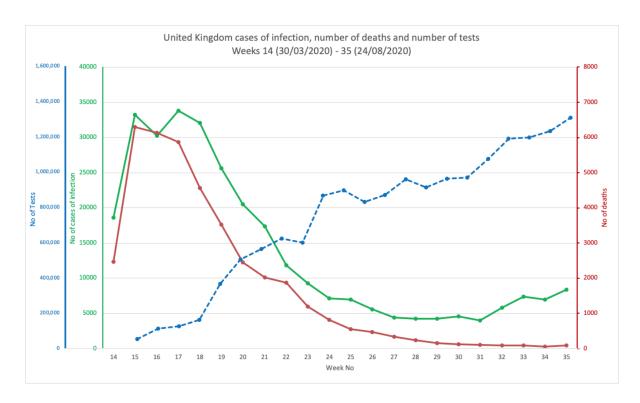


FIG 1A. UNITED KINGDOM

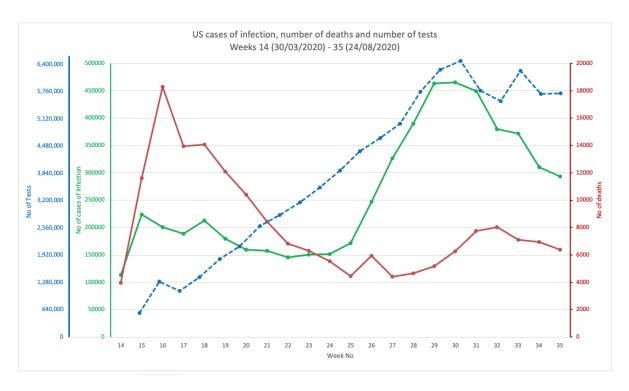


FIG 1B. UNITED STATES OF AMERICA

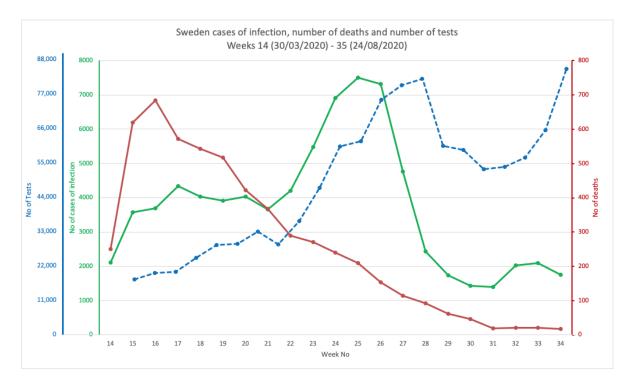


FIG 1C. SWEDEN

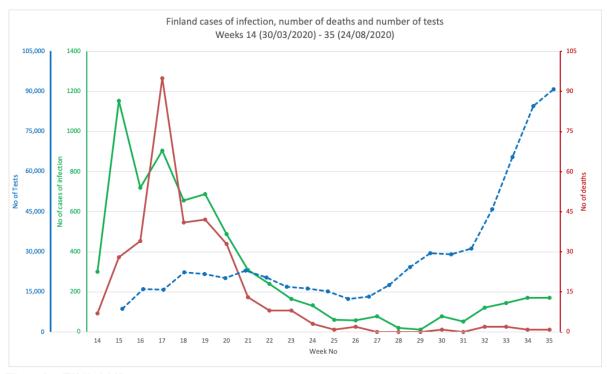


FIG 1D. FINLAND

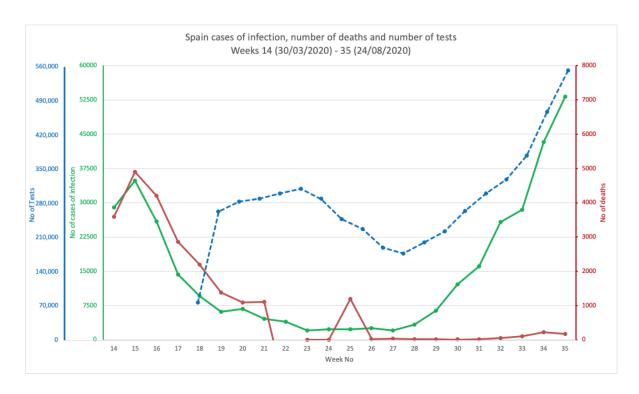


FIG 1E. SPAIN

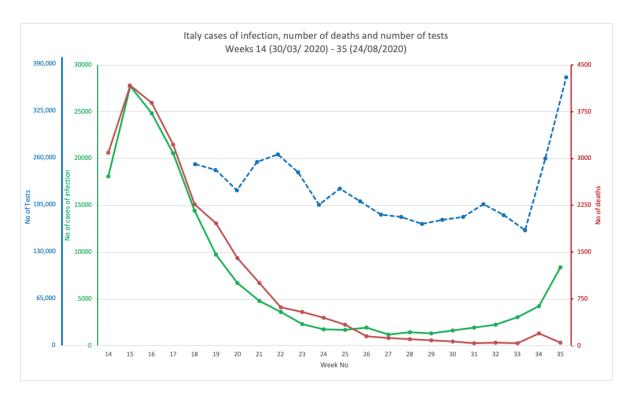


FIG 1F. ITALY

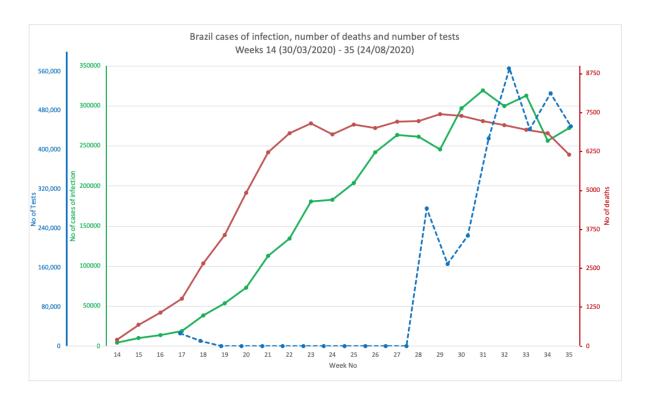


FIG 1G. BRAZIL

FIGURES 1A. TO 1G. (ABOVE). CASES OF INFECTION, MORTALITIES AND NUMBER OF TESTS IN EIGHT COUNTRIES THROUGHOUT THE PANDEMIC PERIOD. SOURCE DATA: WORLDOMETER.

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Age drift

To look at what might have been happening with respect to ages, we plotted the figures for England and Wales (source data: Public Health England) over the whole pandemic period, looking both at cases of infection (Fig 2A.) and deaths (Fig 2b). You have to take into account that testing was more geared towards those who had the most serious disease in the early part of the infection, so that will confound the trends. It probably explains why there is such a big drop in the number of cases among the 80+ age group from the start of the pandemic to the present time (Fig 1A.) What you'll also note is a particular rise in infections among the young age groups, especially the 20 to 29-year-olds and even school-age 10 to 19-year-olds.

Fortunately, none of this translates to deaths, certainly not in the younger groups that are now the predominant ones with infection in England and Wales, at least. But also not in the elderly groups that were hit so hard in the early surge of the pandemic.

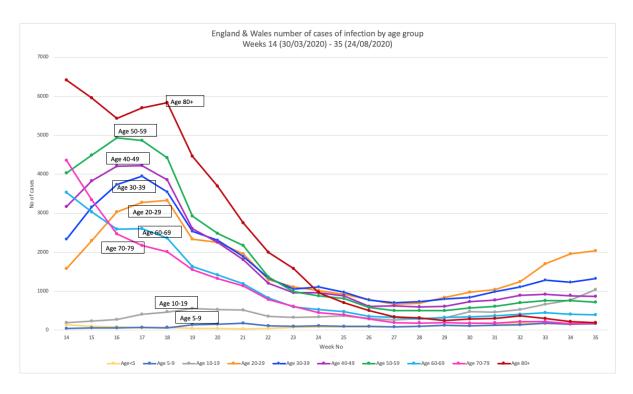


FIG 2A. NUMBER OF CASES OF INFECTION BY AGE GROUP

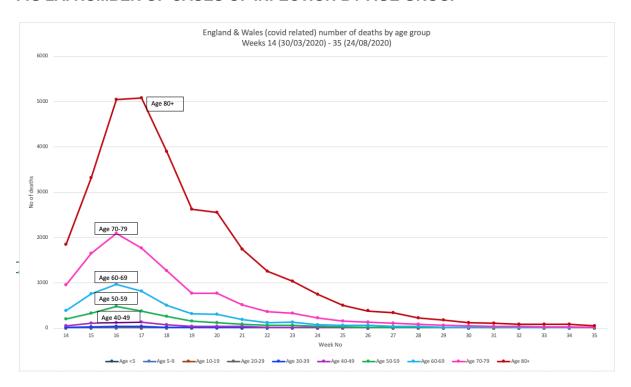


FIG 2B. NUMBER OF DEATHS BY AGE GROUP

FIGURES 2A AND 2B. CASES AND DEATHS IN ENGLAND AND WALES THROUGHOUT THE PANDEMIC PERIOD. SOURCE DATA: PUBLIC HEALTH ENGLAND.

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This picture of declining death rates can be estimated by the infection fatality ratio (IFR) that takes into account the typical one-month delay between onset of symptoms and death. Our view is supported by recent estimates of the IFR in England determined by Dr Carl Heneghan and his team at Oxford University's Centre for Evidence Based Medicine using data derived both from the Office for National Statistics (ONS) and the Medical Research Council (MRC).

These data are shown in Figures 3A and 3B, respectively.

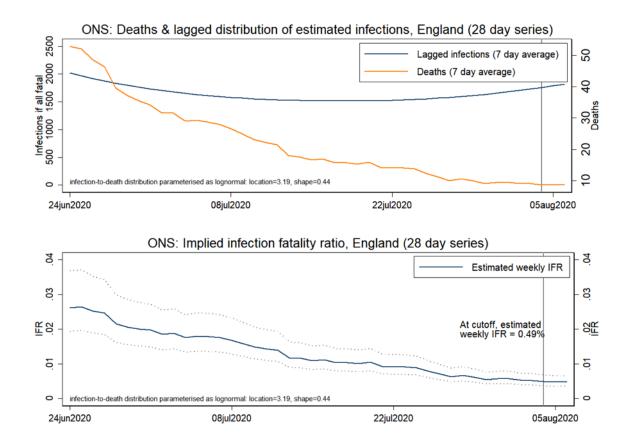
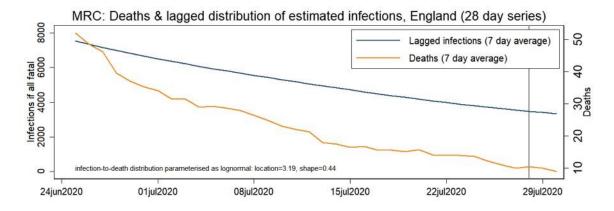


FIG 3A. DEATHS, LAGGED INFECTIONS AND INFECTION FATALITY RATIO TRENDS (ONS DATA), ENGLAND (SOURCE: CENTRE FOR EVIDENCE-BASED MEDICINE).



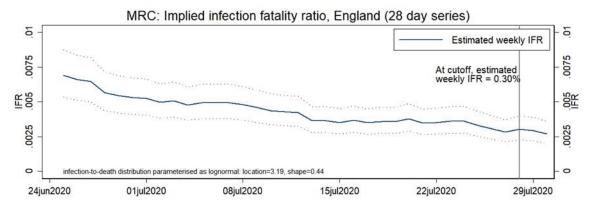


FIG 3B. DEATHS, LAGGED INFECTIONS AND INFECTION FATALITY RATIO TRENDS (MRC DATA), ENGLAND (SOURCE: CENTRE FOR EVIDENCE-BASED MEDICINE).

Wrap up

This analysis would suggest a scenario that is in almost diametric opposition to that which we're hearing on the mainstream media and from many governments, such as the UK's. Let's also not forget that while there's been a view portrayed that the pandemic has hit most of the world, especially countries in northern temperate latitudes, hard. let's not forget that the pandemic had little or no impact on all-cause mortality in Norway, Finland, Denmark, Austria and all the Eastern European countries.

Based on concerns of a second wave in Britain, Boris Johnson's government yesterday banned public gatherings of more than 6 people, making protests a bit harder to organise - or at least expensive if you don't mind maying the £100 fine for the first offence (fines rise to £3200 for successive offences). For those planning to get married - that's still OK. But only if you observe the new guidance. Be warned, though. You'll need to wear a mask, you can't kiss your new spouse, you can have a disco but you're not allowed to dance - and everyone must stay 2 metres apart. Sounds like a heap of fun (not!). And maybe completely unnecessary. If we could follow the Swedes - and be given the right to exercise our freedoms to meet, dance or marry as we choose, we might be a whole lot better off - and out the other side of the pandemic a whole lot quicker. Just maybe.

Let's keep a sharp eye on those data in the coming days and weeks and we'll see ●_●.

UK law changes for COVID-19 mass vaccination

Date:

10 September 2020

Have your say on changes to UK medicines law planned to herald the greatest vaccination programme in British history

Content Sections

- Background
- SUMMARY CONSULTATION RESPONSE BY ANH Intl
- CONSULTATION RESPONSE BY ANH Intl

Background

Legislative changes to The Human Medicines Regulations 2012 (HMRs) that fast-track mass vaccination using unregistered vaccines, as well as permit their advertising by commercially interested parties and their administration by non-health care professionals, should not be supported until such time that:

- 1. A full range of plausible therapeutic treatments and pharmaceutical and nonpharmaceutical prevention options have been thoroughly evaluated and found to be of no significant benefit to public health
- 2. Definitive results from trials (Phase III) are placed in the public domain that demonstrate COVID-19 vaccines have an acceptable risk/benefit profile to justify mass vaccination
- 3. Scientific testing of possible interactions between COVID-19 and influenza vaccines has been conducted and shown to not cause any disease enhancement or other negative interaction given the two vaccines may be administered jointly.

The proposed amendments to the HMRs undo over half a century of regulatory development in the fields of medicinal and consumer protection law that had the intent of protecting the interests of citizens.

The expansion of legal immunity to civil liability, coupled with a reversal of the prohibition of direct-to-consumer advertising and the expansion of the workforce of vaccine administrators outside the healthcare professions, provides a recipe for coercion and a disregard for informed consent. This would create an environment where the planned mass vaccination programme of the British public using novel, unlicensed COVID-19 vaccines could constitute serious breaches of The Human Rights Act 1998.

Following is the response (in both full and summary forms) by the Alliance for Natural Health International to the Department of Health and Social Care's consultation on *Changes to Human Medicines Regulations to support the rollout of COVID-19 vaccines.*

The deadline for responses is 18 September 2020 and responses should be made online at the following

portal: https://consultations.dhsc.gov.uk/5f43b8aca0980b6fc0198f9f

Your response should be given in each of the 5 sub-sections of the consultation, namely:

- 1. authorising temporary supply of an unlicensed product
- 2. civil liability and immunity
- 3. expanding the workforce eligible to administer vaccinations
- 4. promoting vaccines
- 5. making provisions for wholesale dealing of vaccine

You are free to use as much or as little of either our summary or full draft responses as you wish in your own response. We are hopeful that a large number of people resident in the UK will see fit to respond in order that the UK Government is forced to reconsider making such sweeping changes to medicines law that currently, particularly in the absence of thorough evaluation of other options for reducing the impact of COVID-19, appear not to be in the public's best interest.

It is these proposed legislative changes that will give the UK Government carte blanche to roll-out unlicensed COVID vaccines once approval has been granted by the licensing authority, the Medicines and Healthcare products Regulatory Agency (MHRA). That could put the public at significant and, as yet, unknown risk.

We invite comments or feedback that can be emailed to info@anhinternational.org with the subject 'UK covid vaccine consultation' and we will take these into account when making our final submission.

SUMMARY CONSULTATION RESPONSE BY ANH Intl

1. Authorising temporary supply of an unlicensed product

- There are no trial data as yet that confirm the risk/benefit profile of candidate vaccines, therefore it is premature to change to change existing provisions under Regulation 174 of the Human Medicines Regulations (HMRs)
- The UK Govt has yet to adequately evaluate other options for therapeutic treatments and prevention approaches that could be delivered under the existing legislative framework. The terms 'safety' and 'effectiveness' need to be qualified
- Full transparency of raw data from phase 1 to 3 clinical trials to allow independent assessment
- Any revisions to Regulation 174 should include a new condition in which
 evidence of non-disclosure of relevant data or information by manufacturers or
 triallists relating to quality, safety or effectiveness would represent a breach of the
 temporary authorisation of the unregistered vaccine.

2. Civil liability and immunity

- The existing provisions under Regulation 174(3) are too limited and should be clarified further
- The "reasonable person" should exclude persons "with an interest in placing products on the market"
- This is owing to inherent conflicts of interest which would reduce the likelihood of an 'objective bystander' view that is in the public interest
- Non-disclosure, omission or errors of relevant data or information relating to quality, safety or effectiveness, whether deliberate or the result of negligence would constitute a breach in the conditions of temporary authorisation.

3. Expanding the workforce eligible to administer vaccinations

- Administrators of vaccines are typically key providers of information required to ensure informed consent
- Individuals who are not authorised health care professionals have no accountability, nor is there oversight in terms of their expertise in the complex and uncertain field of vaccine science

- The Sideaway 1985 case [AC871] set the precedent for doctors who operated without consent of patients being guilty of the civil wrong of trespass to the person and the criminal offence of assault
- Providing immunity from civil liability to non-health care professionals would create scenarios in which individuals were readily deprived of fundamental human rights through lack of informed consent (The Human Rights Act 1998, Articles 2, 3, 5, 9, 14)
- Accordingly, proposed amendments to Regulations 229, 230, 231, 233 and 234 that seek to expand the workforce of vaccinators beyond authorised health care professionals are rejected.

4. Promoting vaccines

- Reversing the prohibition on direct-to-consumer (DTC) advertising of unlicensed medicines and vaccines would be a backwards step
- Mass vaccination with unlicensed vaccines during a pandemic is non-commercial activity and therefore should not include advertising
- Advertising involves communication of claims, yet given the experimental nature of vaccines there is great uncertainty over claims
- It would be wrong to provide immunity to civil liability to vaccine manufacturers allowing them to escape consumer protection laws that bind other advertisers
- Advertising could include deceptive messages, omission of important information and the use of aggressive sales technics which would otherwise constitute breaches of the Consumer Protection from Unfair Trading Regulations 2008
- It would be ethically wrong to use the pandemic to shoehorn in much wider changes that would in effect 'Americanise' advertising by pharmaceutical interests.

5. Making provisions for wholesale dealing of vaccine

• It is acceptable to limit wholesale license exemption to NHS organisations, NHS contracted service providers, and the medical services of the armed forces.

CONSULTATION RESPONSE BY ANH Intl

1. Authorising temporary supply of an unlicensed product

General Comments

The proposed legislative changes to UK medicines law, that has since 1965 been based on that of European Economic Community (EEC) and subsequently the European Union (EU), represents the greatest change to UK medicines law in over half a century. The proposal, among other things, seeks to: 1) fast-track regulatory approval of unlicensed COVID-19 vaccines, 2) permit individuals other than qualified health care professionals to administer the vaccines so reducing the potential for properly informed consent, 3) reinstate direct-to-consumer advertising and promotion of drugs, at least for COVID-19 vaccines, and, 4) to expand the conditions under which vaccine makers or those administering vaccines are given immunity from civil liability in the event of injury.

The proposal throws to the wind 55 years of development of regulatory processes, expanded patient informed consent procedures and the mandating of more transparency from drug manufacturers.[1] These changes were adopted by the European Economic Community in 1965 as part of its medicinal code that intended to avoid any reoccurrence of disasters such as that linked to the use of the drug thalidomide by pregnant women in the late 1950s and early 1960s.

The current proposal can only be justified if six criteria are met.

Firstly, it has been adequately demonstrated that the current status of COVID-19 warrants a mass vaccination programme based on the known progression of the epidemic, including plausible estimations of the infection fatality ratio (IFR) i.e., the proportion of all those who are infected who die, and excess mortality, taking into account mortality displacement. Infection fatality rates are much more meaningful than case fatality rates (CFRs) as the latter are confounded by the amount of testing being conducted as well as by changes in methods of case assessment over time. They also do not take into account the asymptomatic or those who have recurrent infection but remain relatively healthy despite infection. Attempts to accurately determine the IFR require population-based serological studies that have yet to be prioritised by the Government. Therefore estimates of the IFR should include: a) only fatalities for which COVID-19 has been recorded on the death certificate as the primary cause of death; or b) fatalities where infection was positively determined by RT-PCR tests within 28 days of death, and; c) the extent of community-wide infection has been determined following population-based serologic studies. Even with existing data from the Office for National Statistics (ONS) and the Medical Research Council (MRC) which do not meet these criteria, the IFR in the UK at the end of July/beginning of August 2020 was estimated to be between 0.3 and 0.6%.[2] Excess deaths, while having increased significantly beyond 5-year averages during the peak of the pandemic, are currently neutral or negative for both COVID-19 involved and non-COVID-19 involved deaths.[3] There was some evidence of mortality displacement in the 4 nations of the UK from week 24, this being a short-term forward shift in mortality whereby a certain

proportion of deaths (both COVID-19 related and unrelated, although potentially caused by inadequate healthcare delivery owing to the redirection of effort towards COVID-19) occurred in patients that would have died of other conditions in the following weeks or months.[4]

Secondly, it has been adequately demonstrated that the UK government, its agencies and the universities and institutions that have been funded to help reduce the impact of the COVID-19 pandemic, have exhausted all other options for therapeutic treatments or prevention approaches that could be delivered under the existing legislative framework (or at least a post-Brexit version that does not also seek to expedite roll-out of unregistered vaccines).

Thirdly, sufficient data are made publicly accessible that unequivocally demonstrate that one or more of the COVID-19 vaccines are both "safe" and "effective".

Fourthly, that the terms "safety" and "effectiveness" as used in the second criterion (above) are qualified, following public and Parliamentary consultations. "Safety" could, for example, be defined by the relative incidence of adverse events in Phase 1, 2 and 3 clinical trials as compared with other vaccines intended for adult populations, such as those targeting influenza A(H1N1). The definition of "effectiveness", on the other hand, should reflect the proportion (say 60%) of the vaccinated population that had been found to be immune to symptoms of disease if infected over a given period (say 12 months).

Fifth, there is full transparency of raw data from Phase 1 to 3 clinical trials to allow independent scrutiny and evaluation. These data should be able to be evaluated entirely independently by evidence-based medical research groups, such as the Centre for Evidence-Based Medicine at the University of Oxford and the Institute for Scientific Freedom in Copenhagen.

The sixth and final criterion is that the legislative changes are deemed necessary because the existing provisions in The Human Medicines Regulations 2012 are deemed insufficient, inadequate or not fit for purpose. Our own assessment of the current provisions do not suggest that the provisions require change, this being considered in subsequent sections of our response.

We demand that the Department of Health and Social Care (DHSC) provides comprehensive answers with respect to each of these six criteria. Conforming with these criteria would help to ensure that independent evaluation of data that typically is seen only by regulatory authorities, in the UK's case, the MHRA, is assured. Given the revolving door that has been shown to exist between pharmaceutical companies and regulators, it is entirely inappropriate that the MHRA is given sole access and sight of manufacturers' and trial data. Broadening of the responsibility for evaluation of data would also seek to build public confidence in the authorisation process, which would still be executed, managed and policed by the MHRA.

Incorrect assumptions

In putting forward its proposal for radical changes to The Human Medicines Regulation 2012, the DHSC has made two assumptions that are fundamentally flawed, largely invalidating the justification for the proposed legislative changes where these specifically ease the roll-out of COVID-19 vaccines.

The Introduction opens with the statement: "COVID-19 is the biggest threat this country has faced in peacetime history." This statement is not supported by fact. Public Health England data[5] on premature mortality (death among the under-75s) in England alone accounted for about 330 deaths per 100,000. This compares with a current risk of death of around 62 per 100,000 for deaths at any age in which COVID-19 was involved, the majority of these deaths occurring among those over the age of 75.[6] Premature deaths from cancer alone (132 per 100,000) are over twice the Covidrelated mortality figure. A study evaluating the effects of socioeconomic inequality published in the Lancet showed that 36% of all premature deaths between 2003 and 2018 were caused by social inequality. [7] The Government's response to COVID-19, whether or not it was right or wrong, will have the effect of greatly increasing socioeconomic inequality and thereby will significantly increase premature deaths in the future. The stock market reaction to COVID-19, itself a marker for future social and economic impacts, has exceeded that for any previous pandemic, including the Spanish 'flu' of 1918-19 and the influenza pandemics of 1957-58 and 1968. This stronger reaction was considered to be primarily the result of government restrictions on commercial activity and social distancing exerting their effect on service-orientated economies.[8] Based on the factors above, it must therefore be asserted that COVID-19 does not actually pose the biggest threat to this country in peacetime history. More than that, given the massive impacts on society and business caused by government policy in response to COVID-19, that the biggest threat this country has faced is linked to the consequences of the human (and governmental) response to COVID-19, rather than to the effects of the disease itself. It is of course not possible to estimate or predict what the consequences of a business-as-usual approach might have been on Covid-related mortality in the UK had this option been considered, but the Swedish example does suggest that severe lockdown measures do not significantly reduce total mortality, and may extend the duration of the epidemic or the risk of further infection waves.

The second paragraph of the Introduction makes another bold assumption, one that is both unsupported and, currently, unsupportable, as follows: "Effective COVID-19 vaccines will be the best way to deal with the pandemic". UK data show that based on "deaths involving COVID-19", 63% occurred in hospitals and 30% in care homes.[9] This is evidence of significant shortcomings in critical care and care home treatment protocols, areas in which the DHSC has failed to sufficiently invest or evaluate. This failure is predicated on the unjustified assumption that vaccines would deliver the best outcomes. This assumption was made both without any meaningful or reliable data on the effectiveness (or safety) of COVID-19 vaccines, and without due consideration for alternate treatment or prevention options. Since the UK government has avoided evaluating options against which the safety and efficacy profile of vaccines could be compared, once data become available, the Government should not be given the remit to create a legislative regime that greatly increases the exposure of the public to unregistered vaccines that, at the time the legislative changes were made, are of unknown safety or effectiveness. The Government's failure to evaluate or develop multilateral protocols for use on those who are seriously or critically ill with COVID-19, including the MATH+ protocol[10] being used by critical care doctors in the USA. combined with the absence of safety and effectiveness data on COVID-19 vaccines that, in the main, rely on novel platforms involving genetically engineered antigens, dictates that the Government's assumption that vaccines are the "best" way of dealing with the pandemic is defective.

Legislative comments

The existing Regulation 174 of The Human Medicines Regulations 2012 already makes provision for temporary authorisation of unregistered COVID-19 vaccines by the MHRA. While the proposed new Regulation 174A provides additional conditions for temporary authorisations that will be relevant to unregistered COVID-19 vaccines, they do not go far enough if the aim is, as stated in the guidance, "to ensure product safety, quality and efficacy" with the intention of offering a high level of public protection. To do this adequately, it is necessary to add an additional condition.

This condition, that would invalidate the temporary authorisation, would be discovery of non-disclosure of relevant data or information held by manufacturers or triallists at the time the temporary authorisation was granted when such data or information relates to quality, safety or effectiveness. Such non-disclosure has been common historically.[11],[12] Given the proposed fast-tracking of the approval process, and the perceived demand for COVID-vaccines, there is a greater than ever risk that manufacturers or triallists will avoid full disclosure of relevant data. Accordingly, inclusion of such an additional provision will likely increase public confidence in vaccination.

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2. Civil liability and immunity

General comments

Manufacturers of vaccines in national vaccination programmes have had immunity from civil liability for over 30 years where there is no evidence of negligence or defectiveness in the vaccine or its manufacture. Where there is evidence of negligence that results in a defective product that causes injury, the injured party has recourse under the Consumer Protection Act (1987) (CPA) to sue for damages. The proposed clarification of conditions under which immunity from civil liability would be lost under proposed Regulation 174(3) is too limited and should be expanded and clarified further. We propose the addition of another condition that relates to error, omission or non-disclosure, whether deliberate or the result of negligence, that would not only better protect the public interest, it would also be likely to bolster public confidence. This condition is set out below.

Legislative comments

In terms of the proposal for inclusion or exclusion of the bracketed section that would qualify, or not, the nature of the 'objective bystander', the "reasonable person" who would assess the breach in the eyes of the courts, it is our resounding view that this should explicitly exclude persons "with an interest in placing medicinal products on the market" (i.e. representatives of pharmaceutical companies or other companies in the pharmaceutical supply chain). This is because such persons will have an inherent vested or conflict of interest, implying he or she would typically place his or her interest in protecting his, her or the company's financial interests over and above the interests of the public including the public's health.

It has been shown repeatedly that pharmaceutical companies act consistently in ways that further their own interests, these being related typically to financial gain or market control.[13],[14],[15]

Such concerns apply not only to manufacturers of conventional drugs, but also to manufacturers of vaccines.[16]

An additional condition that should constitute a breach of the temporary authorisation is given below:

Non-disclosure, omission or errors of relevant data or information relating to quality, safety or effectiveness, whether deliberate or the result of negligence, that mean that, at the time of approval, effectiveness was over-estimated and safety under-estimated, would constitute a breach in the conditions of temporary authorisation.

Such data or information, as well as the extent of the over- or under-estimates would then be able to be judged by the courts in the eyes of an objective "reasonable person" without an interest in placing medicinal products on the market.

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3. Expanding the workforce eligible to administer vaccinations

General comments

The entire basis of informed consent is based on the premise of granting permission for a given medical intervention (in this case COVID-19 vaccination) in the knowledge of possible consequences. Informed consent is a key component of ethical medical practice and requires compliance with The Human Rights Act 1998. Particularly relevant to informed consent are: Article 2 (protection of the right to life), Article 3 (prohibition of torture and inhuman or degrading treatment or punishment), Article 5 (the right to liberty and security), Article 9 (the right to freedom of thought, conscience and religion) and Article 14 (prohibition of discrimination in the enjoyment of Convention rights).[17]

Informed consent must include the provision of information by a health care professional on the risks, benefits, advantages and disadvantages of different treatment options including not receiving treatment (in this case vaccinating).[18],[19]

Given the complexity and uncertainty of science around vaccination, it is not possible for a person who is not a qualified health care professional to provide the information

required to ensure informed consent. Therefore the expansion of the workforce allowed to administer vaccinations to persons who are not authorised health care professionals (i.e., registered doctors, nurses, pharmacists or allied health care professionals) cannot be supported. The lack of provision of sufficient information that would be required to ensure properly informed consent would likely constitute a breach of The Human Rights Act 1998.

In the case Sidaway v Board of Governors of the Bethlem Royal Hospital Governors [1985] AC 871, Lord Carman stated: "A doctor who operates without the consent of his patient, save in cases of emergency or mental disability, is guilty of the civil wrong of trespass to the person; he is also guilty of the criminal offence of assault."

It therefore follows if informed consent has not been granted, a situation that is more likely to arise in the absence of relevant information on risks and benefits being furnished by a suitably trained and qualified health care professional, vaccination could be construed as a civil wrong or trespass to the person. Additionally, the vaccinator could be found guilty of the criminal offence of assault. This is presumably why the proposed amendments to The Human Medicines Regulations 2012 seek to grant to such unregistered persons immunity to civil liability.

For the reasons given above, it would be entirely inappropriate to put such individuals, who lack the duty of care associated with authorised health care professionals, in the authoritative position of administering an invasive medical procedure about which they have limited knowledge. Their lack of background, qualifications, training and oversight by a registration authority are very unlikely to give them the required capacity to understand the complex and often uncertain scientific and medical information surrounding vaccines and vaccination. Yet the person administering the vaccine is often the key individual with which a vaccine recipient interacts when providing their consent for vaccination.

Additionally, there is a likelihood that non-authorised health care professionals could be trained by commercially interested parties in ways that seek to maximise vaccination uptake to the extent that the approach taken by the vaccine administrator could readily, particularly if not adequately supervised, constitute coercion. Given that consent must include sufficient information and be voluntary, even where the person administering the intervention is a health care professional, "consent where an individual has been coerced into making the decision will not be valid." [20]

Legislative comments

Accordingly we reject all proposed amendments (Regulations 229, 230, 231, 233 and 234) that seek to expand the workforce of vaccinators beyond the scope of authorised health care professionals, who already maintain immunity from civil liability under the terms of existing article 345(3)(d) which would include COVID-19 vaccination.

References

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4. Promoting vaccines

General comments

There has been a prohibition on direct-to-consumer advertising since the passage of The Medicines (Labelling and Advertising to the Public) Regulations 1978. There is also a prohibition on advertising unlicensed medicines (for which available data on safety and efficacy is often much more limited as compared with ones that are licensed) to health care professionals. There are three key reasons why the reversal of policy that would entail casting aside the existing prohibition on drug advertising is untenable:

- 1. Mass vaccination with unlicensed vaccines during a pandemic is a noncommercial activity aimed at enhancing public health and therefore should not include direct-to-consumer advertising. Advertising is defined as "the activity or profession of producing advertisements for commercial products or services".[21] Citizens who will receive COVID-19 vaccines under the terms of Regulation 174 will not themselves be engaging with a commercially interested party, despite the fact that, as taxpayers, they indirectly pay for the vaccine. During a national mass vaccination programme utilising unlicensed vaccines with temporary authorisation, the party with which the public will primarily engage is health services administered by the Government authorities (e.g. Department of Health and Social Care, NHS, Public Health England, etc.). There will be no direct commercial relationship between commercially interested parties and the public. Therefore the amendment that proposes removal of the current prohibition on promoting unlicensed medicines to the public and health professionals could more correctly be considered a form of propaganda than advertising. Government and commercial parties will both derive greater financial benefit the greater the level of vaccine uptake so have vested interests that extend beyond the purported public health goals of mass vaccination.
- 2. Advertising typically involves the communication of claims, yet there will be great uncertainty over the claims. The amendment provides no clarification on how claims would be agreed. Presently medicinal claims are established during the extensive and time-consuming marketing authorisation process following evaluation of large quantities of data on safety, efficacy and quality. In the case of fast-tracked, unlicensed vaccines, there will be neither sufficient data nor the necessary time to adequately substantiate the accuracy of any advertising claim that might be used to enhance vaccine uptake. The Advertising Standards Authority presently acts as the advertising watchdog on behalf of the media industry, Government and the public, and there would be insufficient data available for it to be able to adjudicate in a manner that is proportionate with other

sectors over the truthfulness, ambiguity or non-misleading nature of any direct or implied claims made in advertising.

3. Advertisers are typically bound by consumer protection law, yet vaccine manufacturers and distributors would be immune to civil liability. The Consumer Protection from Unfair Trading Regulations 2008 provide wide ranging safeguards for consumers. In order to maintain a high level of protection for consumers, companies cannot mislead or harass consumers, for example "by including false or deceptive messages... leaving out important information...using aggressive sales techniques." [22]

Moreover, The Consumer Protection Act 1987 protects the public from products that do not reach a reasonable level of safety. If commercially interested parties are given the opportunity to advertise unlicensed products that have not undergone the same level of evaluation as licensed products, the public (consumer) may be unwittingly exposed to unsafe products.

In both these cases, it is deeply unethical to indemnify commercially interested parties (which act as advertisers) against any civil liability. The actions of advertisers engaged with COVID-19 vaccines could quite feasibly be construed as breaches of The Human Rights Act 1998.

Legislative comments

We wholeheartedly reject any attempt to ease advertising restrictions on unlicensed products for the reasons given above. More than that, it is extraordinary that the spectre of the current pandemic is being used as a means of shoehorning in much wider changes that in effect will go a long way towards the 'Americanisation' of advertising by pharmaceutical interests.

The history of the development of DTC advertising for drugs has been complex in the USA and the current rules governing marketing were cemented in 1999. They require advertisers to include information about the risks associated with using the drug under the "adequate provision requirement" [23]. The lack of information about the safety of an unlicensed vaccine (both from trials required for licensing and post-marketing surveillance) does not allow for the adequate provision of information to citizens.

Insufficient knowledge and research on safety of novel, unlicensed vaccines imply that their administration as part of a heavily promoted (and advertised) mass vaccination programme of the public will amount to a form of experimentation on the public. This could amount to an abuse that would be in breach of ethical standards that have been in existence since the Nuremberg trials, or even earlier [24].

References

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5. Making provisions for wholesale dealing of vaccine

We are generally in agreement with the proposal, given the wholesale license exemption is limited to NHS organisations, NHS contracted service providers, and the medical services of the armed forces.

In the section of the consultation response in which the DHSC asks "What could we do better?", ANH-Intl has responded as follows:

The guideline document and the draft amendments to the HMR could have been line numbered which would have made it easier to reference particular parts of either document. We obviously don't know how you are going to handle the consultation responses but we hope you will publicly identify all individuals and organisations who responded and put all responses in the public domain to ensure transparency. We also hope that you will engage with those who have responded, including with citizensupported non-profits like ours which represent those who have concerns about the mass vaccination with unlicensed Covid-vaccines, including potential interactions with seasonal influenza vaccines. It is essential that transparency is maintained so that citizens can interact with their elected MPs prior to the passage of the legislation in Parliament. To not do this in a transparent manner would be to deny due democratic process.

PLEASE FORWARD WIDELY AND REMEMBER THE DEADLINE FOR CONSULTATION RESPONSES IS 11.59 pm (BST) 18 SEPTEMBER 2020.

LINK FOR ONLINE SUBMISSION

UK vax consultation countdown

Date:

16 September 2020

Comments:

8

Friday 18 Sept deadline for UK consultation to proposed changes to medicines law for mass covid vaccine rollout

Content Sections

Guidance for your letter to your MP

We've been overwhelmed by the reach and response to our video from last week drawing attention to the UK government consultation on proposed changes to UK medicines law intended to help the rollout of Covid vaccines.

This week, we want to remind you the deadline is this Friday, 11.59pm BST.

We ask that you engage with the consultation, and that you share your views with your MP and your friends, family and social networks.

Our draft comments in summary and long-form are on last week's article. You'll find guidance on writing to your MP following the video call to action from our founder and executive director below.

The Department of Health & Social Care has added a new Welcome note for those planning to submit a consultation response. It's designed to put you off if you don't like the changes the UK Government proposes. It specifies 4 things the consultation doesn't relate to, including mandatory vaccination, fast-tracking regulatory assessment, administration of untested unlicensed medicines and powers for vaccine administration by untrained personnel.

Fortunately, none of these are relevant to the issues we raised in our draft response that we know has already formed the basis of a large number of responses. So - please don't be put off - just follow our guidance if these issues resonate with you. Thank you for making a difference.

Guidance for your letter to your MP

Please note that it is much better if you can personalise your letter or email as it has a significantly higher chance of being read and taken seriously than a form letter/email received in large numbers. MPs want to hear what's affecting their constituents and what they can do to make a difference, especially if it's going to increase their popularity in their constituency! They usually have an assistant who processes mail for them, so the time you spend personalising your letter can make all the difference in ensuring your MP actually sees it and takes action.

Find your MP and his/her contact details here.

>> Your address and postcode>>

>>Date>>

>>Rt Hon XXXXXXX Their address>>

Dear Mr/Mrs/Ms >> surname>>

Re: Proposed Legislative changes to The Human Medicines Regulations 2012

I'm writing to you today to express my deep concern about the changes that the Government is proposing to make to the Human Medicines Regulations (HMRs), as set out in the Department of Health and Social Care's consultation on 'Changes to Human Medicines Regulations to support the rollout of COVID-19 vaccines' that closes this Friday, 18 September 2020.

I'm extremely perturbed that the proposed amendments to the HMRs undo over half a century of regulatory development in the fields of medicinal and consumer protection law that had the intent of protecting the interests of citizens. I feel so strongly about these changes that I have submitted my own comments to the consultation. However, as a Member of Parliament >>or the Cabinet if they hold a ministerial post>> I am asking you to please ensure time for adequate debate when this makes its passage through Parliament (expected October 2020) and to not just rubber-stamp the changes.

I have every faith that you and your staff will have already recognised the importance of this consultation and I hope that you will, on behalf of your constituents, make much in Parliament of the expansion of legal immunity to civil liability, coupled with a reversal of the prohibition of direct-to-consumer advertising and the expansion of the workforce of vaccine administrators to people who are not legally authorised health care professionals. One of my concerns – and I know there are many who feel similarly – is that this could provide a recipe for coercion and a disregard for informed consent. This would create an environment where the planned mass vaccination programme of the

British public using novel, unlicensed COVID-19 vaccines could constitute serious breaches of The Human Rights Act 1998.

I summarise the main thrust of my consultation response below:

1. Authorising temporary supply of an unlicensed product

- There are no trial data as yet that confirm the risk/benefit profile of candidate vaccines, therefore it is premature to change to change existing provisions under Regulation 174 of the Human Medicines Regulations (HMRs)
- The UK Govt has yet to adequately evaluate other options for therapeutic treatments and prevention approaches that could be delivered under the existing legislative framework. The terms 'safety' and 'effectiveness' need to be qualified
- Full transparency of raw data from phase 1 to 3 clinical trials to allow independent assessment
- Any revisions to Regulation 174 should include a new condition in which
 evidence of non-disclosure of relevant data or information by manufacturers or
 triallists relating to quality, safety or effectiveness would represent a breach of the
 temporary authorisation of the unregistered vaccine.

2. Civil liability and immunity

- The existing provisions under Regulation 174(3) are too limited and should be clarified further
- The "reasonable person" should exclude persons "with an interest in placing products on the market"
- This is owing to inherent conflicts of interest which would reduce the likelihood of an 'objective bystander' view that is in the public interest
- Non-disclosure, omission or errors of relevant data or information relating to quality, safety or effectiveness, whether deliberate or the result of negligence would constitute a breach in the conditions of temporary authorisation.

3. Expanding the workforce eligible to administer vaccinations

- Administrators of vaccines are typically key providers of information required to ensure informed consent
- Individuals who are not authorised health care professionals have no accountability, nor is there oversight in terms of their expertise in the complex and uncertain field of vaccine science
- The Sidaway 1985 case [AC871] set the precedent for doctors who operated without consent of patients being guilty of the civil wrong of trespass to the person and the criminal offence of assault
- Providing immunity from civil liability to non-health care professionals would create scenarios in which individuals were readily deprived of fundamental human rights through lack of informed consent (The Human Rights Act 1998, Articles 2, 3, 5, 9, 14)
- Accordingly, proposed amendments to Regulations 229, 230, 231, 233 and 234 that seek to expand the workforce of vaccinators beyond authorised health care professionals are rejected.

4. Promoting vaccines

- Reversing the prohibition on direct-to-consumer (DTC) advertising of unlicensed medicines and vaccines would be a backwards step
- Mass vaccination with unlicensed vaccines during a pandemic is non-commercial activity and therefore should not include advertising
- Advertising involves communication of claims, yet given the experimental nature of vaccines there is great uncertainty over claims
- It would be wrong to provide immunity to civil liability to vaccine manufacturers allowing them to escape consumer protection laws that bind other advertisers
- Advertising could include deceptive messages, omission of important information and the use of aggressive sales techniques which would otherwise constitute breaches of the Consumer Protection from Unfair Trading Regulations 2008
- It would be ethically wrong to use the pandemic to shoehorn in much wider changes that would in effect 'Americanise' advertising by pharmaceutical interests.

Please respond to my letter and outline the steps you intend to take to address my concerns.

I look forward to hearing your response in due course.

Yours sincerely,

<< Your name>>

Operation Moonshot: What the Boris is going on?

Date:

16 September 2020

Is this the right time for the UK to invest £100bn+ in Covid testing?

By Robert Verkerk PhD, founder, executive and scientific director

On 19 March 2020, the UK downgraded the status of COVID-19, no longer classifying it as a 'high consequence infectious disease' (HCID). This was even before the reported mortality rate for 'deaths involving Covid' started escalating. It was at the time that the government, academics, the National Health Service (NHS) and the public were worried that the NHS capacity to handle critically ill patients would be overrun. That was back then.

