The Truth Behind the Data Ref194SR

Steven Bruce
Good evening. Welcome to the academy for the second broadcast of the day. It's been quite a day to day I can tell you this evening I'm going to be talking to Dr. Sebastian rushworth. Now Sebastian is a junior doctor in Stockholm. He graduated two years ago, but he has risen to internet fame through an excellent blog that he's written, one which came to my attention through the equally admirable Malcolm Kendrick, who writes a lot about cardio cardiovascular disease. But the thing that drew me to Sebastian's blog is his analysis of all the data and his picking apart of the misinformation, sometimes disinformation that we see through not just the internet, not just through social media, but also in various respectable journals and other sources. And not just regarding COVID. Of course, that's been the focus of the last 18 months or so. But Sebastian has written about exercise, nutrition, cardiovascular disease, a whole host of other things, but I suspect we will be dealing with those as well as COVID. Now COVID has the capacity to polarise opinions as we all know. And I have no doubt that Sebastian will say things with which I might not agree or you might not agree, can I please ask that the only way we get benefit from shows like this is if we accept all this in the in the principle on the principles of medical evidence, and we listened to what Sebastian's got to say and by all means, check in your opinions, because we want to share different opinions and we want to analyse different data that people might have. But there's there's not any room, I think, for being abusive in the way we see so much on social media when someone doesn't agree with our opinion. So having said that, Sebastian, welcome to the show. Great to have you with us.

Thank you. It's my pleasure to be here.

Steven Bruce
Now I bought a copy of your book, as soon as I found out about it. My if I remember the title correctly, it's so why everything you know about COVID is probably wrong, which is a very catchy title. And it's a very good book. And I apologise that I can't hold it up for the audience to see because I'm moving clinic moving house moving studio, and everything's in packing cases. But I do thoroughly recommend the book. It's not expensive. It's not a huge tome. It's a very easy read. But the big question, is it still true?

Yeah, I think most of the things in that book are are correct. Some of the details might be slightly different if I'd written it now, based on new evidence that that's come out since since the book came out in January, but on the whole, I think the book still sounds

Steven Bruce
right. Okay. So can you talk us through them the misconceptions about Russia? Start wherever you like with COVID. But what about the severity of the disease, he says, Is it as nasty disease as we are led to believe? We have a speaker on the other day who said there is no pandemic. And that speaker was also a medical doctor. So that's one end of the spectrum of thought.

Well, I guess that depends on how you define a pandemic. From my perspective, COVID is the pandemic. I heard the other days, I don't know where I heard or read it. But somewhere that around half, that most Americans think that that if they get COVID, there's like a 50% probability of being hospitalised and maybe a 10 or 20% probability of dying. And if that's what people believe, then they're then they're very much incorrect. So I mean, there there have been studies, even from the very beginning with the data coming out from the diamond princess and from gathering antibodies, and comparing with the number of people that had at that point died of COVID. And they universally kind of agreed on a much lower figure and, and so this figure is kind of continued to crystallise over the course of the pandemic, but the general consensus now is that the overall fatality rate is somewhere between 0.2 and 0.3%, which would mean that somewhere between 99.7 and 99.8% of of all people who get COVID survive it. Will I mean, yeah,

Steven Bruce
no, sorry to interrupt you. Um, there are two different rates to measure there on that there is the population fatality rate and there's an infection fatality rate. The figure you gave there, you said the overall figure was that the number who will die who are infected with COVID,

nasty infection, the fatality rate and, and obviously, the population fatality rate will be even lower because not Everyone's going to get infected, and the case fatality rate will be higher, because well, many cases of COVID don't get recognised the up to up to half of all people who have COVID have either no symptoms, or symptoms that are so mild that, that they don't even realise that they have an infection, or at least that they don't bother to get tested. So because of this, the case fatality rate will always be inflated.

Steven Bruce
And that's an interesting point, because it depends on your definition of the word case, doesn't it? And I'm, I always struggle, I read the Guardian over here every day, I don't read every day, but I get it every day. And it tells me that today we have 43,000 cases of COVID in the United Kingdom, and that's increased from last week. But I can't help thinking that if a case constitutes anybody who has the virus of their nose, then the case rate will depend very much on how much testing we're doing, rather than who's got symptoms.

Absolutely, and I mean, this is something new for COVID, that it's enough that you have a positive test to be defined as a case before that, where the within the factions, you were required to have some kind of symptoms as well that you need to fulfil both criteria, you're not a case, just because you show a positive test. So the the definition has become more lenient, and obviously that's going to well, and that's kind of fed into the hysteria because we have ever increasing numbers of cases. But that's not necessarily representative of the number of people who are in in hospital. If you look here at the Swedish data, that becomes very clear the first wave, there were as many people in hospital with COVID, as there were in the second wave that I mean, there were as many people getting sick. But if you just look at reported cases, there were 10 times as many cases, at least in the second wave as there were in the first wave. And that was only due to the fact that there was massively more testing going on during the second wave.

Steven Bruce
Right? Yes, of course, we're probably kept turned back in a little while to how Sweden's fared through the pandemic, because of course, there's been, there has been, there have been interesting reports about whether Sweden did well or did badly will be just the same as everybody else. I'm certain that you've got an opinion on that. We seem to have lost interest in this country in the our number, which was very popular a few months back, but based on what we just said about how we define cases. Does the zero number or any other number for that matter depend on how you define cases? Or would it not change? If you only took symptomatic people are zero, I'm just explaining what I think that means. zero means the rate at which the disease would spread, if no other measures were taken to contain it.

Yeah, well, obviously the more lenient you are defining a case the, the, the higher the Our number is going to appear to be and then and if you compare with with other viruses with other infections, where where the definition of a case his symptoms and a positive test, then the the relative or number or their relative infectiousness of COVID is going to appear to be much higher, relatively speaking.

