Hello and welcome to Going Viral, the podcast All About Pandemics. I'm Mark Honigsbaum (MH), a medical historian and science writer. Today, I'm joined in the studio by three very special guests to discuss ethics in the pandemic. In particular, we'll be examining the prioritisation, of treatment of different patient groups in the UK, and how we balance the competing rights of citizens. Today, some 213,000 Britons have died of COVID 19. In numerical terms, that's almost as many as perished in the 1918-1919 Spanish influenza pandemic. Not only that, but our population mortality rate is only marginally lower than that of the USA and Brazil, and it's significantly higher than the EU average. And that's with vaccines and antibiotics and the National Health Service, none of which existed 100 years ago. Many listeners will find these figures shocking. I certainly do. But from the outset of the pandemic, the British government made it clear that a baseline level of mortality from COVID was being priced into its decision making. Hence, why, on March 12, 2020, the Prime Minister stopped short of ordering the sort of lockdowns seen in other countries and warned that, quotes, 'Many more families are going to lose loved ones before their time.' This approach belied a series of value judgements and trade-offs where people's lives were weighed against other values, such as personal freedoms and the well-being of the economy. Such trade-offs are never easy. Clearly, the UK's death toll entailed difficult moral and ethical judgements, some more explicit than others. This episode is all about unpacking these issues. Joining me in the studio today are Professor Dominic Wilkinson (DW). Dominic is director of Medical Ethics at the Oxford Uheiro Centre for Practical Ethics. He's also a consultant neonatologist the John Ratcliffe Hospital and a senior research fellow at Jesus College. He's one of the editors of a forthcoming book with Oxford University Press on pandemic ethics. Welcome, Dominic.

Thanks very much.

Also joining me today is Martin McKee (MM), professor of European public health at the London School of Hygiene and Tropical Medicine and a member of Indi-Sage. Martin is also research director of the European Observatory on Health Systems and Policies. And he's published many scientific papers on books on health and health policy, with a particular focus on countries undergoing political and social transition. Welcome, Martin.

Thank you.

And finally, we are also joined by Anjana Ahuja (AA), who's a science writer for the Financial Times last year Anj co-authored the bestselling, Spike: The Virus versus the People: The Inside Story of the COVID 19 Pandemic, with Sir Jeremy Farrar. It's good to have you back with us and welcome.

Nice to be here. Thank you, Mark.

So can I start by asking each one of you to say in a sentence where you stand on the British government's response to COVID 19. We'll get into the details later. But firstly, do you think it was effective overall, or not effective? Can I come to you first, Dominic?

Well, I think by any measure the UK fared very badly and you've pointed to some of the figures already. The question is how should it have acted based on the knowledge that it had at the time? So I think the UK made a series of, of really serious
mistakes, some based on ignorance and uncertainty, some based on some value judgements that we'll come to.

**MH [00:03:49]** Can I come to you next, Martin? Overall effective or not effective?

**MM [00:03:54]** Well, in one sentence: Could and should have done better. In 2019, there was a publication, the Global Health Security Index, which looked at countries’ preparedness. And the United Kingdom came second overall in the world in terms of looking at what was in place, looking at scientific capacity and so on. And yet the data, the results, the death rates, the spread of infection, tell us very clearly that we did far worse than other countries that, on paper at least, seemed to be less prepared than we were. I think we had great science, but we had very poor political leadership. That is where I think the problem lies.

**MH [00:04:35]** Anj where do you stand on this?

**AA [00:04:37]** It's a really interesting question, Mark, because the last thing I want to do is to be revisionist about what happened. So, I would say from that standpoint, I would say in the first wave, some mistakes were forgivable. In the second wave, many of the same mistakes were made, but with better data, and it was not forgivable. And I think from where we are now, I dread to think where we would be if we didn't have the life-saving vaccines and treatments that we have today.

