

THE ANDREW MARR SHOW

10<sup>TH</sup> MAY, 2020

PROFESSOR SIR DAVID SPIEGELHALTER, University of Cambridge  
STATISTICIAN

*(Rough transcript, check against delivery)*

AM: Now if you've been watching the daily press conferences or Prime Ministers Questions this week, you will have heard the name Sir David Spiegelhalter. He's a statistician who's advised the government's SAGE Committee on Covid-19 and is much quoted by my ministers about the difficulties of making international death comparisons. I spoke to him just before we came on air and asked for his best estimate of how many people in this country have had Covid-19.

DS: We can do some very rough back of the envelope sums. We've had maybe, I don't know, 35,000 deaths from Covid-19. People would say that the infection fatality rate – that's the proportion of people who get infected who go on to die – is on average pre less than one percent. Well let's say it's one percent. Multiply those up, which I'm sure you could in your head, you get three and a half million people infected in this country with the virus. And it looks like that's a minimum. But because it could be much higher than that, people say the infection fatality rate might be half of that, which would mean there'd be about seven million people at least in this country has been infected. And it is extraordinary. And some people are claiming half the country's been infected. It is extraordinary that we don't know these basic facts yet. And we've heard now from Ian Diamond, the Head of the Office for National Statistics that they have finally got asked to do a proper survey, April 17<sup>th</sup> they finally got asked to do it, and we're going to start getting the results looks like this week, of how many people have got it and how many people have had it. And I think it's extraordinary that we've had to wait this long for

this most basic information and I think that's the one bit of criticism I am willing to make about the government is the fact that the testing you know has been so – the development of the testing has been so delayed.

AM: So I gather the most useful figure probably at the moment is the number of excess deaths per week or per month at the moment. What can you tell us about that?

DS: Well I think there is the most useful figure to look at, and if we look over the last four weeks of the data available for the Office for National Statistics, which is the reliable source of information, goes up to just April 24<sup>th</sup>, so this is still two week old data, we can see that instead of over those four weeks with the 42,000 deaths we'd normally expect at this time of year, in fact we observed 79,000. That's nearly double. That's 37,000 extra deaths. But only 27,000 of those have Covid-19 on the Death Certificate. And that leaves about 10,000 extra deaths running at about 3,000 a week, which are kind of unexplained and this is the mystery. What has caused these extra deaths? And they're undoubtedly there, an undoubted spike in non Covid excess deaths. Now some of them will be under diagnosis, where doctors were not willing it put on the Death Certificate. But Sir Ian Diamond last week in your programme was quite clear that he was attributing much of these two what's called the indirect deaths, or the collateral damage. The damage caused by the disruption to the health service. And this is so clear when we look at the data from care homes and at home – people's homes, there's been a massive shift of deaths from hospitals into care homes and homes. And that's not necessarily a bad thing, that people can die in more familiar circumstances, but there's also a lot of additional deaths happening out of hospitals that we wouldn't have expected at this time of year. More than half the deaths in care homes, which are running at three times the normal rate, are not being labelled at Covid. And it seems to me this is unbelievably important. These are just short term

immediate deaths due to people not going to hospitals and not calling the ambulance when they're ill and so on. And that of course is, let alone the damage that's being done in the longer term by the lack of chemotherapy, radiotherapy, elected surgery and so on. The disruption to the health service is I think when we look back on this will be seen as a massive issue.

AM: Now you had a slight run in with the Prime Minister last week when you criticised him for quoting you in terms of the uselessness of international comparisons. So let's hear your actual view.