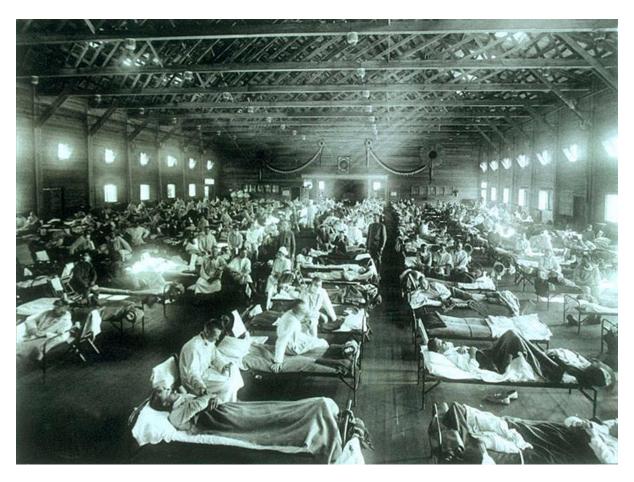
Now we're seeing rising cases – referred to widely as a 'surge' in infections – and government machines are working hard to prepare the public for more restrictions.

If you're in the UK – publicly protesting against such measures has become tougher as of the beginning of the week when prime minister Boris Johnson instigated – against the will of all but two ministers his 'rule of 6'.

Our question of the week

The question we want to pose to the British people this week is this: given the current status of COVID-19 disease as well as the precarious state of the UK economy, is Boris Johnson's £100 billion plus proposed investment in 'operation moonshot' coronavirus testing programme appropriate? Is it the best way of getting back to some semblance of normal life and resurrecting the economy?

This kind of investment needs to be considered in the context of a country that is expected to suffer an 11.5% slump in national income (gross domestic product; GDP) this year according to the Organisation for Economic Cooperation and Development (OECD), worse than any other developed country. This kind of economic slump should be compared with the typical 6% slump in GDP during 1918-21 owing to the Spanish flu that wiped out a staggering 2.1% of the global population.



Spanish flu 1918 (Source: Wikimedia Commons)

This isn't a rhetorical question. It's a question that we hope triggers critical thinking among us, the citizens and residents of a country that is by the end of this week closing its short public consultation on its plans to change UK medicines law to prepare the way for mass vaccination of the population. Testing and vaccination might seem like natural bedfellows – testing ostensibly telling you whether or not you're infected in the absence of any available treatment, vaccination (once available) providing insurance against infection in the future. But could they also be devices designed to achieve something quite different, that's not really in our interest, but more in the interests of those controlling the shots (pun intended)?

Testing troubles

The trouble is that RT-PCR tests on which 'operation moonshot' is based aren't accurate. This problem is complicated by the lack of a 'gold standard', and known, significant variations in sensitivity and specificity. If that wasn't bad enough, there are many other sources of variation as well, that include cross-reaction with other genetic material, timing of tests, potential contamination and sample degradation.

If you felt so inclined, you can use the BMJ's 'Covid-19 test calculator' to work out the percentage of people likely to have false and true positives and negatives according to different pre-test probabilities of infection, sensitivities and specificities of test. Generic test calculators such as this medical test calculator can also be used. Assuming an 80% pre-test probability (i.e. the best estimate of the actual prevalence of the disease in a given area or population), 70% sensitivity and 95% specificity, the calculators show you that for those who receive a negative test result (i.e. the majority), 56% are actually likely to be infected (as compared with 80% if the tests had both 100% sensitivity and specificity).

The trouble is that the precision declines as the prevalence of the disease reduces. So, in the above example, if you substitute the 80% pre-test probability for 1% (still around 10 times more than the current data based on ONS data), you find that the probability of being infected if you have a positive test result is only 16%. In other words, precision (or 'positive predictive value') declines dramatically as prevalence goes down.

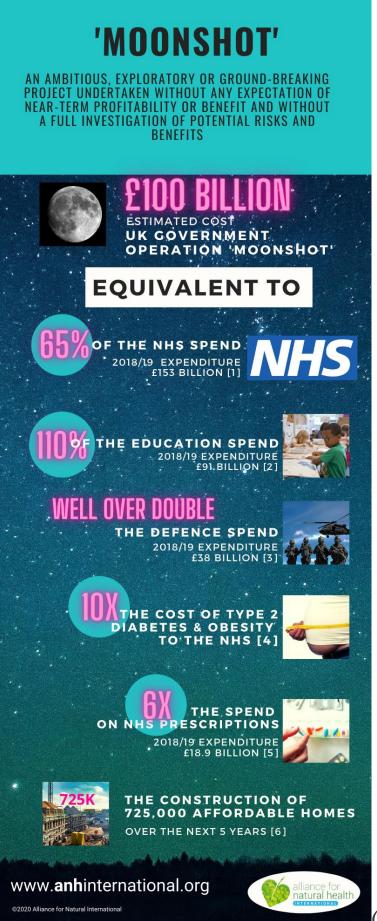
So at 95% sensitivity and 95% sensitivity and a 1% prevalence (pre-test/clinical probability) level, only 49% of those who receive a positive test would actually be likely to be infected. Play with your calculators yourself. Their downside is that they don't go below 1% and actual prevalence for most parts of the world are now much lower than 1%. Keen mathematicians can use he actual formulae to determine positive and negative predictive values from Altman & Bland (1994).

All of that's assuming the tests are taken n the right way and at the optimal time. This all means that precision in the real world can be much lower than under perfect lab conditions.

Also, even when manufacturer claimed sensitivity and specificity are much higher than shown in the above example, the precision can be very low when prevalence is low.

Put another way, if you could be 100% sure that someone had Covid-19 as a result of confirmed infection with SARS-CoV-2 (which is almost never the case because lab-confirmed cases are based on inaccurate PCR tests, meaning this is more of a theoretical notion), for every 100 people who are infected, 30 would be missed. This means there's a 30% failure rate where you can guaranteed infection or a 57% failure rate if you're 80% sure someone is infected, which is a more realistic scenario.

Would you make one of the biggest investments of your life in some unproven technology that had more than a 30 to 50% failure rate? Especially without asking those who'd contributed to your wealth (taxpayers) if they thought this was a good idea?



(See below for references)

From case rate to positivity rate

Last week we discussed the emergence of the 'casedemic' – the change in the narrative around Covid-19 that now rarely discusses daily death rates, and instead focuses the public eye on cases. This week, to aid your critical thinking, we add another metric that helps you look at test results. It's the positivity rate. In the context of Covid-19, it's quite simply the percentage of those tested who test positive, based on RT-PCR tests.

Like all metrics, it has its limitations, because it depends on who's getting tested. With a scientific hat on, the results we see for Covid-19 are limited by the fact that the sample of people getting tested aren't randomised. But it's still a very useful relative metric, that tells you a lot about the progression of an epidemic, much more so than simply the number of cases, something the media has been trying to keep our eyes focused on.

We also talked last week about another useful metric, one linked to mortality, the infection fatality ratio or IFR. But given that so few people appear now to be dying of Covid-related causes, it's important to get a handle on the proportion of positive tests found among those tested using albeit inaccurate RT-PCR testing. Enter the positivity rate. The metric has been given a lot more airtime in the other countries, such as the USA and Australia. It's not used widely in the UK, the country that hosts one of the leading vaccine contenders in the Oxford/AstraZeneca vaccine.

On 12 May 2020, the World Health Organization (WHO) somewhat arbitrarily advised governments that before reopening economies and removing restrictions, the positivity rate should be below 5% for at least 14 days. Currently in the USA, around half the states (25) are below this level, half (26) above. This puts the USA, nationally, a fraction over the 5% positivity rate (5.1%) in week 36 (first week of September).

In the UK, we've calculated the 7-day moving average for the positivity rate based on data from the UK government dashboard at just 0.7 (that's over 7 times less than the WHO arbitrary threshold of 5% (see Figure 1 below). We've included the US data (Figure 2) below for reference; among the reasons for the high figures in the US is the fact that the epidemic wave struck the southern states significantly later.

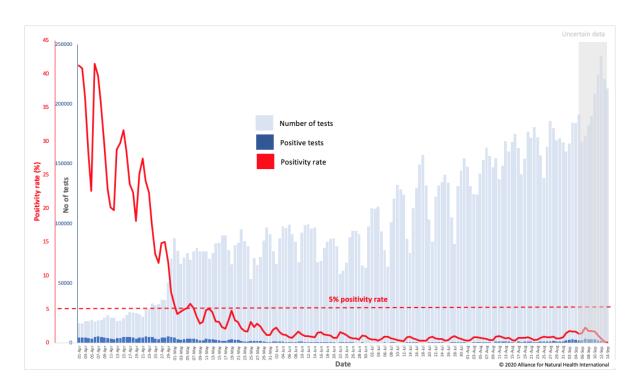


Fig 1 Positivity rate trend for the UK (Data source: GOV.UK; data analysis and graphics by Alliance for Natural Health International)

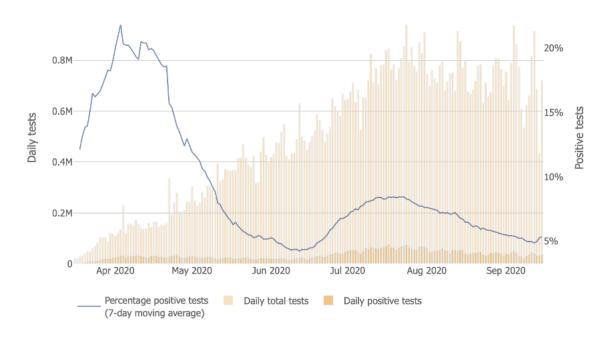


Fig 2 Positive rate trend for USA (Source: Johns Hopkins Coronavirus Resource Center)

Back to the big question

With a bit of this additional food for thought, let's get back to the question: Should Brits be investing such a vast – yes, an eye-watering £100 billion – a figure that is on par with or in excess of the UK education spend, to give just one example – without any recourse to the view of citizens or their elected representatives?

If it helps, you might also want to consider some other questions, such as: Is Boris Johnson's new 'Rule of 6', that was apparently ushered in against the will of every minister other than Matt Hancock and Michael Gove, all part of a crony capitalism revival? One that's being steered through with Boris Johnson's hand firmly on the tiller of the United Kingdom?

Think about it.

We've got two closely related questions we'd love you to answer via Twitter poll:

Question 1

Do you support the £100bn 'operation moonshot'? More info at: https://t.co/OspaHNf17S

— ANH International (@anhcampaign) September 17, 2020

Question 2

Should Parliament be consulted before the UK government invests £100bn in 'operation moonshot'? More info at: https://t.co/OspaHNwBZq

— ANH International (@anhcampaign) September 17, 2020

Infographic references:

- [1] House of Commons Library
- [2] Institute for Fiscal Studies
- [3] Ministry of Defence
- [4] NHS England
- [5] NHS Digital
- [6] Joseph Rowntree Foundation

The one-sided battle of Trafalgar



Date:

24 September 2020

Comments:

5

What the UK mainstream media didn't tell us about the attack on freedom of speech

This video needs little introduction. Having been standing up for citizen rights and freedoms when it comes to health for over 18 years, we find the lack of representative mainstream coverage of the educational event and protest in Trafalgar Square, London, on Saturday 19th September 2020, unconscionable.

The right to peaceful protest has been a cornerstone for free, liberal democracies. So has the right to freedom of expression. At times of such great uncertainty, scientifically and otherwise, we feel passionately these rights should be protected.

https://youtu.be/ZkMW4RtYRW8

Crony trackers soon to exploit public and abuse privacy

Date:

24 September 2020



Fancy letting one man control your biometric and health data?

Content Sections

- Dialling back a few months
- Meanwhile...
- Enter LATUS Health
- • The reality

Those of us who remember the good old days when democracy stood for something in the free world, also place great value in upholding human rights and citizen freedoms. We tend to also have a regard for data privacy. Hence, we've been watching for developments in the area of biometric identity systems - commonly thought of as identity, health and now even vaccine passports. Knowing that many citizens are fervently opposed to such invasions of personal privacy, we shouldn't be surprised to see such technologies seamlessly, surreptitiously and insidiously finding their way into our lives and onto our mobile phones.

During the course of our ongoing research, we have come across this page on the GOV.UK Digital Marketplace listing the VPlatform® and VCode® by VST Enterprises. It's basically code-scanning technology, similar to bar codes, but on steroids. And now we see it's being used to power the V-Health Passport.

Further searching has uncovered a number of concerning facts, not least of which is that the code can be scanned from up to 100 metres away and all that data is being collected by one company, VST Enterprises, a monopoly owned by one man, founder, Louis-James Davis. The concept is backed by VST Enterprises' ambassadors, Zara (née Philips) and Mike Tindall, who seem unaware of the potential for travesty or injustice with citizen rights, promoting the V-Health Passport as a way to open up sporting events and get back to normal.

Dialling back a few months

Draconian changes to legal systems fuelled by a health emergency slid glibly into law in many countries at the beginning of lockdown. These laws have given governments sweeping powers to do pretty much whatever they want with and to citizens under the guise of public health and national security. In the UK, the Government has even abolished (albeit very quietly!) local by-elections and other polls till after May 2021. British parliamentarians are voting on whether to extend the emergency Coronavirus Act on Wednesday 30th September. Write to your MP if you'd like to have your say ahead of the vote.

Given what we've all experienced over the last 6 months, it's understandable that citizens are looking for firm reassurance that hard-won human rights and freedoms are being respected and upheld in the manner expected by governments of supposedly democratic countries. Yet, we seem to be sliding deeper down the slippery totalitarian slope on a daily basis. Our video compilation from Saturday's peaceful educational rally in Trafalgar Square, London, demonstrates what appears to be an unwarranted use of police force. It's hard to believe the UK was once a beacon of democracy in a free world.

During lockdown in April and May there were murmurings in a few reports that immunity passports may be key to returning to normal life. But a Downing Street spokesperson reassured concerned citizens, that the NHS were only at the very early stages of reviewing the options of what is available, but stressed that: "The science is a considerable way from being able to support something like a health passport". We all breathed a sigh of relief and took heart that there was proper oversight for something so critical.

Meanwhile...

VST Enterprises appears to have partnered with the UK government in developing an application called 'COVI-PASS' to track a citizen's Covid-19 history and immune response, along with other health information. The COVI-PASS was slated to use a proprietary matrix called 'VCode' and is billed as the world's most secure digital health passport.

It appears that VST Enterprises' V-Health Passport has replaced the COVI-PASS and it's being billed as a valid track and trace system too. The VCode® is apparently able to store every sensitive detail about your life using military-grade encryption software and is powered by an 'intelligent system' called VPlatform®, where the codes are generated, tracked and the analytics are produced. We quote, "No other technology on the global market today can solve security, distribution and consumer adoption challenges with a single protocol'. Having seen how the likes of Google and Facebook have exerted control over information, how might such data that is controlled by a single man be abused down the line? And what damage might ensue if those data fell into the wrong hands?

As we've mentioned, the VCode® can be scanned outside of the 2m safe distancing zone and can be scanned up to and over 100m away at angles of up to 160 degrees - even if 30% of the code is obscured or destroyed! It's easy to see how this could be of enormous benefit in fraud prevention (also one of the intended purposes). But just how malevolent could it be when used to hold personal data such as health records?

Enter LATUS Health

We watched with interest the recent promotional video on the V-Health Passport where Zara and Mike Tindall welcome Jack Latus (MD, Latus Health) into what appears to be their home. The caption under the video states, "Zara Tindall and her husband Mike have both tested negative for coronavirus after using an at-home kit, the tenminute Covid-19 Rapid test."

Whilst administering the pin-prick device and dropping blood onto the test strip, 'Dr' Latus is heard to explain that this is "... only testing for antibodies", testing 3 antibodies - IgA, IgG and IgM. All good so far, except that the MD tag used on-screen, we found from subsequent research, wasn't an acronym for his Medical Doctor status, but rather for his Managing Director status. Deeply misleading.

Where we ran into real difficulties is when Mr Latus gives them their results and declares them both "... clearly negative for covid-19", whereupon they both take off their masks. Perhaps if Mr Latus had been an MD, doctor, he'd know the difference between an antibody and an antigen test. Since comments under the video have been disabled, we've not been able to comment. Advertising Standards Authority complaint perhaps? Oh no, they're a media industry self-regulator and part of the mainstream media machine.

The reality

Without getting into the minutiae of testing accuracy, Mr Latus - and VST Enterprises by default - have just sent Zara and Mike out thinking that they're in the clear and are not infected by Covid-19. Their V-Health Passport will get a green light and they'll be able to freely enter whichever sporting event they want to attend in the sure knowledge that they're not carrying the virus. Only the test they had was an antibody test, which can only tell you if you've made antibodies to the virus in the past, not whether you're currently infected.

VST Enterprises is out there selling its V-Health Passport, and listed on the UK Government marketplace, as a means to get back to normal. The idea is that people will have to pay £15 a test and take it twice a month to maintain their passport. Results are shown using a traffic light system:- green for a negative test result, the world outside your home is your oyster, red for a positive test, do not pass go, languish at home and amber signals the countdown to your next test. Ka ching. But what does this mean if the data is junk and antibody tests are being used as if they were antigen tests?

It's deeply worrying that an individually-owned, government-sanctioned company like VST Enterprises has such powerful technology that is open to misuse, is using a non-health professional to front the promotion of the V-Health Passport and has so little understanding of the tests that could ultimately be used to determine citizen freedoms.

Is this the new world order we're going to hand over to the next generation?

Hopefully we'll come to our senses soon.

Why your positive test result is likely wrong

Date:

24 September 2020

Find out why you should ask for a re-test if you get a positive test result

Content Sections

- Testing for a virus not a disease
- Accuracy, sensitivity and specificity aren't the same
- Bayes' re-entry
- High false positive rate when disease is at low ebb
- DIY PPV
- Just tell us we're not stupid!
- Could false positives explain the apparent rise in infections?

By Rob Verkerk PhD, founder, executive and scientific director

You've just got the news from your coronavirus test centre that your test was positive. You now have to self-isolate. If you don't, you could face a fine up to £10,000, in the UK at least.

When it comes to health, we're all for monitoring. It's a central plank of our blueprint for health system sustainability. But there has to be some caveats. Here are a few:

- That the test must be accurate
- If there's a chance your test result might be wrong, you should be told
- Any actions that follow from the test result must have been subjected to a careful balancing of risk and benefit – taking into account not only health-related factors, but also social and economic ones.

On all three of these caveats, testing as rolled out in most countries – including the UK's Test & Trace initiative – fails spectacularly.

We're going to explain here why positive test results from RT-PCR tests are more than likely to be wrong – and why, if you've had a positive test result, you should make sure you're re-tested. If compulsory self-isolation following a positive test result has a major negative impact on your work or other aspect of your life, you should think about demanding multiple re-tests. Concerns about false positives become ever more real if you're trying to push towards millions of tests daily, as the UK government is with its Operation Moonshot. Leaked documents reveal that "new types of test [non-PCR] are likely to be less accurate [than PCR], introducing some [additional] level of risk.", raising even greater concern, as revealed in a recent article published in one of he world's most respected medical journals, the BMJ.

Testing for a virus not a disease

By definition, someone who's got Covid-19 has to be diseased and present with symptoms, such as a continuous cough, shortness of breath, fever, chills, fatigue, nausea, runny nose, loss of sense of taste or smell, and so on.

But we know that the vast majority of people who're found to be positive from a PCR test don't have the disease. Most people have come to think of these people as asymptomatic, but the majority of these might not even be infected with SARS-CoV-2 (the virus that causes Covid-19). They therefore can't infect others.

In our video above, we show you why it is wrong to consider positive test results as a measure of infection. Recently deceased inventor of PCR, Dr Kary Mullis, was always clear that PCR should be used for biomedical research and forensics, and not for diagnosis of disease. Echoing Mullis' sentiments, Dr David Rasnick, biochemist and protease developer proferred, "I'm skeptical that a PCR test is ever true. It's a great scientific research tool. It's a horrible tool for clinical medicine."

Accuracy, sensitivity and specificity aren't the same

Manufacturers of PCR tests that measure whether or not you're supposed to be infected claim values expressed as percentages for two metrics. One is sensitivity that measures the ability of the test to detect true positives, the other is specificity, which reflects the ability of the test to detect true negatives. For so-called Covid-19 RT-PCR tests, they're often very high values close to 100%, as you'll see in the table below:

Table: Covid-19 PCR tests – and claimed sensitivity and specificity

Manufacturer	Sensitivity	Specificity	Sour
CovidNudge	94	100	Lance
Virolens	99.8	96.7	Reute
Abbott BinaxNow	97.1	98.5	Abbo
LumiraDx	97.6	96.6	Lumi
Becton Dickinson	84	100	Evalu
Quidel	96.7	100	Evalu
Roche	96.52	99.68	Roch

But these analytical values are based on tests evaluated under perfect conditions using reference samples of synthetic gene sequences. There is no proper gold standard that confirms the infection or the presence of disease, and we also know that real world accuracy of the tests varies according to the timing of the swab sample, the viral load on the specimen, and even things like whether or not someone smokes.

"A test with good analytical sensitivity and specificity does not necessarily have good clinical sensitivity and specificity. The overall performance of SARS-CoV-2 RT-PCR tests cannot be known until we understand who is truly infected and who isn't."

- Andrea Prinzi, American Society for Microbiology

To put it in different terms, the analytical sensitivity, under ideal lab conditions, is the proportion (percentage) of people who will have a positive result when exposed to the virus. Conversely, the specificity is the proportion that should get a negative result when there's no disease around. When specificity for example is less than 100%, say 99%, you'd expect 1% false positives i.e. people testing positive when they should have been negative because they are not infected. A 1% error rate sounds pretty good to most people – but that 99% specificity will only give you a 99% chance of having a true negative if you're guaranteed to be infected. That just doesn't happen when there's not much virus around and a lot of infected people around you.

Bayes' re-entry

When there's not much disease around probability theory comes into play. This general idea was first mooted posthumously by Reverend Thomas Bayes in 1763 in the form of what we know today as Bayes' theorem or law. It took a while for medics and researchers to recognise the importance of Bayesian probability theory in clinical diagnostic and screening and Bayes' theorem wasn't applied to diagnostic or screening tests until the 1950s. It's been thoroughly studied in diseases like TB.

What Bayesian probability tells us in relation to our current pandemic is that if we have information about the prior risk of infection – in other words, if we know what proportion of people in the communities we live in are infected (= disease prevalence) – we can more accurately predict the accuracy of a given test result, whether positive or negative.

High false positive rate when disease is at low ebb

Here's the real cough drop: as the disease prevalence declines, the chances of a positive result from an RT-PCR test being a true positive declines, dramatically so at very low levels of prevalence. The converse is also true, although, fortunately, is much less relevant. When the prevalence of infection is very high, the chances that a negative test result is a true result also declines substantially.

Modelled daily rates of positive tests in different regions of the UK range from 0.04% (West Midlands) to 0.21% (North West) according to UK government stats which are themselves based on the rate of positive tests.

To understand how prevalence affects the likelihood of a test result being true, you need to calculate another statistic that includes Bayes' theorem, the Positive Predictive Value (PPV) and the Negative predictive Value (NPV). Here, one of the world's greatest medical statisticians, the late Doug Altman from Oxford University needs to be credited for his application of Bayesian probability to diagnostic and screening tests.

DIY PPV

You can use many a website diagnostic calculator to compute the PPV and NPV, but remember it's the PPV that is particularly affected by low prevalence. You can also use Altman and Bland's 1994 formulas yourself if you want to do it the hard way, but the MedCalc is an easier option.

If you take real-world sensitivity and specificity at 95% i.e. you assume that a combination of errors in the test themselves and the way the tests perform in the real world contribute to a 5% error rate which is realistic, you get the following percentage probabilities for a positive test result being a true positive.

At 10% prevalence, PPV = 68% At 5% = 50% At 2% = 28% At 1% = 16% At 0.5% = 9% At 0.05% = 1%

In this final scenario, which may be in line with the real world prevalence in the least infected parts of the UK, that means if you got a positive result in a test, there's only a **1% chance it's correct**. Yes, a 1% chance.

Just tell us – we're not stupid!

It's not statistical trickery – it's actually common sense. To try to understand why the false positive rate of RT-PCR tests go up when the prevalence of SARS-CoV-2 is low, let's use the analogy of looking for a needle in a haystack; the PCR test has been designed to detect real needles. But because the test isn't 100% accurate, especially when used in different barns and fields by different people, it sometimes picks up things that look like needles but aren't real ones. As real needles are so few and far between, the chances of finding things that look like needles but aren't increases. OK?

The big question we have is: WHY IS THE PUBLIC NOT BEING TOLD ABOUT THE PROBABILITY OF THEIR TEST BEING INCORRECT?

Don't tell us the public isn't clever enough to understand probability. The public deals with probability all the time. The probability of market prices rising or falling according to

national or global events. The probability of a plane falling out of the sky when you decide to travel by air. The risk of something going seriously wrong when you consent to a given surgical procedure.

Why not now?

Could false positives explain the apparent rise in infections?

The short answer is: no. If the level of testing, test specificity and infection prevalence stays the same, it's simple: nothing changes. if the testing level goes up, the number of positive results will also go up (which is why it's so important to keep an eye on the positivity rate (the proportion of the tested population that are positive - see Fig 1 below). So what happens when the third variable, disease prevalence, changes? What happens here is that the reliability of a positive test goes down - dramatically so as we've shown above.

In the figure below, relying on official UK government data, we present the number of tests (in Pillars 1 and 2), the number of positive tests by specimen date, and by published date, as well as the positivity rate for each method (7-day averages). The positivity rate is simply the number of positive tests as a proportion of those tested. As you will see (Fig. 1) total tests increased and this will likely account for some of the apparent increase in cases that has got everyone deeply concerned. The trouble is in the mix of the slight upward trend is a genuine rise of true positives and the effect of increased testing frequency.

You'll also notice that the way the UK Government chooses to illustrate the rise in case numbers (Fig. 2) is at odds with a more scientifically rational representation of the data, as we show in Fig. 1, which eliminates confounding by testing frequency. Unfortunately, another clear case of Government deception. As we said last week, the World Health Organization (WHO) has advised governments that before reopening economies and removing restrictions, the positivity rate should be below 5% for at least 14 days. The real positivity rate in the UK has been way below 5% for months now.

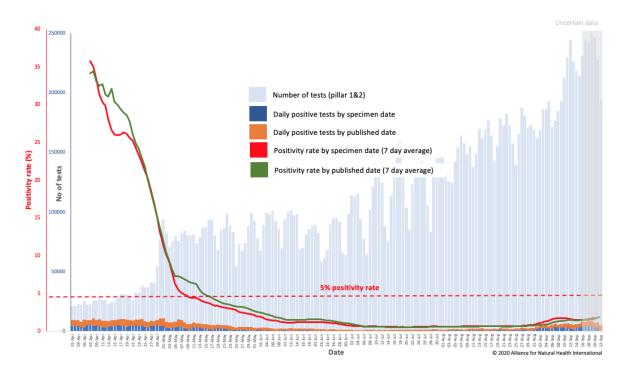


Figure 1: **UK** government data on number of tests, daily positive tests (by specimen and published date) and positivity rates for each (7-day averages).

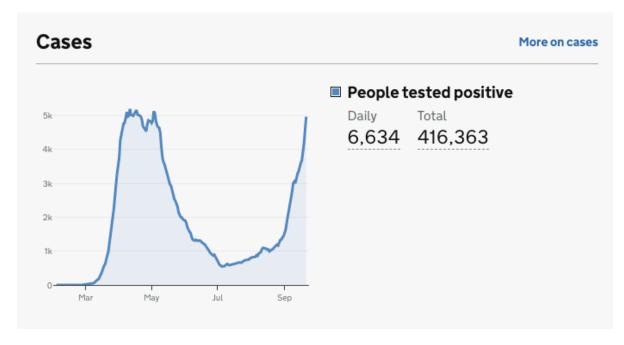


Figure 2. The way the UK Government presents the current rise in cases. [Source: GOV.UK]

Watchful waiting and protection of the most vulnerable may have been a more proportionate response than life-changing fines for those who don't self-isolate when they've been delivered a positive result for a RT-PCR test.

Especially when the chances are it was wrong.

Trafalgar protest transition at the 'witching hour'

Date:

1 October 2020



Why a peaceful protest was anything but fair and square

Like last week, because of the blackout on honest coverage in the mainstream media, we feel it incumbent on us to provide some footage of the 'We do Not Consent' rally in Trafalgar Square, last Saturday 26th September, 2020.

In an almost déjà vu moment, the flow of peaceful, impassioned presentations, in what had been a very calm and unified rally, came to an abrupt end around 3 pm as a German doctor, Dr Heiko Schöning, took to the stage. He didn't get to speak in Trafalgar Square and, ironically, was later arrested whilst speaking at Speaker's Corner in Hyde Park. Three o'clock must be some kind of 'witching hour' for the British police as, just like the 19th September, the riot police, without warning, barrelled into the crowd and surrounded the stage and speaker's area. What transpired was deeply unpleasant. You'll get the gist from our video, but we've left out some of the more brutal footage. There's enough trauma and fear around causing too much division already.

Suffice to say, peaceful demonstrators beaten with police batons, women and children treated in very heavy handed fashion, a large section of the crowd kettled – and still it appears that the protesters managed to stay calm and not retaliate physically. It's hard to believe this has been happening in London, one of the first bastions of democracy, free speech and social justice. One wonders what kind of orders the police must be getting from on high and why people peacefully calling for the return of human rights and health freedoms is such a danger to national security... https://youtu.be/QOq-1tCXBic

Half a million sharks that shouldn't be Covid casualties

Date:

1 October 2020

Why non-shark squalene should be used for Covid vaccines, supplements and cosmetics

Content Sections

- Shark attack
- Shark over-fishing
- Beyond Jaws: humans are the cause of shark decline
- Another half a million threatened
- Plant and microorganism derived squalene
- What next?
- Take action NOW!

Do you recall being asked if you're prepared to accept the slaughter of half a million sharks to obtain an ingredient needed in some of the candidate Covid-19 vaccines? We don't!

Leading California-based shark conservation organisation Shark Allies has estimated that 250,000 sharks would need to be killed to deliver the squalene needed to vaccinate the global population, as planned. That doubles to a shocking half a million if two doses of the vaccine are required.

Shark attack

Currently, around 100,000 to 200,000 sharks are estimated to be harvested to supply the growing demand for shark fins and shark liver oil, the latter being the main source of squalene used in cosmetics, supplements, medicines and vaccines. Around 3,000 sharks, most fished from the deep oceans, are needed for every ton of squalene.

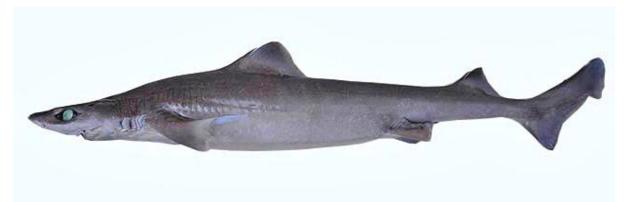
At least 5 candidate Covid-19 vaccines rely on squalene, which is emulsified with surfactants and used as an adjuvant to enhance the immune response. Shark-derived squalene has been by far the most common form of high-purity squalene used in drugs and vaccines, while plant-based squalene is now the dominant source used in cosmetics – the sector that uses over 60% of the global production.

Shark over-fishing

Such is the interest in the many functions and uses for squalene that the international market is set to double from its present level (approx. US\$100 million) to over US\$200 million by 2024.

Sharks belong to a group including skates, rays and chimaeras referred to as the chondrichthyan fishes. There are around 500 described species of shark, all of which have relatively slow growth rates, low reproductive potential and late sexual maturity, making them particularly vulnerable to over-fishing. Global populations are now in decline.

Deep-water sharks – that are the primary sources of shark liver oil, are the most vulnerable to fishing with population growth rates 40% to over 60% lower than other types of shark (pelagic and coastal species). Owing to the presence of deep-water sharks between 100 metres and sometimes up to 4000 metres below the ocean surface, their numbers and detailed ecology are often not well understood. Collapse of populations of top predators like sharks can result in uncontrolled 'trophic cascades' with devastating ecological consequences to marine ecosystems and biodiversity.



A deep-water gulper shark, Centrophorus granulosus. Listed as 'critically endangered' on the International Union for Conservation of Nature (IUCN) Red List of Threatened Species. [Source: Sharkwater.com]

Beyond Jaws: humans are the cause of shark decline

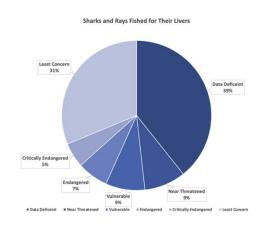
The direct-action marine conservation movement Sea Shepherd has exposed the horrors of the unregulated world of deep-water shark fishing for shark oil. There is still extensive use of illegal gill nets, rather than long lines. Sea Shepherd helped the Liberian Coast Guard arrest the crew of an internationally-blacklisted fishing vessel off the Liberian coast in 2017.

Over 50 shark species are targeted for their livers. Around half of these are endangered, while 5% of these are critically endangered, including the deep-water gulper shark, *Centrophorus granulosus*.

TOP SHARK SPECIES THAT ARE TARGETED FOR THEIR LIVERS:

Basking Shark (Cetorhinus maximus) Cuban Dogfish (Squalus cubensis) Saw Shark (Pristiophorus nudipinnis) Leafscale Gulper Shark (Centrophorus squamosus) Needle Dogfish (Centrophorus acus)
Longnose Velvet Dogfish (Centroscymnus crepid Kitefin Shark (Dalatias licha) Bluntnose Sixgill Shark (Hexanchus griseus) Great White Shark (Carcharodon carcharias) Porbeagle (Lamna nasus) Bramble Shark (Echinorhinus brucus) Sand Tiger Shark (Carcharhinidae taurus) Bignose Shark (Carcharhinus altimus) Silky Shark (Carcharhinus falciformis) Blacktip Shark (*Carcharhinus limbatus*)
Blacktip Reef Shark (*Carcharhinus melan*Sandbar Shark (*Carcharhinus plumbeus*) Wide Sawfish (Pristis pectinata) Whale Shark (Rhincodon typus)
Grey Reef Shark (Carcharhinus amblyrhynchos) Blue Shark (Prionace glauca) Smalltooth Sand Tiger (Odontaspis ferox)
Greenland Shark (Somniosus microcephalus)

Piked Dogfish (Squalus aca Stingray (*Dasyatis pastinaca*) Catsharks (*Galeus* spp.) Hammerhead Sharks (Sphyrna spp.) Shortspine Spurdog (Squalus mitsukurii) Birdbeak Dogfish (Deania calcea) Lowfin Gulper Shark (Centrophorus lusitier) Mandarin Dogfish (Cirrhigaleus barbifer) Roughskin Shark (Centroscymnus owstonii) Thresher Sharks (Alonias spp.) Salmon Shark (*Lamna ditropis*)
Sawback Angelshark (*Squatina aculeata*)
Tawny Nurse Shark (*Nebrius ferrugineus*) Shortfin Mako Shark (Isurus oxyrinchus) Spinner Shark (Carcharhinus brevipinna) Bull Shark (Carcharhinus leucas) Oceanic Whitetip Shark (Carcharhinus longimanus) Dusky Shark (Carcharhinus obscurus)
Sicklefin Lemon Shark (Negaprion acutidens) Tiger Shark (Galeocerdo cuvier) Silvertip Shark (Carcharhinus albimarginatus) Giant Guitarfish (Rhynchobatus djiddensis) Whitetip Reef Shark (Triaenodon obesus) Smooth Hounds (Mustelus spp.) Plunket's Dogfish (Centroscymnus plunketi)



Source: Shark Allies

Another half a million threatened

Sharks are not the only species to suffer at the hands of humans. The milking of around half a million horseshoe crabs every year, many of which subsequently die, is ongoing as a source of limulus amebocyte lysate (LAL) that's used to detect endotoxins in drugs and vaccines. The National Geographic reported that LAL from horsehoe crabs will need to be used in any Covid vaccines used in the USA.

Plant and microorganism derived squalene

Despite the continued ravaging of shark populations to harvest shark liver oil for squalene, there are many alternatives that involve sourcing squalene from plants, microorganisms or biosynthetically using genetic engineering.

Some examples are as follows:

- Plant-based squalene from olive oil
- Plant-based squalene from fermentation of sugar cane (Amyris)
- Plant-based squalene from breadfruit tree (Artocarpus) leaves
- Cyanobacteria source of squalene
- Microbial production of squalene
- Genetic engineering of yeasts

What next?

To prevent further decimation of shark populations for shark liver oil and squalene, four things must happen as a matter of urgency.

- 1. Vaccine, food and cosmetic manufacturers must be forced to declare their use of shark-derived squalene which is not a sustainable source
- Manufacturers need to transition as a matter of urgency to plant, microbe or synthetic sources of squalene to avoid further damage to endangered shark populations
- 3. The public must avoid using any product containing shark-derived squalene or shark liver oil, whether a vaccine, food supplement or cosmetic
- 4. Food labelling laws must be changed to force manufacturers to be transparent about whether squalene in products is animal, plant, microorganism or synthetically sourced.

Take action NOW!

- Sign the Shark Allies petition asking COVID-19 vaccine frontrunners to replace shark squalene with existing sustainable alternatives
- Post about Shark Allies' #SharkFreeVaccines and #SharkFreeProducts campaign on your social media channels
- Don't purchase and consume cosmetics or food supplements that contain shark liver oil or shark-derived squalene (often just labelled as 'squalene')
- Learn and make your friends and family aware of the damage caused to shark populations and marine ecosystems by harvesting shark fins and shark liver oil
- Share this article with your social networks so they can learn more about the way Covid vaccines might threaten deep-water sharks, some of which are critically endangered
- Help create awareness with merchants, restaurants, online distributors and manufacturers that sell shark products, and ask them to discontinue the product.
- See more at Shark Allies.

Is the tide of public opinion turning against governments?

Date:

8 October 2020

As restrictions bite ever harder, is a once fearful and compliant population increasingly rejecting 'project fear'?

Content Sections

- Pro, anti or in-betweener
- The Daily Mail
- Mainstream media reporting bias?
- Turning tide or tsunami?

As coronavirus case rates increase in many countries – governments are preparing us – the people – for further lockdowns and more restrictions on our movement, as well as on our ability to work and function socially.

These guidelines, rules and laws are fuelled by emergency powers handed to governments by the World Health Organization and its very broad definition of a 'pandemic'. Together they prevent us from behaving like normal human beings. From benefiting from a good all-round, non-socially distanced education; holding down jobs; interacting with our friends and families; travelling freely; making plans for the future and keeping ourselves generally in a healthy mental state.

Pro, anti or in-betweener

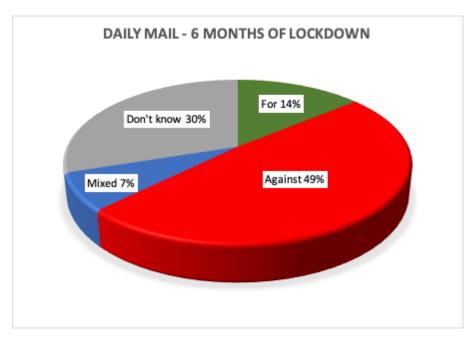
So, how are we reacting to all of this? One way of gauging public opinion is by reading the comments made beneath mainstream media articles and social medial feeds that espouse what's increasingly referred to as the 'mainstream narrative'.

Our sense is that over the last few weeks, certainly in the UK, there's been a fundamental shift in position by many people. More and more of us are questioning the logic of what's happening around us. Questioning the idea of placing such a myopic focus on just one disease, while failing to take note of the extraordinary collateral damage that's occurring everywhere else.

In this video, we've taken 3 recent stories and analysed the public response in terms of whether the comments are for, against, mixed or undecided with regard to the key message being reported.

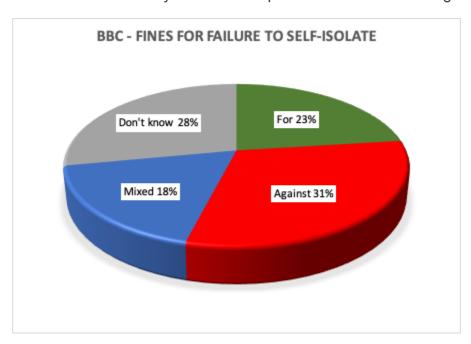
The Daily Mail

The first article we looked at is from the UK's Daily Mail, published on the 20th of September. Jack Wright's story prepares the British public for 6 months of lockdown and at the time of making this video it has drawn over 11,000 comments and 3,000 shares. That's a lot of interest, in anyone's book. In sampling the comments, we found almost exactly half of them opposed the notion of lockdown. What's more, only 14% thought 6 months of lockdown was a good idea or necessary. A mere 7% were undecided and the final one-third didn't express an opinion one way or another. That's quite a shift compared with a few months back when the public was both cooperative and malleable.



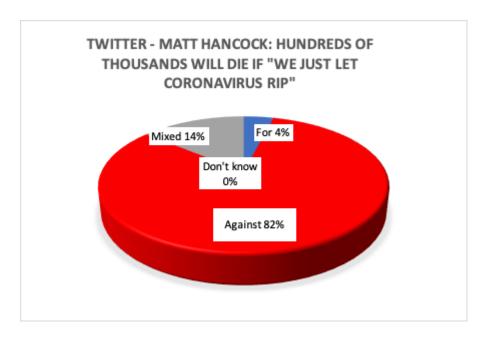
The BBC

Next we looked at an article from BBC News that reported, on the 28th of September, Boris Johnson's plan to fine people up to £10,000 if they don't self-isolate after testing positive. OK – perhaps people aren't quite as polarised on this, but still, only a little over one-fifth of people commenting agreed that fining people if they didn't comply with the self-isolation edict was a good thing to do. A bigger proportion, nearly one-third, thought the exact opposite, expressing it often in no uncertain terms. Nearly 20% expressed mixed views and nearly 30% didn't express a clear view for or against.



Hancock's Twitter post

Our third pick was from none other than Matt Hancock – the UK's health secretary. We looked at a Twitter post he made on the 1st of October which accompanied his speech in Parliament that was all about getting the public ready for what he has in store for us – more lockdowns and restrictions. The device he used was one that's often been used fear. He proposed that it was unthinkable to let the virus rip through society as this would result in hundreds of thousands of deaths. What he never seems prepared to consider is a more targeted and age-structured response that involves shielding the vulnerable, especially older populations, while allowing the healthy, generally younger members of society to get on with life pretty much as normal. His aversion to this more Swedish approach appears publicly to be linked to concerns about asymptomatic transmission among the young and healthy, something that appears, with the benefit of hindsight, less of an issue than was thought a few months back.

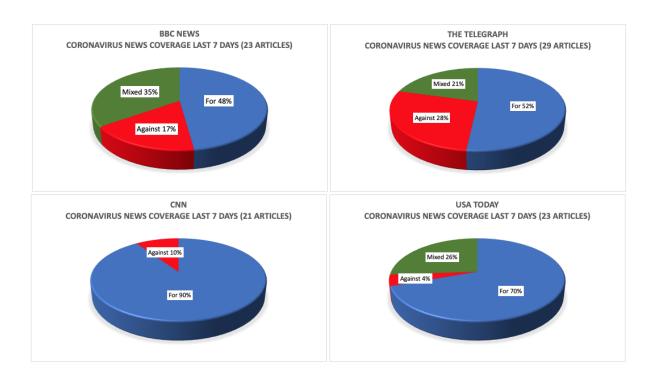


Anyhow, of the 283 comments on his Twitter feed, our sample revealed a massive 82% of replies flat out disagreed with the health minister. Just as telling, only a miniscule 4% agreed with Hancock and those with mixed views were around half the proportion compared with the other two stories and issues.

Mainstream media reporting bias?