**MH [00:05:04]** Okay. So, I now want to sort of take you back, because we'll go through this step by step almost to the early days of the COVID pandemic, and remind you, at the start of this pandemic, we were dealing with a completely novel virus, right? In particular, there was huge uncertainty around its mode of transmission and its infection fatality rate. And we saw countries across the globe taking radically different approaches. So can you briefly talk to me, tell our listeners what was the policy approach of the British government in the early days and why do you think it took the approach that it did?

**DW [00:05:41]** One of the central issues was that the government was relying on preparation for a different pandemic. It was relying on preparation for a flu pandemic, which people had been expecting for a number of years. And in that setting, what they believed was the best course of action was to try and ride out the storm, avoid making big changes to people’s lives, accept that this was going to be bad, but that it would be worse to, to make radical changes to everybody’s lives and livelihoods. And so that's, that's what they aimed for, was for the population to gradually become immune to the virus and the pandemic wave to settle by itself. That's what was referred to as ‘aiming for herd immunity’. There's been a lot of denial subsequently that that was their aim, but it's very clear that that was the underlying philosophy, inspired by lots of the prior pandemic planning.

**MH [00:06:44]** Just just quickly, I mean, are you saying that they thought there was no alternative to the herd or they positively thought that was the best way to get through this pandemic?

**DW [00:06:54]** I think what they thought was it was highly unlikely that a vaccine would be able to be developed in time to make a difference. They thought that the types of liberty-restricting measures that other countries were introducing wouldn't be accepted or sustainable by the British population. They didn't anticipate that the way the pandemic was going to be as bad as it turned out to be, partly because they were initially working off
models of a different virus, of a different pandemic. So that, I think, was the basis for their initial, at least part of the basis for their initial decision not to lock down, as other countries were doing.

**MH [00:07:33]** Martin Is that your interpretation, too? Was there no alternative but to let COVID run through the population because we couldn't maybe develop a vaccine in time to do anything else?

**MM [00:07:42]** I'm not sure that there was. And I think there were some other very important contextual factors. It's right that there was a plan. There had been exercises to test that plan. But those, the lessons from those exercises, had not been implemented. We now know. And in fact, even the existence of those exercises was not well known within government. We had a very particular situation at that time, and although we are often, we seem to be discouraged from talking about this, the government was preoccupied with 'getting Brexit done' and that, by some estimates, was taking up maybe three quarters of the effort of the civil service. There was no bandwidth or very little bandwidth to do anything else. That was a huge problem, both in terms of diverting the work of civil servants. It was also a problem, and I know this from my work – as, I do, much of my work is outside the UK, so my perspective on this has often been from talking to my colleagues and other European governments with whom I work very closely - and what is very clear is that the links that we had with other countries had broken down. So there were very few fora in which our civil servants were meeting and able to discuss with their colleagues elsewhere. And then we cannot get away from the fact that we had a Prime Minister, at the time, who was distracted by his own personal issues and who missed five COBRA meetings. Now, in the rewriting of history, there has been an attempt to say that the Prime Minister does not always attend COBRA meetings, but essentially, for something of this magnitude, they do, unless there's a very good reason for not doing so. So I think that it's not that. I mean we can talk about mistakes being made, but I think I would characterise it more as decisions not being made. Now why that is important is that even a few days earlier to have locked down would have made a big difference. And a number of groups, including, including ourselves, have looked at this using different forms of modelling and they're all quite consistent. Locking down perhaps one week earlier might have saved between 20 and 30,000 lives in the first wave. Two weeks earlier would have saved even more. So even a few days difference would have made a huge difference. We were 13 days later than, than Italy, I think 11 days later than Ireland. We could have done much more, earlier, but I think it was the failure to make decisions, rather than necessarily making the wrong decisions.

**MH [00:10:02]** Anj, do you agree with this kind of analysis? Because you seem to be saying your initial answer that some of the mistakes made, the first wave were forgivable in retrospect, but maybe not the second wave?