DS: Okay, my view. I wrote an article for The Guardian because I'd got so fed up with this sort of I think rather media based competition about who's top. Is it Britain or Italy that's the worst? And I just wanted to say that because of the enormously different ways that different countries were reporting their data that is a completely fatuous exercise to do a sort of Eurovision between who's the worst in Europe. But I should have made much clearer that what I was talking about was the comparisons between. Essentially the bad countries in Europe. UK, Belgium, France, Spain, Italy. I was not saying oh that we can't make any comparisons at all because clearly it's important to note that we as that group is way above in terms of their mortality above a group like Germany, Austria, Portugal, Denmark, Norway who have low fatality rates. If only to say that you know what's happened in this country is not inevitable. It doesn't mean it had to happen. And I wasn't very clear about that and then I found that my paper was being quoted by ministers to support the claim that – and we can't make any international comparisons. And I thought it'll go away, but finally Boris Johnson used this in a response in parliamentary questions and I felt forced – and my colleagues encouraged me to actually go public and say please don't do this, it's not what I meant, don't use this to make this claim that we can't make comparisons. And I tweeted that out and it's my own and possibly only viral tweet with over 10 thousand retweets.

AM: So you said it wasn't inevitable that we had that number that deaths and that then leads to are we talking about policy or are we talking about the clustering of people in London and other issues?

DS: There are so many reasons why countries can differ and let alone the policy. The age distribution – I didn't realise in Ireland you know six percent of the population is over 75, in Italy double that, twelve percent of the population are over 75, and this is a disease of the over 75s almost completely. So I think that these are all many comparisons, we're a densely populated country, all sorts of things, but there's still you know – so making these fine comparisons extremely difficult indeed. However, when you see really massive differences between countries then it is really worth trying to investigate why. But I'm saying why?

AM: All right. You mentioned there it's a disease of the over 75s. So let me ask you another again straight forward sounding question, how scared should most of us be of dying of Covid-19?

DS: Yes it's an interesting question, because as lockdown is released we're going to be - this is turning from essentially a societal threat into risk management, so I think it's very important that we are aware of what the risks are. I mean I'm not saying how anybody should feel what they should be worried about, but I suppose my aim as a statistician was that people's anxieties should be at least roughly proportional to the actual risks that they faced. And I've been looking at some data. Do you want some numbers? Go on, I can give you some numbers. Whether you like it or not.

AM: Numbers.

DS: Right. So Office of National Statistics had reported nearly 30,000 Covid deaths up to April 24<sup>th</sup>. Okay, let's look at a young group. People are anxious about children. Now under 10 million under 15s in England and Wales. Now how many of those have

died and had Covid on their Death Certificate, out of these 30,000 who have died with Covid?

AM: Tell me.

DS: Two. Two out of ten million. And they're very tragic cases, I suspect they might have had something else wrong with them, okay. So it's two out of ten million. This is the tiniest risk you could ever think of and so I do think that when people start talking about protecting our children you know this is a bit of a delusion. Obviously I'm talking about risks to the individual themselves, we have to think about the potential for spreading the virus and that's absolutely vital, but when we talk about personal risk for young people it's staggeringly low. If we look at under 25s, there's 17 million of them in the county. We have had 26 deaths recorded and again many will have had other conditions. That's still just one or two per million. That's about the risk we face over a couple of days of general accidents and sudden death, so this again is completely trivial. Let's compare it with the over 90s, now more than one percent of the over 90s in this country have so far died from Covid, just in four weeks essentially. So that's a substantial proportion. That is ten thousand times the risk of the younger people. Now it's very difficult to communicate that staggering gradient in risk. You can start talking to people and say well the risk doubles roughly every six or seven years and so you can just see it multiplying up and multiplying up. But it's people like me to try to do this.

AM: So we're talking about the over 70s and the over 75s. A lot of this is about how well the communication is done and we're now very familiar with these daily press things. How well are they working do you think?

DS: Well I watched yesterdays and frankly I found it completely embarrassing. We get told lots of big numbers in precise numbers of tests being done, 96,878. Well that's not how many were done yesterday. They includes people that were posted out, tests that were posted out. We're told 31,587 people have died. No they

haven't, it's far more than that. So I think this is you know actually not a trustworthy communication of statistics. And it's such a missed opportunity. You know the public out there who are broadly very supportive of the measures, they're hungry for details, the facts, for genuine information and yet they get fed this what I call number theatre which seems to be coordinated really much more by a Number 10 communications team rather than genuinely trying to inform people about what's going on. I just wish that the data was being brought together and presented by people who really knew its strengths and limitations and could treat the audience with some respect.

Ends.