We also decided to look at how the mainstream media are reporting on the pandemic. We took a sample of articles from *BBC News* and *The Telegraph* from the UK, and *CNN* and *USA Today* from the US, over the last 7 days and analysed their contents to see if they were pro-pandemic (for), against or reporting in a more neutral, unbiased and balanced manner (mixed).

The Beeb's reporting was split between articles that were pro (48%) and mixed (35%) with just 17% against. In contrast, the articles sampled from *CNN* showed a whopping 90% for, with a paltry 10% against. *The Telegraph* came out at 52% for, 8% against and 21% mixed in the last 7 days. *USA Today* also appeared massively pro with 70% for, a tiny 4% against and 26% mixed. Obviously, had Fox News been evaluated, the picture would have been different in the US. What this limited evaluation may be giving us insight to is that polarisation in the US may be even greater than it is in the UK. That's an interesting situation in the lead-up to an election - and perhaps the election is playing its part.



Still, despite a tendency for the mainstream media to act as a voice for government propaganda, presumably to keep the populace in a state of fear and panic so they will be compliant, a large cross-section of the public does appear to be awakening and realising that the virus may be the lesser of two evils.

Turning tide or tsunami?

All in all – this sample of public views gives us some idea that citizens' mood – the tide – might be turning. It's hard to say if this trend will build and build, or whether the number of dissenting voices will plateau. However, what's already happening won't have escaped the attention of the behavioural scientists working with Government – the ones who came up with 'project fear' in the first place in order to create a responsive public.

But we all know so much more about the virus now – and it's important that governments don't underestimate the intelligence and the concerns of those who're most impacted by policies that have decimated lives and created collateral damage unique to any efforts in living memory to manage any one disease.

It may be even that public opinion that opposes government restrictions is close to achieving a tipping point, one supported by an ever growing band of highly informed scientists and lawyers who've decided to take a stand.

You can find out about this in our other story that we've released this week – the link to which you'll find below this video.

Please also share the video and story as widely as you can, as we don't know if, or how long it'll be, before the censors pull it down.

Thank you.

Will science and law be our oppressors or our saviour?

Date:

8 October 2020

Scientific and legal anti-lockdown movement builds momentum

Content Sections

- Over-reach
- Licensed to kill
- From conspiracy theory to conspiracy reality
- Scientific resistance builds
- Great Scott!
- Legal redress
- Take action now

Rob Verkerk PhD, founder, executive and scientific director

Over-reach

Two Australian academics working with the Foundation for Economic Education, Mark Hornshaw and Zachary Gorman, characterise the police action on lockdown dissenters in the state of Victoria, Australia, as "perhaps the developed world's most oppressive and mean-spirited overreaction from the government in response to the COVID virus."

Referencing just a selection of recent acts, they explain, "Police in riot gear are forcefully clearing out farmers markets, harassing elderly women for sitting on a park bench, snatching infants in strollers from fathers, and fining people for catching a bus without a 'work permit.'"

Citizens in dozens of countries around the globe have seen extremes of government over-reach, albeit most more moderate than those enacted by the Victorian state government. For a growing number of us, the actions that most major governments are taking appear disproportionate to the disease in question.

Licensed to kill

Being licensed to kill is not just the stuff of James Bond movies – it's real life. So it's interesting that the UK has, during these unsettled times, chosen to turn into legal statute an existing power that permits government agents to kill and torture people in ways that would otherwise constitute criminality. The Covert Human Intelligence Sources Bill flew through the UK Parliament on Tuesday, almost unopposed by a margin of 180-20, such was the desire by both the Conservatives and Labour to see the law enacted.

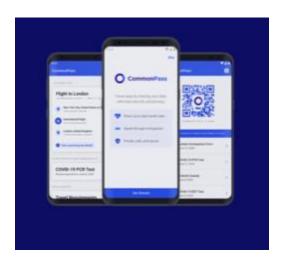
Reading the fine print, it's clear the Government is concerned about threats to its national security. While some of this will undoubtedly be linked to a perceived need to strengthen its defences as a result of its detachment from the security blanket of the EU, this legal power could forever change the relationship between authorities and the public.

It would be unsurprising if this opening of official doors to violent, legal, otherwise criminal, acts didn't incite greater hostility towards those members of the public unprepared to accept the imposition of martial law that's been linked to the arrival of a new infectious disease. Time will tell.

From conspiracy theory to conspiracy reality

Social media posts suggesting that your right to travel might be curtailed if you can't prove you've been vaccinated with one of the expectant, 'approved' Covid-19 vaccines were, until recently, being pulled for contravening 'community standards' (i.e. they were categorised as conspiracy theory or fake news).

CommonPass, funded by the Rockefeller Foundation and launched by the World Economic Forum and Commons Project Foundation, has come to fruition. Trials begin this week in London, New York, Hong Kong and Singapore. It's described as "a digital health platform designed to enable smooth passage during the pandemic by allowing travellers to carry their Covid-19 test results in a standardised, global format, thus easing international air travel."



The CommonPass app (Source: The Commons Project)

CommonPass doesn't try to hide its intent to enforce vaccination on those who choose or need to travel by simply preventing the unvaccinated from travelling.

Security insider, Brad Perkins, who headed up CDC's anthrax investigation after 9/11 and served as CDC's Chief Strategy and Innovation Officer from 2005 to 2009, made an important clarification in his piece in the UK's Telegraph, saying, "The added benefit of cross-border trust for test results is that it lays groundwork for inclusion of Covid-19 vaccination as part of health status."

National Geographic published an article on 29th September that looks at the opaque privacy issues that will face travellers as app-based surveillance continues to expand. If you're concerned, you better delete all apps you're not using and turn off location services when you're not using them – just for starters.

But what happens if you don't want to be vaccinated, or you're not deemed sufficiently worthy? Recall the FT's interview with Kate Bingham, head of the UK's Vaccine Taskforce, when she said there's only going to be enough vaccine in the UK for those deemed at greatest risk, namely "the old, vulnerable and those working in healthcare settings". Was this genuine or part of an elaborate psychological trick based on creating an illusion of scarcity so as to fuel demand? Anyway, if you're able to get travel clearance by simply demonstrating immunity, whether achieved by naturally-acquired infection or vaccination, Covid parties, along the lines of old-fashioned chicken pox parties, will inevitably become de rigeur among some groups of healthy people. But attempting to recruit people to such parties won't be as easy as it might have been, given the current state of digital authoritarianism, which has already led to bans of such content. Street party anyone?

Scientific resistance builds

Last weekend, a number of leading scientists, epidemiologists and doctors came together under the auspices of the American Institute for Economic Research in Great Barrington, Massachusetts. Their aim was nothing short of an attempt to shift the approach taken by governments in their efforts to combat Covid-19 around the world. The call for this shift was to create a more proportionate way of dealing not only with the disease itself (not to be confused with infections), but also taking full account of the unintended or collateral damage caused by any of those strategies. Call it a broad-minded, independent, multi-lateral, scientific approach, one that contrasts with the myopic, siloed approach to Covid-19 that's dominated the WHO-managed government responses to the pandemic to-date.

It wasn't the first time such an initiative was attempted. An earlier effort, headed by Stanford's Prof John Ioannidis, regarded as one of the most high profile, and in more usual times, influential, scientists (and epidemiologists) in the world, was Great Barrington 's precursor.

The result of last weekend's meeting of minds in Massachusetts was the Great Barrington Declaration, authored primarily by three internationally acclaimed epidemiologists and public health scientists; Dr Martin Kulldorf from Harvard, Dr Sunetra Gupta from Oxford and Dr Jay Bhattacharya from Stanford. Their declaration was cosigned by 34 additional heavyweight scientists and doctors, including Nobel laureate and biophysicist Prof Michael Levitt, and leading UK oncologists Profs Angus Dalgleish and Karol Sikora.

	Signed by	
Medical & Public Health Scientists 3,658	Medical Practitioners 6,048	General Public 89,067
The G	reat Barrington Declara	ation

The declaration has seen signatures pouring in, the numbers shown represent signatories for each of the three groups at around 10 pm UK time, 7 October.

I have since signed, as have my colleagues in the ANH-Intl team, and we urge doctors, practitioners, scientists and members of the public to do the same. As dissonance builds, the numbers game may be just as important as bringing on-board those of influence.

One of the challenges is that epidemiologists, scientists and doctors don't all share the same view, such is the uncertainty around the data, the sources of information, and the variable content of the siloes that make up the full picture of Covid and the associated medical, scientific, social, economic and political information. What's becoming ever more interesting is the sheer weight of scientific opposition that's developing against the so-called 'mainstream narrative', that I'd like to rename 'Covid myopia'. But we still don't know if this weight can overcome the inside track to government ears that remains the exclusive domain of a small band of doctors and scientists of the ilk of Dr Tony Fauci, Sir Patrick Vallance and Prof Chris Whitty.

Great Scott!

Standing up and going against the flow of Covid myopia takes courage. It also means you'll be subject to attack. That's been the lot for ex-Stanford, White House advisor on health, Dr Scott Atlas, presently senior fellow at the Hoover Institution of Stanford University. Atlas, who now perhaps has more clout than Fauci in the White House, supports an approach similar to that posed in the Great Barrington Declaration. Its essence seems remarkably logical given the known scientific facts: maximising efforts to protect the vulnerable, optimising therapeutics for those who become ill, while otherwise allowing normal social functioning as community immunity develops.

Showing the joined up nature of social media platforms and lockdown agendas, YouTube censored an interview of Atlas that espoused his views. So much for helping scientific discourse that has for hundreds of years been crucial to achieving consensus on more controversial scientific matters.

THE DOCTOR IS IN: SCOTT ATLAS AND THE EFFICACY OF LOCKDOWNS, SOCIAL DISTANCING, AND CLOSINGS



This is Scott Atlas' interview (23rd June 2020), censored by YouTube, playing off BitChute.

But there was more to come. On 9th September, nearly 100 of Atlas' colleagues at Stanford challenged him via an open letter, claiming "falsehoods and misrepresentations" and "fostering" views that "run counter to established science and, by doing so, undermine public-health authorities and the credible science that guides effective public health policy."



An extract of the open letter targeting Dr Scott Atlas for sharing a different view

As signatures pour in to support the Great Barrington Declaration, the UK Government has just announced its decision to reject the call. The Government argues the notion of protecting the vulnerable is an unproven assumption. When you suffer from Covid myopia, we have to assume you also think that the collateral destruction of society, industry and social function is unproven and therefore non-existent.

It's no wonder more and more people are becoming ever more fearful over the response by the current crop of crony leaders than they are of the coronavirus itself, the attributes of which seem, by comparison, to be both less harmful and more predictable than those of the humans pulling the strings.

Legal redress

The pushback against scientific dissidents is currently not too difficult for our crony leaders to handle. They can just reject the proposals and the people who issue them using unspecified or unjustified reasons, amplified by a paid-for media. Fake news and conspiracy theory are two very useful disposal bins that are always close at hand.

But if governments have over-reached their constitutional and legal powers, and that can be proven, that's a game changer. So there's no shortage of people trying to get legal actions off the ground – believe it or not, for the public good.

Legal strategies targeting policies, authorities, complicit companies and individuals in government are being initiated thick and fast. They vary from very well organised attempts to convict global leaders for crimes against humanity, in the mould of the Nuremberg trials, to individual assaults on particular measures, such as 10pm curfews. They include the well publicised challenge of British entrepreneur Simon Dolan against the UK lockdown, which failed initially, but the appeal hearing will be heard on 29th October. Reassuringly, in a case that sounds like state-sanctioned genocide (still considered a conspiracy theory), UK health minister Matt Hancock will now likely face a legal challenge over the government's blanket issue of illegal 'Do Not Resuscitate' (DNR) notices.

If you want to get a feel for the seriousness of the legal fire power that's building internationally, you could do worse than listen to Dr. Reiner Fuellmich, a German trial lawyer and expert on international law, corruption cases and medical law. Dr Fuellmich is working as part of an international network of lawyers whose aim is to challenge the perpetrators of national lockdowns and associated measures, referred to in his words as the "corona fraud scandal", as crimes against humanity.

Dr Reiner Fuellmich explains why he believes corona lockdowns, testing, social distancing, social isolation and associated measures represent fraud and crimes against humanity.

Take action now

What will happen in the days, weeks and months ahead of us is uncertain. But irrespective of this uncertainty, adding your voice to those of Drs Kulldorf, Gupta and Bhattacharya, along with the nearly 10,000 scientists and doctors and 90,000 members of the public, who've already done so, will move the dial in the right direction.

Sign the Great Barrington Declaration now

Next, we ask that you please forward this article and/or the link to the declaration as widely as you can.

As you'll discover in our second piece this week – the tide may be turning. That's because our combined voices are getting ever louder and being increasingly heard.

Showdown: Great Barrington Declaration v John Snow Memorandum

Date:

16 October 2020



Scientific discourse suspended as we enter a new era of scientific & medical McCarthvism

Content Sections

- • In one corner...
- • In the other corner...
- Adapt, don't fight and reinstate discourse
- Scientific and medical McCarthyism not openness and dialogue
- Play the Great Reset game or fade on the sidelines?
- Call to Action

Rob Verkerk PhD, founder, executive & scientific director, ANH-Intl

Scientific and technological acceleration is one of the hallmarks of the current era. Like an imperfectly balanced spinning top, it can spin out of control. Soon after the World Health Organization declared Covid-19 a pandemic in March, the spinning top developed a severe wobble. It was triggered by two competing processes: on one side, the suspension of the scientific peer-review process, and, on the other, the

marginalisation of scientists and doctors posing solutions that didn't fit with, what is widely referred to, as the 'mainstream narrative'. That's the approach being followed by most governments, health authorities and global businesses that's being stage-managed by two closely aligned, Geneva-based entities, the World Health Organization and the World Economic Forum. This includes new initiatives like the COVAX facility that aims to ensure maximum coverage of the global population for Covid-19 vaccines, as well as protection for countries in the event of failures.

In one corner...

Two weeks ago, world-leading public health scientists came together and made, on 4 October 2020, the Great Barrington Declaration. It called for a seismic change in strategy compared with that currently being taken by the WHO-managed, Gates Foundation-subsidised, global cooperative response. The essence of the declaration, co-signed by over 30 leading scientists and medical doctors, is to resume normal human activities and allow the SARS-CoV-2 to move through healthy, younger populations, while shielding the vulnerable and older populations.

The key justification given is that the cure appears worse than the illness, a notion recently being expounded by none other than US President, Donald Trump. This view proposes that the process of shutting down economies and businesses, as well as enforcing social isolation, is leading to devastating effects that are disproportionate to the actual risks caused by the virus. The declaration has gathered, at the time of writing, the support of over 26,000 medical practitioners, nearly 10,000 medical and public health scientists and almost half a million concerned citizens, ourselves at ANH-Intl included in that mix. In anybody's book, that's some kind of consensus, but clearly one that runs contrary to the mainstream narrative.

Predictably, a rival from the mainstream camp has now emerged, and appears ready to meet its opponent, eye to eye, in the opposite corner. The new opponent goes by the name of the John Snow Memorandum. It was named after the British physician, widely viewed as the father of epidemiology, who carried out ground-breaking work on deciphering the origins of a cholera outbreak in London in the 1850s.

The rival comes complete with a website with the same basic architecture as that of the Great Barrington Declaration, including the ability to collect signatories. It's early days, so the 600 signatories who need to be one of the following, namely "scientist, medic, researcher, modeller, healthcare or public health professional", don't count for much as yet (the equivalent count for the Great Barrington Declaration stands at nearly 36,000 at the time of writing). But let's not forget that scientific consensus shouldn't ultimately be about numbers. It should be about the strength and robustness of the science being put forward. But it's interesting that the John Snow camp has decided to avoid asking members of the public for its support. Is it perhaps concerned it might lose against the rapidly building numbers (over 466,000 at the time of writing) getting behind the Great Barrington Declaration?

But the John Snow group have another trick up their sleeve. They've published their memorandum in one of the world's leading journals, *The Lancet*, in a paper appropriately entitled "*Scientific consensus on the COVID-19 pandemic: we need to act now*".

Table. Key features of the Great Barrington Declaration and John Snow Memorandum

Areas of difference	Great Barrington Declaration	John Snow Memorandum
Key arguments	Current lockdown policies are producing devastating effects on short and long-term public health, and these measures are disproportionate to the actual risks to society posed by the virus itself. Keeping these measures in place until a vaccine is available will cause irreparable damage, with the underprivileged being disproportionately harmed.	Controlling community spread I social isolation and other comm the best way to protect our socie economies until safe and effecti therapeutics arrive within the co
Risk to society posed by the virus	Low risk to healthy individuals; high risk to vulnerable populations	Very high risk; society cannot f until the virus is successfully tre therapeutic agents or vaccines
Key metrics for determining public health risk	Hospitalisations, deaths associated with Covid-19 disease, excess deaths	Cases of infection
Herd immunity	Allowing infection-acquired immunity to build among healthy populations in the community will, in time, provide increased protection to vulnerable populations	It is unethical to allow herd impactured through infection in that and herd immunity can only be vaccination of the majority of the
Relative risk	Covid-19 does not represent sufficient public health hazard to warrant draconian measures that decimate lives and livelihoods and will damage the futures of millions around the world. It should be treated in a similar manner to other respiratory diseases.	Covid-19 represents one of the threats the modern world has evand therefore necessitates dracopharmaceutical measures until seffective vaccines are available
Mitigation	Use available therapeutics for severely ill patients and shield vulnerable populations from infection	Use social distancing, face cove trace and other mechanisms to t community spread until a vaccin therapeutics are available.
Prevention	Focus primarily prevention efforts on vulnerable populations	Focus prevention efforts on enti regardless of susceptibility
Claimed weaknesses	Unethical, unscientific, not supported by enough mainstream scientists or doctors, and (we would add) lack of attention to building immune resilience	Disproportionate effects on who society, the costs (US\$10 trillio disproportionately large, collate great, no certainty that therapeu vaccines being developed will v

Government support

United States of America

193 member states (i.e. all mem World Health Organization, exceedance) of the World Organization

Examples of mainstream media criticism

Google censorship

Half-baked says *The Guardian* (UK) *The Guardian* is planning attack

GB advocates are climate deniers

Not a "legitimate scientific debate"

Trump support criticised (New York Times)

None found.

Adapt, don't fight and reinstate discourse

One of the best ways of properly recovering from the spinning top wobble, to which I referred at the outset, would be to reinstate scientific discourse. It's how Galileo's work cemented Copernicus' then-ultra-radical view, presented in the 16th century, that the Earth orbits around the sun (heliocentrism), which finally replaced the Ptolemaic system, supported by Christian teachings (the then Western, mainstream establishment) that wrongly proposed the sun orbits around Earth and is at the centre of "the heavens" (geocentrism).

Discourse requires dialogue. Dialogue requires direct engagement of minds, arguments and likely testing of hypotheses (experimentation or trials). Not just a tit-for-tat, comparison of numbers or 'quality' of signatories, and media shaming.

The only government administration we're aware of that has pulled in behind the Great Barrington Declaration is that of the United States. This has created outrage among Democrats who argue allowing the population to function normally and gain infection-acquired, as opposed to vaccination-acquired, immunity is unscientific and unethical. But we have yet to find a single Great Barrington critic who has compared the ethics of the John Snow (mainstream agenda) which forces whole economies to their knees with immense collateral damage to lives and livelihoods, as against the Great Barrington one (currently the main alternate agenda) that treats Covid-19 more like any other infectious respiratory disease.

Dealing with a virus newly adapted to the human host, shutting down vast tracts of normal human activity in an effort to reduce transmission, and creating vaccines within unprecedented short time frames using synthetic biology in entirely novel and untested ways are each, individually, areas of massive uncertainty. Put them together and you have something akin to a combination lock in terms of the possible range of outcomes.

It is therefore at this juncture of human history – more than at any other time – that we need scientific dialogue and discourse.

Scientific and medical McCarthyism – not openness and dialogue

Yet scientists and doctors who are posing plausible solutions, like those linked to the Great Barrington Declaration, are being blanked or excluded. Blanking occurs through media blackout, censorship (especially via social media platforms), or just plain dismissal or ridicule. It is no secret that the mainstream media strategy is considered a central part of the global Covid-19 response.

This is borne out by the 'transformation map' (see Figure below) created by the World Economic Forum, the self-appointed, private, non-profit orchestrator between the public (government) and private (stakeholder) sectors that is coordinating key elements of the global response to the pandemic. This is quite at odds with the World Economic Forum's frequent emphasis of the importance of dialogue.

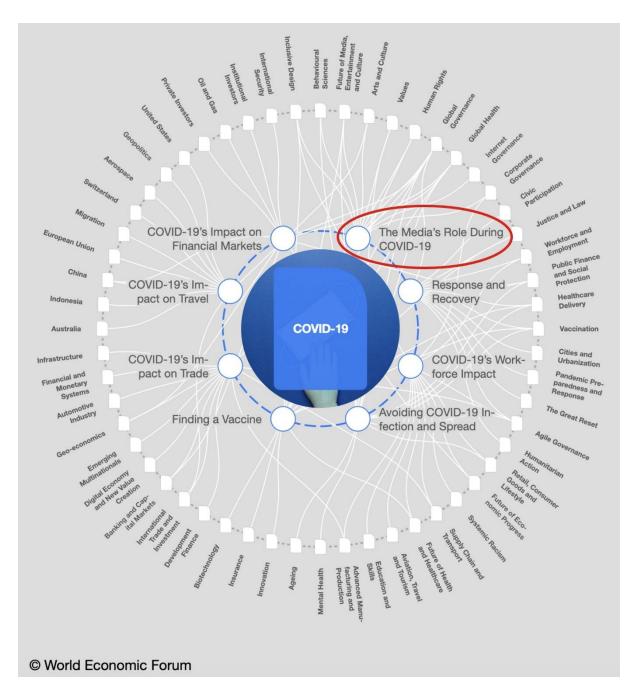


Figure. The World Economic Forum's transformation map (click here for interactive map). Red ellipse highlights central role of the media in Covid-19 global response.

We have entered a new era of scientific and medical McCarthyism – and if we don't emerge from it fast, the consequences could be grave. That's because the path being followed has been pre-determined see our separate piece on the Great Reset [LINK]) and does not allow for a balanced consideration of other options.

Play the Great Reset game or fade on the sidelines?

It seems that some think that if you are to "redraw the geo-political map of the world" – as the World Economic Forum aims to do in its Great Reset (see separate piece this week) – you have to share the same values as those who are planning to push the reset button. It's a selective dialogue. And it's most certainly not scientific discourse.

Call to Action

- 1. Sign the Great Barrington Declaration now if you agree with its tenets.
- 2. Please also share this article as widely as you can, to help those you care about and those in your networks understand the importance
- 3. Promote dialogue and discourse and share information with those whose views differ from your own.

Why the public distrusts official Covid science

Date:

16 October 2020

The inevitable consequence of data being omitted, twisted or misleadingly presented

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By Melissa Smith, outreach & communications officer and Rob Verkerk PhD, executive & scientific director

Testing rates have shot up and 'cases' have inevitably followed suit. Unsurprisingly, governments are now responding by tightening the screws in a bid to reduce community spread of the novel coronavirus.

Equally unsurprisingly, more and more members of the public are realising that case counts based on questionable PCR tests are probably not enough to justify restrictions that destroy livelihoods, economies, mental health – and the rest of it. More useful metrics of the risk posed by the virus are hospitalisation rates, Covid-related deaths and 'excess deaths' (excess death rates as compared against 5-year averages). Hospitalisations and deaths still remain low – but is this just lag? The prevailing uncertainty means we're being taunted by the threat of a repeat of what happened earlier this year.

Who knows?

Scientific advisors to governments appear to be offering randomly picked rocks from a beach to throw at the problems with little or no robust science to support the strategies.

Those who stand up and speak out are dismissed, belittled and smeared. Politicians continue to push the fear agenda, and the bullying and coercion of citizens is on the up.

Scientific discourse – both between scientists and by the public – is being shut down on social media. We're told public non-compliance will end in even in more pain.

Matt Hancock, UK Health Secretary, speaking in Parliament this week, told MPs that delaying action will lead to more non-Covid deaths and economic pain than that caused by the hugely damaging restrictions and lockdowns being imposed.

With all the confusion, mixed messages and differences of opinion, data generated over the coming weeks or months will help make things a little more clear, although if governments move forward with only a single strategy, there will be little prospect of valid comparisons being made across a range of different strategies.

'Lies, damn lies and statistics'

Data themselves aren't the end of the story. It depends on how the stats are collected, recorded, interpreted and presented. Governments and the media appear to pick and choose what they want to share to support their political agenda, presumably knowing the majority won't look at the underlying data in an effort to unpick the bigger picture that underlies the headlines.

Here, we look at three areas that compare different approaches to collecting or presenting data. You can make what you want of it – because, at least for the time being, we have free will.

Mask confusion

First, we were warned that the wearing of masks could cause more harm than good to members of the general public. Jenny Harries, UK deputy chief medical officer said wearing a mask could put people at more risk. Let's remember at this time the science very clearly suggested that there was no scientific evidence that wearing masks would protect people from respiratory viruses in general community settings.

This view was reflected when Dr Anthony Fauci initially told US citizens not to wear masks and a paper in the prestigious journal *The New England Journal of Medicine* cemented this by stating mask wearing outside of a hospital setting "... offers little, if any, protection from infection."

But then, the U-turn: we were next told we should all wear face coverings or masks, because the science had changed. But was the U-turn down to changing science or changing politics?

Shouldn't we rely on the latest science? So how's this: a brand new study by the US Centers for Disease Control and Prevention found, in a study of outpatients from 11 healthcare centres, that of those who tested positive and went on to develop Covid symptoms, 71% reported always wearing face coverings or masks (within 14 days of onset of symptoms). This contrasted with just 4% for those who reported never wearing masks, and the same proportion again who reported rarely wearing one. This obviously

doesn't take into account any differences in viral load or exposure, or the ability of a mask-wearer to reduce (or increase) transmission to others.

What's striking is that the data show that the proportion testing positive was directly and positively associated with the amount of mask wearing and that there were 18 times more Covid symptomatic/positive test people in the "always" wearers versus the "never" wearer groups. It sure puts some questions into the minds of those who might have thought masks were a good thing.

Morbidity and Mortality Weekly Report

TABLE. (Continued) Characteristics of symptomatic adults ≥18 years who were outpatients in 11 academic health care facilities and who received positive and negative SARS-CoV-2 test results (N = 314)* — United States, July 1–29, 2020

	No. (%)		
Characteristic	Case-patients (n = 154)	Control participants (n = 160)	P-value
Previous close contact with a person with known COVID-19 (mi	ssing = 1)		
No	89 (57.8)	136 (85.5)	< 0.01
Yes	65 (42.2)	23 (14.5)	
Relationship to close contact with known COVID-19 (n = 88)			
Family	33 (50.8)	5 (21.7)	<0.01
Friend	9 (13.8)	4 (17.4)	
Work colleague	11 (16.9)	6 (26.1)	
Other**	6 (9.2)	8 (34.8)	
Multiple	6 (9.2)	0 (0.0)	
Reported use of cloth face covering or mask 14 days before illn	ess onset (missing	<u>=</u> 2)	
Never	6 (3.9)	5 (3.1)	0.86
Rarely	6 (3.9)	6 (3.8)	
Sometimes	11 (7.2)	7 (4.4)	
Often	22 (14.4)	23 (14.5)	
Always	108 (70.6)	118 (74.2)	

^{*} Respondents who completed the interview 14–23 days after their test date. Five participants had significant missingness for exposure questions and were removed from the analysis. Patients were randomly sampled from 11 academic health care systems that are part of the Influenza Vaccine Effectiveness in the Critically III Network sites (Baystate Medical Center, Springfield, Massachusetts; Beth Israel Deaconess Medical Center, Boston, Massachusetts; University of Colorado School of Medicine, Aurora, Colorado; Hennepin County Medical Center, Minnesota; Intermountain Healthcare, Salt Lake City, Utah; Ohio State University Wexner Medical Center, Columbus, Ohio; Wake Forest University Baptist Medical Center, Winston-Salem, North Carolina; Vanderbilt University Medical Center, Nashville, Tennessee; John Hopkins Hospital, Baltimore, Maryland; Stanford University Medical Center, Palo Alto, California; University of Washington Medical Center, Seattle, Washington). Participating states include California, Colorado, Maryland, Massachusetts, Minnesota, North Carolina, Ohio, Tennessee, Utah, and Washington.

† Other race includes responses of Native American/Alaska Native, Asian, Native Hawaiian/Other Pacific Islander, and other; these were combined because of small sample sizes.

Figure 1. Source: Centers for Disease Control and Prevention, Morbidity and Mortality Weekly Report "Community and Close Contact Exposures Associated with COVID-19 Among Symptomatic Adults ≥18 Years in 11 Outpatient Health Care Facilities — United States, July 2020"

Interestingly, the same relationship with mask-wearing was found with those who tested negative, who also had symptoms, presumably linked to false negatives or other respiratory pathogens. This suggests that SARS-CoV-2 transmission, at least with or without masks, works in much the same way as with other respiratory pathogens – so surely that re-validates the older science that says, don't bother wearing masks in community settings?

Given that the CDC data suggests that mask wearers may become massive reservoirs of SARS-CoV-2 and other respiratory viruses, are you still persuaded, if you wear a mask, that you'll be protecting others?

Reported at least one of the following underlying chronic medical conditions: cardiac condition, hypertension, asthma, chronic obstructive pulmonary disease, immunodeficiency, psychiatric condition, diabetes, or obesity.
 Community exposure questions asked were "In the 14 days before feeling ill about how often did you:" with options of "shop for items (groceries, prescriptions,

[&]quot;Community exposure questions asked were "In the 14 days before feeling ill about how often did you: with options of "shop for items (grocenes, prescriptions, home goods, clothing, etc.)" (missing = 1); "have people visit you inside your home or go inside someone else's home where there were more than 10 people"; "have people visit you inside your home or go inside someone else's home where there were 10 people or less"; "go to church or a religious gathering/place of worship" (missing = 1); "go to a restaurant (dine-in, any area designated by the restaurant including patio seating)" (missing = 1); "go to a bar or coffee shop (indoors)" (missing = 2); "use public transportation (bus, subway, streetcar, train, etc.)" (missing = 1); "go to an office setting (other than for healthcare purposes)" (missing = 1); "go to a gym or fitness center" (missing = 1); and "go to a salon or barber (e.g., hair salon, nail salon, etc.)" (missing = 1). Response options were coded as never versus at least once in the 14 days prior to illness onset. Some participants had missing data for exposure questions:

^{**} Other includes patients of health care workers (9), patron of a restaurant (1), spouse of employee (1), day care teacher (1), member of a religious congregation (1), and unspecified (1)

UK 'case' data

The UK government is implementing more lockdowns based on rising 'case' rates. Once again, the devil is in the detail. The government has chosen to report case data in two ways. One is by specimen date (the date a test is undertaken), the other by reported date. Needless to say, there is a significant difference between the two. The 'reported by date' data show ongoing high levels of cases, while the 'specimen date' data reveal a different story entirely. First of increasing, then of declining numbers of cases. The government and media appear to be highlighting the number of cases by reported date in order to drive fear or compliance among the general public and justify the ramping up of restrictions.

Professor Carl Heneghan from the Centre for Evidence Based medicine suggests we should rely on the 'specimen date' data.

Which data set do you want to rely on?

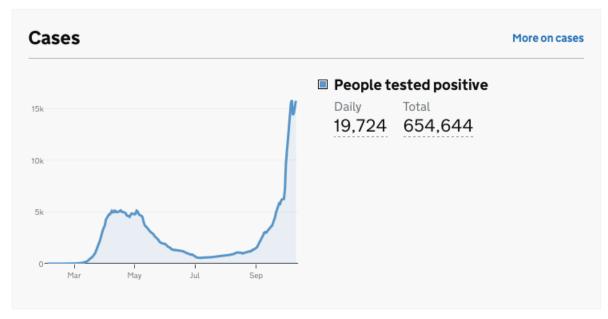


Figure 2A. UK Government Covid-19 dashboard summary showing a snapshot of daily cases by reporting date, the government's preferred reporting measure Source and presentation of data: UK Government Covid-19 dashboard

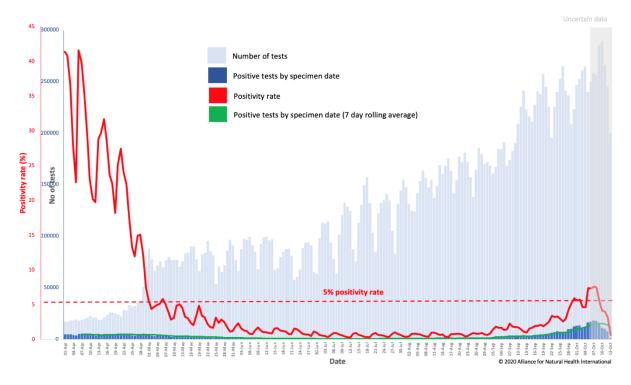


Figure 2B. Number of daily cases by specimen date against number of pillar 1 & 2 daily tests as at 13/10/20. Positivity rate = the ratio (as a percentage) of positive tests among those tested each day. The 5% positivity rate threshold is marked because on 12 May 2020, the World Health Organization advised governments that positivity rates should be 5% or less for 14 days before easing lockdowns. Source data: UK Government Covid-19 dashboard. Presentation of data by ANH-Intl.

When you take our view of UK government data (Fig 2B), you see something a little different to that which is presented by the government itself (Fig. 2A). Which version of the presentation induces more fear, and appears to provide stronger justification for lockdown? Either way, the longer-term trend will of course be critical and the dip that is apparent in Fig 2B may be linked to the greater uncertainty of the most recent data.

Nonetheless, it is our view, and the view of many others including the scientists and doctors supporting the Great Barrington Declaration, that restrictive measures like lockdown should be made on the basis of risks of severe disease, hospitalisation capacity, availability and success or otherwise of therapeutic measures – and mortality rates (especially excess mortality).

Currently, of the 24 participating European EuroMOMO countries, only Spain, Belgium and the Netherlands are experiencing any excess mortality – and the level in these three countries is currently deemed low.

Do you consider yourself to be anti-science or a conspiracy theorist if you don't go along with the prevailing government view to re-invigorate lockdown measures?

Is Covid really worse than pneumonia and flu?

Recent reporting in the UK media is a classic example of cherry picking and unbalanced journalism. It relies, once again, on using very specific data sets that appear set to get people to push the panic button. Things can look somewhat different if you use another set of official data. Are you sensing there's a theme here?

Figure 3A is the BBC's presentation of Office for National Statistics (ONS) data that's being widely disseminated to rubbish anyone, scientists and doctors included, who say Covid is on par with a typical bad flu season.

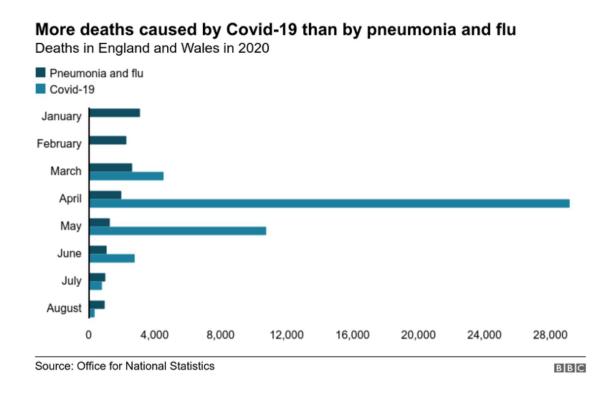
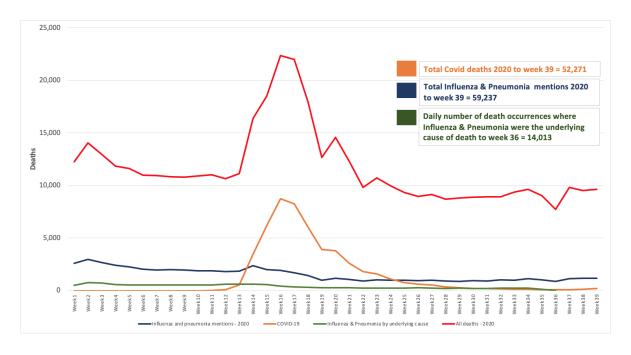


Figure 3A. Covid-19 mortality in England and Wales compared with that from non-Covid pneumonia and influenza.

Source and presentation of data: BBC News



A death can be registered with both COVID-19 and Influenza and Pneumonia mentioned on the death certificate.

Because pneumonia may be a consequence of COVID-19, deaths where both were mentioned have been counted only in the COVID-19 category.

Figures for Influenza and Pneumonia represent where either of these causes have been mentioned anywhere on the death certificate meaning they will not necessarily be the underlying cause of death.

Figure 3B. Total mortality (red line) and Covid-19 mortality (orange line) in England and Wales, compared with deaths from non-Covid pneumonia and influenza ('mentions' = blue line; 'underlying cause' = green line).

Source of data: Office for National Statistics. Presentation of data: ANH-Intl.

We've gone and dug out the original ONS data and plotted it directly – as shown in Fig 3B. The spike during the main surge of Covid in April and May is apparent, but thereafter, Covid-related deaths have been tracking substantially beneath those of non-Covid pneumonia and influenza.

Similarly, in the US, headlines trumpet the deadliness of the coronavirus but downplay the number of deaths related to flu and pneumonia.

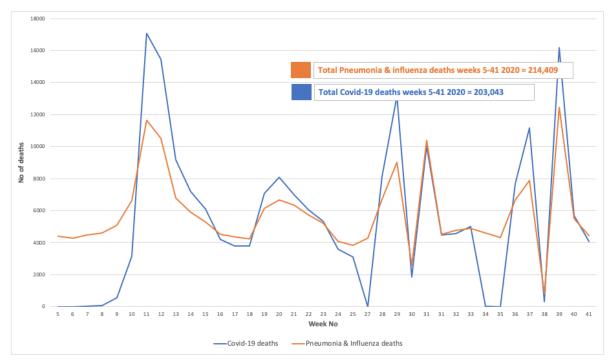


Figure 4. Pneumonia & Influenza and Covid deaths weeks 5 to 41 2020 Source data: Centers for Disease Control and Prevention. Presentation of data: ANH-Intl.

Do you note the close association between peaks and troughs in both diseases – does this suggest they may be some conflation between Covid-19 and other respiratory diseases?

Time to scratch our heads – and look in the toilet bowl

Is it any wonder the general public are losing faith in their leaders and their advisors along with their policies and increasingly distrust the science being used to justify said policies?

Let's just throw one additional piece of scientific information into the mix. There is a rapidly growing body of evidence to show that many parts of our environment test positive for SARS-CoV-2, the virus that causes Covid-19. Especially the sewerage and wastewater systems where human waste ends up being treated and recycled.

All that means is that the specific genetic sequences that are targeted by different RT-PCR testing systems have shown up, or there has been an error (a false positive), the likelihood of which will be much higher and can exceed 90% of all tests when prevalence of the real virus is low.

If you find the sequence that the PCR system uses (different ones amplify different regions of SARS-CoV-2) – bingo – you'll get a positive result. But that doesn't mean you're dealing with a potentially infectious virus, because you could simply have amplified viral remnants or waste. And there's an awful lot of that in sewage systems, and there is likely a lot of it elsewhere.

So when we were alerted about a video by a young vlogger-cum-citizen-scientist, our interest was piqued. Read on and see the video below!

When confused, turn to citizen science!

With all the contradictions and changes in official Covid science, and more and more voices, despite all the censorship, claiming differing degrees of foul play, it's inevitable that some citizens will go out to test a few of their hypotheses themselves.

We found the following YouTube video from a young Vlogger – Jordan Houston – who has over 1 million followers. Being perfectly healthy but having increasing doubts over the reliability of the PCR tests being used, he decided to test his dog, keyboard and the pavement. Two out of three of them came back positive. See the video and find out which two! This is citizen science within a topsy-turvy world in action!

And they wonder why more and more of us distrust official Covid science?

The Great Reset or the Great Divide?

Date:

16 October 2020



The World Economic Forum's exit strategy from Covid-19 is based on false assumptions

Content Sections

Video Transcript

This video has been made to public draw attention to the World Economic Forum's 'Great Reset', the masterplan agreed by governments and transnational corporations that aims to set humans on a new course in the wake of Covid-19.

The information contained aims to be factual and sources are provided. Where opinions are offered, this is clearly expressed.

IMPORTANT NOTICE. We are aware YouTube has removed our 'Great Reset or Great Divide' video and we are currently appealing the decision. UPDATE: Our appeal was summarily dismissed so the video (see below) remains unavailable on YouTube. In the meantime, please find the transcript below. It is a reminder of the extent to which social media platforms are censoring freedom of expression around the system's plans for humanity and the planet. We hope human common sense will prevail over human programming of AI censoring bots. In the meantime you can watch the full video on Bitchute (click on the image below).

Video Transcript

Cortical implants and brain machine interfaces that allow an amputee to control a neuroprosthetic device is a great use of state-of-the-art technology.

But every new technology can have a darker side, depending on who controls its use. Right now, brain to brain interfaces allow humans to control the behaviour of rats. But how would you feel about having your brain controlled by another human? Or have the police or border controls read your thoughts?

Hi, my name's Rob Verkerk. I'm the founder of ANH International. We're an NGO that for the last 18 years has been at the forefront of campaigns, activism, research and education in the field of natural and sustainable health. It's an area that traverses many fields and disciplines, including science, law, politics, economics, as well as the social and environmental sciences. Right at its heart is what we see as our right to manage our health by working with nature not against it – recognising that this right has been consistently been under attack by those who have different ideas.

In this video we take a look at The Great Reset, the masterplan dreamed up by Klaus Schwab, the octogenarian founder of the World Economic Forum, that aims to use Covid-19 as the prime trigger to radically change human life on Earth in ways that go well beyond most people's perception of what the 'new normal' is likely to entail. So many people have been saying, nothing makes sense. When you begin to understand the Great Reset and Schwab's closely related vision of the Fourth Industrial Revolution, our promise to you is that many of the things that are happening at the moment will be explained, even, if you still find they don't make sense to you or resonate. Many of these changes will affect our lives, including our health, in very profound ways, not necessarily for the better. They also go to the heart of our long-standing vision of what natural health is all about – and that's working with nature, not against it – or even, in place of it.

What about Smart dust? Over 15 years ago, scientists envisaged unobtrusively monitoring real-world processes with microcomputers that were smaller than a grain of sand.

But do you want to be surveilled 24/7, not just where you are, but - how you are? What about allowing others to control how you function or even think? Or are you happy for others to read your thoughts, all without you even knowing it? And how about signing up to a new social contract that requires you, for the sake of others, to share all sorts of things you once thought were safeguarded by an inalienable right to privacy?

These are just a few of the ideas that are part of the vision of one man, Professor Klaus Schwab, the now 82-year-old engineer and economist who founded the World Economic Forum, a private non-profit organisation supported by governments, big businesses and billionaires the world over, back in 1971 in the Alpine mountain resort of Davos, Switzerland. Schwab's vision of the future is incarnated in his 2016 book, the *Fourth Industrial Revolution*. This vision is now being fast-tracked by what Schwab calls the Great Reset. It's being communicated alongside another slogan, Build Back Better, that's an old Orwellian UN slogan being repurposed by world leaders including Boris Johnson and US presidential hopeful Joe Biden keen to implement the Great Reset. Look for it, it's a sign, literally.

Professor Schwab is probably the closest thing you're likely to find to a puppet master responsible for the global cooperation we're seeing among governments and big corporates as they navigate the current Covid-19 quagmire.

Schwab was born in Ravensburg, Germany in 1938 at a time when the Nazi regime rose to power and went onto create a regime built on brainwashing, fear, eugenics and extreme authoritarianism. It's impossible to say how this early life experience may have influenced Schwab's desire to create the kind of new world order he's now masterminding. But as we'll see later, Schwab makes some key assumptions that appear to demonstrate a disconnect with the rest of us who don't frequent the rarefied atmosphere of Davos each year.