**AA [00:10:13]** Well, I think perhaps some, some of the delay in - I think 'forgivable' might be... ‘understandable,’ might be a better word. For me, the ethical approach that the government took is summed up by that phrase that the Prime Minister used, which was 'lots of loved ones. Lots of our loved ones will die before their time.' Implicit in that, is that there will be deaths and we will lose people. What wasn't articulated is the, is the number. But it was clear that we were not going to throw everything to stop this virus. So that was one thing. The second thing, I think one of the principles, even though maybe wasn't articulated, is that we are not China. We don't do stuff like China. So therefore, that you know, that the, the quid pro quo, if you like, of, of our liberty is deaths. Look, it was probably best articulated probably even a year later when, I think it was in the middle of 2021, when Dominic Cummings tweeted a picture of that whiteboard. Do you remember?
And in the corner it said, ‘Who do we not save?’ And I think that was a really interesting insight. There you had it in a nutshell of how the government were thinking. And I suppose we, we have to accept that we, we have such a thing as excess deaths, for example. So, we know that there is an acceptable number of deaths in a way, we have in our society, and excess deaths are the are the ones that we don't accept in a way, because we want to do something about those excess deaths. But I think to have it, have it there, sort of, we know that that some people are not going to make it, and to have it, sort of, articulated on a government whiteboard, you know, with the people, the key people in the room making decisions and knowing that some of those decisions are going to cost lives.

MH [00:12:02] For me, the turning point was definitely when we saw the situation Lombardy in Northern Italy in the third week of February: ICU wards being full to overflowing with elderly, very severely ill patients. And I immediately thought the moral principle that, you know, drove my response was this idea that the health and welfare of the people is the highest law, right? Salus populis suprema lex esto. So for me that meant we needed to do something to prevent these avoidable deaths, even if we don't know how big the catastrophe is. There's a level of uncertainty, but in a developed democracy, shouldn't that be the moral principle that drives us? Is it that simple, though, Dominic?

DW [00:12:39] Well, I think every action comes at a price and every inaction too. And one of the, the reasons that the politicians were reflecting at the time was a perceived, though perhaps erroneous, tradeoff between the economy and health and well-being. Now, to some degree, that's a tradeoff that they're very used to thinking about: They set a health budget. They could set more. They would save more lives if they invested more in health. And indeed, the UK relatively underinvested in its health service relative to other European countries. But they don't. They prioritise in other ways. So that was part of their initial calculus, trade off.

MH [00:13:27] Do you think this was an explicit ethical and moral calculus? That they recognised that?

DW [00:13:32] So I don't think that they recognised the ethical and moral dimensions to this choice. I think they thought of it as a political choice and they prioritised the political value that they saw in a successful, thriving economy. And so they seized on what turned out to be a false dichotomy. They seized on the notion that they had to keep the economy going and, as a consequence, lives would be lost. As it turns out, that was a deeply mistaken choice to make.

MM [00:14:03] Well, I'd like to challenge this idea about excess deaths a little bit, because in the United Kingdom, we have tolerated for decades a level of excess winter mortality that is not seen in other countries. I wrote my first paper on this in 1987/88, I think. And you do not see this winter spike in deaths in the Nordic countries, for example. And in the 1980s, the British government then relaxed the building standards so that our houses have much less heat-retaining capacity than in other countries. So we have never really taken seriously the, we have never felt a need to do something about this very high level of excess winter mortality among older people. And we've also had a decade of austerity whenever our life expectancy has been stagnating. Now, that really should be a red flag, because in a country where life expectancy is not continuing to grow, like, for example, the Soviet Union in the 1980s, that really should be a warning. And yet there were many papers, by ourselves and others, pointing this out and they were they were disregarded. So health was never high on the agenda of the British government. And also, I'm not even convinced that there is a, a belief in a tradeoff between health and wealth. There is
copious evidence that healthier populations, healthier individuals, contribute to economic growth. They are more productive, measured by earnings per hour, whatever way you want to do it. They participate in the labour force, in that they work more hours per week and they work until older ages. They invest more in their education as individuals because they know they will get the benefits. And if they are small businesses, they invest more in the small and medium enterprises. So, there are four clear pathways in which health contributes to economic growth. The priority was the ideology of individual liberty, freedom to be foolish, for example. It wasn't a tradeoff between health and wealth because we now know that the countries that actually controlled COVID best were the ones that that in some cases continue to experience economic growth or minimised the impact. Remember that the UK did very badly on both health and the economy. So, it wasn't a tradeoff.