Steven Bruce
Yeah, I'm intrigued the I think the current evidence or the current opinion of exalted statisticians is that the RS zero number for COVID-19 is about three, it's just very slightly less than three, whereas for normal seasonal fluid somewhere around 1.2. Does that sound reasonable?

I haven't looked into the exact numbers on this. But I mean, ballpark it sounds. It sounds pretty reasonable. And the virus has been evolving over time over the course of the pandemic and becoming more and more infectious. The, the the variant that's dominant at the moment is far more infectious than the original variant that came out of Wuhan two years ago.

Steven Bruce
Yeah. And are you seeing a significant rise in symptomatic cases in hospital as a result of that?

Not here in Sweden. And I think that's due to the fact We have already, through the earlier waves built up a large amount of immunity, both both natural immunity and also vaccine acquired immunity. And apart from the fact that, that lots of people already have COVID in Sweden, around 80% of the population is vaccinated so that in that situation it's it's hard for, for the for the virus to create new waves, even even with the new variant that says, infectious is the Delta variant this

Steven Bruce
Joanne has sent in a question saying, how can you include those who do not have symptoms? And I think that's the question that a lot of people are asking Joanne because it seriously distorts the statistics on the number of people who say you have a disease or, or are a case, if you include those without symptoms. And I often wonder if we did if we did national testing for the flu each year, I wonder how many cases we would find?

Well, I mean, we've never done this kind of mass testing ever before this we've done for COVID. I mean, if we did we did on the north end the normal flu season, we'd probably be finding 10 times as many cases of the flu as we do normally, in the flu season. We I mean, we barely even test people who are coming into the hospital with with symptoms of flu. So whereas now we test everyone, at the slightest sign of a sniffle. Obviously we're going to find many more cases,

Steven Bruce
matters asked whether he says it's an obvious question, but do you know Does anyone know why there is such a huge range of symptoms or experiences that patients suffer with COVID?

So you know, some

Steven Bruce
some people very severe, some people very, very mild. You know, obviously there is a range of symptoms not every get Not everyone gets all of them, but it seems to be more more diverse and wide ranging than say for flu or colds.

So I'm I'm not actually sure that that's the case, if we're talking about degree of severity. I'm not sure that COVID is markedly different from from other coronaviruses we have. So there are four so called common cold Coronavirus, is circulating in the population, and they've all been here for decades. So there's been a certain amount of adjustment, evolution in general viruses become nicer over time, they become less deadly over time. And, and I'm sure COVID is gonna evolve in that direction to over time, but there have been studies that have shown that in elderly people, when one of these common cold coronaviruses gets into a nursing home, for example, and causes an outbreak it can easily have a fatality rate of 10%. So this kind of idea that, that COVID is causing much more severe disease than than other coronaviruses. Earlier coronaviruses are capable of is is is false, and I think it is that mainly comes from the fact that we've had this pandemic and lots of people have gotten sick at the same time. And that's kind of laid bare how how wide the spectrum of disease is normally we don't notice because only a small proportion of the population is being infected in any one season.

Steven Bruce
I suppose that we probably can't overlook the fact that in this country, we actively sent people, elderly people infirm people with COVID back into nursing homes. So we actively encourage the spread amongst that vulnerable population which kind of helped our desk statistics particularly you said there were four viruses that so the other two presumably being MERS and SARS.

And also there are four common cold Corona viruses I think and then and then we have the the more serious we have more some sellers and then SARS, Kofi too. So in total, I guess you could say there are seven Coronavirus is known to cause disease in humans in existence at the moment.

Steven Bruce

Interesting that you said you would expect that the virus would become less deadly over time. I have to say that that hadn't occurred to me because of course, we've been faced with all this information about the latest wave being so much more infectious and therefore so much more deadly. Is this simply growing immunity See, or vaccination? Or what do you see as being the cause of that?

Well, I mean, viruses are parasites and parasites that make their hosts really sick or that rapidly kill their hosts or are generally less effective at passing on their genes than parasites that cause more mild illness or no illness at all. So, in general, we you see this, this happen that when a virus first appears in the population, that it causes more severe disease, and over time, it kind of evolves and becomes less, less serious. You can see this with the Spanish flu, for example, in the Spanish Flu hasn't disappeared, it's just evolved and become less deadly. And I mean, it's still floating around.

Steven Bruce
No. More Martin has just sent in a question about whether the data justifies what he calls the draconian restrictions that will put into place in the UK and other European countries. And I suppose that's an interesting opportunity for you to contrast what happened in Sweden with, for example, what happened in the UK and I think you're probably quite familiar with the way it went over here.

So I think there are two things that you have to consider when you're thinking about lockdowns and the first is are they effective? Is there any evidence that they work? And there have been studies trying to estimate this that have been trying to show how much do they reduce COVID deaths? And in general, they haven't been able to show any evidence that they have any noticeable effect on mortality? And in that case, it's kind of moved why why are we doing something that doesn't work, but the lab say lockdowns did work that they were effective, then then you move on to kind of a more complicated calculation where you're trying to estimate well, do the benefits outweigh the harms? Because obviously, if you shut down a society, if you shut down businesses, you make people unemployed, you take children out of school, all these things are harmful, and are going to result in all kinds of unexpected negative health consequences on a population level. And, but but if lockdowns are affected, maybe, if you're dealing with, if you're dealing with the Spanish flu, or you're dealing with Ebola virus, you're dealing with a pandemic that kills 10 or 20%. down, then maybe maybe these kinds of draconian measures are perfectly reasonable, it could, but the thing here is that we're dealing with a virus that like we discussed, it only has something like 0.2% infection fatality rate, that that, that for most people is, is is just a cold, really, and that, especially for healthy people under the age of 50 is really nothing to be concerned about. And then the question is, why are we Why are we? Why is there no cost benefit analysis? Why has there never been any cost benefit analysis? Why are we engaging in these kinds of extreme restrictions that when it's impossible that the benefits outweigh the harms? Because the potential benefits of these measures are so so small considering considering the diseases is for most of the population, not a severe threat? You know,

Steven Bruce
what I've been writing thinking, Sebastian, though, that the data, even if you analyse excess deaths over a five year rolling average from the pre COVID period, there's still the opportunity there isn't there for gross error because it could be that lockdown didn't stop the COVID deaths, but it stopped

a lot of other deaths because people weren't getting the flu or colds or anything else. And maybe actually, the lockdowns have actually suppressed what would have been the overall mortality.