The Great Reset involves changes to almost every facet of our lives – how we work, how we get paid and pay for things, what kind of medicines we need, how we're monitored, how we share information, how we travel. No stone is left unturned and we can see many of the new processes and technologies posed in Schwab's vision of the Fourth Industrial Revolution already being trialled as more and more people around the world are forced into submission through lockdowns. These lockdowns as more and more people are becoming aware, are of course not based on the health risk posed by the virus or a need to prevent hospitals from being over-run. They're based instead – as we've shown in another video – on a faulty PCR test that looks for a specific gene sequence linked to the virus that generates very high levels of false positives when the infection prevalence is low.

Schwab is far from unique in having long recognised that the path the world has been on since the end of World War II would lead to destruction of the world around us and to society as we know it. That way of human life is simply not sustainable. Changing courses requires disruption – and the World Economic Forum's reports on global risks released each January have increasingly recognised the emergence of factors and processes that can bring about that disruption.

They include the meteoric pace of innovation that's morphed into an innovation arms race; climate change coupled with habitat destruction and loss of biodiversity that's triggering the Sixth Mass Extinction and the end of the natural world as we know it; widening social and health inequalities between different parts of the world; geopolitical instability, and; the rise of populist culture alongside a growing resistance to globalisation. That of course leads to what Schwab refers to as 'profound social instability'. Despite the immensity of all these things, they haven't been enough to create the tipping point Schwab's been looking for. A game-changing event superimposed on top of all of this was needed. And in 2020, the last piece of Schwab's jigsaw, one that was both anticipated and predicted, arrived: a pandemic. The Covid-19 crisis, that Schwab likens to a World War because it affects all parts of all social and economic systems in all parts of the world, now serves as the catalyst for Schwab's Great Reset. Like the re-purposed Build Back Better slogan, it seems Schwab may have borrowed the title of his initiative from another professor, Richard Florida from the University of Toronto. In his book, Florida attempted to envision cities that would be winners and losers courtesy of the rise of creatives following the financial crash of 2007 and 2008. It's more than ironic that creatives are one particular group that've been devastated by government actions in response to Covid-19.

Having usurped the term, it didn't take Klaus Schwab long to release a book titled *Covid-19: The Great Reset*, that he co-wrote with ex-World Economic Forum colleague and economist, Dr Thierry Malleret.

The power of Schwab's vision is that along with the massive disruption it requires to take form, it also dangles enough carrots in front of us to make at least some of it seem appealing. Take, just for starters, solving three of the current biggest issues of our time: poverty, inequality and climate change. These are all close to the top of the priority list of anyone with a social and environmental conscience, whether left- or right-leaning.

The basic tenets of the Great Reset aren't hidden from us. While they may have been developed by a global elite, you'll find them all conveniently laid out on the World Economic Forum's website. You'll also find that the World Economic Forum's mission including the Great Reset is supported by virtually every major corporation or association on the planet, from Accenture, the American Heart Association and Amazon to the Zenith Bank and Zurich Insurance Group. Even Pope Francis is in on the act, calling for a global reset while taking a side swipe at the rise of so-called neo-liberalism and laying down a new dogma that goes beyond Catholicism in his October 2020 encyclical, Fratelli tutti, or in English 'All Brothers'. In his third and most recent encyclical, the Pope examines the way the world has failed to cooperate during the Covid-19 crisis. The finger is firmly pointed, whether directly or insinuated, at those who haven't played the game. In the cross-hairs are none other than the current administration at the White House, lockdown skeptics, mask deniers and anyone who dares question the safety or effectiveness of any genetically engineered, synthetic biology vaccine that's seen as the primary means of releasing the world from its current demise.

As widely supported as Schwab's vision might be among the Davos elite who've had the pleasure of being exposed to it over the last few years, its premises don't seem to resonate in the same way with the relatively small proportion of the public that have been exposed to it.

We think this is because Schwab's vision includes a number of fundamental flaws or false assumptions. And to keep things simple here, we're just going to look at what we regard as the Big Three – three flaws or false assumptions that, in our view, are so deep-seated and integral to the vision, they render it not fit for purpose:

SOCIAL CONTRACTS

Firstly, Schwab wants us to form social contracts with each other so that we can all toe a specific line, one largely dictated by people within Schwab's own circles, ones built over many years during annual meetings in Davos in the Swiss Alps. The underlying notion is that we must, in all our endeavours, do good in ways that ultimately benefit others and future generations. Think of it like a humming ant colony where righteous behaviours are programmed in to benefit the colony as a whole, rather than the individual ant. It's an enchanting idea, but deciding what's good and right, or bad and wrong, isn't something that everyone can agree on. It's also highly subjective and few if any of us have enough information to really know what the effects of our newly required behaviours will be. So, are we meant to engage in social contracts with those who share views that are the polar opposite of our own – regardless? And what are the consequences of not signing up for this – do we have to pay a price or have privileges withdrawn? This polarity of views is at the heart of the debate on Covid-19 because more and more people feel the effects of the virus do not warrant the destruction of social systems and economies. Few governments are even talking about it. After all, isn't it logical to question how can you place so much emphasis on one disease and blindly accept so much collateral damage

to livelihoods, economies and even the health of others? And also, when we know that scientific discourse has been fundamental to the progression of science up until this point, why is it OK to simply marginalise the growing number of doctors and scientists, us included, who've signed up to the Great Barrington Declaration. Let's take an example, for the many of us who've not been convinced about the scientific rationale for wearing a face covering in public places, why would we want to engage in a social contract with those who force us to wear masks yet do so little to limit the collateral damage of their government's myopic, Covid-focused agendas?

SOCIAL & ENVIRONMENTAL CONSCIENCE DOESN'T NECESSITATE A CYBER, TRANS-HUMAN FUTURE

Secondly, we think Schwab and his team have got it badly wrong when they assume that everyone with a social and environmental conscience and anyone who supports the idea of moving towards a more sustainable future must also be, or become, advocates of all the other things that Schwab envisages in his Fourth Industrial 'Cyber' Revolution. That includes implantable communication devices, advanced and pervasive biometric surveillance, fast-tracked synthetic biology vaccines like the ones currently in development for Covid, and even the development of designer beings born with deliberately edited genetic codes. It also has other less sci-fi but nevertheless still game-changing elements to it, such as shifting the Western world, and followers of it, from shareholder-based capitalism to stakeholder-based capitalism, a concept that can be hard to distinguish from cronyism.

Many of us are passionate about nature and we want to see humans working with it, not against it. We're all for progress, and we're happy to see technology facilitate our lives, but not necessarily to control us or replace us. Schwab sees an increasing blurring between the biological and technological world. Losing any clear delineation between humans and the tools it creates risks us losing the very senses and consciousness that help us protect the world around us – for the sake not only of ourselves, but for the other organisms with which we share our planet, now and into the future.

USING COERCION TO FORCE US INTO A DISRUPTIVE, HIGH RISK FUTURE

Thirdly, we can all agree that the 'old normal' created a gamut of problems, socially, economically and environmentally – and wasn't sustainable. Yes, the gender gap has been far too big; yes, racial inequalities have long been unacceptable; yes, so-called industrial progress linked to the second and third industrial revolutions have decimated habitats and biodiversity, triggering the Sixth Mass Extinction. But as Schwab himself recognises over and over again in his books and interviews as he positions a cluster of rapidly emerging, largely untested cyber technologies as the solution, these all bear huge risks and uncertainty. In the wrong hands – as Schwab freely admits – they could destroy humanity and even the natural environment. In his typically utopian manner of

speech, he talks of needing to develop harmonious agreement on what's acceptable and unacceptable ethically to avoid these technologies being used to no good purpose for the benefit of a few. So, with no attempt to reach out to the people, the Davos crew have decided that they're going to set us on this path to their own view of Nirvana, without consulting us – the people. Without showing us their risk assessments or comparing them against all the other strategies we could possibly adopt. It seems it's the World Economic Forum route, or the highway.

The trouble is they're using the Covid crisis to force us to agree to all sorts of things that drive a coach and horses through rights that have been hard-earned through hundreds of years of wars, upheavals, protests, treaties and campaigns. And we're supposed to do this now under coercion, while democracy has been suspended because of the emergency measures that have been implemented in nearly every country on the planet. All because the World Health Organization's excessively broad definition of a pandemic allows them to freeze-frame normal life, keep the public in a state of fear and hand governments authoritarian powers.

To many of us, this is simply unacceptable, not least of all because we live in a world in which the public distrust of governments and large corporations has never been so high – often for very good reason.

We've made this video to help clarify our position, which we know represents the views of many of our supporters around the world. We're fed up with being marginalised as conspiracy theorists because we simply question how safe or effective the Covid vaccines will be, or what system of biometric surveillance they're planning to roll-out, or if the mission to send thousands of micro-satellites into orbit to beam down 5G wavelengths that might disturb the function of our brains and bodies, or the orientation behaviour of migratory birds or insect pollinators.

People who question Schwab's vision are not all far-right neoliberals with no conscience about social and environmental issues. Take a look at the faces of those who were demonstrating in Berlin or London. You'll see they have a both a deep passion for humanity and for the environment.

Like so many others, we feel passionately that global governments, along with the big stakeholders in industry and the media, are on a divergent and dissonant path. We don't see a need to decimate lives and futures, using a newly adapted virus as the excuse for instigating a twisted Utopian vision. One which we're being forced to comply with, through increased coercion and a suspension of due democratic process.

That's why an ever growing number of us resist what's being thrown at us – and why we'll continue to resist. So we can reimagine a different view of a better future, not necessarily one dreamed up in Professor Schwab's spiritual home of Davos. That's all.

https://youtu.be/uN9Xh5grzhk

Walk & Talk with Rob Verkerk PhD #1

Date:

22 October 2020



Our team's decided it would be a good idea for Rob Verkerk, our founder, to say a few words to you each week, probably twice a week if he can manage it around his hectic schedule.

Sometimes he'll be walking, hence the 'Walk and Talk' tag, whereas sometimes he might even be riding his bike, in which case his video message will be titled 'Ride and Confide'. But he says he wants to try and communicate to you from natural spaces and places. This first video comes to you earlier today from the woods just round the corner from our office in Chilworth, in the Surrey Hills near Guildford, England.

The primary aim is to disseminate these messages via social media platforms - so please keep an eye on the Alliance for Natural Health International's Facebook, MeWe, Twitter, Instagram, YouTube, Bitchute and BrandNewTube channels along with ColdCast and Parler.

Some of you may have noticed that last week, YouTube removed our Great Reset or Great Divide video from YouTube. We're still unclear which part of its community rules we broke. We've appealed and our appeal was immediately rejected with no reasons given. Diversifying our use of social media platforms is our only option if we're to maintain our freedom of expression during these critical times and we strongly suggest that you sign up for our free email newsletter to ensure our messages arrive in your inbox. You'll find the subscribe box on the top bar of our homepage.

Over to Rob https://youtu.be/Tf-x6e9nC Q

Vitamin D - what governments are and aren't telling us

Date:

22 October 2020

Watch the prequel video to our new TEST & TAKE: VITAMIN D campaign

https://youtu.be/cSh4HFNaCkA

Content Sections

- Video transcript
- Examples of UK-Based Vitamin D Home Testing Companies
- Questionnaire-based check for Vitamin D levels

Enough data have now been published to conclude that people who were deficient in vitamin D had worse outcomes from covid-19 and higher death rates. Yet governments and public health authorities have been slow to communicate this publicly as well as give appropriate advice on whether or not to supplement with vitamin D and at what levels.

We think that such a cheap, safe and effective fix should be shouted from the rooftops, which is why we're launching our new **'TEST & TAKE: VITAMIN D'** campaign on Thursday 29th October 2020.

This week's campaign prequel video sets the scene for why vitamin D is such a game changer of a vitamin, how to find your level and whether you're likely to need to supplement or not.

Video transcript

Should we, shouldn't we? Yes - we're referring here to whether or not you should be taking vitamin D supplements. Have you noticed governments around the world have been flip flopping on this? Well, they shouldn't have, especially for those of us who're moving into the northern winter where your body can't make its own vitamin D from sunlight. But the trouble is – the amounts governments are generally recommending are not enough in most cases. Government health authorities have once again ignored decades of published, peer reviewed research by vitamin D researchers and clinicians.

In this video, we'll help you understand what kinds of vitamin D are best to take and how to find out how much is enough for you.

It's such easy self-care that you can do at home for yourself and with your family. These simple steps could greatly reduce your risk of getting a serious respiratory infection - especially if you have a darker skin and live in the northern hemisphere.

Hi, I'm Meleni Aldridge from the Alliance for Natural Health International. I'm also an integrative medicine practitioner with a particular focus in nutrition, functional medicine and clinical psychoneuroimmunology. Today, I'd like to talk to you about vitamin D ahead of the launch of our new 'TEST & TAKE: VITAMIN D' campaign next week because of its power to support our health and immune resilience - two things we so badly need as we face novel viruses and, in the north, the dark winter months.

Why is vitamin D so important?

Vitamin D is often called the sunshine vitamin and there's a really good reason why Nature made it so easy to for us to get it from the sun. That's because vitamin D, which is really a pro-hormone, rather than a coenzyme like other vitamins, was one of our earliest biochemical partners in our journey through evolution. We evolved in an environment with a lot of sunlight near the equator so it's understandable why vitamin D is hardwired into our genetics, physiology and metabolism. It's also the only vitamin that we can make in our skin, but we have to have enough sunshine bathing our bare skin to make it happen.

Because of this early partnership, vitamin D is involved in thousands of genetic and metabolic processes in our bodies and almost every cell needs it. We must have adequate levels of vitamin D to make strong bones and teeth; protect us from heart disease and cancer; prevent our cells being damaged by oxidation; keep internal inflammation under control and of course - the big one at this time - keeping our immune systems in resilient working order. And it's our immune systems, often thought of as less important than drugs or vaccines, that have ensured the survival of the human race throughout evolution. Vitamin D is also unique amongst the vitamins in that it works more like a potent hormone, regulating gene expression, and regulating key metabolic and physiological processes as well as activating the function of enzymes and proteins.

In short, vitamin D is pretty special and having enough in your circulation is essential for good health. But for many people it's in very short supply, meaning some key functions including immunity, are compromised. This isn't good at any time, but certainly not when many are being exposed to a novel virus. Sadly, finding out if someone is deficient in vitamin D still isn't routine among many doctors and most people think by taking the government-recommended amount of just 10 micrograms or 400 International Units a day – that's enough. The good news is the fix is simple and inexpensive – and you don't even need to see your doctor.

Vitamin D deficiency is also associated with lots of different diseases, from cancer through to heart disease, obesity and osteoporosis, so it's a no brainer to do what you can to optimise your own levels of vitamin D.

Despite the wealth of knowledge from extensive research and clinical data that we have on the benefits of vitamin D, governments - and most doctors - are still not promoting vitamin D testing and supplementation. I wonder how many of you know what your vitamin D level is? Or how many of you have been offered a vitamin D test by your doctor? If you live in the UK it's unlikely, as NHS doctors have been told, in order to save money, not to order vitamin D tests unless there is a specific concern about the deficiency disease, rickets.

About dosing...

Even where there is positive messaging from governments and doctors about vitamin D, the recommended levels are mostly too low to raise the circulating levels of vitamin D in your body to have the desired protective effects.

After it was discovered that a lot of people with the most severe Covid-19 symptoms were also chronically vitamin D deficient, most government health authorities have now decided to make recommendations that people take vitamin D supplements, especially if they are older or have darker skins.

As you can see, most countries recommend a paltry 10-15 micrograms or 400-600 International Units per day, except for Italy — which was hard hit earlier this year — recommending 50 micrograms / 2000 International Units per day and the US at 25 micrograms / 1000 International Units. In the European Union, independent of Covid-19, the recommended daily dose is just 10 micrograms or 400 International Units a day, with a so-called tolerable upper level for adults, including pregnant and breastfeeding women, of 100 micrograms or 4000 International Units.

The minimal 10-15 micrograms or 400-600 International Units per day is barely enough to stave off Rickets, which is why vitamin D researchers and experienced clinicians recommend 100 to 125 micrograms or 4000 to 5000 International Units as a daily maintenance dose in the absence of sunlight exposure, with higher levels short term when you have an immune challenge.

When talking doses, let's bear in mind that just 20 minutes with 80% of your body exposed to a midday, midsummer sun in a typical northern latitude will give you circulating levels of vitamin D that are equivalent to taking around 500 micrograms or 20.000 International Units of vitamin D3.

Getting your D from the sun

Sunlight is definitely the best way of absorbing vitamin D, but to do this, we need to have at least 80% of our skin bare in full sun when it's high in the sky. Sitting next to a window or going out for a walk on a sunny day with most of your body covered doesn't count.

For those of us in the northern hemisphere, this is a real challenge. But it gets more complicated as the darker your skin is, the more exposure to the sun you need. In a light skinned person, 15-20 mins in the midday sun might nets 10-20,000 IU of vitamin D, but a darker skinned person could need around 2 hours more to make the same amount. Age is also a factor in how well you make vitamin D.

Also, many people have higher requirements driven by the genetic makeup of their vitamin D receptors. So, you can see that Vitamin D requirements are very individual

depending on geographical location, age, skin tone, ethnicity, genes, lifestyle and sun exposure. Which is why having a test at least once a year to make sure you maintain a healthy vitamin D level is a very good thing to do.

Whilst sunshine also massively ups our feel-good factor, in terms of vitamin D, we can, for our health at least, take a supplement to maintain optimal levels. The best form to take is vitamin D3, technically known as cholecalciferol. Although you can get a bit of vitamin D from food like mushrooms and oily fish, it's definitely not enough to power your body's needs without sufficient sunshine.

D deficiency and covid-19

The health challenges of the past few months have highlighted just how important vitamin D is for our immune function. There is a huge swathe of new research papers demonstrating that people with lower vitamin D levels had much worse outcomes and higher death rates from covid-19. And that vitamin D plays many roles in reducing the risk of covid-19 and other respiratory diseases.

This is such important knowledge to have because you can very easily bring your vitamin D levels up with supplementation, right in your own home. We suggest having a vitamin D test first to find out your starting level, see links below. This can now also be easily done from home using a blood spot kit, but if this isn't possible, then we've also added a link to a deficiency questionnaire (via the D Minder Pro for Apple / D Minder for Android apps) below.

Safety margin

Whilst vitamin D can have some adverse effects if you have too much in your system, you'd need to be taking extremely high doses over 750 micrograms or 30,000 international units a day for 3 months or more to create a problem. At the doses we talk about in our campaign, this is just not possible. This of course never happens with sun exposure as our bodies naturally just stop making vitamin D when we've made enough.

It's worth remembering that our bodies are used to getting nutrients like vitamins and minerals through our diet. They all work in synergy with each other, even with vitamin D, which we make primarily with sun exposure. This means that having deficiencies of certain vitamins and minerals can influence the effectiveness - or otherwise - of other vitamins. With vitamin D, you need adequate levels of vitamin A and vitamin K2 to keep the benefits on the right track and avoid potential toxicity issues, which is why a healthy diet is also so important for immune resilience.

So, even if you can't take a vitamin D test or complete the deficiency questionnaire, you can just follow the advice of Professor Michael Holick – one of the leading vitamin D researchers and clinicians in the world. Professor Holick says that taking vitamin D at a dose of 125 micrograms per day, which is 5,000 international units is entirely safe as a food or dietary supplement all year round, and for most people this amount will be much more likely to bring you into an optimal range than the amounts recommended by governments, especially if you're older or have a darker skin.

For more information on our 'TEST & TAKE: VITAMIN D' campaign, please visit our website and subscribe to our social media and video channels.

Examples of UK-Based Vitamin D Home Testing Companies

Company	Type of test	Cost
GreenVits – Kiweno DIY Vitamin D test (- sends results to your smart phone in approx. 15 mins)	Fingerprick bloodspot	£39.99
Medichecks	Fingerprick bloodspot	£39.00
VitaminDtest.org.uk (NHS pathology lab)	Fingerprick bloodspot	£29.00
Cerascreen	Fingerprick bloodspot	£39.00
Better You (- includes vitamin D spray)	Fingerprick bloodspot	£32.95

>>> NB: If you're not based in the UK, please search for 'Vitamin D bloodspot home test kit' in your own country or ask your doctor.

Questionnaire-based check for Vitamin D levels

Via the **D Minder Pro app** in the App Store and **D Minder app** in Playstore, which is designed to help you track and manage your vitamin D levels. It's free till the end of the year because of the pandemic.

Don't forget to subscribe for updates via email, You Tube and social media so you don't miss the launch of this important campaign!

Democracy suspended in UK in preparation for mass vaccination

Date:

22 October 2020



When the voices of nearly 200,000 citizens were ignored

Content Sections

- Ask and ignore
- Suspend democracy
- Breed more distrust
- Let's revisit the Magna Carta

By Rob Verkerk PhD, executive & scientific director, ANH-Intl

A staggering, nearly 200,000 people (191,740 to be precise) in the UK submitted responses to a consultation run by the UK's Department of Health & Social Care, headed by the Health Secretary Matt Hancock. This torrent of responses was made during a deliberately narrow window, from 28 August to 18 September. The consultation clearly piqued people's interest, asking the public and stakeholders for views on the Government's proposed changes to UK medicines law to prepare the way for mass vaccination against Covid-19 disease and flu.

Ask and ignore

The majority of consultations get a light sprinkling of responses, typically a lot fewer than 100, often less than 20. So it's important to get some sense of the numbers of people who saw fit to respond within this very narrow 3-week time frame. The one-fifth of a million who responded represents 0.4%, or 400 in every 100,000, of the adult population. That's nearly 5 times all the adults who have died *with* (not of) Covid in the UK since the pandemic broke in March, based on official figures.

It's also about the same case rate that the Government has declared for the UK hotspot of Liverpool – but imagine this same density spread over the entire four countries of England, Wales, Scotland and Northern Ireland. We'd like to think that our 'Say it Now, Don't Regret it Later' campaign had something to do with this. It was, after all, the most visible campaign alongside that of the journalist-run Mirror Project.

Last Friday (16th October), the Government released a press release saying it had "analysed the responses and considered the feedback received". Every one of them? Somehow, we doubt it. According to the Department of Health and Social Care, It included 188,040 completed responses received through the GOV.UK page and 3,700 responses received by email.

The day before this announcement, the new regulation, entitled The Human Medicines (Coronavirus and Influenza) (Amendment) Regulations 2020 was put before Parliament without a whiff of publicity. The Government argued it was urgently needed as cases of infection of both flu and Covid start ramping up.

Given the scale of the response, you'd expect the Government to be listening keenly. So what did the Department of Health officials and our elected executive authority do with these responses? The answer: nothing. Zilch, Nada. They went ahead as if no one had objected.



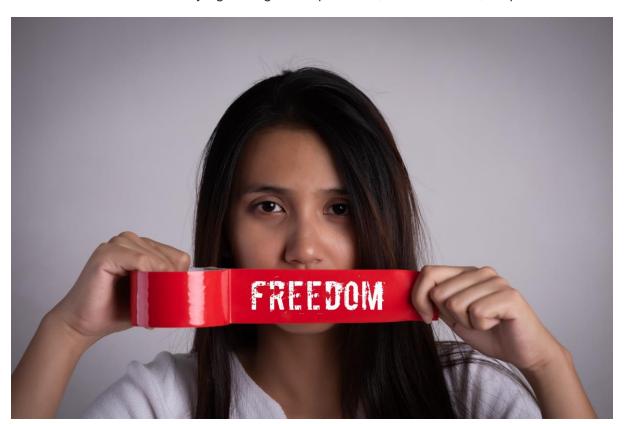
Suspend democracy

But drafting legislation is one thing – getting it through Parliament is another. Unfortunately, not in this case, at this time. It turns out that democracy gets suspended when it's likely to get in the way. Two factors work together to give the Government sweeping authoritarian powers. The first is the World Health Organization's cavernous and controversial definition of a 'pandemic' that no longer requires severity or deaths to describe it. The second is the UK-specific, recently renewed Coronavirus Act 2020 that swept through Parliament almost unopposed, 330 for and only 24 against.

These two things hand the Government powers that have been described as "the biggest restriction on civil liberties in a generation". They mean that dialogue between different scientific factions, the need to justify and be accountable for measures that decimate lives, livelihoods, education and the economy, are entirely optional.

In the case of the changes to the medicines regulations to prepare the way for mass vaccination – it was obviously decided it was best to push it into law through the back door, especially given the scale of public sentiment that we expect would have largely opposed the changes.

As the Hansard report shows, Matt Hancock's Under Secretary of State for Health& Social Care, Jo Churchill MP, tabled the draft regulation in a written statement on 16th October – and it went flying through. No questions, no discussion, no petitions.



Breed more distrust

The real bombshells in the amended medicines law are tucked away in the legal language of the regulations. Our four top picks are as follows:

- 1. No attempt to enforce higher levels of transparency to compensate for abbreviated testing time. The history of vaccine development is not one that is synonymous with data transparency or lack of bias. We have argued before this is a major reason why 'vaccine confidence' is declining, not increasing, in many regions. So how about amending the medicines regulations to overcome such issues especially given the Covid vaccine project has been positioned as a cooperative exercise intended for the public good, including massive funding by taxpayers? We're not so sure, especially given the lack of any attempt in the amendments to make vaccine trial data more transparent, an approach we've been pushing since we wrote an open letter to the UK Health Secretary in late April. A letter that remains unanswered despite reminders.
- 2. Vaccine company reps, as originally proposed, will become the most likely 'objective bystander' in any court cases concerning civil liability. While manufacturers have had immunity from civil liability since 1987 if the vaccine is found to cause damage or injury to a vaccinated person, this immunity applies only if there is no evidence of negligence or defectiveness in the vaccine. Understandably, what exactly represents negligence or defectivity could end up being a key battleground for anyone trying to pursue a case for damages. It then becomes a matter of opinion to be judged by the courts. Bearing this in mind, whoever is to be the 'reasonable person' who will represent the view of the legally appointed 'objective bystander' becomes all-important.

In our own response, we strenuously advocated that such so-called 'reasonable persons' should not be tied to the vaccine or pharma industry as they then couldn't possibly be objective or independent. They would be more like a 'vested interest bystander' than an 'objective bystander'. As a nod to the dismay that we are sure most responses would have reflected, the Government removed reference to the pharmaceutical industry. The reference now is to a person with 'relevant expertise in the subject matter of the breach'. Different words, same thing. We're not impressed by this kind of lip service, Mr Hancock.

3. Drug and vaccine advertising is re-legitimised. This change will allow direct-to-consumer advertising of drugs or vaccines for the first time in the UK (or existing members of the European Union) in over half a century. This will be applied to one or more unlicensed Covid-19 vaccines, vaccines for which the true safety and effectiveness will likely still be unclear because of the unprecedented expedition of the roll-out. One thing is to get the numbers required to conduct Phase I, II and III clinical trials within a concertinaed time frame, all of which gives the Government justification to say that while the vaccine is 'unregistered' it is not 'untested'. But it's quite another thing to not have sufficient passage of time (years, not months) to be able to observe the possible manifestation of longer term effects (e.g. certain autoimmune, nervous system and other systemic effects) that have shown up with other vaccines only after years of post-licensure surveillance.

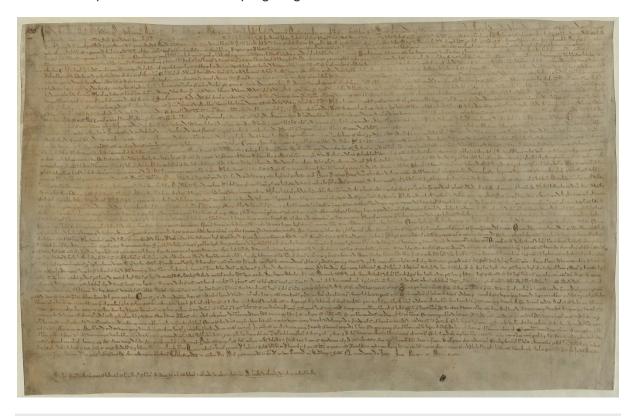
Anybody can become a vaccinator as long as they're supervised by an "experienced vaccinator". Leaked documents reported in *The Sun* newspaper suggest vaccinators will be "trainee nurses, physios and paramedics" who are anticipated to deliver "tens of thousands" of vaccinations every day in five mass vaccination centres in the UK. On top of that there will be hundreds of mobile units operated by GPs and pharmacists which will deliver vaccines to the vulnerable and care homes. The military, in turn, will apparently be involved in the massive logistical operation of delivering vaccines to the centres and mobile units under the correct storage conditions that for some vaccines could be as low as minus 80 degrees Celsius. For the UK, the widely anticipated pre-Christmas roll-out assumes the Oxford-AstraZeneca vaccine, based on an engineered, replication-deficient chimpanzee viral vector, sails through its Phase III trials and gets green lighted by the UK medicines regulator, the MHRA.



But contrary to news reports that talk about nurses, paramedics, physios, pharmacists and doctors being the vaccinators, the amended, post-consultation and final text of the Regulation doesn't require vaccinators to have any background in the healthcare professions. This is presumably to keep options open for all eventualities, which may include shortages of healthcare professionals. But imagine how vaccinators with no healthcare background or training would respond if asked questions about the effectiveness, safety or contents of a vaccine? What if the military were called in for this particular duty? Would military personnel, who are more used to firing weapons designed to kill or maim, really be able to deliver the new generation of synthetic biology vaccines safely, painlessly and with sufficient knowledge that would allow them to legally support informed consent? Or are we just asking too much?

Let's revisit the Magna Carta

It was around 800 years ago that the *Magna Carta Libertatum* (Latin for the "Great Charter of Freedoms") was signed as a royal charter by the unpopular King John at Runnymede, near Windsor, in 1215. Despite its rocky history and subsequent revisions, that culminated in it being integrated by Edward I into English statutory law in 1297, the Magna Carta is widely viewed as the foundation of an English (albeit unwritten) constitution, protection of the rights of the public and the basis of the emerging democratic process in the developing English Parliament.



Magna Carta 1215. Source: British Library

We are now at a critical time in history where government powers in relation to civil liberties need to be reviewed or the consequences could be traumatic and affect generations to come. Such reviews are likely to be accelerated by legal challenges, such as that of Simon Dolan's now at appeal.

This requires dialogue with the public and due parliamentary process. An authoritarian Government supported by a mainstream media that acts as a propaganda mouthpiece for Government, coupled with widespread censorship of debate by social media platforms, and the suspension of parliamentary process – all factors that are very much in play today – set the seeds for deep social instability. It's not good enough for the current Government to say 'we can do as we like because we got in with a huge majority'.

Revisiting governmental powers over civil liberties, including our rights to the respect for private and family lives (Article 8, the Human Rights Act 1998) and freedom of expression (Article 10, the Human Rights Act 1998) — through the historical lens of the Magna Carta — would be a good start.

We await with bated breath the results of the appeal by entrepreneur Simon Dolan against the disproportionate response by the UK Government in its lockdown measures. Will there be a future legal challenge over the UK's mass vaccination programme? We now some senior lawyers who are keeping a sharp eye on this. More in due course.

But let's not give up on Parliamentarians yet - Desmond Swayne MP - is one of very few who currently gets our full support for his views on coronavirus disproportionality!

https://youtu.be/pl3d8DZwQlo

Sir Desmond Swayne MP calls out "herd stupidity" and coronavirus fearmongering in Parliament (22 October 2020)

The case for vitamin D

Date:

28 October 2020



Guest article from health journalist Jerome Burne as we launch our Test & Take: vitamin D campaign

We're publishing Jerome's latest, detailed, article on vitamin D to kick off the launch of our new Test & Take: vitamin D campaign - possibly the cheapest way to support your immune system and protect yourself and your family against respiratory infections like covid-19.



By Jerome Burne, investigative health journalist and author, HealthInsightUK

This was the opening paragraph of an article on latest developments with vitamin D that I wrote for a magazine 10 years ago:

'Until fairly recently the general view was that vitamin D was only needed to grow healthy teeth and bones and that we could get enough from a bit of sun exposure plus a diet that included foods such as eggs and fish oil. But now some scientists are saying that vitamin D does a lot more for our health than just protecting bones. However to get this benefit, which is said to include cutting the risk of infections and various chronic diseases including cancer, heart disease, diabetes and multiple sclerosis, we need much higher levels than most of us get in the UK.'

What stands out is that the same key points are still worth making a decade later - does more than protect bones, can cut risk of infection but we need higher doses than are currently approved. There is little sign, however, that this information has had any impact on the official handling of the pandemic

We are now heading into winter, a time when much of the population becomes deficient. The number had just been calculated back then by Dr Elia Hypponnen of the Institute for Child Health in London. She had published a paper revealing that by Easter every year 90% of the population's vitamin D levels are seriously depleted. "High dose supplements of the vitamin should be more easily available over the counter," she told me.

Even that advice has largely been ignored, although Public Health England (PHE) has lately advised that children and adults take 10mcg (micrograms) or 400IU - regarded by many experts as an absolute minimum. But what about the seriously depleted elderly, known to be at higher risk?

Buried in the government's health statistics there is data about the level of Vitamin D deficiency among the over 65 and number of people that involves. It has never been released to the public but is available if you know where to look, and it is shocking.

According the latest government figures, 24% of those over 65 are deficient in vitamin D - below 25nmol/I - (UK measurement, which is 10ng/mL in America) and since 18% of the population is over 65 that means there are over 2,850,000 people who have less than the absolute minimum for bones, let alone sufficient to help fight an infection (Vitamin D measurements are confusing. What's measured in the blood is 25(OH)D which is what sunlight or supplement derived vitamin D turns into. Multiply the US measurement by 2.5 to get the UK one).

The advice given by NICE and the policy of NHS not to routinely test or treat the elderly for mineral or vitamin deficiencies - yet another way in which they have been failed, since many trials - see below - have found that people with very low levels do worse when infected with covid.

But even when the NHS recognised the importance of Vitamin D, albeit for bone and muscles rather than for the immune system, and recommends supplementing those in care homes, it still doesn't happen because, a recent BMJ study revealed, bureaucratic confusion over who was supposed to dish it out.

Interviews with care home staff found they thought checking on vitamin D status was the job of GPs and managers and feared they would be in trouble for providing over-the-

counter tablets. Steps are now being taken to revise the guidelines. Such bureaucratic crossed wires don't inspire confidence that any of those almost three million deficient over-65s will have had their blood levels boosted any time soon.

The official line is that we still don't know that vitamin D does anything for the immune system - the sort of organisation that should know is the National Pharmacy Association, which currently warns: 'There is no evidence that vitamin D reduces the risk of COVID.'

But even ten years ago it was known that vitamin D could directly affect DNA, which provided a link between it and the immune system. The latest research had discovered that almost 3,000 genes had their activity boosted or damped down by the presence of vitamin D.

In that article I quoted one of the most senior vitamin D researchers, Professor Michael Holick, as saying: "Vitamin D can turn genes on and off. That's the reason it can improve resistance to infection. Healthy amounts boost the activity of the gene that makes a peptide which kills bacteria, viruses and fungi." Holick was then the director of the Bone Healthcare Clinic and the Vitamin D, Skin and Bone Research Laboratory at Boston University School of Medicine.

So, had vitamin D been a drug in the last ten years there would have been large sums devoted to investigating and testing it, but that has not happened. With the result that faced with a predicted rise in covid cases and deaths, there has been a belated scramble to establish what vitamin D can do.



'The anti-viral and anti-inflammatory actions of vitamin D make it an interesting candidate,' says Professor Adrian Martineau of Barts Health NHS Trust 'but there is genuine uncertainty about whether it can support the immune system and so fend off the virus. We need a trial to resolve it.'

Martineau is heading a large trial of 5,440 volunteers to test the idea, which is due to start at the end of the month. The treatment group will get 3,200 IUs a day for six months.

It seems unlikely that the NHS will take any decisions about widespread use of vitamin D supplements for prevention or treatment until the trial is completed and published, which could be many months away. Meanwhile other countries are not being so cautious.

For instance, a White Paper has recently been published in Switzerland recommending supplementation for the general population "...and especially adults aged 65 and older" of 200mg of vitamin C and 2000 1U of vitamin D.

It begins by clearly setting out the benefits of nutrition for a "...well-functioning immune system as a modifiable factor to reduce the risk of virus infections." It refers to: "...reviews that showed a benefit of vitamin D supplementation for preventing lung tract infection for all age group." One of these was a meta-analysis of trials involving over 11,000 people, which had found that supplementation reduced the probability of infection by 36%.

Another trial referred to is an Israeli one, involving nearly 8,000 health care workers, which found that those with a low vitamin D level - below 75 nmol/L - were at double the risk of COVID infection.` It is striking that this is effectively three times higher than the deficiency level used by the NHS.

Elsewhere trials comparing survival between those getting higher and lower amounts of the vitamin consistently show that people with higher levels do better than those with lower - especially those with a deficiency level 25nmol/L.

Many of them have been posted on a "wiki" site dedicated to vitamin D. A page run by Dr David Grimes, long-time vitamin D researcher and author of 'Vitamin D and Cholesterol' describing his research into the link between heart disease and latitude and how the risk rises the further north you go.

On Oct 9 he posted a summary of results of recent studies from around the world that found a link between the level of vitamin D in the blood and the chance of getting or surviving covid-19.

That is only a correlation but what stands out is that the level considered safe in the UK - 30nmol/L - is far lower than nearly all other countries. Some consider 75nmol/L the point where immune system benefit kicks in.

For instance: A study from the Philippines found that the disease was mild in 85% of those whose blood level was above 75nmol/L (30ng/ml) while among those below 75nmol/L (30ng/mL) just 5% had mild disease, for the rest it was moderate, severe or critical.

The same crucial level of 75nmpl/L (30ng/mL) seemed to play a major role in whether you lived or died. An Indonesian study reported that of those above it, 96% survived but only 12% of those below did. And among those below 50nmol/L (20ng/mL) - a level your GP would consider adequate - just 1% survived.

An Indian study reported a less dramatic difference around a cut off point of 87.5 nmol/L (35ng/mL). Among those who were over that level, 62% had severe disease, compared to 85% of those below it.

A small randomised controlled trial (RCT) from Spain measured the difference between those getting a concentrated form of vitamin D (Calcidiol) and those with regular treatment. Half (13) of those getting regular treatment needed intensive care and two of them died. Just one of 50 on Calcidiol needed intensive care and none died.

These were all relatively small studies, some with dramatic differences between those above and below the cut-off point which seem excessive, but all showed higher levels were more protective. Many other factors, however, could have made a difference as well.

This prompted researchers in Boston to do a large RCT with close to two hundred thousand people to establish a more accurate figure. It took a lower cut-off point 50nmol/L (20ng/mL), considered healthy in the UK, as the cut-off point and found that those below had a 12% risk of infection compared with 6% for those above it. A less dramatic difference than others but still in the same direction.

These and similar studies suggest that blood levels considered sufficient in the UK are too low and that there is good evidence for routinely testing those at risk - something NICE has consistently refused to recommend. So just how much vitamin D should we be getting?

Official recommendations vary widely. In the UK it's 400 IU (international units) or 10mcg (micrograms). The EU and many countries go for 400-600IU, the exception is Italy's 2000 IU (50 mcg), in the USA is 1000 IU (25 mcg). At the other end some vitamin D researchers and experienced clinicians, such as Professor Holick, recommend 4000 to 5000 IU (125 mcg) for daily maintenance.

If the UK trial using 3,200 IU (80mcg) shows a protective effect, will that amount be given to the millions of those over 65 who are deficient?

Until all this is clearer it makes sense to test what your own levels are at somewhere like GreenVits – Kiweno DIY Vitamin D test (sends results to your smart phone in approx. 15 mins) or VitaminDtest.org.uk (NHS pathology lab). Then taking the sort of amount recommended by Professor Holick is very unlikely to be harmful.

When it comes to treating severely infected patients there are a couple of trials suggesting that very very high doses can be effective.

In one trial, 30 mechanically ventilated, critically ill patients with pneumonia were given 1,250µg (500,000iu) of vitamin D3. This significantly increased their haemoglobin concentrations, improving iron metabolism and the blood's ability to transport oxygen properly. Like vitamin C, this change would rapidly reduce the damaging inflammatory immune reaction known as a cytokine storm.

Another high-dose study in Georgia US, gave ventilated intensive care unit patients with mean baseline vitamin D blood levels below 50nmol/l either 1,250µg (50,000iu) or 2,500µg (100,000iu) of vitamin D daily for five days. It reported that hospital length of stay was reduced from 36 days in the control group to 25 days in the 250,000iu group and 18 days in the 500,000iu group. That's a halving of hospital stay, and costs, in the high vitamin D group.

The benefits of a very high dose supplement - 80,000 IU, known as a 'bolus' - also showed up in a recent trial involving 66 frail elderly patients in a French nursing home. All were aged 77 and got standard treatment including steroids and antibiotics, but 57 of them got the bolus as well. It wasn't a RCT but there was a very significant benefit for the treated group - 82% of them survived compared with 44% of those without the bolus.

But to use vitamin D most effectively clinicians don't just need to know 'how much?', but also 'in what combination?' At the moment the trials used to test vitamin D and other nutrients are designed as if they were pharmaceutical-style magic bullets. But nutrients don't work like that.

They are not lone anti-viral gun slingers; they are team players. To work best they need to be used in cocktails and combinations. All antioxidant vitamins need to be recharged after damping down a damaging oxidant and what does that? Another vitamin.

The most sophisticated and detailed protocol for treating covid patients has been developed by Dr Paul Marik, Chief of Pulmonary and Critical Care Medicine Eastern Virginia Medical School, Norfolk, VA. It runs to 34 pages and is available for download here - Evms Critical Care Covid-19 Management Protocol

Marik suggests that Vitamin D "... may be a very powerful prophylactic and treatment strategy against covid." As part of the treatment package for severely infected patients, he recommends 20,000 to 60,000 IUs in a single oral dose, followed by 20,000 IUs weekly until discharged from hospital.

For the early stages of an infection he suggests combining quercetin (a plant compound) with zinc, which is essential for the immune response, while quercetin is antiviral it also helps zinc enter cells. Vitamin C is part of the cocktail, improving the anti-viral action of quercetin as well as acting in its own right as an antioxidant, antiviral and anti-inflammatory agent.

A further development, just proposed in the BMJ, is for nutrients to be combined with the low carb ketogenic diet. The rationale is that high carbohydrate diets are linked with diabetes, which results in high blood levels of glucose and possibly insulin, and diabetics are more at risk for covid infection. But why?

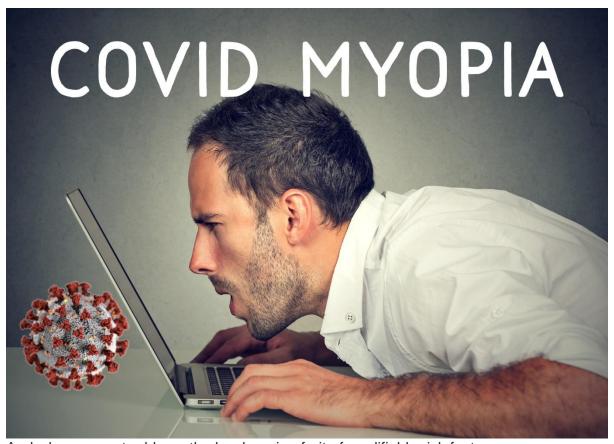
The key factor, the paper suggests, is that high insulin and glucose brings down magnesium levels, which in turn makes vitamin D less effective, raising the risk of infection for these patients and the elderly, who may well be magnesium deficient anyway for a variety of reasons. The recommendation of the authors is to bring down the glucose and insulin levels with a low carbohydrate diet and to supplement with vitamin D, magnesium and zinc. This paper makes no mention of vitamin C which works closely with magnesium

It's a long way from supplementing with 400 IUs but a health service interested in health would factor this in and run a big trial on it.