DW [00:16:20] So I think that's right, Martin. I think it's clear in retrospect that there that it was a false trade off and that, as you say, those countries that did worst in terms of health on COVID, like the UK, did worst in terms of the economy. But I do think that was a, that was a prevalent belief amongst many in the community and at high levels in politics who were chary about making too great a sacrifice for the sake of preventing what they thought inevitable deaths from the virus. But in terms of the second trade off, I think it's very clear that there is an inescapable trade off when you're responding to a pandemic between freedoms and, and health and wellbeing.

MM [00:17:05] But I think it's not surprising because this, these are politicians who actually have presided over, particularly parts of the north of England, Blackpool, places like that, life expectancy declining over the past decade. So why would they prioritise health in a pandemic when they hadn't prioritised it at any other time?

AA [00:17:26] Viruses don't respond to boosterish thinking. You can't will a virus away. There's no getting around it. And I think it's again, it's this mindset, isn't it? Of, if we think hard enough, we can make what happened in Iran or Italy not happen to us. It almost felt like that.

MH [00:17:43] There's a lot to unpack here, but I do want to… because we've been talking a lot about ideology and the values and that's all important. But I do want to start by digging deeper into this idea of the precautionary principle. Now, you'll all be aware that there are various different definitions, you know, and I spent some time researching what those definitions are. But broadly speaking, this is the idea that when we're faced with an uncertain threat – and Anj you spoke very eloquently about all the uncertainties and the signs at the beginning - when we're faced with an uncertain threat, it's better to be safe than sorry: that's the sort of, that's the basic concept. So it kind of gives us this common sense rule for preventing harm by acting without delay to prevent or remove a potential hazard, right? . However, in talking to different scientists and sociologists during the pandemic, I became aware that that's not how everyone interprets it. Anj, I want to begin with you. What did you think the precautionary principle meant and yet sort of the sort of values, or the actions, that it mandated in a in a situation where lots of information is uncertain, we really don't have all the answers.

AA [00:18:50] I felt that in the early days because I'd started writing about the virus, this mysterious virus from Wuhan in early January. I think by February I was feeling that the government were, seemed to have no regard to the precautionary principle and from what I could see. .

MH [00:19:14] But how did you understand that principle at that point?
AA [00:19:16] That we should be looking to what was happening abroad and actually not pretending that (a) it wasn't going to come to the UK or (b) that there was nothing that we could do about it. That seemed to be the, that seemed to be the essence for me, was that we're going to be hit by this thing. And it seemed to me that, that when I read the Coronavirus Action Plan, which I think was released in March, it still didn't seem to me to contain much in the way of protection for people that there wasn't there didn't seem to be much in it that accepted that social contacts were going to be problematic. I often think thought experiments are very useful, and when we're talking about how many deaths is too many, I just wonder how differently we might think about this pandemic if it had been primarily children who were dying. And I think that that would be an interesting sort of experiment to run. How do we think that the government might have acted differently? But in terms of the precautionary principle, I, which is your original question, it is really tricky, isn't it? I mean, I personally, maybe it's because I tend to be a person of caution, I think it is, if you have, I think one should wait and collect evidence and use the evidence you have in front of you. And actually, if you look at the evidence that there was by February, there was evidence of asymptomatic transmission, we did have the infection fatality rates and from China. So I was a little bit surprised, in February and March, that it didn't seem to be more action, guided by the precautionary principle.