Well, that seems unlikely just based on I mean, we know what the infection fatality rate is and I guess you could argue that we should have massive lockdowns because then we are preventing all infectious diseases. from spreading but then I'm I guess you have to consider well is that the society that we we want to live in I mean, it's it's everyone is free to go out and live alone in the woods and avoid all contact with other human beings and you don't require a lockdown or the government telling you to do that. But I mean, that's not how we want to live. Up until 2020. We thought it was worth accepting that, that we get the occasional infection, but it's worth it because we like to live in a society.

Steven Bruce
Yes. What about the hospitals? And Robert has sent in a question saying, well, surely one of the reasons for the lockdowns was to stop the hospitals being overrun. And possibly they were because nobody was going in with anything else because they weren't allowed to travel. Unless it was for COVID reasons because they weren't being seen for heart disease or cancer or any of those other things, were they?

Well, so I can't exactly speak to the English hospital situation, but I assume it was similar to the Swedish hospital situation. In the first wave, people were so well, if we look at this in total, there have well, so here in Sweden, the government in the first wave, they were expecting this massive onslaught of patients. And they built a number of large field hospitals. But after a couple of months, they shut them back down again without ever having created a single without them having taken a single patient because that massive onslaught never materialised. And so and I'm not going to say that COVID hasn't resulted in people in hospital but but there's been there's always been the capacity to be able to handle that and in at and now it's mainly been done well here in Sweden by by pushing forward elective surgeries. And so surgical wards, orthopaedic Ward so the heavy instead of being kind of converted into COVID wards and and obviously that's not ideal but but the big problem here is that for the last I guess 20 to 30 years, at least here in Sweden, the the government's have continuously been cutting down the number of hospital beds, the number of ICU beds and and we now have a situation and I think the situation is pretty similar in the UK where there is literally zero excess capacity. And that's why I mean even before COVID every winter, there was media reporting that the health care system was in crisis. Because there when there's no excess capacity, you can't handle even relatively small peaks and every winter, you're going to get a peek from from, from the respiratory viruses that are circulating and, and COVID has really been no different in that perspective.

Steven Bruce
Interesting what you said about the the Swedish field hospitals because of course we set up what were called Nightingale hospitals in this country. And I think they were four or 5000 bed hospitals but I was reading earlier on today. I mean, they only treated about 40 patients. Whether that's because they didn't have the staff for the hospitals which you'd think that the planners would know about in advance or whether there weren't enough patients I'm not sure. And john has said do you think the multiple lockdowns in most of the West have hindered our ability to develop natural

immunity and would the strings with become less virulent if we hadn't locked down well and Sweden didn't lock down did it

well, no, Sweden didn't lock down Sweden had the well I guess it depends on what you define as a lockdown if you mean forest orders then no, Sweden didn't have a lockdown. But the government was still kind of recommending people to work from home if they could and to try to keep a few metres distance when they were out in public and and, and, you know, common sense type things. So it's not like Sweden was. It's not like the Swedish government was telling people to let the virus virus rip, but it's just that there wasn't any kind of force involved. Businesses weren't forcibly shut down. Nothing like laughs like you've seen in some other countries in in terms of the question. Well, I don't know. I think I think Australia and New Zealand have shown that if you're like separate if you're an island nation that's far away from other countries you can potentially prevent the virus getting into the country but but once the once the virus is in the country and it's spreading, there's there's not really not much you can do to prevent the spread so and I mean, if you compare to the UK and Sweden that even though the UK had more more severe measures on Sweden, there's no noticeable difference in, in in the proportion that got sick with the COVID or the proportion that died. And, and I think that just speaks to the fact that most of these measures have have a limited impact.

Steven Bruce
And it's interesting because only recently or a review has come out harshly criticising the response to COVID in this country that the lockdowns were too late. And, you know, we made lots of other mistakes on the way. And the whole implication is that our death rate has been far higher than other Western countries. Now it could be that it's the same as Sweden's, but Sweden and Britain both have a hugely exaggerated death rate. But are we pretty much the same across Western Europe?

Yeah, actually, that's what you will find a few if you compare different Western countries, they're all in. They're all in a very similar place. And so I mean, England, Sweden, France, the Netherlands, the US it's it's not possible to see any, any kind of pattern if you're if you're trying to see an effective lockdown or have restrictions it isn't it isn't there, some of the countries that have done the most severe lockdowns have ended up having the highest COVID fatality rates and other countries that have had a very kind of relaxed approach have have very low numbers of COVID deaths. There's no clear pattern.

Steven Bruce
You're not even seeing any correlation between population density and I would imagine that the UK would be dreadful because we're a very densely packed small island, whereas Sweden, Australia and New Zealand, you'd expect them to be a little bit more spread out a little bit less variance. That's right expression.

So Well, I mean, what what matters isn't really population density over the geographical area of the country, but rather, the proportion of the population that lives in cities. And from that perspective, the UK and Sweden are very similar. I mean, we have lots of forests here in Sweden, but but no one lives there. We're all living in cities. So from that perspective, we are just as densely packed over here as you are over there. Yeah, and no, if you look at urbanisation then, well it's possible that

there is some effect of urbanisation that more urbanised countries get have higher rates of infection. But

Steven Bruce
suppose you've got a couple of comments saying that a lot of what you're saying sounds as though it's personal opinion. Now, from reading your blog, I know that you have actually analysed an awful lot of data and presumably if people want to see the facts behind what you're saying then they can either get your book or they could look at your blog for more hard figures and so on. Is that the case?