Why Covid myopia is killing us

Date:

28 October 2020



And why we must address the low hanging fruit of modifiable risk factors

Content Sections

- From whales, penguins and polar bears to health
- Token risk assessment
- • The Big 52
- Skating on thin legal ice
- Reasons for government neglect
- Putting all your eggs in just two baskets
- Collateral benefits
- Let's start at the very beginning
- Taking back control

By Robert Verkerk PhD, Founder, executive & scientific director

While researchers around the world have been exploring the many risk factors linked to the risk of severe disease or death from covid-19, governments by and large have limited most of their attention to very few. Their primary emphasis has been on a 'hide-then-vaccinate' strategy that aims to try to reduce transmission of SARS-CoV-2 until such time one or more safe and effective vaccines have been developed.

This strategy is in itself risky and emerging evidence is that lockdown might not be as effective as some claim. The effectiveness and the safety of Covid vaccines is currently unknown, and there is no certainty of either.

From whales, penguins and polar bears – to health

When faced with uncertainty and risk, a common sense strategy involves carrying out a thorough evaluation of all options, looking at risks and benefits, then choosing what appear to be the most appropriate options that minimise risk to people or planet. Where there is a high level of uncertainty, the precautionary principle, that has long been invoked to help protect endangered species and habitats, can be applied. That's what the World Health Organization's interpretation of the precautionary principle, as applied to human health, has dictated since 2004.

It states: "...in the case of serious or irreversible threats to the health of humans or the ecosystem, acknowledged scientific uncertainty should not be used as a reason to postpone preventive measures."

Do preventive measures only involve trying to reduce transmission and developing vaccines? Have the risks and benefits of these been properly assessed in relation to other potential strategies? The answer is 'no', and huge uncertainty remains around each of these approaches.

Our recognition of the myopic strategy being taken by governments triggered our attempt to identify some of the other factors that are known scientifically to affect risk of severe disease or death from Covid-19 disease, 52 of which are listed below. We regard asymptomatic, mild or even moderate symptoms of the disease as irrelevant to any justification of a global pandemic strategy, such as that controlled and coordinated by the Geneva-based World Health Organization and World Economic Forum.

Token risk assessment

As Ortwin Renn indicates in his chapter on the precautionary principle in the Reference Module in Earth Systems and Environmental Sciences (2015), a precautionary approach or a risk-based approach are typically taken when uncertainty prevails around major issues affecting environmental, consumer and health protection. In the UK, it seems neither approach has been used. While a traditional risk assessment approach has been put forward by the Health and Safety Executive (HSE), it has been oriented specifically towards companies rather than individuals or the health professions. It

also fails to address many of the modifiable risk factors other than transmission - or exposure-related risks. It also leaves the assessment up to individual companies.

The Big 52

At ANH-Intl, we've identified 52 factors that have been linked to risk for severe disease or death from covid-19, these being divided into 7 groups (Fig. 1). Of these 7 groups of factors that affect disease, health, metabolism, nutrition, social or working conditions, and the natural environment around an individual, on average 54% of risk factors in each group are considered modifiable. A further 36% are considered possibly modifiable, leaving just 11% as generally not modifiable (see Table below).

Factors include age, gender and underlying conditions, in addition to well-recognised social or environmental determinants of health, such as social deprivation and air pollution. But they also include less well recognised metabolic, nutritional and behavioural factors that can have profound impacts on the risk of serious covid-19 disease.

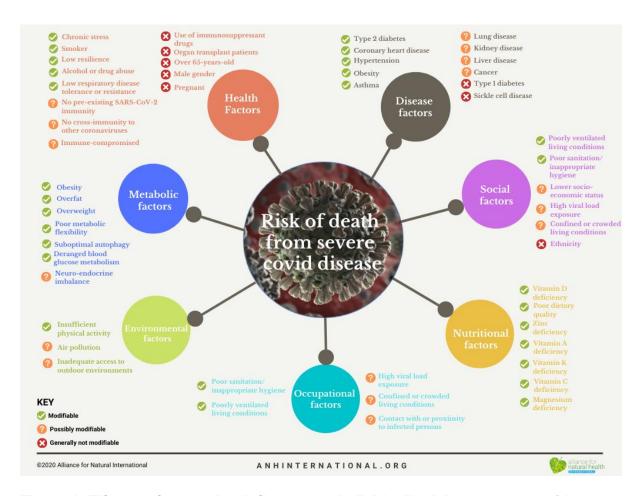


Figure 1. Fifty two factors that influence an individual's risk to severe covid-19 disease and death, categorised according to the typical ease by which each factor is modifiable.

Table. Summary of risks of severe covid-19 disease and death showing the percentage of three categories of risk that relate to 7 groups of factors

		RISK FACTORS FOR SEVERE COVID DISEASE & DI (percentage of factors)*		
	Modifiable	Possibly modifiable	Gener modifi	
Health factors $(n = 12)$	42	17	42	
Disease factors $(n = 12)$	42	42	17	
Metabolic factors (n = 7)	86	14	0	
Nutritional factors $(n = 7)$	100	0	0	
Social factors $(n = 6)$	33	50	17	
Occupational factors $(n = 5)$	40	60	0	
Environmental factors $(n = 3)$	33	67	0	
Average percentage	54%	36%	11%	

^{*}Sum of percentages may not equal 100 owing to rounding.

Skating on thin legal ice

Ignoring these factors given the status of knowledge about their effect on risk could be considered tantamount to negligence by governments and may represent a breach of the duty of care by governments under tort law. Medical doctors who have not provided the appropriate standard of care to covid-19 patients, because, for example, they were highly vulnerable by virtue of their age and were not transferred to intensive care (critical care) units, a fact revealed by *The Sunday Times* last weekend, may also be found to be clinically negligent.

Reasons for government neglect

Of all the factors, it is the nutritional and metabolic factors that are by far the most modifiable (see Figure 1 and Table). So why so little attention by governments?

There are many reasons for government failure to prioritise the many things that could greatly affect people's risk of serious disease or death, failures that will definitely be costing lives, including:

- Governments have consistently failed to recognise the big picture, transdisciplinary nature of the multiple factors that influence risk of serious covid-19 disease, preferring to focus on trying to break the transmission cycle and developing a vaccine
- 2. **Siloed experts.** Medical and scientific experts advising governments are generally weighted towards epidemiologists, modellers, statisticians or behavioural scientists with a limited grasp of nutritional and environmental factors that affect immune resistance, tolerance or resilience
- 3. Mis-delegation. Mainstream medicine has long ago delegated the responsibility for nutrition and related health sciences to dietitians whose practice has been slow to integrate developments in the nutritional sciences. Hence this profession's failure to impact the rapid increase in incidence of metabolic diseases like type 2 diabetes and obesity that are in turn a major reason for the vulnerability of significant sectors of the population to covid-19 disease
- 4. **Locus of control.** Focusing on modifiable risk factors places the locus of control back on individuals and communities and away from governments. That's something governments don't want as they try to assert control over populations to enact, through the Great Reset, the greatest societal transition since the Industrial Revolution of the late 1800s
- 5. **Time and inequity.** Modifying the risk by an individual may take time and people's capacity to modify risks will vary according to their knowledge base, support and education, as well as their social, cultural and economic conditions or circumstances.

Only the final point is a possible justification for accepting the need for, or ignoring the collateral damage associated with lockdowns and social distancing. It is certainly not sufficient reason to not engage in trialling broader strategies that aim to build immunity in the population.

Putting all your eggs in just two baskets

If you focus global efforts on only one disease, in this case Covid-19, and you conclude that the disease has a high degree of lethality and you fail to recognise there are therapeutic solutions to the disease, you can potentially justify shutting down societies and decimating economies to save lives. Unfortunately, neither of these assumptions are right. Regarding lethality, there was a period of time when some countries, the UK, some European countries, the USA and South American countries, suffered higher than average mortality that was likely linked to infection by SARS-CoV-2. But this is presently historic, as highlighted by EuroMOMO data and latest 'Nightingale' plot by the Centre for Evidence-Based Medicine at Oxford University.

While 'cases', as determined by positive PCR tests, in many parts of the world are again rising, it is still too early to predict with any degree of accuracy how many of these will be found to translate to covid-19 disease, hospitalisations and deaths. Getting a clear view

of this will in any event always be clouded by symptoms being shared with other respiratory diseases and the murky classification of covid-related deaths.

The other flawed assumption is that there is no effective treatment. Dr Paul Marik and other emergency doctors in the US have developed a sound scientific and medical rationale for what's called the MATH+ protocol (Fig. 2) that includes corticosteroids, anticoagulants, antivirals and immune supporting nutrients, including vitamin C, thiamin (vitamin B1), zinc, vitamin D, magnesium and melatonin. Clinical evidence has suggested mortality rates among critically ill patients treated using this protocol is considerably less than 10%, a mortality rate that's significantly lower than standard care approaches.

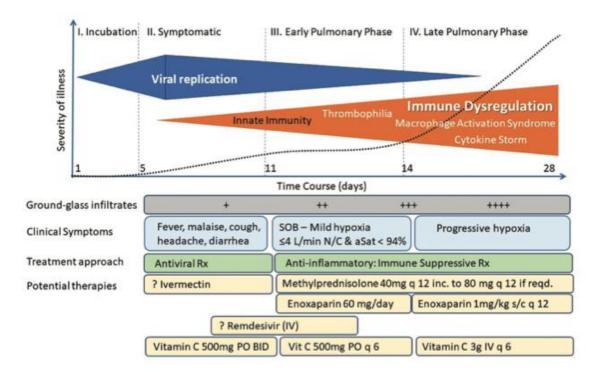


Figure 2. Typical course and stages of Covid-19 disease with associated treatment plan according to the MATH+ protocol. Source: Marik et al.Expert Review of Anti-infective Therapy, DOI:10.1080/14787210.2020.1808462.

Governments shouldn't of course just be doing risk assessments that focus on covid-19. They need to consider the implications of all measures and policies they implement on all facets of society. And it's this fundamental difference in outlook between, on the one hand, the 'covid myopic' governmental approach, and, on the other hand, the big picture view of public health, as espoused by the scientists behind the Great Barrington Declaration, that leads to such polarised views of what should be done.

What's more, why look only at risk? What about benefit? At ANH, we've long been pushing for a transition away from risk assessment towards risk/benefit assessment wherever circumstances being assessed are likely to involve both risks and benefits for health. It's an approach that doesn't just apply to things like vitamins that are both good for us in some forms and doses, but can be harmful in certain forms and doses too. It should be just as applicable for dealing with the current global crisis around covid-19.

Risk/benefit assessment would mean the collateral damage caused by lockdown and related measures designed to protect populations from covid-19 would have to be factored in. This is the very issue that the Great Barrington Declaration scientists, now supported by over 11,000 medical and public health scientists, 32,000 doctors and nearly 600,000 concerned citizens, have been calling for. As Dr Scott Atlas, a public health scientist advising The White House said in an interview with Unherd.com, "We must open up because we're killing people."

Dr Atlas crystallised some of the statistics that graphically highlight the secondary impacts of lockdowns as follows:

"In the US, 46% of the six most common cancers were not diagnosed during the shutdown... These are people who will present to the hospital or their doctor with later stage disease — many of these people will die. 650,000 Americans are on chemotherapy — half of them didn't come in for their chemo because they were afraid. Two-thirds of screenings for cancer were not done; half of childhood immunisations did not get done; 85% of living organ transplants did not get done. And then we see the other harms: 200,000 cases plus of child abuse in the US during the two months of spring school closures were not reported because schools are the number one agency where abuse is noticed; we have one out of four American young adults, college age, who thought of killing themselves in the month of June..."

Collateral benefits

There is a potentially more sinister reason why governments are averse to risk/benefit assessment of the possible options that go beyond the 'hide-then-vaccinate' strategy that has become the mainstay of nearly all governments. Not only would they have to face head-on the extent of the damage that is being wreaked on societies the world over in their efforts to break the cycle of transmission up until such time a safe and effective vaccine is ready. They'd also have to consider the collateral benefits of any multi-stranded approach that prioritised modifiable risk factors. That includes the very strategies they have so long resisted or failed at: improving nutritional status and metabolic function.

Then there's the real sting in the tail: if you help populations to improve their nutritional status and metabolic function in order to reduce susceptibility to Covid-19, you simultaneously reduce the risk of almost every single chronic and autoimmune disease. These include heart disease, cancer, obesity, type 2 diabetes, dementia and a rash of autoimmune disease like Crohn's, rheumatoid arthritis and ulcerative colitis, that have, prior to the emergence of covid-19, been seen as diseases that might break modern healthcare systems. That might be exactly what governments *don't* want, given the size and might of the pharmaceutical industry, that depends on an ageing, chronically diseased populations.

That also might explain why governments prefer collateral damage to collateral benefits.

Let's start at the very beginning

There is no way any government will take on all, or possibly any, of the responsibility to help support their populations in modifying their risk in the face of the current and topical infectious disease threat. But there's no harm in trying to force their hand, if for no other reason to ensure they don't ignore the wider science, politics and economics that would allow for a more just and democratic society.

We make this point on the day we launch our vitamin D campaign, in which we ask the UK Health Minister to consider donating vitamin D supplements to those in deprived communities who are likely to be most deficient in the vitamin, and least able to to justify supplementation. The measure would involve a tiny investment compared with the millions involved in running test and trace programmes, or providing support for communities devastated by job losses and other effects of draconian policies.

Taking back control

But our key advice is this: please don't wait for your government to decide. We might just need to wait a lifetime or more. Wherever we can, let's make the decisions that seem most relevant to us. Doing things that involve minimal cost that deliver significant benefits – such as adults taking 5000 international units (IU) (125 micrograms per day) daily, or better still, getting yourself tested and then supplementing to get your circulating levels of 25-hydroxyvitamin D into the optimal zone for immune support. Find out more in our Vitamin D campaign.

We urge you to look carefully at the array of factors we've detailed in Figure 1. Self-care is where so much healthcare is going – and so much of this is in your control. In the health space, you might need the guidance of a health profession. But the travesty is you generally won't find the right guidance from a conventionally-trained medical doctor or physician. You will however find it from a wide range of non-conventionally trained health professionals, such as functional medicine practitioners, herbalists, practitioners of traditional systems of medicine (Ayurveda, traditional Chinese medicine), and many other disciplines. It is for this very reason we see it as so critical to progress turning our blueprint for health system sustainability into reality.

We are currently engaged in organising a major conference in London for 2021 on this theme – we'll keep you posted as arrangements progress.

Sunshine vitamin covid protection that governments need to back

Date:

28 October 2020



ANH-Intl launches 'Test & Take: Vitamin D' campaign!

Vitamin D is emerging as probably the lowest cost, modifiable risk factor for severe covid-19 disease. Governments are increasingly recommending it but most are limiting levels to those based on protecting bone and muscles, not those required for immune protection.

The UK government recommendation for adults is just 10 micrograms or 400 IU, and that is around one-tenth the amount required to ensure proper function of the immune system. Vitamin D acts as one of the key pro-hormones that helps ensure signalling between the innate and adaptive side of the immune system and is critical to immune function, a health relationship recognised by the notoriously conservative assessor, the European Food Safety Authority.

Today, we launch our 'Test & Take: Vitamin D' campaign that makes a case for vitamin D supplementation, as well as the importance of testing owing to common differences between individuals in levels of circulating vitamin D even at the same levels of intake. As we move into winter in the north and the risk of being exposed to pathogens, including SARS-CoV-2 increases, optimising your vitamin D status becomes even more important.

Apart from launching our brand new campaign (see link above) replete with lots of information that will help you learn how to measure and optimise your vitamin D levels, and a video interview with Dr Damien Downing, the UK's most established medical proponent of vitamin D, you'll find below our second open letter of the year to Matt Hancock, the UK Secretary of State for Health and Social Care.

This time, we're appealing to Mr Hancock to upgrade vitamin D advice from bone and muscle health to immune health, as well as to implement studies on vitamin D on covid-19 in the most deprived communities where the need is greatest.

You can download the full letter here.



Open letter to the Rt Hon Matt Hancock MP [By email and hard copy]

The Rt Hon Matt Hancock MP Secretary of State for Health and Social Care House of Commons London SW1A OAA

29 October 2020

Dear Secretary of State

RE VITAMIN D: THE LOWEST COST MODIFIABLE RISK FACTOR FOR COVID-19 DISEASE?

It is exactly 6 months to the day that I last wrote an open letter to you, along with my colleagues at the British Society for Ecological Medicine. Our letter included a request that Government ensures transparency in relation to 10 aspects of vaccine science in your efforts to produce a safe and effective vaccine against covid-19. Although I still have not had a response, despite reminders, I am now more aware than I was that you do not tend to encourage dialogue with those whose views do not resonate with your own.

Unperturbed, I write to you again, partly because I have not entirely given up hope that you might respond, and partly because I am keen to continue to build a paper trail in the event that we decide to take legal action against the current Government for its failure in its duty of care to the British public.

As the largest state funder of the World Health Organization (WHO) and as its second largest funder, behind the Bill & Melinda Gates Foundation, you will be aware of the WHO's commitment to applying the precautionary principle to human health. The WHO defines the precautionary principle as follows: ""...in the case of serious or irreversible threats to the health of humans or the ecosystem, acknowledged scientific uncertainty should not be used as a reason to postpone preventive measures."

Your government has seized on a very limited range of measures that aim to be preventive, most especially: 1) attempts to avoid exposure to SARS-CoV-2; 2) efforts to reduce transmission of the virus, and; 3) development of vaccines. Social isolation, national and local lockdowns, NHS Test and Trace, as well as efforts to develop a vaccine, are themselves highly uncertain endeavours.

ANH Feature: Legal actions against government overreach gather momentum

Date:

6 November 2020



With governments seemingly blind to alternate scientific views, it's now the lawyers' turn

Content Sections

- United Nations onboard with the Great Reset
- Sharper than a razor
- Limited options
- When the gavel goes down
- NOW is the time for action

By Robert Verkerk PhD, Founder, executive & scientific director

Authoritarian, coercive, anti-democratic, unaccountable, disproportionate – just some of the adjectives that are being used to describe the global governmental response to Covid-19.

Secretary-General António Guterres of the United Nations, speaking online on 22 September with the leaders of 32 nations at the opening of the General Assembly's annual general debate, described it differently. He referred to Covid-19 and the global response as "a wake up call and a dress rehearsal for future challenges." This, ladies and gentlemen – as we've suggested before – is just the warm-up act.

United Nations onboard with the Great Reset

With no holds barred, Guterres, former prime minister of Portugal, as well as a devoted socialist and Catholic, laid bare the UN's agenda for a New Global Deal and New Social Contract with citizens, echoing Klaus Schwab's Great Reset proposal that has emerged as the globalists' masterplan. In his introduction to the UN's Annual Report (2020), Guterres said, "There can be only one fight in our world today: our shared battle against COVID-19."

The World Economic Forum unabashedly view covid-19 as a "once-in-lifetime opportunity" to roll out the Great Reset.



Sharper than a razor

All of this raises questions in many of our minds.

Here's one, albeit cynical or at least rhetorical: Isn't it something of a non-sequitur to claim that because Covid-19 has brought so much inequity to the world, it's now necessary to put in place an altogether new plan and system to fix the problems, when it's clear the people who caused the inequity are also the people with the new, shiny 'solution'? In the old days we used to refer to such behaviour as sharp practice or a conflict of interest. But that was before the 'new normal' came in.

Now for a genuine question: do we have a choice? If we support the narrowing of social or health inequalities, and if we also harbour a deep desire to protect what's left of our natural environment and halt or reverse the downward spiral of biodiversity, have we no alternative but to sign up to this Davos-inspired plan?

We adamantly believe the answer is 'no'. In fact, we're concerned that the plan is a honey trap, that also can't and won't deliver on its promises.

Limited options

Our options to take control over our own destinies got a whole lot narrower with the opportunistic arrival of Covid-19 this year. That's because the emergency measures justified by the existence of a 'pandemic' mean democracy in many parts of the world has been largely suspended. This boils down to the World Health Organization's scoping of an ingenious, deceptive and controversial definition for a 'pandemic' that ensures there is no requirement for the pandemic-causing pathogenic agent to pose any serious risk to human health.

So we get held to ransom not by a bug, but by humans, who it seems have been planning our future for quite a number of years.



So what can we do? We can try to share our concerns. Trouble is, more often than not, we get censored or marginalised. We can protest. But let's be aware that protests can give the authorities exactly the reason they need to clamp down on us to neutralise what the World Economic Forum calls "profound social instability".

What about the courts? Well, if we can raise the readies, we can go to the courts and try to test the constitution, and determine if the Davos deity have genuinely overreached themselves legally. But have the globalisers, or the groupthink with which they've become associated, infiltrated the courts? Frankly we don't know, and we'll be in a better position to judge when we see how the many rulings for those cases already initiated end up panning out.

It turns out many are holding hope for some redress via the courts. Here we give you taster for some of the cases in train.

British Bulldogs

Simon Dolan Lockdown challenge. This has been the most well publicised case in the UK initiated by British entrepreneur Simon Dolan. The crowdfunded case argues that lockdown contravenes a number of basic human rights under English law. It was kicked out by government lawyers in July but has successfully gone to appeal last week and the verdict awaits.

The Good Law Project cases. The Good Law Project is the brainchild of leading Queen's Council, Jo Maugham QC. It's been running for a few years and has taken many actions including challenging the Electoral Commission over funding transparency of the DUP during the Brexit campaign. It's now turned its attention to matters covid. Cases include challenging the claimed "world-beating", now failing and backtracking, £100 billion Operation Moonshot of Boris Johnson. The anti-cronyism case seeks to make transparent government deals and contracts and their scientific and contractual bases.

Another case by the Good Law Project goes under the catchy heading of 'Money for Dominic Cummings' mates'. It challenges a direct award (yes, no advertising or formal tendering) to polling company Public First owned by good friends of Dominic Cummings, Boris Johnson and Michael Gove for a cool £840,000 of taxpayers money. They've another case challenging the government over its messy handling of PPE for NHS staff and care workers, as well as apparently shady procurement or distribution deals over PPE including one worth millions with a two-bit company called Crisp Websites Limited, trading as PestFix, with assets of less than £20,000.

>>> View extensive evidence of covid cronyism by the Johnson government, compiled by The Canary

Rational Global class action. This initiative is urging people to come together in the three distinct jurisdictions of England & Wales, Scotland and Northern Ireland, to serve notices (letters) of non-compliance on authorities that attempt to close businesses, using common law as the legal basis.

John's campaign - Government guidance has failed care home residents and their families. Around the UK families have been separated from their loved ones be they in care homes, hospitals, mental health units and prisons due to the fear of infection by the coronavirus. Court proceedings have now been issued against the government to challenge the blanket bans on visits to those in care homes that has had and continues to have a devastating impact on both their mental and physical health.

The Night Time Industries Association has joined forces with industry leaders in the North of England to challenge the Government's lockdown restrictions on the night-time economy and hospitality sector. The move came after the imposition of a 10pm curfew and predates the lockdown initiated on the 4th November across England. The campaign calls the restrictions "hugely disproportionate and unjust" with neither scientific

rationale to back up the measures, nor correlation to Public Health England (PHE) transmission rates. In Scotland a coalition of five hospitality industry bodies, The Scottish Beer & Pub Association, The Scottish Licensed Trade Association, UKHospitality (Scotland), the Scottish Hospitality Group and the Night Time Industries Association Scotland, sent a pre-action letter to the Scottish Government over the restrictions on the hospitality industry. The Scottish Government has now responded to the letter and the coalition are deciding on their next moves.

The Free Speech Union is a mass-membership public interest body that stands up for the speech rights of its members and it argues (rightly, we say) that free speech is in greater peril than at any time since the Second World War. On 20th October the Free Speech Union's case challenging the 'coronavirus guidance' issued by the UK's communication regulator, Ofcom was rejected in the High Court. The Free Speech Union is now seeking an oral permissions hearing to go before a judge.

The People's Brexit describe themselves as "a group of solicitors, legal researchers and campaigners that have been extensively researching the current legal situation since 'lockdown' removed democracy, human rights and freedoms.

The group has apparently now established that The Coronavirus Act 2020 is null and void. There are many reasons for this, the main one being that Section 1(1) of the Act defines 'coronavirus' as being 'covid-19' or 'SARS Cov-2'. However, they argue, "by virtue of the fact that it is not legally, medically or scientifically recognised as a disease or virus it cannot be legislated against, and this makes the whole Act null and void."

Save Us Now case. Kate Shemirani & Mark Steele have initiated an action that challenges the right to peaceful protest and the validity of the coronavirus regulations in the courts, as well as the legality and the necessity of planned mass covid-19 vaccination of the public.

Common law to the rescue! Common law actions against the UK Government and Parliamentarians are gathering pace. One of the leading initiatives is headed by Michael O'Bernicia (aka, The Bernician), who describes himself as a "Critically Acclaimed Comedian, Playwright & Filmmaker, a Blacklisted 'Potential Subversive' Revisionist Historian, a Recalcitrant Philosopher Bankster-Busting Nemesis of the Rigged System." This latter tag is well deserved given Michael's ground-breaking, common law-based work on exposing mortgage fraud (see film The Great British Mortgage Swindle). Now he's focused on the tyranny and non-democratic process that has unfolded courtesy of, what he refers to, as Covid-1984. In late September he served every Member of Parliament with a notice of intended private criminal prosecution that would be followed up if they continued to support the Coronavirus Act 2020. The pressure is being maintained on the majority of MPs who didn't opposed the Act. Now the Government and Cabinate have been served notice, the unfolding story described in The Bernician's latest Facebook post below.



Today, the Trustees of the People's Union of Britain served lawful documents upon the UK government cabinet office by hand, but armed policy enforcement officers said they were not allowed to accept any such deliveries.

So a courier was engaged and they were served again, but this time we were told that only mailed documents will be accepted by every government department and the package was returned.

We therefore dispatched the documents by Royal Mail Special Delivery and they are due to arrive tomorrow morning at the Cabinet Office in Whitehall. Electronic copies are also being sent to every member of the cabinet.

Within the notice, we demanded that the UK government does the following:

- 1. Publicly declare that the UK Government has no records of evidence that either the purportedly deadly virus or its cause actually exist, as per the results of numerous Freedom of Information requests to every government department [which are already in our possession].
- 2. Further declare that the Coronavirus Act 2020 is unlawful and the COVID-19 lockdown regulations are legally unenforceable and void ab initio.
- 3. Further declare that the Queen is no longer sovereign [by way of section 38 of the EU Withdrawal (Agreement) Act 2020, which purported to acknowledge Parliament as sovereign, thereby forfeiting its legitimacy under the Common Law], Parliament is therefore dissolved and British sovereignty automatically reverts to the People.
- 4. Further declare that Magna Carta 2020 -Declaration of Rights has re-established the Common Law and must be upheld by all government employees, from this day forth.
- 5. Further declare that the UK Government agrees to fully cooperate with comprehensive criminal investigations into the crimes committed against the People, as alleged in Magna Carta 2020.

They have until noon on 09/11/2020 to issue the foregoing declarations, in which case [we've told them] the sentences they receive for their crimes will be tempered by their unequivocal agreement to do all they can to put right their myriad of wrongdoings.

The two refusals of lawful documents the cabinet office are obliged to accept and respond to was filmed, along with the mailing of the package, and the video will be released as soon as it's been edited.

To add to the Government's headache, former co-leader of the Green Party, Caroline Lucas, is reportedly also taking legal action against the Government, although her view on the need for lockdown is almost diametrically opposed to those initiating the other actions.

German lawyers expose 'Coronavirus Fraud Scandal'

A group of 5 lawyers, led by Dr Reiner Fuellmich a citizen protection trial lawyer licensed in both Germany and California who has previously taken on the might of the banks, shipping companies and the VW car company, have established Corona Schadensersatzklage that is defending the rights of businesses destroyed by covid policies in Germany. They are also working on finding solutions for businesses impacted in other German-speaking countries, Switzerland and Austria.

The lawyers have forged links with other lawyers in the USA, Canada, Austria, UK, Jordan, Portugal, Poland and Brazil with a view to taking similar actions and filing for "crimes against humanity". They argue that governments have breached principles established during the Nuremberg trials on the basis that lives and livelihoods have been ravaged through lockdowns justified by a deliberate exaggeration of the true nature of the risk posed by SARS-CoV-2, while certain parties, with the support of the WHO, are profiteering massively.

Check out below Dr Fuellmich's 49-minute video launching his team's legal initiatives on the 'Coronavirus Fraud Scandal' that had over 1.5 million views before being censored by YouTube – but is available on Bitchute.

You may also want to see Dr Fuellmich's recent 'Money Talks' video (5 minutes) released on 15 October.

American rights

Such is the desire of the American to defend rights set down in the US Constitution by the Founding Fathers, Americans have taken to the courts in large numbers in order to protect civil liberties stripped of them courtesy of state governments and federal agencies.

A list of 997 cases (at the time of writing) has been consolidated on Ballotpedia.

Also check out what political activist Candace Owen has to say about her legal action against Facebook's fact-checkers. More at her website www.factcheckzuck.com.



Source: wwwfactcheckzuck.com

Other countries

It doesn't stop there. There are more cases kicking off in different parts of the world. Here's just a sprinkling that have come to our attention:

- Australia

 under the direction of lawyer Serene Teffaha, Advocate Me is seeking
 to challenge the Victorian government's disproportionate response the SARSCoV-2 pandemic.
- Canada Action4Canada is a not for profit grassroots organisation mounting a
 constitutional challenge to defend Canadians Charter rights and freedoms in
 response to the extreme and destructive emergency measures instituted by the
 Canadian government to control the spread of the coronavirus.
- **Israel** a group of journalists and scientists have instructed a **legal team** to submit a freedom of information request requesting the Israeli Health Ministry provide information on various issues related to the pandemic due the Ministry's repeated failure to provide information requested.
- Italy the Covid-19 Class Action is a class action lawsuit being built to obtain compensation for those who have suffered damage due to the reactions and restrictions to the pandemic that allowed the spread of the coronavirus by the Italian government.

When the gavel goes down

It's anyone's bet what will eventuate after this surge of legal cases works its way through the courts and out the other side, no doubt with many following on its heels. But it's one of those situations when a loss can still be a win – if it draws attention to government actions that are *ultra vires* or outside of the rule of law.

There are still a very large number of people who have yet to wake up. Who have not accepted that many governments in democratic countries are overreaching their authority as executors of the people's will. They have yet to hear of the Great Reset, or if they have, they think it's a conspiracy theory. The majority don't know that the people who invented the Great Reset view Covid-19 as a "once-in-a lifetime opportunity" to

force the biggest change to societal function seen since the Industrial Revolution of the 1800s. It's not that change is bad. Nor is it that the greening of industry and the breaking down of gender and other inequalities is bad. Quite the reverse.

What's bad is the removal of a rash of human rights, some of which have been with us since medieval times – as in the Magna Carta – are being stripped from us so the top-down, undemocratic, our-way-or-the-highway approach is enforced coercively. The highway could mean you're just pushed out to the margins of society, it could mean you're thrown in jail, although it's becoming more apparent that one of the the most likely tools of coercion will be the withdrawal of personal privileges, such as the use of shared tech platforms, travel and maybe even the education of your children.

NOW is the time for action

Please don't <u>not</u> take this seriously. It isn't a conspiracy theory, it's a conspiracy reality. Don't forget the words of the top man in the UN, Secretary General António Guterres: this is just the "*dress rehearsal*".

Here at ANH-Intl, we are preparing to bring another legal action with a leading team of lawyers that tackles issues that have yet to be targeted by the existing clutch of well developed cases. We'll keep you posted. The time for action is now.

And one more request: please share this article widely through your networks – thank you.

Evidence of collateral damage from lockdowns consolidates

Date:

13 November 2020



Great Barrington scientists team up with UK businessman Luke Johnson to create repository of evidence of lockdown harms

Content Sections

- Evidence speaks louder (than politics, eventually)
- On balance, the 'no lockdowns' have it
- The blindness of groupthink
- What is the collateral damage of lockdown?
- Find out more

While some were gratified by the change in lifestyle that the first round of lockdowns brought, it's becoming apparent that lockdowns can have a devastating downside. More and more information is emerging showing they can destroy lives, livelihoods and economies, while robbing people of their health and wellbeing. Increasing numbers of scientists and health professionals are voicing their concerns over the continued use of lockdowns to 'control' an uncontrollable virus that has likely already become endemic. But their calls are falling on deaf ears as governments globally once again resort to lockdowns to counter spiralling 'case' rates seemingly regardless of the indirect collateral damage caused by lockdowns.

Evidence speaks louder (than politics, eventually)

Long-term, it's evidence – especially robust evidence – that will hold sway. That's the reasoning behind an initiative at CollateralGlobal.org that's being established as "a global repository for research into the collateral effects of the COVID-19 lockdown measures." It was set up on 4 November with the help of UK businessman, Luke Johnson (no relative of the UK's prime minister).

The entity hosting the website is a UK based non-profit and it has none other than the three, world-leading public health scientists behind the Great Barrington Declaration on its supervisory board, namely Dr Jay Bhattacharya (professor of medicine, Stanford Institute for Economic Policy Research), Dr Sunetra Gupta (professor of theoretical epidemiology, University of Oxford) and Dr Martin Kulldorff (professor of medicine, Harvard Medical School). They are accompanied by outspoken, evidence-based lockdown skeptic, Dr Carl Heneghan, professor of evidence based medicine, University of Oxford).

The site has initially focused on the UK, but will be expanding to include other countries in the coming weeks. Writing in *The Times*, Luke Johnson accused the UK government and its "expert" advisors of "suffering from a number of failings linked to cognitive biases in their approach to Covid-19 and lockdowns".

Given that the heavily funded, pro-lockdown scientists responded to the Great Barrington Declaration with the John Snow Memorandum, should we expect to see copy-catting with the release of a website containing a repository of evidence for the benefits of lockdown? Drs Bhattacharya, Gupta, Heneghan and Gupta have been predictably smart: the John Snow lobby will struggle given the paucity of data. They're also well behind on signatures. So if you hear anyone in government telling you lockdown decisions are being based on science, you'll know they're either lying or they're ignorant.

Signatures

current signature count

concerned citizens

medical & public health scientists

medical practitioners

625,561

11.930

34,425

Signatures of scientists will be made public after verification and approval

With the current success of the campaign we have to ensure that the server remains available for signatures to be added.

We will update this page with a static list of verified and approved signatures as time allows.

Please read the Frequently Asked Questions here.



Screen grab today from Great Barrington Declaration website

MORE THAN 6,900 scientists, researchers & healthcare professionals have now signed the John Snow Memorandum.

We vet every signature, so it may take 72 hours for your name to appear.

Thanks for your support, and please continue to share with your colleagues.



THE JOHN SNOW MEMORANDUM

Screen grab today from John Snow Memorandum website

On balance, the 'no lockdowns' have it

What's emerging is an interesting balance of evidence: The evidence for lockdown benefit continues to be wafer-thin, with the harms caused by lockdowns increasingly outweighing any perceived or measured benefits. As we showed last week, countries that have locked down hardest have among the highest covid-associated mortalities and there is no clear association with outcomes and lockdown severity or absence.

Even Dr David Nabarro from the World Health Organization has gone on record to say that governments should only ever use lockdown as a last resort.

The blindness of groupthink

UK Chancellor Rishi Sunak warned in October of an impending 'economic emergency' if the UK Government was to go ahead with a second lockdown. His warning went unheeded and a second lockdown was initiated without any impact assessment. It seems when the strings of the global governance movement including UN agencies, the World Economic Forum, the International Monetary Fund, and others have decided on a particular course of action, obedient governments choose to follow suit, regardless. Groupthink becomes the driver, not science or the welfare of the world's populations.

In the US, 600 doctors sent a letter to Donald Trump branding lockdowns "a mass casualty incident" with "exponentially growing health consequences".

What is the collateral damage of lockdown?

Following is a summary of the known evidence of lockdowns, based on established harms of lockdown measures, reflected by the evidence documented on the *collateralglobal.org* website. The Figure complements the 'Big 52' we identified in an article on 'covid myopia' released 2 weeks back, that includes 52 risk factors for severe covid-19 disease, many modifiable, widely ignored by governments and health authorities.

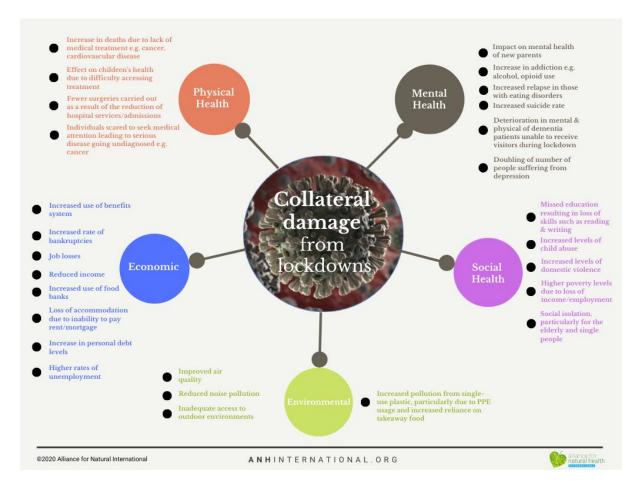


Figure. The collateral damage from lockdowns. Based on the expanding evidence repository at collateralglobal.org

Note: evidence marked with an asterisk below can be found at www.collateralglobal.org. Other evidence is from variable sources including media reports and has sometimes yet to find its way into peer reviewed journals.

Mental health

- Increase in addictions e.g. alcohol, opioid use. Levels of alcohol consumption in the UK has increased and many recovering addicts have experienced a relapse or reoccurrence of their addictive behaviours during lockdown*
- Recovery from eating disorders has been heavily impacted with loss of support services*
- Increased suicide rates. In the US a quarter of young adults are reported to have contemplated suicide during the summer. While in London calls out to attempted suicides and suicides have doubled.
- The mental and physical health of elderly patients in care homes and especially those suffering with dementia has deteriorated considerably with the loss of contact with loved ones.*

Physical health

- Increase in deaths due to lack of medical treatment e.g. cancer, cardiovascular disease. Data to the end of April show a significant fall in hospital admissions for chemotherapy and urgent referrals for patients with suspected cancer*
- Children's health has been impacted due to difficulty accessing treatment
- Fewer surgeries have been carried out as a result of the reduction in hospital services and admissions as medical services focus on covid-19 cases*
- Calls to protect the NHS created a fear of catching the virus in hospitals resulting in individuals being scared to seek medical attention leading to serious disease going undiagnosed e.g. cancer.

Social Health

- Levels of child abuse have increased dramatically.* With children unable to get away from their abusers due to restrictions. The NSPCC reported* a 32% increase in calls during lockdown
- With schools closed many children missed out on education resulting in a loss of basic skills such as reading and writing
- The EU reported a 60% increase in emergency calls about domestic violence during lockdowns*

- Higher poverty levels due to loss of income/employment*
- Social isolation, particularly for the elderly and single people*
- As people become increasingly unable to pay rent or mortgages homelessness has risen. It is expected to continue rising as more people are forced into unemployment.

Environmental Impacts

- Among the most tangible positives from lockdown are environmental benefits. Air and noise pollution reduced, water quality improved and nature had an opportunity to regenerate
- However, pollution from single-use plastic increased significantly, particularly due to PPE usage and increased reliance on takeaway food and drink.

Economic Impacts

- Bankruptcies in advanced economies are predicted to increase by around 20% in 2021 as government support for businesses affected by lockdown is withdrawn
- High levels of unemployment due to job losses. Record numbers of British workers have lost their jobs in the three months to September causing the unemployment rate to rise to its highest rate since November 2016. In the US unemployment hit a record high of 14.7% as a result of the first lockdown. With the current government so far resisting further lockdowns the unemployment rate has now dropped to 6.9%
- Levels of personal debt are rising as people struggle to pay for essentials
- Benefits claims in the UK have increased over 112% since March 2020.

It's not only scientific factions that are polarised, so are political ones – that polarisation being reflected in society.

In the US, President-elect Biden has pledged to rebuild the relationship with the WHO, go for a national mask mandate, and has mooted the possibility of nationwide lockdowns. Where's the science. Mr Biden?

It's no different this side of the pond. In the UK, health secretary Matt Hancock vows "to inject hope into the arms of millions this winter", although it's reassuring he'll have to face a growing army of Tory rebels who've launched an anti-lockdown campaign group.

If there can be one generalised conclusion, it's that politics trumps science (pun noted).

Lies, damned lies and [UK government] statistics

Date:

6 November 2020



Unpicking the misinformation on which lockdowns are based

Content Sections

- The Video
- Transcript
- How dangerous COVID-19?
- Where did the dead die?
- How close were hospitals to being overwhelmed during the first lockdown?
- Will whole city testing in liverpool work or backfire?
- Do lockdown work?
- Why is dialogue being shut down

The following video was immediately pulled from YouTube when uploaded this afternoon for the following alleged reason:

"YouTube doesn't allow content that explicitly disputes the efficacy of local health authority or World Health Organization (WHO) guidance on social distancing and self isolation that may lead people to act against that guidance." It is now playing from Vimeo. We don't mention either social distancing or self isolation in the video.

The Video

https://vimeo.com/476417488#share

Transcript

Hi there – my name's Rob Verkerk – welcome to our latest coronacast, coronacast 9. In it we're going to be taking a closer look at the confusion around government statistics, focusing especially on those used by the UK government

The United Nations tells us "The coronavirus COVID-19 pandemic is the defining global health crisis of our time and the greatest challenge we have faced since World War Two."

If we accept this, and also accept there's now evidence that social distancing, lockdowns, working from home and wearing masks significantly reduce hospitalisations and deaths, there'd be at least some justification to put us once again under lockdown, a particular form of house arrest.

Here's how, Lord Jonathan Sumption, a former and eminent supreme court judge, describes our current predicament:

As we, here in the UK, prepare to go under house arrest once again this Thursday, let's look at some of the government's own data that underpin this draconian decision that will inevitably result in another surge of businesses going under, suicides and mental illness, and potentially crippling impacts on the economy.

How dangerous COVID-19?

If we forget for a minute that we still don't know how many people have died of Covid – and consider only those who've died *with* Covid as the Government does, we need to be aware that for September, the most recent data for which there is publicly accessible data, Covid-19 ranked just 19th in the leaderboard of leading causes of death in England. It was ranked 24th the month prior, in August. We await the data for October, which will inevitably see an upturn – but we'll still be unlikely to be able to decipher how much of this is actually caused primarily by SARS-CoV-2, rather than being people who died who also tested positive within 28 days of their death.

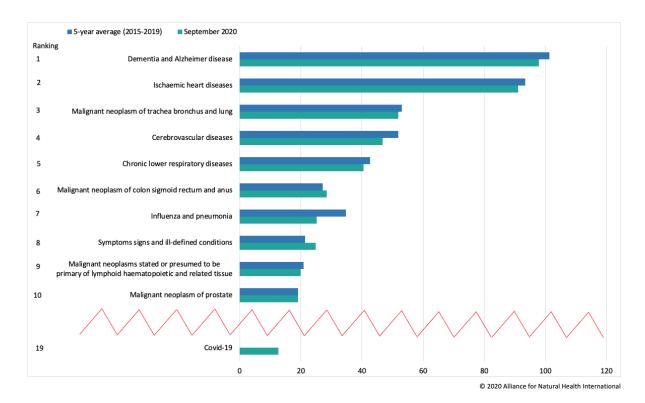


Fig 1: Leading causes of deaths in England in September 2020 Data source: Office for National Statistics

By comparison, chronic lower respiratory diseases, and then influenza and pneumonia, ranked 5th and 7th respectively, both of these sharing many of the symptoms that are also common to the disease in 19th place that's brought the country to its knees.

We have to ask ourselves why do we accept so much collateral damage through our myopic reaction to one disease that may not even make it into the top 10 list of killer diseases by the end of the year? What if we were to do the same thing for another disease? And why haven't we done anything as radical as this for influenza and pneumonia in the past, given both are communicable diseases caused by viruses or bacteria that get passed to people in close proximity with each other?