MM [00:21:04] We had the evidence from in front of our eyes from what was happening in Italy. We could see. And as Mike Ryan, W.H.O. said, in a pandemic, you act early with no regrets. I mean, you will make mistakes, but you don't have the time with exponential growth. It goes to my point, people not understanding the nature of exponential growth and the need for really rapid action at the beginning.

MH [00:21:27] One of the big uncertainties were what would be the long term impacts of lockdowns, not only on the economy, but on deaths and ill health over the long term, right? So that goes to, I think, to the heart of the more technical, narrow interpretations of the precautionary principle.

MM [00:21:47] Absolutely. And I have very little sympathy with that view, because, in April of 2020, we published a paper in the British Medical Journal looking at all the collateral damage that might arise. And we have a rather a complex mesh of effects. And those people ignored that. What we were saying is that there will be a lot of consequences in education and employment and so on, but they can be mitigated. And that we drew, for example, on our work during the global financial crisis where we showed that even in a situation of austerity with job losses, there were things that government could do.

MH [00:22:20] So I do want to come to Dominic as the ethicist. I am looking for some guidance here Dominic. The precautionary principle - that was the original question.

DW [00:22:27] Yeah. So what should we do in the face of uncertainty? Well, I mean, I think there are issues here about knowledge and what do we know and what do we believe and who do we believe? And then there are issues about values. And when we're thinking about values, there are the lives that we might save, by, by taking an action; there are the lives that we might lose if we fail to act. And then there are the other consequences of both action and inaction. And once we recognise that, that these questions are about who do we believe, what do we believe, and then how do we make weigh values, it becomes clear the nature of the decision. This is an ethical decision. The precautionary principle I think, places a lot of emphasis on averting harm of a particular kind. And one of the reasons that in a pandemic, because of the phenomenon of exponential growth, there's a strong need
to act quickly. That should have led to earlier action, even if it was ineffective, to try and prevent spread of the virus. But the precautionary principle doesn't, as a general principle, tell us always what to do, because we do have to make these decisions. There are all sorts of other situations where we could avert harm. We could take the course of action that would avert the most harm, but it might cause all sorts of other problems or it would come with other prices. Here's an example: we could reduce by 30% asthma admissions this winter by returning to another lockdown. We saw dramatic reductions in all sorts of other viruses, in all sorts of other morbidities. We're not going to take that step, even though that would be the most cautious step, because there would be very substantial consequences of doing that. It's all a question of how we, we weigh up those consequences. And of course, in a pandemic, when the stakes are very high and it's really urgent, that really should have pushed us to take steps earlier to try and prevent what subsequently unfolded.

MH [00:24:35] So the title of this episode is ‘How Many Deaths Are Too Many?’ It's kind of somewhat provocative, I suppose, but you'll recall that at the start of the pandemic, the government's chief scientific officer, Patrick Vallance, said that if deaths could be kept below 20,000, it would be, quotes, ‘a good result’. Do you think that at the beginning the government had a sense of how many deaths it was willing to tolerate? Was that just a throwaway remark?

DW [00:25:01] I think it's difficult to know what those involved were contemplating. I mean, any question about numbers of deaths depends on what we're referring to. What's our comparison? And one of the obvious comparisons, and it came up again and again during the pandemic, is with surges in deaths with flu. So a bad flu winter like 2017 to 2018, there were 22,000 flu deaths that winter. That was a really bad winter. Definitely wasn't as bad as the flu pandemic in 1918, but that was a bad winter. And I think one of their reckonings was, 'Would it be possible to keep this to the level that we've seen elsewhere?' Why should we accept the 20,000 excess deaths from a bad flu winter is, is acceptable when we might be able to make that lower? It's always relative and it's relative to what you're prepared to do.