Yeah, so I mean, I don't have I don't really have a personal I came into this without any preconceptions, I wasn't intrinsically pro or anti lockdowns or masks or anything. I just kind of wanted to know what the studies were showing and and so if people want to see the the background to what I'm saying the actual studies that I'm basing my claims on them, the best place to go for that information is the book I am everything is referenced.

Steven Bruce
Robin again again on the statistical front has said that his local hospital currently has 64 high dependency cases of COVID and he says is that a normal event for flu or colds etc. And he says not trying to be confrontational but you know that those are the numbers I guess Robin it might help if we knew what the local population size was, what the size of the hospital is. What do you think Sebastian?

Well, I mean, I don't know about your situation in the UK. So it's hard for me to to respond. I mean, if I look in Well, in Sweden at the peak when things were at their worst, we had 550 people in ICU with COVID. Which was high wick, I mean that that was pandemic level, which, I mean, I'm not denying that we've had the respiratory virus pandemic. And that's what, even if, even if the virus overall is relatively mild, if it's a completely new virus, there's no immunity in the population at all, then it's going to tear through the population and, and the relatively unusually large numbers of people are going to end up in the ICU at the same time, just because of the fact that it's a new virus, and it's tearing through the population at such a rapid rate and lots of people are being infected at the same time. That doesn't necessarily mean that the virus is extremely deadly when compared with other respiratory viruses. Okay, my

Steven Bruce
blood satisfies Robin, getting my questions keep moving. Robin also asked a question following on from what you've just said that about immunity really, is immunity from the disease more powerful than immunity gain from vaccine.

And so there have been quite a few studies that have been looking at this. And logically, it should be the case that natural infection provides better immunity. And the reason for that is that when if you're vaccinated with at least with one of the currently available vaccines, you were only developing immunity to, to one specific part of the virus, which is the viral spike protein. Whereas if you're infected and develop immunity, that way, you're developing immunity to, to multiple different

components of the virus and, and this results in a broader immunity and it's more difficult for the virus to to evolve past this immunity because it requires the virus simultaneously changing massive parts of its its genome, which while evolving past vaccine mediated immunity really just requires tinkering with a single, single protein. So So I mean, logically, it should be the case. But now we actually have real world data. And like I said, there have been a number of studies looking at this. And they've generally found that naturally acquired immunity is at least as good in terms of the the level of protection offered when compared with vaccine induced immunity. And now we've kind of there's been data coming out suggesting that, that the vaccines are quite rapidly losing, losing their ability to protect while naturally acquired immunity is continuing to provide protection at the same level, as it did from the beginning. So I would say the the evidence at this point shows that naturally acquired immunity is at least as good as vaccine induced immunity and possibly better.

Steven Bruce
Where do you stand on the vaccines themselves? We've certainly we've had people on the show before who've said, you know, these vaccines are experimental and therefore, you know, we shouldn't be trusting the vaccines. And certainly, we've never produced a vaccine in quite such a hurry as we have for COVID.

Well, I mean, no one can deny that they're experimental. I'm amazed that people can deny that and keep a straight face because they've they've only started being used in humans a year ago. And the trials that are designed to answer these questions were supposed to run for two years and they started for they started one year ago. So So technically, they should still be running, which means that the vaccines should still be considered experimental. I am not most definitely not against vaccines, I think vaccines are a very good thing. And this, the COVID vaccines seem to offer a high degree of protection. I do think we should be a little bit more careful than we've been with with the vaccinations just because of the fact They are new and, and we still don't understand them completely, we still don't understand the the side effect profile. I mean, people were saying the, after just two months, or three months, the vaccines have been shown to be completely safe now and everyone should take them and, and it's kind of ludicrous to be making statements like that, that early in, in the development of, of a new drug. And after these statements have been made, there have been revelations that well, the Astra Sonic vaccine, for example, can can cause serious blood clotting disorders primarily in young women. And the Pfizer and Madonna vaccines can cause mild carditis primarily in young men and, and so my personal stances that it makes sense to vaccinate the elderly, and it makes sense to vaccinate risk groups. But that we should be, we should be more careful about vaccinating the young and the healthy, and especially about vaccinating children until until more evidence has been gathered. And it can clearly be shown that the benefits outweigh the risks. And I mean, considering how extremely low risk COVID is to, to to young people and to children. Even if even if the vaccine is associated with with a very, very small risk, the risks from the vaccine could still easily outweigh the risks from the disease, it wouldn't take much considering how low risk the diseases for a healthy young person,

Steven Bruce
I suppose is a difficult question to square for a family that might want to go on holiday and they can't go on holiday if their children are vaccinated. I don't know if the rules do specify that there is a lot of pressure isn't there to get every every person in the country vaccinated is here anyway.

I mean, in absolute terms, the risks appear to be low, right? So if you get vaccinated, if you're a young, healthy person and you get vaccinated, the the overall risk that you're going to have a serious adverse event is is low. I just think considering that the disease is also so low risk if you're a young, healthy person, it's not clear that the benefit to you of the vaccine outweighs the risks. And I don't personally think it's it's ethical to vaccinate young people, especially to vaccinate children in that situation we shouldn't be asking children to be we as adults shouldn't be asking our children to take a risk, even if it's a very small risk. for our benefit, if we give them the vaccine, that should be because they personally benefit.

Steven Bruce
That being the case, then how does that affect the overall achievement of herd immunity, which is talked about so much?