You'll remember earlier this year when we went into lockdown the first time round, it was all about protecting the NHS and preventing health services being overrun.

Well the picture here tells us something that's quite at odds with what the Government's been saying – yet this figure relies on their data.

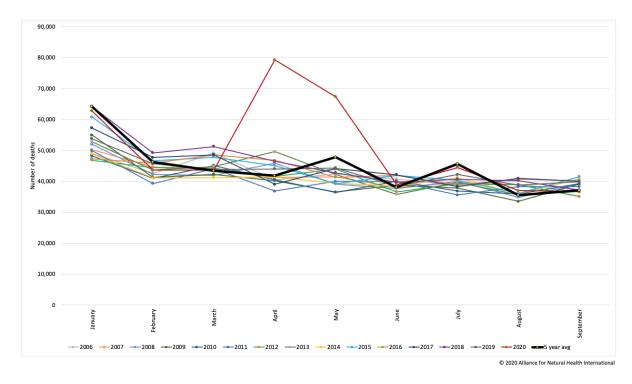


Fig 2: Mortality rates England & Wales. 2006 - September 2020 Data source: Office for National Statistics (ONS)

The graph is based on data from the Office of National Statistics and it shows – with a red line – all the deaths from January through to the end of September in 2020. All the other lines show the same time period for all the years from 2006 through to 2019. You can see the clear excess of deaths compared with the other years that occurred between March and June 2020 – something quite unique in recent time and obviously deeply tragic for the families and friends affected.

But as we'll see in a minute, the vast majority of these deaths were among those who were elderly with underlying conditions who would have likely died relatively soon even without SARS-CoV-2. What we've seen is in effect a concertinaing of deaths.

But there's something else that's important about this graph. Look at the right side of it. You'll see that since June – there's been nothing to speak about that's different from any other year. Yet, the country has been able to do little else than wallow in a state of fear, preparing itself for the next lockdown that was sold to us as an inevitability by the Government and the well-healed mainstream media.

Where did the dead die?

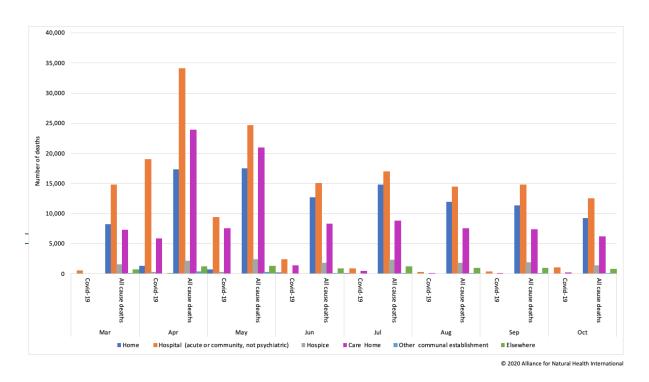


Fig 3: Weekly provisional figures on deaths registered where coronavirus (COVID-19) was mentioned on the death certificate, by place of occurrence, in England and Wales

Data source: Office for National Statistics (ONS)

Most people who died in 2020 in England and Wales, died in hospitals, not necessarily getting the best care known to science or medicine. Many early on were put on ventilators before it was realised they do more than good for most people with Covid. Often people's immune systems were not working properly because they were deeply depleted of essential nutrients like vitamins D, C and zinc. Next in line were people dying in their homes, then in care homes – but this pattern is typical of people who die of all kinds of respiratory infections in other years.

Whichever way you look at the data, the death toll associated with Covid-19 in hospitals and carehomes was bad in April and May. But the fact is – it's been trivial compared with other causes of death since June. And it remains that way.

How close were hospitals to being overwhelmed during the first lockdown?

The simple answer to this question is not close at all. Even before extra capacity was created through the construction of the Nightingale hospitals, there was always space, especially given that the Covid wave of March and April came after the worse of the normal winter surge from respiratory infections including flu and pneumonia.

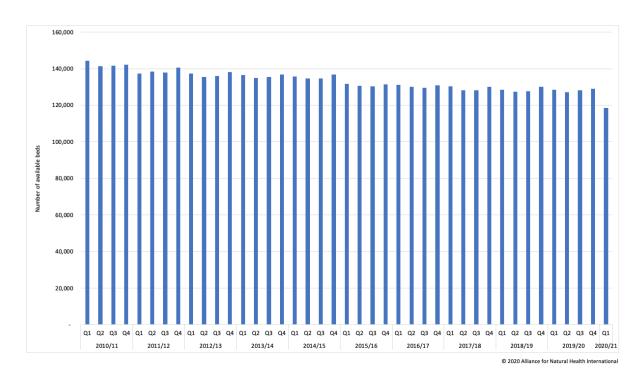


Fig 4: Average Daily Available Beds. 2010/11 - Q1 2020/21

Data source: NHS England

As this graph shows here, there were consistently between 120,000 and 140,000 hospital beds available from 2010 through to the first quarter of 2020, when the primary wave of infection hit. And despite the predictions, hospitals were nowhere near to being overwhelmed.

Moving on to this autumn and the impending winter – while numbers are ramping up in British hospitals – the number of beds in critical care – are in line with other years – as you can see here in this latest graphic from the Daily Telegraph.

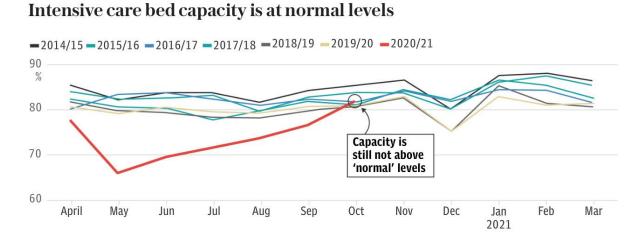


Fig 5: ICU bed capacity
Data source: Daily Telegraph

And now to a pretty fundamental and key point that's far from a favourite topic of discussion with governments. The fact that a lot of people are testing positive doesn't mean they're being hospitalised because of the danger Covid-19 disease poses to them.

As we and many others have said before, the PCR test is flawed.

It simply amplifies a specific sequence of the virus and tells you nothing about whether that sequence is linked to a virus that's active, transmissible and can cause serious illness or death. That all-important 'read-across' is simply not there – and we've never before classified illness only on the basis of the presence of a gene sequence. Usually we define diseases according to specific symptoms and described patterns of pathogenesis. Right now, the Government is being very cagey with data – and it has yet to put clear information into the public domain that explains the underlying reasons for hospitalisation.

In fact, it's positively interfered with the sharing of data as you can see here in the case of Manchester hospitals.

Will whole city testing in liverpool work or backfire?

The army is also now being mobilised in Liverpool to roll out the first whole city testing programme anywhere in the UK using both a flawed testing and a flawed disease classification process. That means they plan to test everyone, regardless of who you are, your age, locality, risk of disease or your state of health. Liverpool's been chosen as a testing ground for a plan that's being considered nationwide because it's claimed to be one of the country's worst Covid hotspots.

This next round of lockdowns will now further decimate lives, livelihoods and economies. More people won't get the care they need because healthcare systems have been so myopically focused on one disease for the last three quarters of a year.

But what's really going on in Liverpool?

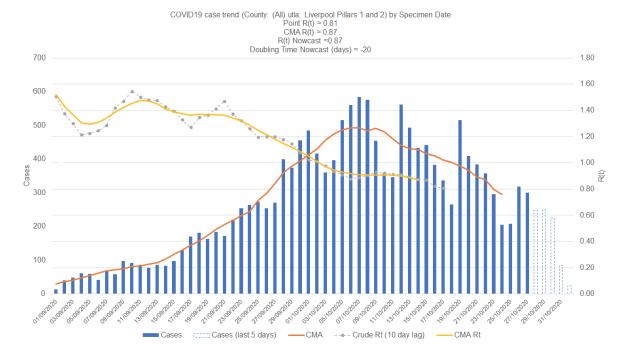


Fig 6: Data source - https://pbs.twimg.com/

The Liverpool data show that even so-called 'cases' of Covid-19 based on testing are going down – and there's conflicting information in the media as to whether hospitals in the area are close to capacity or not. But bear in mind this is the time of year when most hospitals face the greatest pressure from increases in respiratory infections among older and immune compromised patients, regardless.

Will more positive tests – inevitably including a large number of false positives – lead to the people of Merseyside having even more of their rights stripped from them? Will their fate be used as reason to lock them down even harder?

Do lockdown work?

One way of finding out whether lockdowns work is by looking at what happened to Covid-related deaths in different countries or regions that enacted different degrees of severity of lockdown or other restrictive measures.

Here we take international data sets collated by Worldometer and look at rates of severe disease and death related to covid.

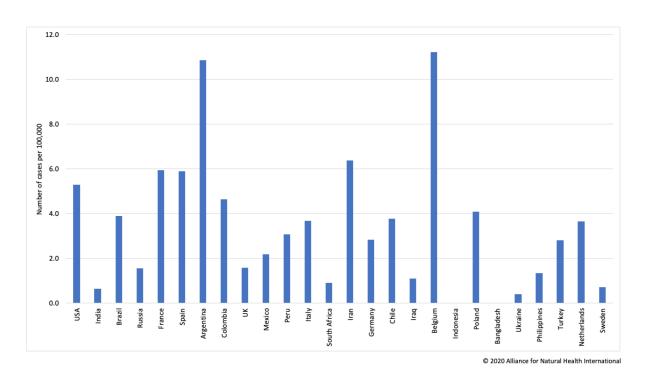


Fig 7a: Total coronavirus serious/critical cases per 100,000

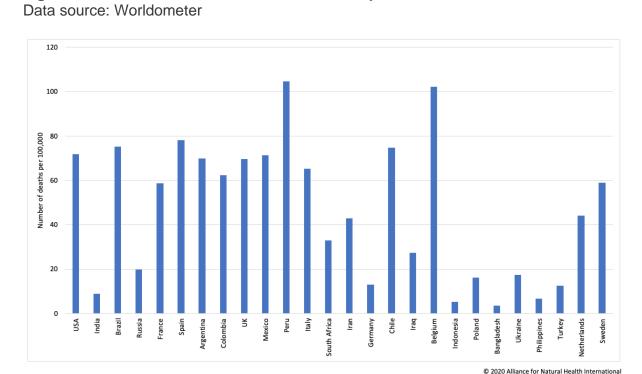


Fig 7b: Total coronavirus related deaths per 100,000 Data source: Worldometer

You'll see there's precious little evidence that countries with severe lockdowns have fared better than those who used a more hands-off approach. The three countries with the, so far, highest death rate per capita, Peru, Belgium and Spain, all locked down very hard. Sweden was heavily criticised for its light and voluntary lockdown approach that spared its economy did slightly better than Italy or Spain – and is on par with France –

these three other European countries were praised for the rigour of their lockdowns and clearly playing the game.

President Bolsonaro in Brazil was widely lambasted for his laissez-faire approach, while President Piñera of Chile has been accepted. Their per capita death rates are more or less the same, regardless.

It seems that whatever humans try to do to stop transmission through lockdowns and social distancing, like every respiratory virus before it, this one will do its own thing. And it may be there are a bunch of other factors that affect it more than human attempts to break the transmission cycle. Such as the number of cases that kicked it off in a given country, what groups became infected, in what kinds of conditions they were located, what their underlying health was, what the climate and seasons are doing – and so forth.

Governments seem to think they can control the virus – pragmatic evidence suggests otherwise.

Why is dialogue being shut down

Whatever our differences of views, based on the huge, varied and variable data quality we're able to access, there's one thing that normally helps us resolve things. It's called dialogue. But the concerted effort around the world to shut down conversations and dialogue that's at odds with the masterplan being enacted by governments and controlled by intergovernmental and non-governmental organisations such as the United Nations and its various agencies like the WHO and UNDP, the World Economic Forum, the International Monetary Fund and others, is – wait for it – unprecedented.

If you don't toe the party line, you get shut down, censored or marginalised.

In the UK, like in many other countries, it seems the Government will do what it wants by simple decree, without good reason, without scientific dialogue, and with barely any consultation with Parliament, the bedrock of the democratic system that's existed since the signing of the Magna Carta in 1215.



The Magna Carta was described by the eminent Lord Tom Denning back in 1956 as "the greatest constitutional document. Yet these rights, that have been central to liberty for 800 years, have been withdrawn in just 8 short months.

In the quagmire of misinformation, censorship and restrictions in which we now exist, there's one thing we can probably all agree on. People across the world are deeply divided. It's as if we are at a juncture in which those with different values are incapable of seeing eye to eye with each other – and now are forbidden to enter into conversation.

But as evolutionary biologist Bret Weinstein said the other day from his home in Portland (Oregon), we're one species on a piece of rock, orbiting a star. If we've got differences, we better learn to talk to each other. It's the only way we're going to sort things out – it's the only way we ever have done.

If there's just two things we should be asking of governments, the media and the tech platforms who've assumed control over our lives and our hard-won rights over the last 8 months – it's to be accountable for any decisions that restrict our freedoms, and allow dialogue and conversation so that the many divergent voices can be heard.

Let's hear each other's differences, not bury them.

That way, at least, we'll be less likely to be exposed to lies, damned lies and manipulated statistics.

Only with transparency, as well as accurate and balanced information about the world around us, can we help to shape a future we'd be proud of handing over to the next generation.

Premature and presumptuous Pfizer vaccine publicity

Date:

13 November 2020



Are BioNTech & Pfizer trying to avoid transparency and will their ethics further erode public trust in science and vaccines?

Content Sections

- Chasing rainbows
- What we've been told
- What can we make of this?
- Unknowns
- As transparent as a not-quite-black box
- What shall we make of it?

By Rob Verkerk PhD, founder, executive & scientific director, ANH-Intl

It won't have escaped you that the airwaves are currently booming with news from an interim report of the Phase 3 trial on the Pfizer-BioNTech mRNA-based vaccine, snappily named BNT162b2. It's one of 48 vaccines under clinical evaluation that aims to protect against Covid-19. The primary source of the news, headlined by a "90% effective" claim, isn't a peer reviewed journal article. Nor is it the World Health Organization (WHO). Rather, it's a media release issued on Monday by Pfizer, the

commercial partner linked to the young German biotech company BioNTech, that developed the vaccine.

The news that the vaccine has been shown to be "90% effective" has sent Pfizer stocks flying, and caused the company's recently appointed, ex-veterinarian chairman, Dr Albert Bourla, to sell off 62% of his personal stock in Pfizer. The share sale was apparently tripped by an automated system set up in August when the share value hit a given price.

Chasing rainbows

Pfizer was conspicuous, given its position as one of the largest drug companies in the world, in excluding itself from the US government Operation Warp Speed. The downside for Pfizer was that it didn't benefit from the US government (= taxpayer) funding support that the likes of Moderna, Johnson & Johnson and Astra-Zeneca have been privy to. But don't feel too bad, BioNTech received funding from the German government. The plus side for Pfizer was that it didn't need to be dictated to by others, and it didn't need to data share or have its data analysed by a shared, Operation Warp Speed data monitoring committee. Remember this as you read on.

So, what do the headlines really mean? Here's the first problem. We only have a press release to go on. At ANH, we're always keen to get to primary data sources so we had to look further. The press release refers to an interim report on the Phase 3 trial by an "external, independent Data Monitoring Committee (DMC)". An article by the Kaiser Family Foundation suggests that Pfizer's DMC is anything but independent. The anonymity of its 5 members also makes it anything but transparent.

We weren't going to give up looking for the interim report given widespread calls, such as that in a September editorial in one of the world's most influential journals, *Nature*, which argued "COVID vaccine confidence requires radical transparency".

We'd seen the protocol, but if better-than-expected interim primary outcomes were going to be cited, we had to assume Pfizer or BioNTech would make the data behind the results available. The first place we went hunting for the interim report was the WHO "Draft landscape of COVID-19 candidate vaccines" page, that incidentally "disclaims any and all liability or responsibility whatsoever for any death, disability, injury, suffering, loss, damage or other prejudice of any kind that may arise from or in connection with the procurement, distribution or use of any product included in any of these landscape documents".

Alas, while the WHO page was updated yesterday, the report isn't there. What you will find there is the now outdated trial design for the vaccine as a link to the NIH ClinicalTrials.gov portal. But no interim study results. A Google search using the terms "Data Monitoring Committee" BNT162b2 BioNTech Pfizer' and similar didn't make it magically appear either, just lots of references to the "90% effectiveness" claim across a plethora of media channels. Suffice to say, I think we can confirm that there are no supporting data for the claim.

What we've been told

Back to the press release. The key pieces of information that fall out of it are as follows:

- The claim in its full glory: "more than 90% effective in preventing Covid-19 in participants without evidence of prior SARS-CoV-2."
- A link to an updated study design (protocol) which presumably replaces the one listed on ClinicalTrials.gov.
- 43,538 participants enrolled to-date (89% of which have received the second dose)
- 42% of participants have "ethnically diverse backgrounds" (which begs the question what ethnicity is the non-diverse 58%; surely not Caucasian? But probably)
- 94 people out of the 43,538 participants (i.e. just 0.2%) have contracted Covid-19 so far, these being split between the vaccinated and placebo groups, the split not being reported
- "No serious safety concerns have been observed" which does not mean
 moderate or severe adverse reactions have not been observed. Two months of
 safety data will be available at the time Pfizer applies for Emergency Use
 Authorization with the US Food and Drug Administration (FDA)
- The clearest statements of all appear in the disclosure notice and commentary on forward-looking statements at the end of the release that appear to be directed at the stockmarket. They effectively abrogate Pfizer and BioNTech of any responsibility for performance of the final product, especially in relation to effectiveness, safety or supply. The lawyers are clearly being attentive to their clients given the world's eyes are on them.

What can we make of this?

In terms of the key statement on effectiveness, let's say that just 10% of the vaccinated group of 94 were infected. If you round that up to 10 people, a 90% claim that would make it 9 out of 10 were able to prevent infection post-vaccination. Not a lot of people potentially – which is why Pfizer and BioNTech should have been clear about numbers because 60 is a lot different to 10. But, remember that the press release states "over 90%"? Dialling in the inner Sherlock Holmes, just 11 of the infected group also being vaccinated, with 10 of these exhibiting immunogenicity as per predetermined trial endpoints would do it (9 divided by 10 gives 90.9%).

But for this interim endpoint the protocol lists primary and secondary endpoints for effectiveness – principally the prevention of Covid-19 symptoms in those showing evidence of infection (by nucleic acid amplification tests [NAAT]), as well as secondary ones – the development of various serological (antibody) results such as neutralizing antibody titers, S1-binding IgG and/or RBD-binding IgG levels, N-binding antibody. But which ones and by how much? And for how long (too soon for that of course)?



What else would we need to know to understand better the BioNTech/Pfizer interim result? Key information that hasn't yet been put into the public domain and could have accompanied the interim release includes:

- The number of people in the vaccinated or placebo groups who were exposed to SARS-CoV-2
- The demography (age, gender, ethnicity, etc) of those who were infected and how many of these represent the most vulnerable groups i.e. the elderly or those with comorbidities
- On what particular outcome parameters was the effectiveness determined? Was it, for example, based on lack of Covid-19 disease symptoms combined with elevated antibody responses, and if so which ones?
- How serious was the manifestation of Covid-19 disease in the equivalent vaccinated and placebo groups (i.e. similar ages, gender, ethnicity and underlying disease pattern)?
- What is the composition of the placebo that is being delivered to 50% of the 44,000-strong study population? Does it include the lipid nanoparticle minus the mRNA that encodes for the full-length spike protein of SARS-CoV-2?
- What was the response of the cell-mediated (T cell) side of the adaptive immune system (which are not included in the endpoints according to the trial protocol)? The October publication of the Phase 1 results in the New England Journal of Medicine indicated it was the sister vaccine, BNT162b1, that produced a strong T-cell response but this was dropped as the vaccine induced some serious adverse reactions

- What was the nature, severity and extent of adverse events to BNT162b2 reported until now in the Phase 3 trial?
- How long will immunogenicity against SARS-CoV-2 persist in different people?

Unknowns

There are also many unknowns that may well remain unknowns. Top of my list would be these two:

- The possibility that some of the NAAT-confirmed cases involve infection with other human coronaviruses and it is these non-SARS-CoV-2 viruses that have triggered the measured immunogenicity and the NAAT results are either false positives or the result of SARS-CoV-2 viral fragments
- The presence of non-replicable viral fragments of ('dead') SARS-CoV2 have triggered immunogenic reactions so infection could not anyway have occurred

As transparent as a not-quite-black box

As so appropriately put by Peter Doshi, an associated editor of the BMJ and also associate professor of pharmaceutical health services at the University of Maryland School of Pharmacy, "The lack of data is very concerning....All we have right now is a headline by Pfizer."

"The lack of data is very concerning....All we have right now is a headline by Pfizer" Dr Peter Doshi, associate editor, BMJ

What shall we make of it?

I've taken you through my thoughts triggered by the press release. You can see it's led to a number of dead ends and it's raised more questions than it's answered. But let me distil my views down to the following:

- 1. In my view, it's misleading, far too premature and disingenuous for Pfizer to be telling the world that the trial has demonstrated 90% effectiveness so far because most people will assume that that means, regardless of age, health status, ethnicity or underlying conditions, if they get vaccinated with an emergency approved vaccine that has undergone just 2 months of safety evaluation, they will have only a 10% chance of getting seriously ill if they become infected and it will be safe. There are insufficient data to support either outcome.
- 2. It's difficult to judge the effectiveness claim against what your chances might be if you remain unvaccinated. But if you're healthy and under 75-years-old, the

chances of serious disease are very low, probably much less than 10% following infection. But accurate estimates still cannot be made because we continue to be blind to the number of people who have been infected, and therefore, also to the true rate of serious disease and mortality among those infected. What we are also aware of are big variations in estimates of the number who are likely asymptomatic (infected but without symptoms).

- 3. Nothing can be said about the risk of harms from vaccination with two doses of BNT162b2 such as triggering autoimmune conditions as the trials need to run their course and most of these kinds of problems are generally not picked up until years after the product is first marketed. And that's assuming a normal 6-year development program. Two months of post-vaccination adverse event reporting just doesn't cut it if you want a proper handle on safety.
- 4. If this vaccine fails to be effective a few months after its second doses has been administered, is there going to be a justification made for its mass roll-out, given the huge economic cost to society, the risk of harms, and the fact that healthy people seem to tolerate SARS-CoV-2 more than adequately? Remember, it was the alternate BioNTech vaccine, BNT162b1, that was found to enhance the T-cell response more, but had an unacceptable safety profile so was dropped
- 5. Where is the risk-cost-benefit analysis by governments showing that rollout is both necessary and justified?
- 6. Disturbingly, this announcement, and the lack of data associated with the press release, demonstrates that Pfizer and BioNTech have an incapacity for real and meaningful transparency.

This leads to one central question: Can the public truly afford to trust vaccine companies who deliberately withhold information and data and have preyed on the public's desperation to escape lockdowns, while, at the same time, reaping the rewards from the stock market that has responded to a premature and unsupported announcement?

Call me a conspiracy theorist, if you like, for asking this question.

Kids aren't superspreaders, and they may even be superbarriers

Date:

19 November 2020



The study of one Aussie family that may hold the key to breaking the transmission cycle. Remember how the global response to Covid last March was all about stopping hospitals from being overrun? It turns out very few were ever overrun. Then there was this big focus on kids and young people, as it was thought children might be 'superspreaders' who would go on to 'kill Granny'.

Kids misjudged as superspreaders

As early as June, the likes of Spanish paediatrician and public health specialist, Dr Luis Rajmil, showed how the available evidence at the time revealed that children could be no more important than adults as spreaders. It turns out, unsurprisingly, you can't just transfer knowledge and experience from influenza and apply it to covid. Then, in July, Swedish epidemiologist, Dr Jonas Ludvigsson from the Karolinska Institute, well and truly put the nail in the coffin of the idea that kids might be the problem, pointing to evidence that showed that is was unlikely that kids were the main driver of the pandemic.



Kids: from problem to solution?

Now we have a new insight. Kids are not only unlikely to be superspreaders, they could actually be a significant part of the solution. It seems their exposure to the virus may create one of the most effective ways of breaking transmission cycles of SARS-CoV-2. If that turns out to be the case, the Preston-born slogan "don't kill Granny" will have been another policy that will need to be U-turned, like vitamin D.

The latest insight comes from a very detailed case study on a single family published by a group from the Murdoch Children's Research Institute and the University of Melbourne, led by Dr Shidan Tosif, just published in the journal *Nature Communications*.

The purpose of the study was to monitor in great detail the immune responses in one particular 5-person family in which the two parents (female, age 38; male, age 47) contracted the virus on a 3-day inter-state trip from their Melbourne home to attend a wedding. When they got home, they developed symptoms (fever, cough, runny nose, headaches, fatigue, headache) that lasted around 2 weeks.

Two out of the three kids (both boys, aged 9 and 7) developed mild symptoms but the youngest, a girl (aged 5), remained entirely asymptomatic. The symptoms in the older of the two boys were slightly worse than the younger boy, including cough, runny nose, sore throat, abdominal pain and loose stools. The younger boy suffered only a cough and runny nose. The girl remained entirely free of symptoms despite having the closest exposure to her parents when they were infectious, sharing the bed with them when they were unwell.



The Melbourne family that were subject to the detailed case study. The children all developed a SARS-CoV-2 immune response after chronic exposure to the SARS-CoV-2 virus from their parents but never tested positive. Source: Murdoch Childrens Research Institute / AAAS EurekAlert

Despite repeat PCR testing, none of the 3 children ever received a positive test result. Yet, despite having no evidence of replicating SARS-CoV-2 in them, all three kids developed strong antibody responses as measured in saliva and blood plasma. Additionally, the adults developed strong and sustained T-cell responses which would have conferred long-term immunity.

What's particularly interesting is that the youngest child who never had symptoms developed the strongest antibody response and that response was especially strong in the saliva. The authors of the study rightly suggest that this could mean that children can develop a very strong innate mucosal response to virus particles that land in the nose, mouth and airways that prevents the virus from gaining entry to the body and replicating. Hence the lack of evidence of replicating virus in these three children.

What can we learn from the Aussie family?

It's early days in terms of understanding a new disease, but let's tease out a few key points that this study brings to light:

- Kids might have such a strong innate mucosal response that they are able to block the virus from entering the body
- Younger kids may have a stronger innate mucosal immune response than older ones
- Measuring blood levels of antibodies doesn't tell us what the mucosal response will be and it's our mucosal surfaces that provide the first line of (innate) defence against virus particles
- Adults would do well to build their innate immune responses to make their mucosal immune defences work more like those of kids – and that requires vitamin D, vitamin C and zinc, among other 'essential', 'conditionally-essential' and so-called 'non-essential' nutrients.
- Young kids who are exposed to the virus may be among the most effective neutralisers of the virus, so when they are in the transmission chain, they could break the transmission chain and reduce rather increase total viral loads



Could the kids in Sweden have played their part in blunting the second wave that's now being felt in some other European countries (Fig. 2)?

Australian study to Swedish reality

The role of kids as a driver of the pandemic now seems entirely misconceived. Millions of kids have been deprived of education in many countries – and may now suffer unnecessary consequences that could last a lifetime.

Worse than that, efforts to try to narrow social, educational and health inequalities among children over the last few years are likely to have been in vain. Kids from deprived backgrounds have been disproportionately impacted.

We think it's probably just a matter of time before there's widespread recognition that school closures and continued social distancing policies will turn out to be entirely unjustified with no upside whatsoever, just a big, drawn out series of downsides.

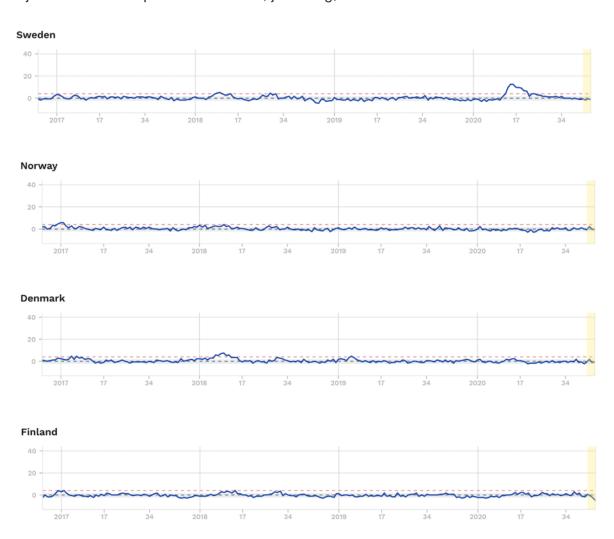


Figure 1. Excess mortality (as z-scores) for selected Scandinavian countries, with Sweden showing significant excess mortality during 'first wave'. Source: **EuroMOMO**

It's worth keeping an eye on Sweden. Remember that Sweden suffered a relatively high initial infection rate, comparable to the UK, France, Spain and Italy, unlike its Scandinavian neighbours Finland, Denmark and Norway (Fig. 1). But despite this, the light, voluntary lockdown which involved no school, restaurant or café closures, has led to no increased excess mortality since the end of May. On top of this, the Swedish economy has been among those least impacted by the pandemic, and perhaps, in time, the same will be found to be the case with the education and development of the country's most valuable assets: its children.



Figure 2. Excess mortality (as z-scores) for selected European countries, showing excess mortality during 'first' and 'second' waves, albeit being borderline and subject to change as recent uncertain data solidify for France and England. Source: **EuroMOMO**

Podcast: The pieces of the covid jigsaw the mainstream don't talk about

Date:

27 November 2020



Join ANH's Rob and Mel in a 2.5h marathon podcast for the Seekardo Show with Dr Ro Weerasinghe and Harminder

Rob Verkerk PhD, ANH Intl founder, executive and scientific director, and Meleni Aldridge, ANH Intl executive coordinator joined Dr Ro and Harminder on their Seekardo Show podcast for a wide ranging conversation about:

- The power of the collective consciousness to make change happen
- Protecting your mental health during lockdown (and beyond)
- How to create a resilient immune system
- The four R's to overhaul your nutrition and in turn create a resilient gut & immune response
- Important nutrients to supplement your diet to encourage a healthy immune system
- What daily health symptoms are not normal and should be addressed asap
- Understanding Covid better overall
- Important questions to ask yourself about Covid
- Covid testing, masks and other common questions people have
- Understanding personal risk assessment
- What can you personally do going forward to manage risk on a personal level

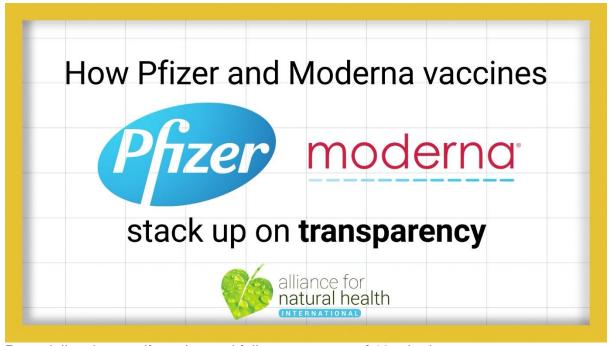
We hope you find it a useful and insightful discussion from ANH's unique perspective. Settle in with a cup (you may need more than one!) of your favourite beverage, put your feet up and journey with us for around 2.5 hours! And if you then feel this is the kind of conversation more people should be exposed to, please share!

https://www.podbean.com/ew/pb-h94hy-f2d52b

Could we be the losers in the vaccine race?

Date:

19 November 2020



Potentially – but not if we demand full transparency of 10 criteria

Content Sections

- The race is on
- Not enough data
- Pfizer and Moderna announcements
- Vaccine transparency manifesto
- Engaging with the data
- Don't blame us for asking

By Robert Verkerk PhD, founder, executive & scientific director

"Pharmaceutical corporations have a very poor track record of transparency across the board – from licensing deals and technology transfers to costs of R&D and clinical trial data – and the little information that has been revealed around AstraZeneca's not-for-profit promises should be a warning sign that pharma cannot be trusted to act in the interest of public health."- Médecins Sans Frontières / Doctors Without Borders (MSF)

The race is on

When everyone's trying to pick potential winners of the global race to produce covid vaccines, spare a thought for those of us who are the guinea pigs. We, the public, as well as concerned doctors and other health professionals, need to be crystal clear about what information we need to give consent – assuming vaccine rollout is not made mandatory in your country or state.

This is a bigger ask than it might be if we had functioning democracies. But in most countries that have enjoyed democratic governance in recent years, emergency measures granted by the World Health Organization's characterisation of Covid-19 as a "pandemic" on 11 March 2020, has seen democracy widely substituted by coercion and authoritarian rule.

Not only that, those who ask questions about vaccines have been marginalised as conspiracy theorists. A large international survey with over 13,000 people in 19 countries published in *Nature Medicine* found that 71% of those surveyed would agree to vaccination if it "was proven safe and effective" (but who adjudicates?). The highest acceptance rate (88%) was found in China and the lowest in Russia (55%). The same study found that acceptance was strongly correlated to trust in governments – another reminder that governments who have not managed to win the trust of their people must shoulder some responsibility for lack of vaccine confidence.

Not enough data

For many people, the problem isn't just a lack of trust, it's a lack of data. Scientists like Dr Tom Jefferson from Cochrane and Oxford University's Centre for Evidence Based Medicine as well as Dr Peter Doshi, the BMJ associate editor, have long argued for full transparency of trial data to allow clinical trials by vaccine (and drug) makers to be independently analysed.

>>> The UK Government's Vaccine Taskforce: strategy for protecting the UK and the world

Demand for transparency is also being called for by Médecins Sans Frontières / Doctors Without Borders (MSF) which recently warned "...the little information that has been revealed around AstraZeneca's not-for-profit promises should be a warning sign that pharma cannot be trusted to act in the interest of public health."

While some vaccine makers have agreed to not profit from the pandemic, AstraZeneca has made clear that it's limiting its non-profit pledge to 1 July 2021 which it has determined will be the end of the pandemic period. Clearly they have access to a crystal ball that we don't!

Pfizer and Moderna announcements

Pfizer's press announcement on 9 November said its BNT162b2 vaccine was "90% effective". That was followed by Moderna's claim of "94.5% efficacy". Moderna was then pipped at the post by the previous week's silver medallist, Pfizer, when it came back with its 95% effective claim just yesterday with the completion of its Phase 3 clinical trial. Of course this one half of one percent difference is meaningless in terms of statistical significance.

All these buoyant claims have been made with passing reference to a lack of serious adverse events, which you should know are ones that endanger life. The fact that 9 of the leading vaccine developers have signed up to a pledge to put consumer and covid-19 patient safety first (therefore before profits) is no doubt intended to help build confidence among a hesitant public.

If that wasn't enough – the airwaves are full today of news of the Oxford/AstraZeneca vaccine, courtesy of a newly published article in *The Lancet* journal. The headline was the immunity was as good in older people as younger ones, but we don't have sufficient detail around the kinetics of the adaptive immune response to really judge this claim objectively. Little emphasis was given to adverse reactions being worse for the genetically modified chimpanzee vaccine targeting SARS-CoV-2 as compared with the control meningitis vaccine.

But as with any marketing proposition, there's more than just one USP, the claimed efficacy in a Phase 3 trial. Other players like Johnson & Johnson and Novavax are claiming that the standard refrigeration temperatures required for their vaccines will likely be more suited to global logistics and distribution.

Vaccine transparency manifesto

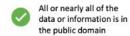
In May 2020, together with our colleagues at the British Society for Ecological Medicine. we launched a manifesto for the 10 information criteria we thought should be pre-conditions to providing informed consent for covid vaccination. These include manufacturers putting raw trial data into the public domain to allow independent analysis, disclosing the full list of ingredients in vaccines and what the state of naturally-acquired immunity is in representative populations prior to vaccination.

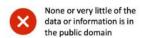
The table below shows how the BioNTech/Pfizer and Moderna vaccines stack up so far according to our transparency criteria. There is clearly a long way to go before meaningful transparency can be declared.

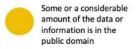
Table. Current status of transparency on BioNTech/Pfizer and Moderna mrna vaccines (19th November 2020)

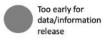
	Vaccine transparency manifesto areas	Pfizer	Moderna
1	Full disclosure of raw data from studies and trials to allow independent analysis	8	8
2	Full transparency in relation to safety and efficacy trials		
3	Full transparency over the vaccine platform(s) and technology used for commercial vaccines		
4	Conduct of comprehensive studies evaluating the independent risks from adjuvants (additives)	8	8
	Full disclosure of vaccine composition in commercial formulations	8	8
6	Full transparency of all adverse event data in all studies and post-marketing surveillance	8	8
7	Clarification of eligibility and criteria for no-fault vaccine injury payments or compensation	8	8
8	Clarification of nature and extent of government indemnity of manufacturers in the event of injury	8	8
9	Public dissemination of extent of naturally-acquired (herd) immunity prior to vaccine roll-out	•	
10	Engagement of due democratic process if mandatory vaccination is contemplated		

KEY









It's impossible to give properly informed consent without this information!

Engaging with the data

But having the necessary data and information is just the starting point. Then you have to engage with it. An important priority for many will be to weigh up the known risk/benefit profile of the vaccine against need. This requires understanding the danger posed by the virus, the virulence of which is likely weakening, as well as knowing the extent of naturally-acquired immunity. It should also take into account other potential interactions, such as the observed correlation between flu vaccination and Covid-related deaths. A recent study has suggested that herd immunity thresholds that interrupt the progress of transmission might be as low as 10 to 20% from naturally acquired immunity, as compared with over 60% if immunity is to be gained by randomised vaccination. The reality is that it will take many more months to compare the complex pattern of sustained immunity from memory B and T cells, and it may well be that exposure to the real virus elicits a more robust and persistent response than exposure to, for example, endogenously produced spike protein following injection of synthetic messenger RNA sequences.

Don't blame us for asking

Seen in the context of just how much information we don't know or have at this stage, it's not clear to us why those of us who are asking for more information about the current crop of covid vaccines under development are so marginalised and ridiculed. We're simply exercising our right to informed consent.

https://vimeo.com/481571532

Which hurts us more: virus or governments?

Date:

27 November 2020



In his latest video coronacast, Rob Verkerk explains, using the latest evidence, why the governments' medicine has caused more harm than the virus itself

Content Sections

- Covid-related versus non-covid deaths
- Are hospitals overrun?
- Collateral damage
- The travesty of over-testing
- Solutions

It's impossible to doubt that our species is amidst a health crisis. As it turns out, so are many other species as we propel starship Earth ever deeper into what is undoubtedly our planet's sixth mass extinction.

The question more and more people are asking themselves is: how much of our 2020 health crisis, that looks set to continue into 2021, is caused by the SARS-CoV-2 virus – and how much is caused by the way we – and especially our governments – have reacted to the virus? This short video makes the case that it's our reaction to the virus that's already caused, and is set to cause in the future, by far the greatest and longest-lasting negative impacts.

Let's now break down how we get to this view.

Covid-related versus non-covid deaths

There are two main ways a disease can seriously impact our health, the function of society and economies, and therefore the all-important socioeconomic determinants of health. One is by a lot of people getting very sick, not being able to work, and dying prematurely. The other is by overburdening our health care services.

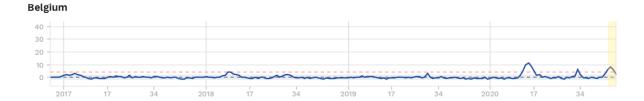
On both counts – the latest data shows us that, in contrast to what the mainstream media and politicians would have us believe, Covid-19 is far from the most dangerous threat to health.

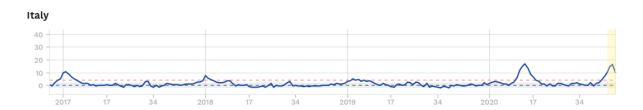
Putting some perspective on it, 6.8 million children under the age of 5 have already died this year.

About the same number of people – around 1.5 million - who've died with, not of, covid - have died of HIV/AIDS, often at much younger ages. Only slightly fewer have died in road traffic accidents. Three times this number of deaths have been caused by smoking. Five times more have been caused by cancer.

In terms of deaths – there is now broad agreement that owing to different ways in which deaths have been recorded in relation to covid-19, the most reliable way of looking at covid's contribution is via excess mortality – typically the number of additional deaths that have occurred in a given week or month as compared against the same time over the previous 5 years. Because we're now well and truly over the first wave, we shouldn't be making decisions based on what happened historically during the first wave. The virus has mutated over 200 times, more and more people have already been exposed to it so some degree of immunity has already been achieved. We must look instead at the present, as well as at trends going forwards.

While it's hard to ignore the very raised excess mortality in some but certainly not all countries during the first wave, the pattern of excess mortality even in most of the countries hit hardest during the first wave is now pretty typical for the time of year. Belgium and Italy are outliers currently with higher than average excess mortality for the time of year. It's therefore no exaggeration to say, at its worst during the first wave, covid posed a threat that was in line with a bad flu season. Right now, for the vast majority of the world, it looks a lot more like a typical flu season.





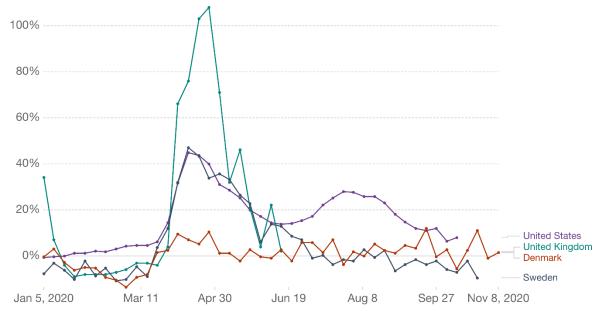
Source: Euromomo

Even in the USA, that has been one of the hardest hit countries, excess mortality never rose more than 50% at the peak of the first wave in the north, and didn't exceed 30% in the south. Excess mortality in the UK doubled largely because not enough was done to protect the vulnerable in care homes. Sweden, which was put in the naughty corner for its light and voluntary lockdown approach, now seems to be enjoying the double benefit of an economy that's barely missed a beat and a population that's enjoying negative excess mortality – in other words fewer people have been dying than was the case in the pre-covid era.

Excess mortality during COVID-19: Deaths from all causes compared to previous years, all ages



Shown is how the number of weekly deaths in 2020 differs as a percentage from the average number of deaths in the same week over the previous five years (2015–2019). This metric is called the P-score. We do not show data from the most recent weeks because it is incomplete due to delays in death reporting.



Source: Human Mortality Database (2020), UK Office for National Statistics (2020)

OurWorldInData.org/coronavirus • CC BY Note: Dates refer to the last day in each reporting week for most but not all countries. More details can be found in the Sources tab.

Source: Our World in Data

Are hospitals overrun?

The long and short of this is that hospitals are overrun in a few places in the northern hemisphere – and these get a lot of publicity. But they're not in most places. What the mainstream media doesn't like to tell us is this is the typical pattern in other years at this time of year. The greater pressures of respiratory diseases and cold weather have for many years threatened over-burdened health care systems during the winter months.

As you can see here looking at data from the UK Intensive Care National Audit & Research Centre – ICNARC – the tan line here shows the number of critically ill patients with confirmed Covid-19 is increasing, but is nothing like the numbers in April, and the confirmation of Covid doesn't mean that SARS-CoV-2 is the cause of the primary health concern for which patients have been admitted to critical care.

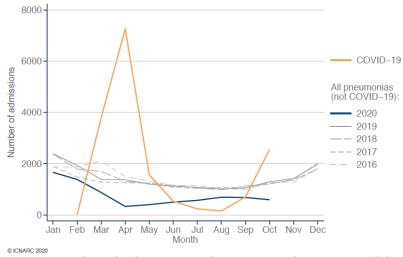


Figure 13. Number of admissions with pneumonia (not COVID-19) by month, 2016-2020 *, compared with confirmed COVID-19 during 2020

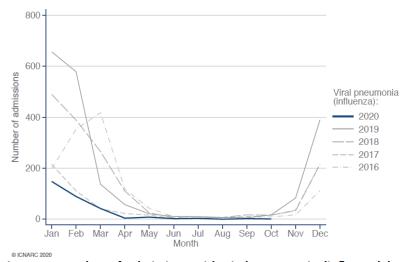


Figure 14. Number of admissions with viral pneumonia (influenza) by month, 2016-2020 *

Source: Intensive Care National Audit & Research Centre

But balanced against that – other non-covid pneumonias – notably caused by flu – are lower. The net burden is therefore pretty much normal for the time of year.