MH [00:25:55] Martin, so 20,000, that would have been a good result, according…. But we know that when the government were presented with this modelling by Neil Ferguson, of Imperial in March, that it could be as many as half a million deaths within lockdown, that clearly wasn't acceptable.

MM [00:26:10] Or in fact more, because as I understand from Matt Hancock's book, the figure that he was given was even higher: 800,000. And he describes how the, his advice was greeted with a shrug. So I think that we should be very careful. I'm always very cautious about using the word 'government' because governments are not monolithic. And clearly there will have been a diversity of views. And I think it will only be whenever the inquiry reports Lady Hallett's inquiry, and whenever we have full access to the papers and particularly to the WhatsApp messages, and others that have been requested, that we will really know what people were thinking. I think we already know from what Dominic Cummings has said, that there were differing views within the Cabinet, which would be entirely understandable. So, I think, there were, it wasn't exactly true that there were consistent policies being followed across government, even though there was a facade that this was happening.

MH [00:27:08] Anj what was your reaction when you heard Sir Patrick Vallance make that remark early on?
AA [00:27:13] The 20,000 figure? Well, to me, I mean, to be honest, I mean, it seemed like a reasonable figure. It's a ballpark figure for flu and pandemic planning was for flu. And we know we don't have people rioting out on the streets every winter saying 'Why have 20,000 people died of flu?' You know. The fact is that as a society, for better or for worse, we tolerate those kind of casualty rates for flu. And I think it's seen as politically palatable. It was probably seen as a manageable health outcome. It's interesting to hear Martin, you know, and I applaud you for being outraged at 20,000 deaths from flu. But the fact, that's probably why you're in public health, but most of us are not. And we have just become inured to this idea that we get deaths from flu, we get them from other diseases. We have, you know, kids dying from respiratory diseases, which I find a lot less acceptable. But we have people dying on the roads. And so it all comes down to this, we've kind of over, over decades, centuries as sort of public health has moved on, we've kind of we've moved the goalposts, haven't we, of what are acceptable deaths. And I think the notion of excess deaths kind of recognises that.

DW [00:28:30] I mean, so here's one thing that we haven't touched on, which is the mantra that kept coming from government about 'following the science', and that was I think there were two elements to that. One was the mistaken belief that science could tell you what to do and that somehow you could look at the numbers, you could work out what was going to be the, a number that would fall below your acceptable threshold, and then then you would take that path. So that was the first mistaken belief. But the second was actually that this was a way of passing the buck. This was a way of handing over the blame for the subsequent mistakes. We'll see how, whether that transpires when the inquiry happens. But to pass over the, the blame for the consequences on to somebody else, onto scientists is what a friend of mine described as 'the government's nerd immunity strategy'.

MH [00:29:26] I think rather than talking so abstract terms, it might be quite useful now to listen to the testimony of someone who lost their father very early on during the pandemic.

MF [00:29:38] My name is Matt Fowler. I am the co-founder and current chair of the COVID 19 Families for Justice campaign. What's important to me is that his passing meant something. If he had to die, then I need to do something to make something good out of it. And I think that's something that I've definitely taken from him. He was a big inspiration for me. At the time, I don't think any of us really thought that it would be as bad as it was. Certainly for that first week, things were bad, he was on a nebulizer, they were giving him steroids and oxygen to help him breathe. As that last week dragged on, his condition just got steadily worse. Eventually he couldn't breathe without the use of the oxygen mask and the hospital was saying, well, we're going to have to intubate you... We got the phone call sort later on. It was April the 13th, saying that they'd made the decision to withdraw his life support and to let him go peacefully.