Well, so there's been well, we have the Delta variant now, which is highly infectious. And there's also been the evidence coming out that the the ability of the vaccines to limit transmission of the diseases is quite limited. And especially against Delta, the ability to prevent transmission is very limited. And in that situation, it's not going to be possible to vaccinate our way out of the pandemic is we're never going to be able to vaccinate enough of the population to be able to create herd immunity that way and, and it is kind of a risky strategy for creating herd immunity because well, like I said, that the, the vaccines only produce protection against one part of the virus which makes it not that hard for the virus to evolve in such a way that it becomes resistant to the vaccine whereas whereas with naturally acquired immunity, the immunity is much more difficult for the the virus to evolve past and for all these reasons. The I mean, the pandemic is going to continue until enough of the population is immune. Naturally, then the pandemic is going to Peter out it's just it's impossible to back And eight and a half of the population to be able to create herd immunity with the vaccines.

Steven Bruce
In terms of the vaccine safety, do you have a gut feeling or specific insight into how long you have to go before you can say we're absolutely confident this is a safe vaccine? How long might it be before the last of the long term side effects might appear?

Well, so Peter, gotcha. I don't know if you know who he is. He is,

Steven Bruce
if I can interrupt you just Peter gotcha, is a fellow Swede, I think, isn't he?

He's the dean actually. Sorry, he

Steven Bruce
was a founder of the Nordic Cochrane Institute. I brought him up some time ago, because I was very taken by his book about breast cancer screening and whether it was good or bad for the population. And that is the reason somebody complained about me to the general osteopathic

Council, a complaint which I must have was dismissed. But he's a he's a brilliant mind. And I find the book was fantastic. But yes, where he

is a legend within evidence based medicine, he was one of the founders of the Cochrane Collaboration, which all doctors have heard of, which is kind of, well, the Cochrane Collaboration produces systematic reviews of evidence of drug of drugs and treatments. And, and the reviews they produce are kind of considered the pinnacle of evidence based medicine. And he was one of the founders of these, this organisation, and he's written a number of books on evidence based medicine, and in one of his books, where he talks about, in particular about drug side effects and, and how, how the pharmaceutical industry often does its best to cover them up and, and how long it takes for side effects to actually come out and become revealed he makes a recommendation that you shouldn't take any new drug until it's been on the market for at least seven years. Because that's often how long it takes for for the authorities to act and to pull Dangerous Drugs off the market. So from that perspective, if you want to be really safe, you should wait another six years before you take one of the COVID vaccines. I don't think it I don't necessarily think you have to wait that long. But But I, I think if if you're not a risk group, or if you're not elderly, then the risk from the viruses is so low, there is really, it's really not clear that the benefits of vaccination outweigh the risks. And from that perspective, I think, Well, I think it's worth waiting certainly for children, it's worth waiting, waiting in more data before, before making a decision.

Steven Bruce
process of the problem I imagine is that every time somebody dies of, of COVID, and we might get onto how whether you die off with or because of COVID, every time someone dies, or COVID, the press will blow it up if they're in a in a not at risk group, right? Because then it's unusual. So if a child dies of COVID, we hear about it. And I imagine that the risks of the disease are therefore much exaggerated in the minds of most of the public and that I include quite a lot of the medical profession as well.

And well, if you look at Sweden, since the beginning of the pandemic, I think nine children in Sweden have died of or where the COVID and the Swedish state doesn't make a distinction. And all nine were definitely sick in one way or another that they would have been they would have been included in the risk group category. So no, so far, no completely healthy child in at least here in Sweden has died of or with the COVID. And I mean, if you compare with some broader statistics, twice as many children have died in Sweden and car accidents since the beginning of the pandemic, so died of COVID. And I mean, Sweden is widely considered to have the safest roads in the world. So the risk of dying in a car accident, this is very low. And you think that should kind of put it in some perspective, the risk really is for children, the risk is infinitesimal. So you may use for healthy

Steven Bruce
children. Yes. Yeah. You did mention looking for a question which came in earlier on here? Well, I don't know who asked the question. But you talked a moment ago about death rates in Sweden and elsewhere. And a number of people have asked this, did all of Europe's European countries report debts in the same way and a moment ago, you mentioned that Sweden didn't distinguish between With How about the rest of Europe?

So I'm not an expert on how different countries have have chosen to define a COVID death. But at least here in Sweden, no distinction is made. I think you you do the same thing in the UK that anyone who dies within 28 days of a positive test is considered a COVID death for the purposes of the statistics, even if they they had a positive test and then went out and got hit by a bus.

Steven Bruce
I think I think that's changed. Now the the who do fish definition of death, which I think we're pretty much alongside with is someone who dies were clinically compatible illness in a possible or confirmed COVID case unless there's a clear other cause such as trauma. So I think we've actually that certainly was the case some time ago. And to answer you know, the number of people who've asked about this, when they say was everyone measuring the deaths the same way as the UK, the UK hasn't measured them the same way. All the time, we've had four different ways of measuring deaths in this country, including you might, you might, I'm sure you must remember this, there was quite an outcry at one point because a death from COVID was defined in Britain as being anyone who had died following a positive COVID test. So it didn't matter how long afterwards, which pretty much meant that everyone who died after that point was likely to be classified as a COVID death, which is bizarre and ridiculous and was quickly changed. But there is no consistency that I can see in in between countries, or even in our case within countries. Joanne has said she's heard that the curve of the death rate was no different in countries that haven't locked down than those that did. That's true. Okay. And yet, Joseph here says excess deaths have been used as a measure of the virulence of the pandemic. Do you happen to know what the figures are? At the moment? I think we can forgive you if you don't know the figures for Britain, but