Collateral damage

We're starting to see the publication of more and more reports that are pointing in one direction – that most of the damage to health, society and economies are the result of government policies, not the virus itself. These policies for the first time in history removed people's ability to manage their risk of infection themselves, in the process causing catastrophic impacts on livelihoods, businesses and economies – the very things most people rely on to stay afloat.

It's also the very source of damage that Sweden chose to avoid, and its economy has fared better than almost any other in the Western world. What's more, the acquired immunity of its population seems to be protecting Sweden's population from a second wave of infection.

The travesty of over-testing

Much of the hysteria about Covid is being driven by focusing attention on cases measured by PCR tests, not cases of disease. There's an ever growing literature of publications that is making clear that most commercial antigen tests using Reverse Transcriptase RT PCR looking for SARS-CoV-2 relies on a cycle threshold or CT that is in excess of 35. The RT part means the RNA in this or other viruses is converted into a matching sequence of DNA which is then amplified, doubled, 35 or more times. One study by Jared Bullard and colleagues from the University of Manitoba in Canada published in the *Journal of Clinical Infectious Diseases* found very little infectivity in patients who tested positive with CT values greater than 24.

Another study published in the same journal, led by Bernard La Scola from the IHU in Marseille, France, found that for CT values of 35 or more, only 3% of cultures were infective. Yet most commercial tests can run up to 40 to 45 CT and those who receive positive test results are not told the CT value that triggered the positive result. This is crucial especially in non-symptomatic, presymptomatic or asymptomatic individuals with either no or likely low viral loads. A positive result with a high CT value will be detecting viral fragments or bits of closely related virus like the common cold that have no ability to infect another person.

Adding to that are the problems of very high rates of false positives when prevalence is low – that's linked to Bayes' theorem that we discussed in a previous video. Incredibly – given there's a Wild West of mass testing going on out there, there's still no true gold standard by which to compare PCR tests. Bottom line: mass testing of the general population is very unreliable and it's bordering on the fringe of scientific lunacy to base enforced isolation, travel bans, visits to sports or entertainment events or government mandated lockdowns on a flawed mass testing regime. But that's what governments are doing anyway.

Solutions

When times are tough, it's more important than ever we're solution-based. Here's out top 3 solutions.

Protect our rights and freedoms, and the rule of law

Trying to hide away from a virus, the threat of which to the global population has been greatly exaggerated, crashing economies in an effort to escape a single virus, and removing people's rights and freedoms as a means of trying to control the spread of this one virus, is looking ever more difficult to justify scientifically, socially and economically. Let's stop the politicians from trying to play scientists and then trying to justify their decisions politically. While the science will in time be so overwhelming and inescapable, right now the surest and quickest way of trying to halt the madness is using the accumulating evidence in courts of law to upend the irrational policies being enforced on hundreds of millions of people around the world. Let's do this before the next new virus appears. This particular coronavirus, whether deliberately or unintentionally, has been used as the doorway for global governance — at huge cost to citizens around the world.

Enhance wellbeing

Secondly, let's all work on developing, as much as we can, the protective effect of wellbeing, something that's been known for years. People who suffer more severe consequences of covid-disease generally suffer from underling conditions or are older. That means the allostatic load on their systems is greater, so they have less capacity available for their immune systems to overcome the virus. They may also have insufficient resources for their immune systems to work – and most of these resources come from our diets and simple vitamins like vitamins D, C, A and zinc. In a word, the people who suffer most are those who're less resilient and for most of us, there's a lot that we can do to improve our resilience.

Share

Thirdly, let's share what we know to be factual and true – via whatever medium or platform you find is still working – because there's never been a time in the so-called once-free-world when so much of the world's media was attempting to control a given narrative while also trying to root out dissenting voices. Our freedom of expression and freedom of thought has long been one of the best things about the human race. Let's not let this right be stripped from us for the sake of the few that seek to benefit from a widely misunderstood virus.

Scientific challenges to mass testing and vaccine trials

Date:

4 December 2020

Find out why the pandemic could continue forever if these challenges don't succeed

Content Sections

- Challenges 1 and 2: Mass testing using PCR
- Challenge 3: Vaccine trial design and mass testing using PCR
- False positives can be used to drive a perennial pandemic
- Take home

Three major scientific challenges have been made to mass testing using RT-PCR as well as to the BioNTech/Pfizer vaccine trial design that, if successful, will throw into question the entire global plan being coordinated by the World Health Organization, the World Economic Forum, the Coalition for Epidemic Preparedness Innovations (CEPI), the Vaccine Alliance (GAVI) and governments.

Challenges 1 and 2: Mass testing using PCR

The first challenge comes from a team of 22 top molecular biologists and immunologists that is demanding a retraction of the article published in January 2020 by Victor Corman, Christian Drosten and colleagues in the journal *Eurosurveillance*, on which all SARS-CoV-2 PCR testing is based. Jeff Goldblum lookalike, Drosten, has become something of a hero in some circles. Less so in others. His co-authorship of the *Laboratory testing of human suspected cases of novel coronavirus (nCoV) infection* published on 10 January 2020 is noted.

The authors have identified 6 major and 4 minor "fatal problems" with the method being adopted universally. Hence their call for the retraction, which in effect would mean all current testing would be invalid.

The fatal flaws include: use of the wrong primer concentrations, the detection of viral genes (as opposed to viable virus particles), the excessively high number (>35) of amplification cycles commonly used (which mean viral fragments will give positive results with no capacity for infection), lack of biomolecular validation or 'gold standard', an inability to differentiate closely related coronaviruses (or fragments thereof), and lack of a standard operational procedure (SOP), which causes large variations between different commercial testing systems.

We eagerly await the response from the journal *Eurosurveillance*. If the challenge is ignored, it would be a very sad day for science – and it will become increasingly clear where real agendas lie. The more positive side will be the creation of a paper trail that could be used in legal proceedings.

"In light of our re-examination of the test protocol to identify SARS-CoV-2 described in the Corman-Drosten paper we have identified concerning errors. How can the continuing use of the test protocol be justified after these findings? Furthermore, with knowledge of the misuse and misinterpretation of test results on a global arena, should we not be mindful of this test's contribution to these terrifying consequences? The decision as to which test protocols are published and made widely available lies squarely in the hands of Eurosurveillance. A decision to recognise the errors apparent in the CD paper has the benefit to greatly minimise human cost and suffering going forward. Is it not in the best interest of Eurosurveillance to retract this paper?"

Co-author, Howard Steen

The second scientific challenge comes from Dr Tom Jefferson, Carl Heneghan and colleagues from Oxford University's Centre for Evidence-Based Medicine. The challenge comes in the form of a systematic review published in then high ranking journal, Clinical Infectious Diseases. In reviewing 29 studies that investigated the ability of specimens derived from samples that had been PCR tested taken from blood, urine, stool or the environment, they showed a clear pattern that PCR reliant on high levels of amplification (cycle threshold = CT) were generally unable to infect or be cultured.

The reason is simply that PCR when it's pushed to amplify over around 33 amplification cycles (CT) is responding positively to fragments of virus, not whole, viable viral particles.

All of this before you even look at the false positive issue (below).

Challenge 3: Vaccine trial design and mass testing using PCR

The third scientific challenge has been made to the EU's centralised drug regulator, the European Medicines Agency (EMA), which recently shifted its long-standing base in London, to Amsterdam, courtesy of Brexit. The EMA has already received applications for conditional marketing authorisation of the BioNTech/Pfizer and Moderna vaccines.

The petition challenge originates from Dr Wolfgang Wodarg, a German physician, epidemiologist and (and politician), along with former Vice President and Chief Science

Officer for Allergy & Respiratory at Pfizer, Dr Mike Yeadon, who is also an author of the Corman-Drosten PCR challenge (above).

The challenge requests a stay of action on the Phase 3 BioNTech/Pfizer vaccine trial pending a revision of its design as well as a stay on any vaccine trial that relies on PCR as the primary evidence of infection. Drs Wodarg and Yeadon rightly argue, mirroring the parallel stay of action against the US Food and Drug Administration by Dr Sin Hang Lee, that infection by SARS-CoV-2 in vaccine trials that has been reliant only on PCR testing should be confirmed using Sanger sequencing, that has been found to give 100% accuracy for SARS-CoV-2. The petitioners also challenge any evidence that purports to claim a vaccine effect on viral transmission, where transmission is based on flawed PCR testing.

The petitioners further outline that the trials may not adequately detect post-vaccination vaccine hypersensitivity (VAH) that can lead to a very severe, potentially lethal, adverse reaction when vaccinated individuals are later exposed to the real virus. Such hypersensitivity or enhancement has been noted in vaccinated experimental animals subsequently exposed to the SARS and MERS viruses, the SARS virus sharing 88% of its genotype with SARS-CoV-2.

Wodarg and Yeadon also warned that because the spike protein shares much of the same sequence for syncytin-1, that itself originates from human endogenous retroviruses or HERV (that are ancient remnants of exogenous viruses that now make up around 8% of the human genome), there is a possibility that antibody responses to the vaccine may result in infertility in women for unspecified duration. Since pregnant women have been excluded from the trial, this would not be discovered for some time after the commercial release of the vaccine.

>>> For a detailed review of different assays for detection of SARS-CoV-2, including PCR, LAMP technique, microarrays, etc. see: Jalandra et al. Strategies and perspectives to develop SARS-CoV-2 detection methods and diagnostics. *Biomedicine & Pharmacotherapy*, 2020; 129: 110446.

False positives can be used to drive a perennial pandemic

Back in September we called out the issue of anything other than 100% specificity of tests being a problem, particularly if disease prevalence is low. We explained how a test with claimed 99% sensitivity could be more like 95% specific in the real world owing to errors that creep in in taking swabs, contamination and other factors.

More than this, it would be wrong to assume, as many do, that 95% specificity means that there would only be 5 false positives in 100 tests of uninfected people that should all be negative, in all situations. This is especially problematic when disease prevalence is low. This is what many, including government ministers and the mainstream media, wrongly assume and claim. This is because of the way that any reduction in specificity from 100% plays out in the real world, courtesy of Bayesian probability.

So we were thrilled to find an article penned by a team of distinguished microbiologists with the American Society for Microbiology say the same thing. The microbiologists show that if you were to rely on the Abbott's BinaxNOW™ rapid test with claimed 98.5% specificity, when disease prevalence is 0.1%, you should expect 94% of positive results to be false positives. Not 1.5% that many think should be the case!

Imagine a group of 1000 people being tested. As prevalence goes down, the number of false positives goes up, giving the impression that the R number is increasing. If you're a government authority, that might be when you decide to impose more restrictions, or push for more vaccination – all because of an inappropriate and deeply misleading testing system.

Owing to Bayes' theorem and mass testing, if we don't change the way societies around the world are assessing this disease, you can keep the pandemic running forever, with no sign of any covid-19 disease! It is an abomination of science!

Take home

For our part, the evidence is now crystal clear that mass testing reliant on PCR, as well as reliance on data from vaccine trials that depends on PCR to confirm infection, is so unreliable as to be scientifically unworthy.

There are therefore ample scientific grounds, in our view, to refuse PCR testing especially if this might disadvantage you in any way, and consider vaccine trial data incomplete and therefore insufficient basis on which to allow informed consent.

The 188,000 of us who the UK Dept of Health ignored

Date:

4 December 2020

Freedom of information request reveals 188,000 responses to mass vaccination consultation by UK Dept of Health

Do you remember a few weeks back we launched a 'Say it now' campaign to ask as many of you as possible to respond to a UK government consultation on the Department of Health and Social Care (DHSC) plans to amend UK medicine laws in readiness for mass vaccination? These changes allowed the UK to be the first country in the world to issue emergency authorisation to a covid vaccine.

The shares and video views we received on this one issue outnumbered any we've previously had. They may have been responsible too for us being subsequently censored on YouTube so we're now having to use other platforms for some of our video content, especially as it relates to vaccines. That means the primary access to our video content is now from our website at www.anhinternational.org/videos.

A group of journalists at the Mirror Project also drew attention to the consultation. But cutting a long story short, given that the government roundly proceeded with its planned approach almost completely ignoring the substantive concerns we'd outlined (we issued guidelines to help our supporters with their submissions), we thought it important we get some sense of the scale of responses, in relation to all other consultations conducted by the DHSC, over the last 10 years.

So we recently submitted a freedom of information request to the DHSC to find out the number of responders for the DHSC consultations with the 10 highest number of responses over the last decade. It turns out 188,000 responses were made - a truly staggering figure. This comprised 77% of all responses in the 10 consultations that received the highest number of responses over the last decade came from the most recent one that was the focus of our campaign, namely "Distributing vaccines and treatments for COVID-19 and flu".

This is an important part of the paper trail we're developing with regard to future campaigns and potential legal actions. We want to thank all of you who contributed to this piece of history.

The detail is below.

Table: Ten DHSC consultations with the highest number of responses in the last ten years

Number of responses	% of total responses to top 10 ten consultations	Name of consultation	Date of (
188,040	76.84	Distributing vaccines and treatments for COVID-19 and flu	August 2 2020
17,000	6.95	Introducing 'opt-out' consent for organ and tissue donation in England	Decemb 2018
8,891	3.63	Setting the mandate to NHS England for 2016 to 2017	October 2015
7,410	3.03	Availability of gluten-free foods on NHS prescription	March 2
6,678	2.73	An Information Revolution: a consultation on proposals	October 2011
3,622	1.48	Early years healthy development review: call for evidence	Septemb 2020
3,607	1.47	Liberating the NHS: developing the healthcare workforce	Decemb 2011
3,279	1.34	Opt-out organ donation: organs and tissues excluded from the new system	April 201
3,140	1.28	Next steps for Nursery Milk	June 201 2012
3,063	1.25	The regulation of medical associate professions in the UK	October 2017

Have you decided what you'll do or say if offered a covid vaccine?

Date:

4 December 2020

4 things you should know for informed choice

Content Sections

- Transcript
- 1.The vaccine: what and how
- 2.Risks from SARS-CoV-2
- 3.Vaccination risks and benefits
- 4.Testing prior to vaccination
- 1.Sufficient information for properly informed consent
- 2.Stop governments claiming covid vaccines re safe
- 3.Equal rights for vaccinated and unvaccinated
- Other petitions

With the UK being the first drug regulator in the world to greenlight a covid vaccine, we felt it important to get some important information out to you that cuts through the flannel that's being delivered via the mainstream media.

We haven't found we agree with a lot of commentary by Dr Tony Fauci, Director of the US National Institute of Allergy and Infectious Diseases (NIAID). But we concurred with him over his criticism of the premature rubber stamping of the BioNTech Pfizer vaccine this week that Fauci described as "really rushed".

"But they just took the data from the Pfizer company. And instead of scrutinizing it really, really carefully, they said, OK, let's approve it. That's it.' And they went with it."

- Dr Anthony Fauci, NAID, quoted by Politico

Apart from rushing the approval, there are a gamut of other problems with the decision to green light the trial (see study design):

- Many of the trial endpoints that relate to safety and efficacy are not yet complete, so it is impossible to draw conclusions about safety or efficacy until this is complete
- These include measuring covid-19 incidence per 1000 person-years (e.g. 1000 people for 1 year, 500 for 2 years, etc) of follow-up following vaccination (that should include reactions after naturally-acquiring infection to evaluate any post-infection vaccine-associated hypersensitivity)

- Immunogenicity (in terms of S1-binding IgG levels and/or BD-binding IgG levels, and SARS-CoV-2 neutralising titers) will be measured up to a year after the second dose has been delivered (and the MHRA is unlikely to have seen more than 2 months worth of data)
- None of the data sets have been released for scrutiny by independent experts
- Immunodeficient patients were excluded yet will be vaccinated
- Cases were all confirmed using one of three RT-PCR tests (Cepheid Xpert Xpress, Roche comas SARS-CoV-2 RT-PCR, Abbott/RT SARS-CoV-2 assay) that are flawed as a diagnostic method for determining transmissible SARS-CoV-2 infection
- Pfizer has reported 3.8% severe (Grade 3) adverse events despite claiming "no serious safety concerns". This is misleading given that the vaccine industry and regulators use the term "serious" only in relation to reactions causing hospitalisation or death (grade 4 and 5 adverse events, respectively). In the Phase 3 trial, up to 3.8% of test subjects suffered severe (Grade 3) adverse reactions (severe headache, undoubtedly caused by a severe, systemic inflammatory reaction). If that percentage was applied to 70% of the US and UK populations, that would amount to a staggering 10 million+ people who would experience severe adverse events
- The trial design and results have not been subject to external peer review
- The UK government has taken the "precautionary step" to add the emergency authorised covid-19 vaccine to the Vaccine Damage Payments Scheme that limits payments to £120,000 for proven vaccine damage.
- Pfizer has legal protection from the UK government in the event of injury to those who are vaccinated.

In the patient information leaflet, "Very common side effects that may affect more than 1 in 10 people" (some of which overlap with covid disease symptoms) are listed as:

- pain at injection site
- tiredness
- headache
- muscle pain
- chills
- joint pain
- fever

We have produced the following video (see transcript with links below) to emphasise that, at the time of writing, there is not currently sufficient information to allow any member of the public to give properly informed consent for the BioNTech/Pfizer or any other covid vaccine. That doesn't mean that some may wish to be vaccinated regardless and give their consent in the absence of more complete information. Assuming you reside in a country that has not mandated the vaccine, you have the right to refuse or delay the vaccine, pending provision of further information.

IMPORTANT NOTE: Since the video was recorded on Tuesday, the BioNTech/Pfizer vaccine composition, including the nanoparticle composition, has been **released by the MHRA** but it does not include concentrations of ingredients making it impossible to assess toxicology. The ingredients will include 30 micrograms mRNA in each dose, along with:

- ALC-0315 = (4-hydroxybutyl)azanediyl)bis(hexane-6,1-diyl)bis(2-hexyldecanoate),
- ALC-0159 = 2[(polyethylene glycol)-2000]-N,N-ditetradecylacetamide,
- 1,2-Distearoyl-sn-glycero-3-phosphocholine,
- cholesterol.
- potassium chloride,
- potassium dihydrogen phosphate,
- sodium chloride,
- disodium hydrogen phosphate dihydrate,
- sucrose.

The ALC-0315 is a hexane containing compound and these are known to be potentially neurotoxic. ALC-0159 contains polyethylene glycol (PEG) that is associated with hypersensitivity and allergenic reactions. The toxicological profile of the mRNA delivery system cannot be determined because neither have the concentrations been declared, nor has the nanoparticle delivery system, surface charges and other physicochemical characteristics been declared. These may dramatically increase the toxicological profile.

Transcript

Hi there, my name's Rob Verkerk – and welcome to our latest coronacast. With the news that the UK regulator, the MHRA, has this week given the green light for emergency authorisation of the BioNTech/Pfizer vaccine, we're obviously going to talk vaccines in this week's coronacast. For those of you who've followed our campaign to pressurise governments and vaccine makers to be transparent on their science, it won't be a surprise to you to find the roll-out that might start as early as next week will occur in the absence of key information that's really needed for people to be able exercise properly informed consent. So we're going to drill down into some of the key pieces of information that will hopefully help shine a little more light into the opaque box of vaccine information.

As more vaccine doses are received, and more vaccines receive authorisations, much of the world's population will soon be asked to make a momentous choice: vaccinate using the first ever fast-tracked synthetic biology vaccines. Or not, as the case may be, and then face the possible withdrawal of basic rights or privileges. To help you make this choice you need access to specific pieces of information that allow you to give medical informed consent that, as explained in a previous video, is a legal obligation on the part of healthcare providers and authorities.

This video has been made to help you understand what's known or not known about four key pieces of information you have a right to know before making this choice:

The first is knowing what the vaccine is, including what's in it, and how it works. This is

important because this is the first time synthetic biology vaccines have been released at scale.

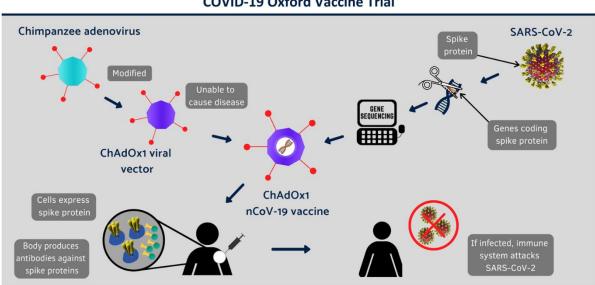
The second is having a clear understanding of what you're protecting yourself from, and that relates to the current not past health risks posed by the virus that causes covid-19 disease, namely SARS-CoV-2, at the time you need to make an informed decision about vaccination. The third is knowing about what benefits and risks the vaccine might offer you in the wake of news of claims of 62% to 95% efficacy among the covid vaccine frontrunners from BioNTech & Pfizer that we'll refer to as just Pfizer in thiss video, Moderna and Oxford University & AstraZeneca, that we'll just refer to as AstraZeneca.

The fourth and final area is knowing what information you can get about your immunity status before being tested before you decide to vaccinate. These are all components of the 10-point vaccine transparency manifesto that we launched last May.

https://vimeo.com/487177290

The vaccine: what and how

Let's start by looking at how the UK grown AstraZeneca vaccine works.



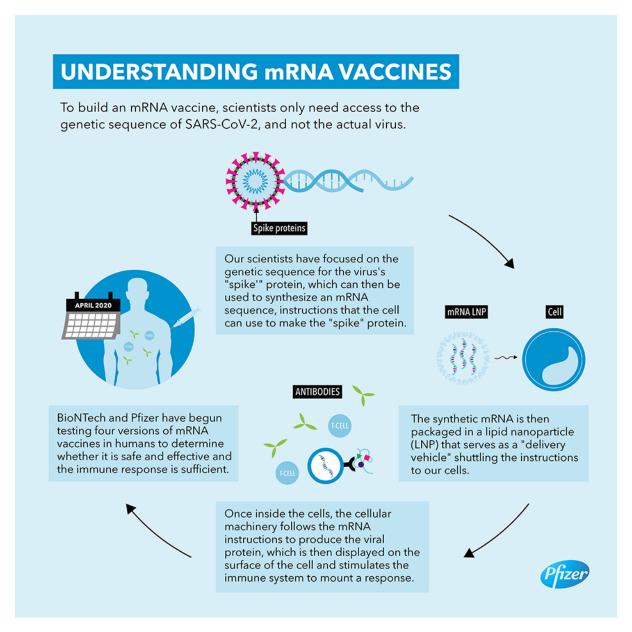
COVID-19 Oxford Vaccine Trial

Source: Covid-19 Vaccine Trial

This vaccine is called a Non-Replicating Viral Vector vaccine. It's the same technology platform that was used for MERS and zika vaccines as well as some flu vaccines. It uses a vector or transporter that's a common cold virus that infects chimpanzees that's been genetically altered so it can't replicate in humans. Into this GM chimp virus is inserted a piece of synthetic genetic material that codes for the surface spike protein of SARS-Cov-2. Once it's injected into a human being, the surface spike protein is expressed from the synthetic gene sequence and an antibody response to the antigen is produced, this providing protection from a trained immune system if you then encounter SARS-CoV-2 during the yet to be understood time period in which the immune protection has been

enhanced. This vaccine can be distributed and stored at normal refrigerator temperatures of between 4 and 8 degrees Celsius. It's reckoned to cost around £3 sterling per dose and it's the 2 dose schedule that was found to given 90% efficacy under trial conditions, one dose offering just 62% by comparison.

Both the Pfizer and Moderna vaccines use a different vaccine platform – one called messenger RNA or mRNA for short. Messenger RNA itself is a single strand of the nucleic acid RNA that corresponds to a particular genetic sequence that codes for a given gene, that is in turn read by a ribosome within the cell to synthesise the specific protein that is normally produced by that gene. mRNA vaccines use a synthetic gene sequence that codes for the spike protein of SARS-CoV-2. They are encapsulated within miniscule lipid nanoparticles that when injected into muscle, causes the muscle cells to start producing the spike protein. This then causes the body to mount an immune response which should also protect someone who is infected with the real virus during the unknown period of time in which the immune system is primed. By giving the instructions to the body to produce the spike protein, mRNA viruses are in effect turning the body into the vaccine factory. The mRNA vaccines require 2 doses that cost between £15 and £25 sterling per dose and need to be stored at minus 70 degrees Celsius which complicates the cold distribution chain currently used for vaccines and certain drugs.



Source: Pfizer

Presently, there isn't any reliable information on exactly what the lipid nanoparticles in the mRNA vaccines are comprised of, whether there are any other ingredients or adjuvants added to any of the vaccines, or if there might be any potential contaminants in each of the main vaccine candidates.

Moving on to how the vaccines affect the immune system – the main, so-called primary, endpoints being evaluated in the Phase 3 trials for the current round of emergency use authorisation reviews are safety issues. Some are also evaluating covid symptoms among those who test positive by PCR, and others look at raised neutralising antibodies.

Some also include endpoints round safety that won't complete until well after emergency use authorisation so in our view it is entirely disingenuous and unscientific for health authorities to make the claim that these vaccines are safe.

2. Risks from SARS-CoV-2

If you want to participate in the Phase 3 trial of the Oxford AstraZeneca vaccine you're still in with a chance as it's running a little behind the Pfizer and Moderna schedules. But you'll only be prioritised if you're at high risk of exposure, such as a frontline health worker or care home worker. The reason given by the Oxford researchers is that the epidemic is waning and they need to make sure enough people are exposed to the real virus to get enough data to see how vaccinated and control populations respond when they're infected. You heard that – didn't you? The university that's ranked as the world's number 1 since 2017 by The Times Higher Education World University Rankings says the epidemic is waning.

Last week, Dr Mike Yeadon, a former Vice President and Chief Science Officer for Allergy & Respiratory at Pfizer, along with others, presented a detailed briefing to UK Members of Parliament this week that is supporting what is described as a parliamentary rebellion – which I guess it is in some ways as it's rebelling against groupthink and politics attempting to take over healthcare and driving a coach and horses through people's rights and freedoms .

The briefing argues with supporting data that the pandemic is now over and what we're really seeing now in the northern hemisphere is a pseudo-epidemic propagated by a flawed mass testing regime reliant on PCR that's generating large numbers of false positives – enough to give the impression of an epidemic. False positive pseudo-epidemics are actually well known in the medical literature and have been found in everything from TB to prostate cancer to whooping cough, and have been on the rise with increasing reliance on single target PCR testing such as that used for SARS-CoV-2.

We're also seeing a tendency for excess mortalities going up in countries that didn't experience any first wave excess mortality. Some of this might be linked to delayed indirect effects of lockdowns when people with serious diseases haven't been able to access the care they needed while some may be experiencing a delayed first wave.

3. Vaccination risks and benefits

It's essential that all known risks, relating both to the pathogen but also to the particular vaccine in question, are put in the public domain, along with what's known about the protection the vaccine offers. That's not just headlines like 90 to 95% efficacy. That means putting the raw data into the public domain so it can be analysed by independent scientists. To-date, none of the full datasets have been released.

>>> Covid-19 vaccines: where are the data? in The BMJ, 27 November 2020

Not only that, none of the three frontline vaccines

from AstraZeneca, Pfizer or Moderna have published their Phase 3 trial results. The only things we've got to go on so far are press releases that are deeply deficient in data on both risks and benefits. What has been blasted around the airwaves of course are these dizzying efficacy rates of beween 62 and 95% that past history from vaccine trials and post-marketing surveillance suggests are unlikely to be achieved in the real world.

So what do these 62 to 95% headlines really mean? First, they relate to efficacy, not effectiveness. Efficacy measures the performance of a treatment under ideal and controlled circumstances, while effectiveness is the performance under real-world conditions. Because the vaccine are being evaluated under trial conditions, you don't have the vagaries of the real-world to contend with. And what are the performance parameters? Is it protecting people against transmitting the infection, or is it about protecting the vaccinated person from severe disease if you are infected during a specific time window.

>>> Call by Dr Peter Doshi to "be cautious and first see the full data" in The BMJ, 26 November 2020

As it turns out, it's only the latter. That means vaccinations are not being evaluated for their ability to stop the transmission of infections – something you'd think would be a target if you wanted to wipe out an epidemic or pandemic. But it's actually something that takes much longer than the very short time frame these vaccines are being created within. The same applies to safety issues – some of the trials will continue to look at safety issues for 12 months or more, but the vaccines will be rolled out at least for emergency use sometimes with just a couple of months of safety data.

And as we've said before, history tells us it can be years before safety concerns are exposed, as we discovered with the swine flu vaccine Pandemrix and narcolepsy in children.

The current crop of novel covid vaccines are only being tested for their ability to stop people getting seriously ill, a risk that becomes less and less in a waning epidemic, and a risk that primarily only affects older people or those with underlying conditions.

On top of that, we don't know a lot about the populations who appear to be protected from severe disease, and how many of these include groups who are the most vulnerable. Also note that two doses are needed in all 3 vaccines to yield the highest immune response – and higher dosages generally also yield more adverse reactions.

In effect, it means that the current Phase 3 trials are really testing the vaccines as a preventative treatment, not for their ability to make you immune to the virus and incapable of transmitting it to others. This is an important distinction. In other words, what the vaccines are really trying to do it make more people respond just like an unvaccinated healthy person who has a good functioning immune system, with some possible historic cross-immunity to other coronaviruses or previous exposure to SARS-CoV-2, and adequate amounts of vitamin C, D, zinc and other cofactors in their system.

On the risks side, AstraZeneca, Pfizer and Moderna have all claimed a lack of safety concerns. But in the Phase 1 and 2 trials of the AstraZeneca vaccine, moderate to severe adverse events were experienced by 70% of those receiving the covid jab. With the Pfizer vaccine, nearly 4% of people suffered from severe – or Grade 3 – adverse events. These grade 3 adverse events aren't a walk in the park – they're just one category down from grade 4 adverse events that are described as "potentially life threatening events" that require hospitalisation and critical care.

People with Grade 5 events don't get to tell their story, but the more separated in time a death is from a vaccination, as hundreds of families have found in the various national vaccine courts, the harder it gets to prove a causal relationship.

Anyway, Grade 3 adverse events are certainly severe enough to give a susceptible person sufficient immunologic or neurologic shock to trigger long-term health challenges that might affect their nervous system or autoimmunity. And while Pfizer might have dismissed these as insignificant at just 3.8%, if that percentage was applied to say 70% of the US and UK populations, that would amount to a staggering 10.6 million people who would experience severe adverse events. The trouble here is that the potential for long-term consequences of an adverse event isn't something you can just monitor in a couple of months – typically it takes years of post-marketing surveillance. And here I want to emphasise the point: Until that kind of time scale has passed, we think it would be premature, irresponsible and unscientific to call these vaccines safe.

4. Testing prior to vaccination

What if you've already had Covid, knowingly or unknowingly? If you've had Covid quite severely and you're being tested for your levels of antibodies – they may still be raised. But if you've had milder infection, or you already have some cross immunity from another related coronavirus, and in particular if you're a healthy woman, you might not have raised antibodies at all. Yet you might still be immune to infection.

What would protect you is your memory T cells like CD4+ and CD8+ T cells, along with B cells, all of which aren't measured when you have one of those "if I had it in the past" tests. These actually don't accurately tell you if you had it in the past as they only measure one kind of marker – up to three different immunoglobulins, IgA, IgM or IgG - for longer-term, adaptive immune responses – namely neutralising antibodies. Not the all-important memory T cell response that is the main driver of herd immunity.

If immunity passports are to be developed which is the plan of the UK and many other governments, it would make no sense to do this without T cell tests being included. We know from other pathogens including the closely related SARS that memory T cells may remain active against a given pathogen for years, even decades. We also know that antibodies always fade after a few months.

This brings us on to what we can all do.

I know for many people, as long as the vaccines don't become mandatory in their country or region, deciding whether or not you, your loved ones or your children should or shouldn't have a covid vaccine isn't going to be an easy decision. The first thing that needs stressing is that given the uncertainties around any medical intervention, the information you have at your disposal that forms of the basis of you exercising your right to consent or not is always going to be imperfect or incomplete. But right now – before phase 3 clinical trials are published and before any raw data has been released, it's much more imperfect than usual. What normally takes 10 years has been achieved in 10 months, and while vaccine development and testing has been fast-tracked, the biology of human beings remains the same – so you can't fast track safety.

I'm going to focus here on what we think are the 3 most important things you can do.

1. Sufficient information for properly informed consent

Firstly – you should make sure you have enough information that *you* think is sufficient for you to exercise your right to informed consent. You have a right to know any information about the safety and effectiveness of vaccines that's already known to public bodies such as drug regulators that is of overriding public interest. That's a right that's expounded in constitutions, human rights legislation and is endorsed by the United Nations Commission on Human Rights. In our book, this should involve at least 2 things: firstly, full disclosure of exactly what's in each of the vaccines, and that includes the exact composition of the lipid nanoparticles being used to deliver the mRNA in the Pfizer and Moderna vaccines. Are these synthetic or are they animal-based? Do they include shark squalene like a lot of more conventional vaccines – and will animal-derived products like this be injected unknowingly into vegetarians and vegans with vaccine makers and regulators turning a blind eye? The second piece of essential information we think is necessary, is full disclosure of the raw data from Phase 3 trials as well as any other relevant results from safety and efficacy trials to allow independent scientific review.

Presently – we're a long way from having this – and, quite simply, it isn't possible to give informed consent without a lot more information being released than what's currently available. From an informed consent point of view, we'd say right now, on the basis of inadequate information, you have an ample right to ask to delay your decision pending further information. It seems the vaccine lobby is very quick to accuse vaccine hesitants on the basis of claimed ignorance, while it fails to recognise that lack of confidence is largely down to distrust that has built up over years of non-disclosure. The tobacco industry has had its comeuppance for such failure to disclose key information - but the vaccine industry has yet to fall from grace for what is in effect the same failure to disclose information of overriding public interest.

2. Stop governments claiming covid vaccines re safe

You don't even have to deconstruct the design of the covid vaccine trials or study the available results to-date to have a view on this. You need to just read the trial designs as they stand. The fact that many of Phase 3 trials have primary or secondary endpoints that relate to safety that are months away – requiring 12 or even 24 months of time to have elapsed from the second dose, governments are misrepresenting the science when they claim that vaccines are, or have been found to be, safe. If you combine the use of this false safety claim with ramped up direct-to-consumer advertising, as expected or legitimised in some countries, like the UK, you can get some sense of how prepared governments are to lie to the public. We will all be looking to the courts to resolve any such public health abuses as they occur. But in the meantime – please sign our petition (see below for a selection of petitions you can sign to oppose restrictions linked to refusal of coronavirus vaccines) that asks governments to stop claiming

vaccines are safe in the absence of comprehensive safety data. You'll find all the links to this and other references in the article that accompanies this video.

3. Equal rights for vaccinated and unvaccinated

It goes without saying given the current threat posed by the virus and the uncertainties around the long-term effectiveness and safety of covid vaccines, we are opposed to mandatory vaccination. Mandatory vaccination doesn't engage with the reasons why so many people lack confidence in the current crop of vaccines. It's also a major intrusion on individuals' rights and freedoms, and it undoes all the work in public health that's trying to develop greater autonomy and responsibility for self-care that's right at the heart of resolving some of the biggest challenges in health.

What's actually a bigger threat than mandatory covid vaccination is coercion. This is likely to play out through the withdrawal of rights or privileges from those who don't consent to vaccination. That might be by stopping those who can't prove they're vaccinated from travelling on planes, trains or buses, attending sports fixtures or entertainment, enjoying hospitality, claiming benefits, sending your kids to school – you name it, the list of possibilities currently being discussed in political circles is potentially a long one.

We argue that it's a infringement on the right to a private and family life to suffer loss of these rights simply because a person has decided there are insufficient data available to give informed consent to vaccination.

Once again, this is something that many of us are watching very closely, and it's likely that it will be a matter that will ultimately be settled in the courts. But in a world that is rightly calling out for more equality – let me leave you with this last question to ponder: Why are some people so driven to mandate this kind of inequality to those who've decided that the lack of vaccine transparency prevents them from making a properly informed choice?

Finally – we ask you to **share** this video and linked article as widely as you can, on whatever platform works for you. You'll now find all our videos in the videos section of our website at anhinternational.org forward slash videos. Unfortunately, YouTube isn't allowing balanced representation of information of vaccines so we can no longer post videos on vaccines on that channel. Bear with us as we navigate the current era of unprecedented censorship and please also sign up to our newsletter for weekly analysis, articles, updates and videos. Thank you.

Other petitions

UK

Prevent any restrictions on those who refuse a Covid-19 vaccination

Germany

Keine covid-19 imfpflicht (No covid-19 vaccination required)

Belgium

Pas de vaccination obligatoire contre le Covid-19! (No compulsory vaccination against Covid-19!)

Canada

Petition to the Government of Canada

If you know of any other petitions that oppose restrictions on citizens who choose not to receive a covid-19 vaccine please let us know.

Covid catalysed collaborations

Date:

10 December 2020



Shining a light on 3 initiatives with a common interest - together we are stronger

Content Sections

- International vitamin C campaign
- Medical Freedom International
- • The Mirror Project

This year, 2020 has been an extraordinary year for many reasons. The pandemic which has dominated so much of our lives, as well as governments, health authorities and politicians, has brought about circumstances that have profoundly changed our lives. It is no understatement to say that life is unlikely to return to the way it was in 2019. The consequences of the human reaction to the pandemic are far reaching and likely to be long lasting. With economies having been brought to their knees, school children having missed out on the education they expected and deserved, and with millions having lost their livelihoods, it's sometimes hard to think what the upsides might be for most of us. One that comes to mind, is the bringing together of those of us with a common interest.

In this light, we'd like to share briefly with you three of the collaborations with which we're involved that have emerged from the circumstances we've found ourselves in during 2020.

International vitamin C campaign

Monday 7th December saw the launch of a new campaign calling for the use of vitamin C both as part of a preventative protocol and as a treatment for covid-19. The launch was timed to coincide with the publication of the latest review paper in the journal *Nutrients* on the science of vitamin C for both the prevention and treatment of covid-19. We've joined forces with friend, colleague and nutritionist Patrick Holford to get the word out about the importance of vitamin C — why governments and health authorities should be pushing vitamin C, why critical care facilities should be using vitamin C as an adjunct therapy and why members of the public should be taking vitamin C in divided doses on a daily basis to protect themselves against covid-19 and other respiratory diseases. But we're going to need to push hard to get the word out!

Sign the petition, whether you're a health professional or concerned citizen, to show your support.

Medical Freedom International

The ANH is a collaborating organisation with Medical Freedom International (MFI). The newly formed MFI is an international alliance headed by UK doctor Anna Forbes that brings together professional organisations from around the world in support of medical freedom. It includes medical professionals, scientists and lawyers from a wide array of countries, and its inspiration comes from a recognition that our governments' responses to covid-19 have been misguided, create unnecessary harms, and are not based on the best available scientific evidence. Check out the introductory video below and the new MFI website.

https://vimeo.com/488080759

The Mirror Project

The Mirror Project is a new platform for all those who believe that we are under attack from a new form of tyranny. It is a place to collect and present evidence, give whistleblowers a voice, organise resistance, and educate others. Along with ourselves, the Mirror Project, called attention to the UK Government's plans to change the Human Medicines Regulations earlier this year. Our calls resulted in the government receiving over 188,000 responses to the consultation, which it chose to ignore. We now have a a paper trail that could pay dividends in the event of potential future legal actions. We're collaborating to encourage UK citizens to respond to a call for evidence for an inquiry being conducted by the Joint Committe on Human Rights, which is examining the impact of lockdown restrictions on human rights.

https://youtu.be/2ZrogWjvgV4

'Long covid': what is it and what might be the best way back?

Date:

10 December 2020



The first post-viral syndrome to be recognised by mainstream medics, researchers and politicians. A functional and integrative medicine approach might offer the best hope.

Content Sections

- What is long covid?
- Behind the long covid headlines
- What's likely going on inside the body of a long-hauler?
- How might we reduce our risk of long covid?
- How can long-haulers enhance recovery?
- Separating health from politics

Nine months on from the global action to combat covid-19 we're seeing that post-infection responses are not unnaturally, very individual. Many appear entirely asymptomatic. Others sail through with minor or barely detectable symptoms. A smaller group still, suffer more severe symptoms, some so severe as to be fatal for those with underlying conditions. Those who survive may take up to 6 weeks to recover. But now

there's another group: those who are suffering with what's being termed, 'long covid' in the UK or 'long-hauler syndrome' in the US.

Whilst the media are making much of long covid, please bear in mind that this only affects a very small minority. Prof John loannides, professor of medicine at Stanford university and the most cited scientist in the world, reminds us that 99.7% of people survive covid-19, with over 80% of those cases only having mild to moderate symptoms which are akin to having the flu.

What is long covid?

'Long covid' is the term given to the lingering post-viral symptoms that can last weeks or months experienced by some people after having been infected with SARS-CoV-2. These long-haulers are perplexing the mainstream medics as their needs seem to be unique to them as individuals, rather than fitting a common symptom picture. Sufferers appear to be from different age groups and include those noted to be high-risk for covid-19, as well as those with other underlying conditions. But, perhaps more surprisingly, they also include those who appear to have been healthy pre-infection.

There is a growing list of symptoms associated with long covid, which you may be surprised to note (as we were), have been compiled by Members of the UK Parliament after speaking to their constituents and not from the medics! A similar list can be found on the US Centers for Disease Control (CDC) website, which serves as useful corroboration.

Table 1. List of 16 common symptoms of 'long covid' reported to UK MPs by constituents. *Data sourced from the UK MPs list and US CDC list.*

SYMPTOMS			
1. Breathing difficulties	2. Purple toes	3. Chills	4. Disorier
5. Hallucinations	6. Muscle/body aches	7. Insomnia	8. Arrhythi
9. Tachycardia	10. Exhaustion	11. Vomiting	12. Diarrho
13. High temperature	14. Hair loss	15. Cognitive issues - memory loss/brain	16. Chest p

fog/confusion

However, the most common symptoms appear to be shortness of breath, a lingering cough, aches and pains and crushing fatigue. Could it be that genetic predispositions or variations in certain pathways are playing a role?

Even if they are, because our health is so intimately linked to gene expression, every effort should be made to create optimal internal and external environments. Actions such as ensuring we are replete with macronutrients (protein, healthy fats and complex carbs) and micronutrients (such as vitamins, minerals and phytonutrients) from a healthy diet;

reducing our toxic load by avoiding chemicals in our food, personal care and household products and air; reducing exposure to potentially harmful electromagnetic fields (EMFs); prioritising regenerative sleep; managing stress, and maintaining daily physical activity, all have the ability to drive gene expression toward health and away from disease.

That's why our nutrition and lifestyle behaviours are so critically important as they have the power to change the way our genes express.

Behind the long covid headlines

In the UK, a study from Kings College London at the end of October 2020 is fuelling the flames of hysteria. Media reporting about the paper suggested that 1 in 20 who contracted covid-19 were suffering the effects of long covid. If this were so, it would amount a large number of people; based on Worldometer data on cases, around 800,000 in the USA and 90,000 in the UK. That might justify the headlines and hysteria.

The study itself looked at data from 4,182 incident cases of covid-19 who logged their symptoms in their Covid Symptom Study app over an 8-week period. Worth noting before we go further is that 8 weeks isn't generally long enough to be classified as chronic, a term normally applied to conditions lasting 12 weeks or more.

However, the Kings research team do acknowledge that if you had to extrapolate these data out to the rest of the UK population, only 1 in 45 would be likely to be experience some symptoms of long covid for 12 weeks (that's more like 40,000 people, again based on Worldometer numbers).