My take away right from the very start of the pandemic is that there was a lot of confusion. There was a lot of, I guess, trepidation. I remember reading the news articles and saying reports about COVID appearing in China. And that's a worry. And I think is the problem is that we had people over here thinking well China's a long way away, it's not going to affect us. And I think that's the that is the first mistake. A lockdown at the start that would have dealt with or cut off the issue earlier, would have meant that that lockdown would have lasted so long. And instead, what we had was a lockdown that came in far, far, far too late and then was carried on for a lot longer than it would have been. I think that going into 2020, approaching the final date for Brexit, I think that the government was looking at what they could do to restimulate the economy and the pandemic happening was an
inconvenience for them, not, it wasn't a big worry or, you know, a health crisis that they had to deal with, it was an inconvenience. So, coming up to a point where we're going to have to act, where we have to do something about it, they didn't want to. And that's why we saw this push to make sure that business carried on as normal. So that sort of reluctance to act was, in my opinion, financially motivated. The necessity to lockdown was reported to have been accepted by the 14th of March. However, ex-Prime Minister Boris Johnson was the person who decided not to act on that for another nine days. That was his personal decision, reported in The Times as down to his libertarian views. This is why that's quite, quite difficult for me, because that time between the 14th and the 23rd is the time when my dad caught COVID and died. So that decision had a direct effect on my life. But what we saw after that was a rush to try and get out of lockdown before we were ready. And then our reluctance to go into a second lockdown, a second lockdown which was reportedly opposed most by current Prime Minister Rishi Sunak, and again: financially motivated. It's just a string of times where money has been proven to be more important than people's lives. The horrendous thing is that now we're getting to a point where people are a commodity and they were choosing to sell lives for the benefit of pushing business. That's disgusting. And if you talk about sort of ethical choices, if the choice is between a real human being's life and money, why is that a choice? Why would anybody want to make that choice?

**DW [00:33:20]** I think Matt's story very powerfully illustrates how pandemic, the scale of the pandemic was global, but it was enormously tragic at individual levels. And every one of these, not just deaths, every one of these illnesses had a huge impact on, on the individuals and the families. I think we can we can be mistaken from an ethical perspective in two different ways. So we can be mistaken by, seduced by, the numbers in the way that you already alluded to already. And by, by virtue of the numbers lose sight of the fact of the individual impact. Or sometimes we can get distracted the other way, we can get entirely focussed on visible individuals in front of us and neglect the well-being of those who we can't see. So we'll come back to the question of vaccines globally. But in that situation we were very focussed on the people we could see, the people around us, at the cost of those who we couldn't.

**MH [00:34:29]** Okay. So welcome back to Going Viral. And we've just been talking about vaccines and the issue of the equitable distribution. And I think you're making the point that perhaps we thought too much about, you know, people in Britain and not enough about the wider picture.

**DW [00:34:44]** I mean, vaccines, I think, are really interesting element to the pandemic story in the U.K. and they're often cited as a huge success story. And of course, in many ways they are. But there were there were a series of, not always, obvious ethical challenges at the heart of vaccines. And one of them is a recurring challenge in pandemics: it's a problem of resource allocation. You've got a finite amount of resource, and a huge number of people who could benefit. How do you decide? You can't give the vaccine to everybody at the same time? So we started off with the process of prioritisation for those who were at highest risk of dying or going into hospital, and that was linked particularly to one of the fundamental principles that, in fact, motivated the initial lockdown, which was trying to prevent our hospitals from falling over, our health system. Now, that's not the only thing that matters in the pandemic, but is very important in terms of thinking about the government policy response. So that motivated a very strict allocation system that was based, really almost entirely, on one factor: age. But then there were two additional factors that were added in: one was somebody's risk of illness based on their underlying health; and then also the risk of exposure if they were a health professional,
there were lots of people who were at risk of exposure, who were not health professionals, who didn't get any extra priority on the list. So just highlighting that, points out that this was a really obvious ethical question. Now, that, I tend to think that the approach that was taken was ethically justified, but one of the interesting things was that there was very little discussion about the nature of that. Again, it was a just came out of the, the expert panels and it was adopted. It might have been the right decision, but unless we're willing to articulate why we are making these choices (a) democratically, it's problematic, but (b) there's a risk that we might not be making the right choices.