no, so Well, I've been keeping track of the Swedish numbers. And well, since the January since January 2021, here in Sweden, there has been no excess mortality, in fact, there's been there's been less than you would expect. If we look at 2020, then there was an excess mortality for the year as a whole and, and that was driven by the big spring peak and partly by the the winter peak. And in in absolute terms, in a normal year in Sweden, you would expect about 0.9% of the population to die and MDM 2020 that number increased to 0.95. So in absolute numbers 0.05% more of the population died. And it I mean, to me this says something about how how deadly the viruses because the it I mean, that you don't have to look back for to find the mortality rate higher in Sweden. In fact, if you go back to 2012, the mortality rate was higher than it was in 2020. And I don't personally remember anything massively deadly is happening in Sweden in 2012. And if you if you just kind of track a curve, looking at the mortality over time, you see, you see this massive spike in 1918 caused by the Spanish flu, and then you you just see kind of not much happening. You see a small bump in during the Hong Kong flu. And now with COVID, you see a small bump again and it just becomes clear when you look at these overall fatality numbers that that that any kind of comparison with the Spanish flu is completely ludicrous. That was a deadly pandemic COVID this is much more on par with kind of a bad flu season, particularly bout flu season, the kind you would see. You would expect to see maybe three to four times per century, but certainly nothing like the Spanish flu, which was A massively deadly pandemic that wiped out up to 5% of the global population. Yeah,

Steven Bruce

I think but it's very hard, isn't it in the face of sec media and social media, publicity and misinformation, the exaggeration or the amplification of debts and so on, it's so hard to reassure people along the lines that you've just said, I think the average member of the public is still desperately worried about dying from cocoa and maybe not all of the public. But I still see a lot of people walking around in face masks in my local town when they've not been compulsory for a very long time. And then many of these are not people who I would imagine are in the vulnerable group. What's the evidence for face masks actually doing their job? We had somebody on the show some time ago who said Actually, these face masks are designed to stop surgeons from dribbling into the body cavities of their patients. So they don't they weren't their job is not to do or prevent COVID, obviously, but

no, that's, that's true. They're they're intended to prevent the surgeon dribbling and they're also intended to prevent blood spatter getting in in your face and your mouth, if you're doing surgery, they've generally been found to be quite ineffective. Other than laughter, and there have been a number of studies pre COVID that have tried to estimate the effectiveness of face masks. And the general consensus before COVID was that, well, cloth masks are completely ineffective, they might even actually increase your risk. surgical masks are better, they appear to result in in a modest reduction of in infection. And there's only really been one high quality study done since the pandemic began. And it wasn't able to show us statistically significant benefit of masks, but it kind of suggested that there might be a modest reduction somewhere in the region of a of a 10 to 20% reduction in infection spread which which is on par with the the earlier evidence that looked at other viruses. So I think that's somewhere in that ballpark is is the effectiveness of, of a surgical mask if you're if you're handling it correctly, and replacing it regularly. These kinds of masks that people just wear continuously, and masks that are made of cloth or a completely ineffective.

Steven Bruce
Why did you say they might make it worse,

though, just because the studies found there have been some studies that looked at cloth masks that have found that more people getting sick and the group that wears the cloth cloth masks than the than the people who aren't wearing a cloth mask.

Steven Bruce
Interesting because I've been led to believe and it's widely publicised here. Certainly that the masks don't protect the wearer at all. They only protect other people. So I wouldn't have expected the cloth masks to protect the wearer, I certainly wouldn't have expected them to make make it make it worse for the wear. What do I go here? Now Amanda has asked about different types of masks FFP, two FFP, three and IR. Is there any evidence about the value of different masks?

Well, there is some there is some evidence that the the higher quality masks provide some additional protection. And as you would expect, these kinds of high quality filter masks are provided appear to provide the best protection and then we have the surgical masks which would ship here to provide the similar, maybe a little bit worse, but not that much worse protection. And then we have the cloth masks which don't provide any protection at all.

Steven Bruce
Can I turn back to the vaccine again, because I'm just looking at the list of questions coming in here. And we had a lot of people asking, won't the vaccine prevent non vulnerable people perhaps getting long? COVID long COVID of course, divined I think symptoms last beyond four weeks.

Yes. So if it really well, long COVID is complex because there's really no good evidence on it yet. There's not good evidence on what it is or how how common it is there. There was a UK study Published towards the end of last year, that was using an app and it found that that 98% of the population was fully recovered within the book, the infected population was fully recovered within three months, which suggests that it's, it's rare. It does appear to follow an age gradient. So the risk appears to be extremely low for children. And for older people that appears to be higher. And so to me, that kind of again, speaks to the fact that it makes sense to, to vaccinate older people and risk groups, but if you're young and healthy, the odds of, of developing like, serious, or long term problems is, is low and n. And then yeah, I mean, I'm not telling anyone what to do. Everyone has to kind of weigh the data for themselves. And obviously, that's hard to do. And, and, and then the question is kind of, who are you going to trust because most people aren't going to have the time to look into all the studies themselves. And, and my personal thinking is that the younger you are, the healthier you are, the lower your risk from COVID as overall both when it comes to hospitalisation when it comes to death when it comes to long, COVID. And the more more, the more you need to think about it. But on the other hand, I mean, if we look at the absolute risks, there no either way, if you get COVID, and you're young and healthy, you're going to be fine. If you take the vaccine and you're young and healthy, most likely you're going to be fine. And so I mean, it really comes down to a personal decision of which risk do you do you consider worse, I guess,

Steven Bruce
but you you particularly amongst all other medical doctors are in a particularly difficult position, I would say. We osteopath chiropractors physiotherapists. Similarly, because our patients turn to us for advice, and as you've said, the evidence for everything regarding COVID is very, very hard to interpret. And I suspect that many of us fall into the trap of preferring the evidence which agrees with what we already believe it's a well known phenomenon, isn't it? And, of course, we are there advising our patients. And what do you do when a patient comes in You said you're not telling anybody What to do? But they will believe what you say before they will believe perhaps their neighbour or the newspaper?

And well, so like I said, my, my personal position is that if if, certainly if you're over the age of 60, or if you're, if you're in any way, a risk group, you you're obese, or you have high blood pressure or diabetes, then I certainly think it makes sense to get vaccinated if, if and if you're under the age of 40, and completely healthy, then you're you're exceedingly unlikely to benefit from from taking the vaccine and and then everyone else who's in the middle, it's really not clear the evidence, there's just not enough evidence to be able to say what the right decision is.