What's likely going on inside the body of a long-hauler?

Post viral syndrome from any infection isn't pleasant and can be life-changing, but we need to keep our feet on the ground with regard to what we hear about long covid and use what we know from the data and physiology as a reality check.

This is not to decry or ignore the possibility of more serious complications post covid-19 infection, like scarred lung tissue or damage to the endothelium of blood vessels. As new scans become available it will be easier to diagnose the severity of these conditions, but the treatments will still encompass the methods this article goes on to discuss, as well as new breakthroughs, such as using proteolytic enzymes to safely break down scar tissue and clotting proteins.

But first, after decades of being told that ME (myalgic encephalomyelitis) and CFS (chronic fatigue syndrome) are psychosomatic, with sufferers having had decades of inappropriate and often damaging medical advice, it's somewhat ironic that suddenly you have the likes of Dr Anthony Fauci saying (listen from 33:19 mins in) that post-covid syndrome is highly suggestive of ME. If nothing else, we hope that this will ensure that long-haulers are able to benefit from the learning that's come out of the ME and CFS groups. Most importantly, that everyone is different in their presentation and response

and that treatment approaches must be individualised. Not something that siloed mainstream medicine has understood or dealt with adequately as yet.

Individualised medicine is something that Jeffrey Bland PhD knows a fair bit about given that he's honoured as being 'the father' of Functional Medicine and the co-founder, with his wife Susan, of the Institute for Functional Medicine. In his video, released on 25th September 2020, entitled, *Covid-19: The Functional Medicine Solution for "Long Haulers"*, he asserts categorically that the answer will not be found in conventional medicine. Instead, he urges sufferers to seek out a functional medicine practitioner to make use of their deep understanding of systems biology and upstream thinking. According to Dr Bland, these practitioners are the most knowledgeable providers to help individuals who are struggling with serious post-covid-19 health concerns.

And here you can listen to how Dr Bland backs up such a potentially inflammatory statement:

How might we reduce our risk of long covid?

Reducing the risk of long-term symptoms post infection speaks to the body's ability to vanquish the pathogen and resolve the resulting damage from the ensuing battle, e.g. inflammation, removal of damaged/dead cells, rejuvenation of scarring, resuscitation of energy etc.

Our ability to do this successfully depends on our state of health pre-infection, our genetic predispositions, stress levels and general metabolic and immune resilience. But it also depends on whether we receive the relevant and appropriate treatment support for our illness. Covid-19 has turned a flood light on all of these issues given the enhanced vulnerability of those with underlying conditions, such as obesity, type 2 diabetes and heart disease, as well as factors like nutritional deficiency of the main immune support nutrients — vitamins A, D and C, zinc, selenium and iodine. Much has been made of the dangers of low vitamin D levels and immune function. But it's a damming indictment of conventional healthcare to find that in 2020 severe covid-19 sufferers were pretty much in scurvy territory (\leq 11 µg mol/L) so deficient in vitamin C were they. In essence, we need to keep in the best shape possible using healthy diet and lifestyle choices to meet the onslaught of immune and life challenges.

If we do succumb and require medical intervention, then the nature of that intervention is also important for our recovery. Hence, the furore we've seen over treatment protocols. The subject of which we have covered previously, and the pitted battle over the use of hydroxychloroquine. Just like the punishment should fit the crime, you could view this as, so too, should the treatment fit - not only the disease - but also the individual. This is the likely reason why patients of integrative medicine doctors like Dr David Brownstein or those treated with the MATH+ protocol do not appear to be long-haulers.

Clearly, treating patients successfully without the use of ventilators was not something the US authorities wanted shared as the FTC shut down Dr Brownstein's blog for explaining how he was curing covid-19 patients from his parking lot! He has since found many other routes to get his information out. Here, Dr Mercola discusses one of Dr Brownstein's key interventions for covid-19 and upper respiratory infections with nebulised hydrogen peroxide. We've not yet heard Dr Brownstein saying that any of his

treated patients have any resulting lung scarring from covid-19. Hydrogen peroxide is not something we should be scared of. In fact, intravenous vitamin C in levels over 24 g creates hydrogen peroxide and is extremely effective at reducing inflammation, knocking out viruses successfully and safely treating sepsis - with no adverse side effects or lasting damage. It's also been proven very effective for cancer. You could say it's one of medicines best kept secrets because it's cheap as chips, there are no patents and it's not a big earner for pharma!

How can long-haulers enhance recovery?

Here is a summary of clinical pearls from a functional medicine perspective that may be helpful for long-haulers. These are for information purposes only as we'd always recommend consulting with an appropriately trained health professional before starting any programme to address long covid. It's very important that each programme is fully individualised.

- Gastro-intestinal restoration the gut immune connection is intimately involved in chronic inflammatory states. Most naturopathic and integrative practitioners will address the gut as the first step in any health restoration programme. Functional medicine health professionals work with the '4R programme' remove (inflammatory foods, drugs, caffeine, stress etc), replace (with healthy, 'clean' foods), repair (using nutrients and lifestyle changes to repair the gut), and reinnoculate (with beneficial microorganisms to restore a healthy microbiome).
- Detoxification supporting the liver and other organs involved in detoxification to convert toxic substances for successful elimination through urine and faeces.
 Many people have genetic predispositions (SNPs) that affect these pathways, which can impact function and require specific support. Taking other actions such as reducing overall toxic load by making dietary changes, choosing non-toxic personal care and household products and ensuring daily access to clean, fresh air is critical in supporting this process.
- Reduce inflammation it's very common to be left with a level of systemic, or localised, inflammation after a severe infection and the ensuing 'cytokine storm'. Our immune system is complex and made up of many components that all need to turn on and off at different times and smoothly interact, much like a well-tuned orchestra. Often, particularly when there are deficiencies in nutrients which power the immune system (e.g. vitamins A, D, E, K and C; minerals zinc, selenium, iodine, plus essential fatty acids and nucleotides to name a few), there can be exaggerated (cytokine storm) or mis-timed responses that can leave lingering inflammation.
- Immune-rejuvenation in light of the previous point, such immune systems can be damaged from the insult of the viral infection. In these cases, the immune cells 'remember' that injury. But we can rejuvenate the immune system using a process called autophagy (cleansing or getting rid of old, damaged or dead cells), which regenerates the right kind of new, active, immune cells. This kind of damage is caused by inflammation, which then also perpetuates the symptoms of long covid, or post-viral syndrome. Our natural evolutionary autophagy mechanism is fasting, which is why intermittent fasting provides such an array of health benefits. However, in immune rejuvenation, it's important to also support this process with nutrients such as vitamin D, zinc, vitamin C and plant

compounds called flavonoids e.g. rutin, quercetin, hesperidin and kaempferol. You find flavonoids in vividly coloured veggies and fruits, but particularly in those of the cruciferous family e.g. kale, broccoli, brussels sprouts. There are many reports of quercetin (in red onions, kale, blueberries, apples) being beneficial in the treatment of covid-19 with its anti-inflammatory properties and inhibitory effect on blood clots.

• Mitochondrial resuscitation - using nutritional and lifestyle support to improve energy production in cells to combat fatigue. Mitochondrial dysfunction is a common side-effect of inflammation and immune challenge because of the massive demand that both place on the mitochondria, the energy factories in our cells. If we go into an immune challenge with a level of mitochondrial dysfunction, then we will be unable to mount a proper defence or power the smooth orchestral delivery of our immune response. Long covid is essentially a mitochondropathy - an illness caused by the malfunctioning of mitochondria, which is why debilitating fatigue is an integral part of the symptom picture. This is also why any form of exercise prescription is likely to be very damaging until a level of mitochondrial resuscitation has been reached. Again, autophagy plays a critical role here, as well as a range of nutrition and lifestyle strategies inherent in a systems biology approach to health creation and healing.

Separating health from politics

There is little doubt after the last 9 months that covid-19 has emerged as a political disease. Battle lines have been drawn around treatments and vaccines, economies have been crashed, ostensibly to save national health systems (that have never reached anywhere near breaking point), and crony 'corporatism' has flourished to the tune of millions. Citizens are the losers in all this. But far more so at the hands of politicians, the corporate elite and powerful globalist organisations like the World Economic Forum, the WHO and the International Monetary Fund than from any virus. After all, we have evolved symbiotically in partnership with viruses - and all other microbes - since time began. Our complex and intelligent immune systems know how to deal with new viruses. Each and every one of us need to be questioning the lack of talk about healthy diets, immune-modulating vitamins and minerals, and natural treatments like quercetin, turmeric, silver and hydrogen peroxide. Yet continuing focus bordering on obsession with social isolation, masks, vaccines and what is amounting to totalitarian control.

The way out of long covid, as with any other post-viral syndrome, lies in the appropriate response to each individual's symptoms to restore the loss in function. Most often these responses will be rooted in nutrition and lifestyle approaches, not drugs, because they are such powerful medicine and alter the way our genes are expressed.

Resources:

- Institute for Functional Medicine Find a Practitioner
- British Society for Ecological Medicine Find a Practitioner

Campaign to put the C into Covid

Date:

10 December 2020



Landmark paper triggers launch of international vitamin C campaign

Content Sections

- International Vitamin C campaign launches this week
- How to C sense
- Find out more

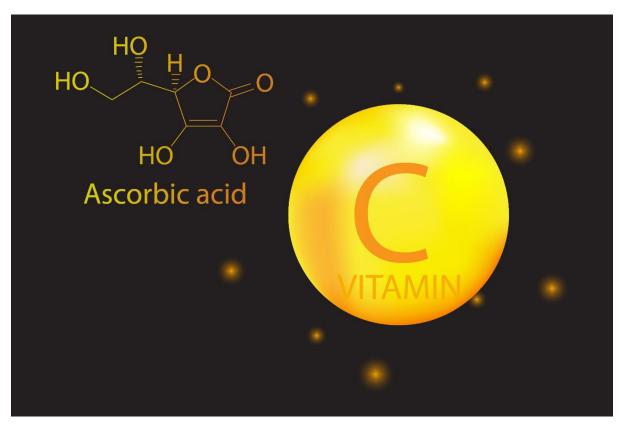
By Rob Verkerk PhD, founder, executive and scientific director

If you're a human, gorilla, chimp, fruit bat or guinea pig (among the few species that have lost the ability to make vitamin C within the body), you live in the northern hemisphere, and you're not taking vitamin C more than once a day, you're likely to be putting yourself at unnecessary risk from respiratory infections.

If you're older, or you suffer from underlying conditions such as heart disease, cancer, diabetes or obesity, these could be life threatening. Covid-19 is but one virus, of over 200, known to infect the human airway and cause respiratory diseases.

Not only can we not make our own vitamin C, we also don't get anything like enough from our diet. More than that, our vitamin C requirement increases 10 times or more when our immune system is challenged by infection.

But there's more still. There's mounting research on the importance of high dose vitamin C as an adjunct therapy for those seriously ill with covid disease – and, those who suffer the worse impacts from the disease, have very low vitamin C status. Their circulating levels of vitamin C are so low – they're likely to be firmly within the levels that cause the vitamin C deficiency disease, scurvy. Yes, scurvy may be a historic disease, but it's very much with us in this modern world in which the vitamin C content of our industrialised food supply is so low that, for most of us, our only option is now to take vitamin C as a supplement. Or if we get really sick, have it administered intravenously by forward-thinking medics.



This all sets the scene for why a global campaign – something we're thrilled to be a part of – is so necessary and why it's been launched this week, on the back of a review article published in the journal *Nutrients* that puts all the arguments and science in one, neat place.

That makes it harder for those who're not keen to accept that a humble vitamin, like vitamin C, has so much to offer, at such low cost, and with such an extraordinary safety profile. Put as simply as we can: taking vitamin C as a preventative and then, upping your intake if you're infected, is a no brainer. So is using vitamin C intravenously for those with acute respiratory infections, or sepsis, in critical care.

So much so, that we argue – given the now available evidence – that doctors and other health professionals who avoid recommendations on vitamin C in relation to covid disease prevention and treatment, should be considered medically negligent.

International Vitamin C campaign launches this week

On 7th December, a landmark paper on the importance of vitamin C was published. Lead author and instigator of the international campaign is none other than nutritionist and best-selling author Patrick Holford. Patrick has pulled together many of the leading scientists and clinicians working with vitamin C and other vitamins, including Dr Paul Marik, leading the Front Line Covid-19 Critical Care Alliance in the US, and Ass Prof Anitra Carr from the University of Otago in New Zealand, both of whom have been working with vitamin C in both sepsis and covid-19 patients.

I'm honoured to have been asked by Patrick to join the scientific advisory board and act as campaign advisor for the newly launched **Vitamin C 4 Covid campaign**.

How to C sense

Our asks are fourfold:

- 1. Make sure you're taking optimum amounts and forms of vitamin C for prevention. Check out the website and our video above for more information.
- 2. Sign the petition on the campaign website if you're a concerned member of the public or a health professional.
- 3. Share this as widely as you can so we have enough support from the petition to put pressure on health authorities to include vitamin C in public health messaging, as well as increasing awareness of the benefit and almost zero risk of vitamin C among critical care doctors as an adjunct therapy
- 4. Please donate to the campaign so we can help finance professional PR activities to maximise impact.

Find out more

>>> Vitamin C4Covid campaign

>>> ANH-Intl vitamin D campaign

>>> ANH-Intl Covid - Adapt, Don't Fight campaign

Cronyism and censorship update

Date:

17 December 2020



Content Sections

- YouTube censorship
- Cronyism in the UK
- Find out more

This piece summarises and gives you quick links to some important information that is of the moment, relating both to censorship and cronyism. These are two elements of the corporatocracy that have gone into overdrive since the WHO's declaration of a pandemic in March this year.

YouTube censorship

With normal social interaction greatly curtailed by government responses to covid-19, video has become one of the most important media for communication. While the mainstream media have been doing their best to follow an agreed narrative created by the World Health Organization, the World Economic Forum and other inter-governmental organisations, as well as YouTube (a division of Google) has hosted a wide range of content that has contradicted this narrative.

A recent change in YouTube policy that proposes a censorship of information concerning covid is set to change this.

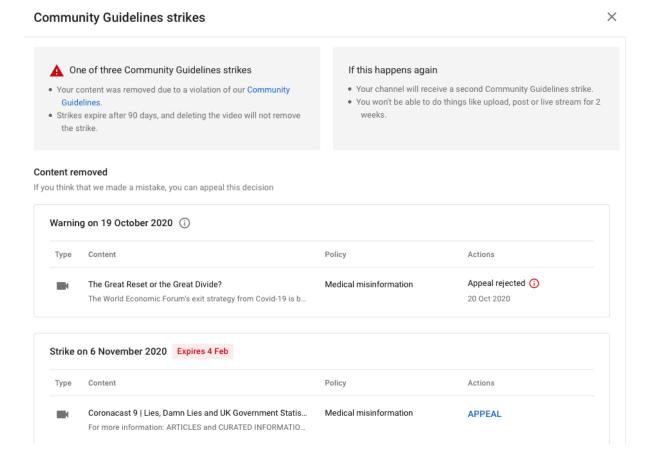
>>> YouTube 'COVID-19 Medical Misinformation Policy'

The new policy states that any information that "spreads medical misinformation that contradicts local health authorities" or the World Health Organization's (WHO) medical information about COVID-19" will be removed when it relates to treatment, prevention, diagnostics or transmission. Perhaps they think we'll be relieved that cronyism and corruption (see below) are still fair game.

Top of the list of definite 'no no's' is one area that affects many of us, namely the use of natural therapies, including well evidenced vitamin D and vitamin C. The policy reads: "Content that encourages the use of home remedies in place of medical treatment such as consulting a doctor or going to the hospital."

This new policy represents a brazen attempt to shut down scientific discourse which has been at the heart of scientific progress given much of this discourse by dissenting scientists has been shared on YouTube. At a time when governments have been trying to prevent hospitals from being overrun, it is also absurd to see an attempt to reduce citizen self-care.

It is ironic, that our YouTube video about the World Economic Forum's Great Reset was our first video to be censored (see below). Two more strikes, and we will be deplatformed.



Screengrab of YouTube 'strikes' against ANH-Intl.

We are presently using a range of other platforms for our video content. The full content is accessible via our website at: https://www.anhinternational.org/videos

Cronyism in the UK

Sophie Hill is currently a PhD candidate researching the economics and politics
of government at Harvard. She has created an interactive map called 'My Little
Crony' that depicts cronyism in the UK government, showing up the personal
relationships involved in political donations and the issue of government
contracts. In the spotlight are contracts that have been awarded as a result of
frenzied public procurement during the covid pandemic.

>>> Link to 'My Little Crony' interactive map

- South Coventry MP exposes cronyism in Westminster
- The Good Law Project has initiated a number of legal actions to tackle cronyism.
 One such action targets the appointment of Dido Harding to head up the non-NHS administered, misnamed 'NHS Test and Trace' seemingly without advertisement or use of a fair recruitment process.

Transvac vaccination transparency tool launched

Date:

17 December 2020

Lack of transparency on covid vaccines limits public ability to exercise informed consent

The first covid-19 vaccine in the world, from BioNTech & Pfizer, has been released for mass vaccination of the public - in the UK. Outwardly, given the publication of Phase 3 trials in the peer reviewed literature, many may feel that everything they need to know if they are to give their informed consent for vaccination is already known - and is in the public domain.

This simply isn't true.

That is why we've seen fit to create a tracker that can be used to evaluate vaccine transparency for individual vaccines, in specific countries.

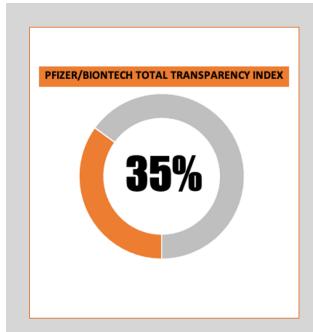
In launching the tracker, *Transvac*, and placing it in the public domain to allow others to engage with the interactive algorithm (in Excel), we hope to be able draw attention to the continued withholding of data that we consider to be essential for properly informed consent.

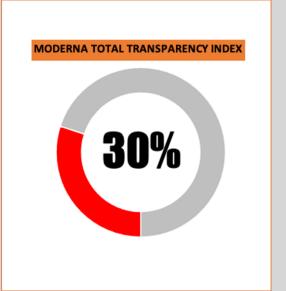
We have initially evaluated with *Transvac* two vaccines: the BioNTech/Pfizer vaccine in the UK, and the Moderna vaccine in the US. The results showed there is a long way to go before transparency can be declared, the former yielding a 'transparency index' of just 35%, marginally better than Moderna's 30%.

We issued a press release this morning (below) to publicise the new vaccine transparency tool.

PRESS RELEASE
For immediate release
17 December 2020

Newly launched vaccination transparency tool yields 'transparency index' of 35% or less for Pfizer and Moderna vaccines





The Alliance for Natural Heath International, a UK-based, internationally active, non-profit campaign, research and education organisation, has released into the public domain an open source vaccine transparency tool, *TransVac*, that allows comparison of the relative degree of vaccine transparency relating to citizenfacing information for the new generation of covid vaccines.

Using the new tool, Pfizer/BioNTech's vaccine, currently being administered to the UK public, was found to have a 'transparency index' of just 35%. The Moderna vaccine, destined for imminent release in the US, fared even worse with an index of just 30%.

In April, together with colleagues at the British Society for Ecological Medicine (BSEM), the Alliance for Natural Health (ANH) International published an open letter to Matt Hancock, the UK Minister for Health and Social Care, calling for vaccine transparency prior to roll-out of synthetic biology covid vaccines in what is described as the "biggest vaccination drive in British history".

Given it is crunch time for an increasing number of Britons, and will be soon for US citizens, and others around the world, the vaccine transparency tool was developed to help citizens understand more about the nature and availability of information required for properly informed consent. The tool uses an algorithm to determine compliance with the ten criteria outlined by the ANH and the BSEM in their vaccine transparency manifesto issued earlier this year.

Transvac generated a transparency index for the Pfizer/BioNTech vaccine in the UK of just 35%, with the index varying between 0% and a maximum of 68% for the 10 different criteria. That was marginally greater than the 30% found, using identical criteria, for the Moderna vaccine in the USA, which is expecting an imminent greenlight from the US Food and Drug Administration (FDA).

The results suggest that information required by citizens on which to be able to give informed consent is severely limited, and more opaque than it is transparent.

"We've developed the Transvac tool to help people understand what they should be asking health professionals and authorities if they wish to exercise properly informed consent, which is a legal right in most parts of the world for any medical intervention. Historically, vaccine transparency has been poor, and given the synthetic biology platforms and fast-track development timetables for the new generation of covid vaccines, a high degree of transparency is more important than ever."

Although both the Pfizer/BioNTech and Moderna vaccines use the same mRNA platform, one of the main differences in transparency between the two vaccines is that the lipid nanoparticle (LNP) ingredients used by Moderna, unlike Pfizer, have yet to be released to the public. This prevents any independent scientific risk assessment. In neither case have the amounts of the LNP adjuvants or their specific physico-chemical properties been released. It has been well established that nanoparticle delivery can greatly alter—and increase—the intrinsic toxicity of nanoparticles compared with the same ingredients in non-nano form. It is therefore unsurprising that "Moderna warned that they cannot be sure their LNP's will not have adverse effects."

The ANH is calling on the public, independent scientists, elected representatives and health professionals to engage with the open source Transvac tool. Most of the 10 criteria are subdivided into 4 to 6 sub-components and as more information materialises, the indices will change.

Dr Verkerk said that the ANH has been inundated by members of the public who say they are hesitant to receive covid vaccines because of a lack of information, and added:

"The public is often blamed for vaccine hesitancy. But accountability lies more with the vaccine makers and regulators for information that generates confidence. Transvac provides transparency over the nature of information that the public should have access to if the right to informed consent is to be respected during the forthcoming mass vaccination programs."

The Transvac Dashboard

Table 1: Data source: ANH-Intl Transvac vaccine transparency tool

Tuesday	Dook	امير مرجا
Transvac	vasr	iboard

1

Source data: 16 December 2020

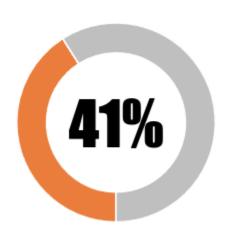
 \geq 99% of raw data in the public

domain

Source data. 10 December 2020		
CRITERIA	Pfizer/ BioNTech %	Moderna %
	ик	us
Full disclosure of all raw data from safety studies of		
commercial Covid-19 vaccines	0%	0%
No raw data in the public domain	0	0
1-25% raw data in public domain	0	0
≥25%%<50% of raw data in public domain	0	0
≥ 50% < 99% raw data in public domain	0	0

0

3 Transparency over the type of platform used for commercial vaccines





Platform unknown	0	0
Platform type declared by WHO or national regulator	33	33
Platform declared in citizen facing promotion of mass vaccination programme	33	0
Synthetic biology terminology (or related nomenclature e.g. synthetic, gene edited) declared in citizen facing promotion of mass vaccination programme	0	0
No declaration in citizen facing promotion of absence of previous use of novel vaccine technology in mass vaccination programmes	-25	0
SUB-TOTAL	41	33

4 Conduct and transparency of studies to elucidate any risks associated with adjuvants as distinct from antigens

SUB-TOTAL





No published (including peer reviewed) safety studies on adjuvants used in same format as vaccine	0	0
Third party peer review safety studies for adjuvants that are bioequivalent	0	0
Raw data for third party peer review safety studies (for adjuvants that are bioequivalent) available in public domain	0	0
Product specific safety studies published in peer review	0	0
Raw data for product specific safety studies available in public domain	0	0

5 Transparency in relation to vaccine composition

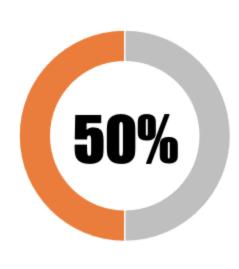




No declaration by manufacturer or regulator approving emergency use of all ingredients present in vaccine	0	0
Declaration by manufacturer or regulator approving emergency use of all ingredients present in vaccine	25	0
Declaration by manufacturer or regulator approving emergency use of amounts of all ingredients present in vaccine	0	0
Declaration by manufacturer or regulator approving emergency use of quality assurance tests for any contaminants in vaccine	0	0
Declaration by manufacturer or regulator approving emergency use of physico-chemical characteristics (including of any nanoparticles) of all ingredients present in vaccine	0	0

Full disclosure of cases and potential cases of vaccine injury (= adverse events, whether short- or long-term, whether from active constituents, adjuvants or contaminants, intentionally or unintentionally added to the vaccine)

SUB-TOTAL





50

No data on nature or severity of data from Phase 3 trial or commercial use in public domain	0	0
Summary data from Phase 3 trial safety endpoints available in public domain	25	25
National authority has published, or declared its intention to publish in the public domain, postmarketing surveillance data relating to safety/adverse events	0	0
National register established for recording vacccine adverse reactions	25	25
Primary care physicians have been formerly notified by appropriate health authorities to add patients presenting with adverse reactions to national register	0	0

7 The Government must clarify eligibility and criteria for no-fault vaccine injury payments for Covid-19 vaccines



0

0

The national government has provided no public clarification of eligibility and criteria for no-fault vaccine injury compensation

The national government has placed in the public domain some, but inadequate, information

about eligibility and criteria for no-fault vaccine injury compensation

The national government has placed in the public domain comprehensive information about eligibility and criteria for no-fault vaccine injury compensation

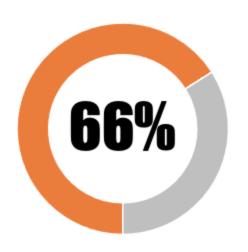
50 50

0

0

SUB-TOTAL 50 50

8 The Government must clarify indemnity offered to vaccine manufacturers





No information provided to the public about government indemnity of vaccine industry against liability in the event of 'nofault' vaccine-injury

Some, but grossly inadequate information, provided to the public about government indemnity of vaccine industry against liability in the event of 'nofault' vaccine-injury

Some, but nevertheless inadequate information, provided to the public about government indemnity of vaccine industry against liability in the event of 'nofault' vaccine-injury

Comprehensive information, provided to the public about government indemnity of vaccine industry against liability in the event of 'no-fault' vaccine-injury

0

33

33

33

0

33

0

0

SUB-TOTAL

66

9 The public must be informed of the extent of naturally-acquired immunity prior to public release of Covid-19 vaccines





No publicly accessible data on main national covid-19 portal on proportion of national population with naturally-acquired immunity (antibodies and/or T-cells)

0

0

0

0

Some, but inadequate, publicly accessible data on main national covid-19 portal on proportion of national population with naturally-acquired immunity (antibodies and/or T-cells)

0

0

Comprehensive publicly accessible data on main national covid-19 portal on proportion of national population with naturallyacquired immunity (antibodies and/or T-cells)

0

0

Regional publicly accessible data on main national covid-19 portal on proportion of regional population with naturallyacquired immunity: antibodies only

0

Regional publicly accessible data on main national covid-19 portal on proportion of regional population with naturally-

	acquired immunity: antibodies and T-cell responses		
	Members of the public given the option to have immunity status tested prior to vaccination	0	0
	SUB-TOTAL	0	0
10	Any decision to mandate Covid- 19 vaccines or limit freedoms of the unvaccinated must be democratic	50%	50
	Government or national authority has formally deliberated mandating covid vaccines or limiting freedoms of the unvaccinated but has not engaged with the democratic process (elected representatives)	0	0
	Government or national authority has formally deliberated mandating covid vaccines or limiting freedoms of the unvaccinated but has not engaged with any aspect of the democratic process (e.g. elected representatives and public consultation)	25	25
	Government or national authority has formally deliberated mandating covid vaccines or limiting freedoms of the	25	25

unvaccinated with input from elected representatives

Government or national authority has deliberated mandating covid vaccines or limiting freedoms of the unvaccinated and has included input from a public consultation

0

0

Government or national authority has deliberated mandating covid vaccines or limiting freedoms of the unvaccinated final decision will be made on the basis of a democratic vote by elected representatives

0

SUB-TOTAL	50	50
TOTAL TRANSPARENCY INDEX	35	30

Founder's Blog: Virus versus humanity

Date:

23 December 2020

What the %!#★ happened in 2020?!

Content Sections

- Pasteurian pursuit
- Conflation of science and politics
- Abuse of molecular biology
- Cronyism
- Last stop café
- Governance and censorship
- Bifurcation
- More information

By Rob Verkerk PhD, founder, scientific and executive director

Regardless of how you feel about the threat posed to the human race by the new coronavirus, or the human response to it, these last 10 months have been an ordeal. You may or may not agree that the best thing we could have done was to try to reduce transmission of a virus that is innocuous to the vast majority and in the process drive a wrecking ball into economies and livelihoods. Equally, you may or may not agree that developing synthetic biology vaccines at warp speed is the only way out of this. Regardless, barring the few that have benefited massively from the pandemic, nearly all of the rest of us have been impacted negatively – sometimes catastrophically so. Years of work to build employment and narrow socio-economic inequalities has been undone.

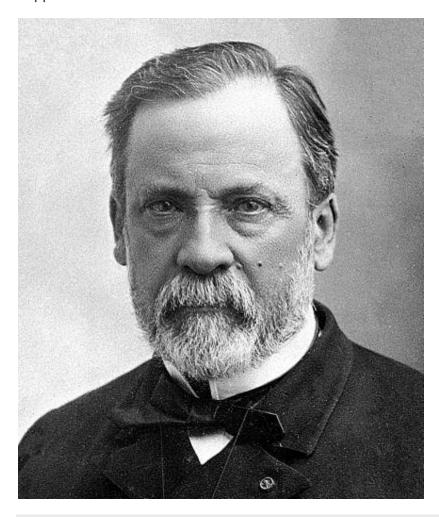
As they say, there's no point crying over spilled milk. Let's try and get it as right as we can going forward, with as much learning as we can muster under our belts. Despite what's happened, there is always a silver lining somewhere. If we lose focus of this and concentrate only on the negativity, we will pay an unnecessarily heavy price and among the many outcomes will be anxiety, depression, apathy, disempowerment. That and more costs lives and people's futures.

So, in my last blog of the year, I wanted touch on what I feel are some of the most important things we've learned about the anthropocentric world we inhabit that we are so drastically, and often unwittingly, reshaping.

Pasteurian pursuit

Louis Pasteur's germ theory has been re-popularised. Prior to widespread recognition of SARS-CoV-2 in early 2020, there had been a trend for microbiologists to be at least as interested in the 'terrain' that would trigger pathogenicity in otherwise latent microorganisms, as in the pathogens themselves. All this work suddenly seemed irrelevant once the coronavirus arrived on the scene. It was all about the virus, that was fully sequenced in early January. Within days came the WHO-approved antigen test led by Dr Christian Drosten's group at Charité University Hospital in Berlin, now a focus of legal action.

The silver lining to this Pasteurian pursuit has been the belated but by now widespread recognition of the importance of the terrain, especially vitamin D and C, as well as zinc status. These micronutrients help to provide the immune system with resources that are often inadequate for its competent function. We've launched campaigns around both vitamins (links to our vitamin D and C campaigns are here and here, respectively). We've also recommended use of science-based levels that are much higher than those recommended by governments that have failed, with very few exceptions (e.g. folate and neural tube defects), to acknowledge the preventative or therapeutic role of supplements.



French biologist Louis Pasteur (1822-1895)

Early next year, we will be releasing the results of the work we've commissioned at a university in the Netherlands that aims to counter the restrictions being imposed by national authorities in Europe. The output will be an open source risk/benefit assessment tool for micronutrients in supplements that we believe will help democratise the agreement on beneficial, safe and proportionate maximum levels for food/dietary supplements.

Conflation of science and politics

Another observation that struck me as a scientist (who first qualified in the discipline 39 years ago) is the engagement of politicians and world leaders in scientific decision making. The circumstances that allowed this to happen involved three main factors: a) the emergence of a global crisis that transgressed borders, b) one that posed a significant health threat, and, c) ongoing and great uncertainty over the actual threat posed by the virus, as well as how it might be best contained, delayed, mitigated or prevented.

So while scientists have been feeding huge amounts of information to governments and inter-governmental organisations like the World Health Organization (WHO), it is governments that have been making the decisions and policies that most affect our daily lives. These circumstances have allowed for remarkable U-turns in policy on lockdowns and other restrictions. They have also resulted in a communication of a lot of erroneous information to the public, such as telling people they should stay indoors, or justifying huge public spending programmes for mass testing using PCR on the grounds of its infallibility. When a government exerts so much control over how we should manage a single pathogen, everyone looks to that government for answers. When governments don't seem to have a full handle on things, even ex-leaders, like former British PM Tony Blair, decide to chime in and tell everyone how vaccines should be rolled out.

Right now, while scientists in the UK attempt to understand the transmission capacity, virulence and host preferences of the two new "*mutant strains*" of SARS-CoV-2, politicians are forced to give answers. Expect some to be wrong.

When we live in a world where distrust of big government and big corporations has reached an all-time high, this isn't a good plan. Better to communicate truthfully about the uncertainty and substitute uncertain information for something that appears like, but isn't, fact.

As Agamemnon was reputed to say: "There is no avoidance in delay." Back to the mutant strains of SARS-CoV-2, if there is no evidence suggesting increased threat to public health, there is no justification to act as if there was. So don't shut the borders. Let nature do its thing. This brings us swiftly to the next point.

Abuse of molecular biology

Those who have said that a new virus might not even exist, have perhaps not looked at the huge scientific efforts that have been expended in the field of molecular biology. One argument we've heard many times is that the virus has not fulfilled the 4 original Koch-Henle postulates, proposed in 1884 for bacterial, not viral, infections, that have been viewed by some as the necessary proof of causation of Covid-19. Actually, if you accept the modification for these postulates in 1937 by Thomas Rivers for viruses that are not amenable to culture, the revised 6 postulates have been met many times over, as they were for SARS before it. The use of molecular biology technologies like RT-PCR has been central to this in the identification of the virus as contrasted with diagnosis of disease (see below).

When the first wave of infection hit Europe, then the USA and South America, it was immediately apparent that only a small sub-group of the population were impacted, primarily those with multiple underlying conditions or those who were very old.

When the WHO said in March "test, test, test", the largest roll-out of diagnostic testing the world has ever seen was begun. Then it seemed that the business model driving this boom overtook logic and science. Critically important elements such as Bayes' theorem that has long informed us that false positives will become very common when prevalence is low, set the scene for a pandemic that might never have an end. Dissenting scientific voices such as those of Dr Carl Heneghan at the Centre for Evidence-Based Medicine at Oxford University were marginalised or ignored.

The pandemic was soon flipped into a 'casedemic'. The very life-saving molecular biology tools that had so effectively and rapidly sequenced this virus, as well as many others before it, were transferred to mass testing programmes, only to be misused and abused at an incredible scale.

Clear flaws in how the tests were being used as well as their interpretation were identified and are now the subject of a petition to the European Medicines Agency.

The WHO then belatedly indicated its recognition that over-amplification by RT-PCR would deliver false positives for fragments of SARS-CoV-2 (and possibly other viruses sharing the same gene sequences being amplified) with no potential to cause infection. It has still done nothing to cap the cycles threshold of the PCR devices.

Now gene sequencing is delivering a new type of narrative – one of mutant viruses. The reality is that all viruses mutate and in the case of RNA viruses like this the mutations rarely lead to changes in function or pathogenicity. Many thousands of mutations have occurred already, but the latest mutants to be found in the UK involve significant changes to the gene sequence of the spike protein. Accordingly they could affect different aspects of the interaction with the host, including transmission, immune response, and so on. Presently there is scientific debate over whether transmission is increased and if human hosts include people of younger age. The general view is there is, as yet, no evidence of increased virulence. There may also be impacts on vaccine effectiveness, given we know that some mutations can be resistant to neutralising

antibodies; but this is currently being widely denied (without supporting data) by vaccine makers.

All of this deep uncertainty won't become less opaque until extensive gene sequencing and proteomics have been integrated with epidemiology from different countries and regions. That's something that takes time. But knee-jerking to the new mutations given there is no evidence yet of any increased threat to life seems unjustified, despite the murky and premature status of the science.

The silver-lining to all of this could be that we learn just how much unnecessary damage can result from the misuse of molecular biology. Let's use this technology judiciously and cautiously. Just like my last point, this one takes us neatly to the next.

Cronyism

'Jobs for their mates' has been a feature of the pandemic, none quite so clearly illustrated as in the UK by Sophie Hill's *My Little Crony* interactive map. We appreciate that tender times have been limited and urgency high, but this is public money we're talking about.

We are thrilled to see the likes of the Good Law Project taking a legal scalpel to the problem— hopefully delivering results and teaching our leaders that cronyism, which is separated from corruption only by a fine line, is unacceptable.

Last stop café

It is challenging to find any substantive evidence that the new generation of synthetic biology vaccines can rid the world of this virus. They depend on new synthetic biology vaccine platforms that are untested at scale. The effectiveness claims from Phase 3 trials on which emergency authorisation of the BioNTech/Pfizer and Moderna vaccines have been based rely on very small groups of individuals, not reflective of the population groups at most risk from the virus. Additionally, we have the curved ball of the recently exposed significant mutations to the spike protein to add to the list of uncertainties.

Vaccines for the two most closely related coronaviruses, SARS and MERS, caused excessively severe reactions or arrived too late. These viruses have managed to self-regulate with the immune system of their human hosts so they're still present but no longer a global threat. SARS-CoV-2 could peter out in the same way, or probably more likely, weaken in virulence over time and become endemic as part of the pool of circulating respiratory viruses. No wonder Roche has rolled out a '3 in 1' antigen test kit that detects SARS-CoV-2 as well as influenza A and B viruses. A complementary '3 in 1' winter vaccine must be on someone's drawing board.

We'd argue, as we did at the start of the pandemic, for those of use who are healthy, we should stop either trying to fight with, or hide from, this virus. Nature will take its course and will re-balance. It turns out the patterns of mortality in Sweden and the UK over the last year have been remarkably similar – yet the governmental responses have been dramatically different. It seems the virus is in charge more than humans, although time

will ultimately tell. It may be that in time we will see that the inordinate efforts invested in trying to control the virus resulted in vast amounts of resources being wasted. As well as driving a coach and horses through decades of societal efforts to narrow social and health inequalities. Using lockdowns and social distancing to slow transmission of viruses might one day be considered akin to trying to herd cats.

What we have to do is be much more cognisant of whole systems – and therefore the risks and benefits to all parts of the human and non-human ecosystems we inhabit and share.

We need to do this in a way that minimises net damage, which is why we can no longer ignore the collateral damage caused by efforts, such as lockdowns and related measures, to delay transmission. We also probably need all the available data – which is why the vaccine transparency initiative we've launched is so crucial in our minds.

We need, too, to get real about it being unlikely that there will ever be a single silver bullet for this virus, even one that comes in the form of a syringe. And finally, we should appreciate that we probably could not afford to repeat this exercise every time we encounter a new virus that has adapted to our species.

Governance and censorship

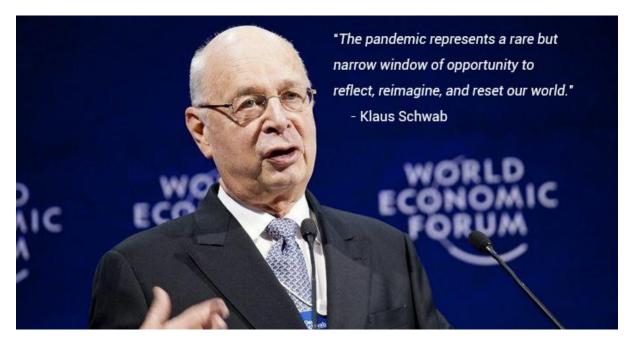
A global pandemic, even one that had to be massaged from time to time to ensure a suitable level of fear and hysteria was maintained in the minds of the masses, has been the ticket for a number of very fundamental changes to the way we are governed. The pandemic control system, that had been rehearsed for such an occasion, meant that global governance of the pandemic response, coordinated by the WHO, was able to be rapidly initiated in January 2020. The World Economic Forum was also closely involved, given its close association with stakeholders, including the media and vaccine makers.

Superimposed with the transition to increasingly authoritarian approaches to controlling the spread of the virus were the complex issues around the recognition of racial inequalities triggered by the killing of George Floyd, the US election, and Brexit. Division and polarisation of viewpoints arose like a fountain from the desert during the course of the year, beyond most expectations. Social media platforms, especially, have gone to extraordinary efforts to curtail freedom of expression. Even mainstream media channels like the BBC, once hailed for its balanced reporting, has been roundly criticised for its biases (here and here).

The transitions proposed by the World Economic Forum are so material to our everyday lives, to how we work, get paid, eat, recreate, manage our health and interface with one another and the world around us, that it may turn out to be a grave mistake to try to rush them through while most of the democratic functions of the Western world have been suspended owing to the perceived, ongoing emergency.

The World Economic Forum has described the covid-19 pandemic as a "once-in-a-lifetime opportunity", an opportunity to make fundamental changes to the social and geopolitical order, as well as to how cyber technologies can be interfaced with humanity. The World Economic Forum calls it the Great Reset, which has been intimately linked to

covid-19 through the co-authorship of a book by the Forum's founder, Klaus Schwab. The Great Reset, that can be likened to pressing the reset button on planet Earth, is the chosen gateway for the 'Fourth Industrial Revolution', the subject of another Schwab book. One that envisions a blurring between technology and humans, including the development of transhuman beings replete with synthetic genes. We debated the ethics of genetically modified foods for decades, why now is there no public debate on synthetic biology vaccines, implantable cell phones or transhumans?



With this kind of backdrop and the suspension of normal social and scientific discourse, forcing people into social contracts when they have so little say in, or even knowledge of, the content or implications of the contract, is a very risky endeavour. One that could lead to massive social unrest. Better to re-instigate due democratic process and scientific discourse and co-create a new way forward for people, industry and society. One that resonates with protecting our delicate and besieged planet, yes.

But one that also resonates with the masses, not just the few who have been sampling the rarefied air of Davos each January.

Bifurcation

I want to finish my year-end blog with what I feel is the single most important take-home from the year. Irrespective of which side of the highly polarised debate around covid-19 responses, governance, media censorship, cyber technology, surveillance, or democracy (let me stop there) you sit, 2020 will almost certainly be seen as a highly significant fork, or bifurcation, in human evolution. It may be as relevant as the transition that occurred in Abu Hureyra in present day Syria, some 10,000 years ago. This settlement, that existed up until around 6,000 years ago, represented the transition from nomadic to pastoral lifestyles. Archaeologists and anthropologists have pieced together from this settlement the first evidence of widescale domestication of plants and animals. Abu Hureyra set the scene for the bifurcations we now regard as the agricultural and industrial revolutions.

At this point, in recognising the extreme significance of the present time, we might find ourselves on the same page as Klaus Schwab. Where we, or at least I, differ, is that you shouldn't be predetermining the future of the human race without consultation with most of the nearly 8 billion people with which you share the planet. And you shouldn't try to force such great transition through while so many of the civilised processes associated with advanced democracies have been suspended.

In a recent article, Hungarian scientist and philosopher, Ervin László pondered over the role of covid-19 in such a bifurcation event. He wrote the following:

"We have learned a few things about such a shift. It is one-way, it cannot be reversed. But it is not predetermined - it allows choice. In a bifurcation, we can choose the way we go. For the first time in history, we can consciously and purposefully choose our destiny. This could be a bright destiny; the dawn of a new era of sanity and flourishing. But whether it will be that is not determined. It is up to us."

- Ervin László, Paradigm Explorer, 2020, 122, 4-5.

Here's hoping László is right. His call is at least hopeful, and where there is hope, anything is possible.

That's why we will be working just as hard in 2021 to help bring more and more people on board with a vision and plan for humanity and health that works with, not against, nature.

In health and hope, here's wishing you the very best for the New Year.

More information

>>> For a full repository of ANH-Intl articles and video on covid-19, **visit our Covid- Adapt Don't' Fight campaign page.**

>>> **Sign up here** for our free Heartbeat newsletter.

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