Steven Bruce

So as somebody who's calling themselves Jay said, Well, what would what would you recommend for pregnant women, then presumably, most of them are going to be under 40. would you suggest that they are more vulnerable and should be vaccinated?

Well, so pregnancy is considered a risk factor. And I haven't personally looked into the evidence enough to be able to say what the right decision is for pregnant women.

Steven Bruce
And Gail is asked about data regarding the spread between vaccinated and unvaccinated people and particularly her interest is in the policy that we are considering getting COVID passes or vaccine passes in order to get into different venues. Is that something that's worthwhile? Am I less likely to transmit COVID? Because I'm vaccinated, presumably I can still carry the virus even if I don't react to it.

Well, like I said, the more recent data, especially data on Delta suggests that it really is very innocent. That preventing transmission. So I don't think it makes sense to to think that you're that you're not going to spread the virus to others if you're vaccinated and doesn't make sense to think that you're going to be protected if everyone around you is vaccinated. I think really, vaccination is something you do to protect yourself. And and that's kind of the extent of what the vaccines can do.

Steven Bruce
Just out of curiosity, D has asked this as well. But what's the Swedish policy on vaccination? Is it an attempt to get everybody of all ages including children vaccinated?

Yes, the Swedish authorities are very much in line with, with authorities, health authorities all over the world. And, and, and that, yeah, the the general strategy is to vaccinate as larger proportion of the population as possible. And now, they're kind of recommending it down to 16 years of age. And below that, if you're a risk group,

Steven Bruce
is it compulsory for healthcare workers such as yourself?

No. And I think that would be very hard to implement in Sweden, for legal reasons.

Steven Bruce
Essentially, legal reasons. I was told actually, one of the reasons Sweden didn't have a lockdown is a legal one isn't something in the constitution that the government cannot order a lockdown to be enforced?

So the Swedish government felt that the constitution prevented them from implementing the kinds of lockdowns that were implemented in a lot of other countries. after the fact, I guess it turned out that a lot of countries have constitutions that prevent them from implementing these kinds of measures.

But they went ahead and did it anyway. But that's Sweden kind of stuck to the Swedish government kind of stuck to what, what it was allowed to do within the limits of the Swedish constitution.

Steven Bruce
Yeah. I don't quite like to talk about something other than COVID related issues at some point, but I can kind of put one to you from Steve. Steve asks, What's what does the evidence tell us about the onward transmission risk of those who have been vaccinated? I know it kind of asked that question a minute ago. Is there any evidence to say that transmission is less likely? Even if we don't consider the Delta variant? Perhaps? What

the original randomised trials didn't even look at this question. So there's no high quality data. What we have is observational data. And it's kind of pointing in multiple, different directions. So it's hard to draw any, it's really hard to draw any conclusions.

Steven Bruce
Right? So it's, yeah, it is still confusing, isn't it? Let's let's talk about something else for a little while, see if we can encourage a few questions about that we can come back to COVID. If, if you insist in a little while, but it would be nice to explore some of the other things that Sebastian has looked into over the last few years. All I was thinking about diet, actually, Sebastian, in my office, I'm trying, I tried desperately to convince my staff that they should not be drinking semi skimmed milk. Because I think it's worse than full fat milk. But you've written quite a lot about diet. What do you think about saturated fats?

Well, there's nothing wrong with saturated fat. And I mean, this is well established, going back at least a decade or two, that there's no, there's really no connection between saturated fat and heart disease. It's amazing that these recommendations still exists concerning saturated fat. And one thing I think it's worth remembering is that a lot of vitamins are fat soluble. And if you're kind of obsessively trying to remove fats from your diet, then you do run the risk of not getting enough of these fat soluble vitamins, A, D, E, and K.

Steven Bruce
Think I remember reading I've written this down here and I think I took it from one of your blogs that the Finnish healthcare guidance was that you should have four pieces of fruit or vegetables or berries every day. two portions of fish every week, 14 grammes of fibre for every 1000 calories, and may and must maintain less than 10% of your calories from saturated fat. And I think you I think it was you when you wrote in the comments. It was it was this In ridiculous guidance and unresearched guidance that's been offered across the planet really didn't where it came from Why Why did people assume that this was a good diet? I mean, there's obviously there's no evidence.

So I think this is more to do with the kind of political infighting in the world of nutrition than, than any kind of real science. And there was a group of nutritionists in the late 70s and early 80s, that really came to become very dominant in terms of their influence on official government health and diet recommendations. And and what they said really kind of came to become written in stone, and lots of research has continued to be produced since then. But it's like, it's like, these dogmas are

impossible to shift and, and you need 100 times more evidence to to change the recommendations than was ever needed to create recommendations in the first place,

Steven Bruce
particularly if a celebrity has endorsed it. Absolutely. see quite a lot. Ian has asked I mean, this was about pharmaceutical fraud, rather than the sort of non research fraud that's conducted in some of the maybe nutritional other barriers. He says there's Dr. Reiner filmic has spoken to over 150 scientists about the global fraud of Big Pharma Is this a chap you're aware of?

I've heard of him. But I'm not really not left aware of what he's doing or saying.

Steven Bruce
You were telling me earlier on that you read the British medical journals. But I think a recently retired editor of The Lancet, I'm going to say, has admitted that you can't trust any of the stuff that's printed in them either, because so much of the medical evidence is based on fraudulent data. And there's very little weight, even the Cochrane studies failed to pick it up, because they'd have to spot that the studies there, including a fraudulent in the first place.

The problem is that when you present the study for public key publication, you're only really presenting a small part of the data. And, and often you're not, you're not really required to, to, I mean, you would assume that when you present your studies, you present the full datasets and everything, all the data you have gathered. But that isn't the case. And if if this full kind of raw data was presented, it would be relatively easy for statisticians to go through it and see, okay, this is fraudulent, or this is, this is real data. But But since that isn't the case, all we have is kind of final numbers and short, one or 2000 word article in it, it becomes very hard to tell if, if this data has been produced honestly or not, and that kind of allows fraudulent data to get through? I'm not sure.

Steven Bruce
How do you decide yourself, which papers you're going to trust?

Well, I I don't have any kind of fixed rules, but I mean, I read the paper myself and see are there are there like any, is there anything to make you suspicious and out but otherwise? My general principle is that you kind of you kind of have to trust the studies because otherwise there's nothing to hold on to and and then you I mean, we might as well just go back to living in caves and using bloodletting as a cure for everything we have to at some point, we have to assume that most of what is being published this is honest and true, because otherwise, we really have nothing to base our decisions on.

Steven Bruce
Well, we're back to COVID already, because on that subject, Robin has asked whether you accept the Israeli study, which apparently shows that the vaccinated are 78% less likely to transmit the virus.

probably haven't seen that study personally.

Steven Bruce
I've seen a reference to it in the paper. I must, I think, Robin, can you send me the reference so I can look it up obviously, but if you've got it to him and that will be interesting to have a look at. I had Slight suspicion I don't know that Israel wanted to be seemed to be doing everything first and best and and again, I'm just a little sceptical. I mean, I could be entirely wrong, because certainly that was the case over here as well we wanted to be seem to be doing the same thing and miserably failed it would be it would seem. Matz is saying that the the business about the dietary advice probably came from post war margerine producers, which is possible, I suppose. Okay, Jason says is that we're going back to food now, is there any good link for evidence of saturated fats? So many people even in medicine, don't accept it? I think what Jason's saying is that what are the references we can turn to that would give weight to the argument that saturated fats are healthy? Or at least not unhealthy? So

there, there are plenty of studies, plenty of systematic reviews that have been published on this. And I mean, I my impression is that, even among nutrition researchers, this is not really a controversial issue anymore. I really, I think it's just really a matter of time. Like I said, the the nutrition guidelines are written in stone, and for some reason, and are exceedingly difficult to change. But I think this this one in particular, is is going to get knocked knocked down in the next couple of years and disappear from diet guidelines.

Steven Bruce
Well, I'd hope so because I think, personally, I think people do suffer from being given advice like this. And I don't know where you stand on this particular issue, but we've had a couple of speakers talking about either paleo or keto diets. And then I think they would both agree that there is not strong evidence for a paleo or keto diet, but there's no evidence for other forms of diet. And there does seem to be some significant reduction in diabetes in people following those diets, which can't make them bad. And of course, they are all heavily fat based, and to some extent, protein as well. And you delve into that, have you looked at

I mean, what the Paleo diet and the keto diet have in common is that they both heavily restrict carbohydrates. And I mean, when you have type two diabetes, by definition, what you have is carbohydrate intolerance. And the most effective treatment is to cut down on carbohydrate intake, and in particular, refined carbohydrates, and many people can reverse the disease completely just by doing that. So in both paleo and keto diets are, are therefore very effective against type two diabetes.

Steven Bruce
I read that there's good evidence that actually they will completely reverse the condition, I don't know whether that means you could go back to eating carbohydrates and not suffer the problems of diabetes.

No, I think they can reverse the condition. But if you've had the habit once, then that shows that you are more sensitive to a high carbohydrate diet, and you should probably avoid it. For the rest of your life, I mean, it should be considered a good way to look at this as kind of being allergic to to a high carbohydrate intake if if a high carbohydrate intake causes you to develop type two diabetes.

Steven Bruce
But I suppose one of the benefits is one of the many benefits is that actually, if you can reduce your drug intake, that has to be a good thing?

Yeah, it's it's a much better strategy to make diet, dietary modifications then to start taking drugs because if you start taking drugs, then you're kind of on this slippery slope where you're gonna end up taking more and more drugs. In the end, you're going to be on insulin, which I mean, ever increasing doses of insulin are not good for you and, and they're going to make you sicker. And I mean insulin, the insulin is just going to make you more and more obese and, and more and more insulin resistant, and the best, the best way to avoid ending up on that kind of in that vicious cycle is to to cut out the carbs instead.

Steven Bruce
So in terms of other dietary issues, do you have a recommended list of supplements that people should be taking

them? Not really, I

Steven Bruce
think you're a big fan of omega three, I think on you. As

Not really. I But I think, really, if if people are eating a complete healthy diet, they really shouldn't need to be taking any supplements whatsoever. With mate with the one possible exception of the vitamin D, if you're living in, in a northern climate, I mean like in the UK or in Sweden, it's, there's a high probability, and you're spending your time indoors and wearing lots of clothes, there's a high probability that you're not getting enough vitamin D. And in that situation, I think it makes sense to supplement with vitamin D, especially in the winter months. Other than that, I think it's better to try to get get all the nutrients you need through your diet rather than through pills.

Steven Bruce
I was teasing you a little bit about omega three, because in one of your blogs, you said you've been taking it seriously for many, many years, and then you read the research.

Exactly. So no evidence? Well, it might have some benefits. The the the article I wrote was really only looking at whether it has an impact on mortality, which it doesn't seem to do, at least in the studies that have been done with the limitations that they all that all studies have. That doesn't mean it doesn't have other benefits on on cognition or or eyesight or something else.

Steven Bruce
Right, but you're I think you said you'd stop taking it. So you're obviously not, you're not that convinced that it will have those benefits. Oh,

well, I so I started taking it a long time ago. And I don't even really remember why I started taking it or what I was thinking at the time. And I just decided based on this evidence that there is I'm not going to take it's at least until I look into the data more and find some more compelling evidence that it actually does have a benefit and And with that said, I definitely think it makes sense to try to get enough omega three in the diet and by eating oily fish for example.