AA [00:36:55] Fascinating topic. And the Joint Committee on Vaccination Immunisation decided to do it by age because actually the age profile of people falling victim to the disease, you know, was, was quite stark. You know, older people were more at risk and had worse outcomes. So that made sense. But as Dominic said, you know, that was made, it was a decision that kind of was presented as a fait accompli. And I remember at the time there were discussions, for example: should teachers get priority? But, you know, are teachers expected to go into work if they've got underlying health conditions? There are all these really complicated issues. In fact, I think it worked quite well that the age profile. And I think what was interesting about that was that it was there was relatively little pushback, actually. So people were, could see the rationale, they could understand that. And what I found interesting was, you know, vaccines are a lifesaving tool and in this country and other countries also have priority lists and priority groups who would get them. But how we didn’t seem to have an analogous conversation about, say, ventilators. You know, it was not clear who was going to be prioritised for lifesaving treatment once they had got infected and ended up in a bad way.

MH [00:38:10] I think that very neatly moves us on to this issue of triage in the pandemic. So not just about access to ventilators, but who would be progressed from primary care through the system and be allowed to have high level intervention in an ICU setting? Martin, can you can you give us the context of this? Because I'm not sure that, well, we certainly didn't really have a very open discussion with the public about this issue of whether even triage was taking place. And I've spoken to lots of medics and consultants who insist there was no triaging of access to ventilators in ICU. They say that that was a fear, but that we never had to make those hard decisions.

MM [00:38:55] So I think we need to look at the context here and remember that the United Kingdom has far less ICU capacity than comparable countries, much less so, for example, than Germany. So we're starting off with a scarcity that is of our own making. That was not necessary. It's not just the ICU capacity, it's the health workforce. We're way down at the bottom of the international league table. So, we go into this with a problem. And then the other issue, of course, is that we go into it with an unhealthier population because of the decade of austerity. So, there's greater demand, less supply. So we were already, in a way, struggling with one hand tied behind our back when the pandemic struck. That said, I think full credit to the frontline workers and the NHS because they did expand capacity and they found innovative ways of working, so they would have one ICU trained nurse supervising a number of others, and they repurposed wards. They did a huge amount. And, you know, the NHS has of course, developed a backlog. We have so little capacity, in a way, it's surprising. I think one of the worrying things as we go forward is that we are now, we have not recovered our provision in the way that other European countries have, but that goes back to our basic capacity. But I think that there is a difficulty when you compare, and I take the point that we need to have be explicit about the ethical principles that underpin these things. We need to be much clearer. I think we are not very good generally about saying what are the ethical principles we will apply. And
we've got many excellent ethicists who can contribute to this and help us to understand it. But the other thing is that when you're looking at who you will prioritise in a national vaccination programme, you're dealing with the sort of unit of analysis of the whole country. When you're in an individual hospital, would you then say that well we just happen to have a lot of young people, relatively young people who have come in and who would benefit from ventilation and then you say well, actually we're going to leave our ventilators unused until we get an older person in or, or something like that. The, you can't just move people around. You don't have that flexibility. So I think that there are differences simply that the individual decision is more problematic in an individual hospital. We're not dealing with an entire population. And also the urgency, the speed of decision making, it's different from deciding what age groups you'll vaccinate. I think there are some differences, but it doesn't get away from the point that we do need to have transparency about the principles.

**DW [00:41:28]** I mean, I think it's worthwhile just to zoom out a little bit to talk about where triage comes from. I mean, triage comes from the battlefield. It comes from a situation of multiple casualties where you cannot treat everybody at the same time. Who do you decide to treat? Well, it's not necessarily the person in front of you with the, with the visible injury. And it's not necessarily the sickest person on the battlefield. You treat the person who you can save, who you can make the most difference to. Because the sickest person, it's likely you'll spend an awful lot of time and they will still die. And the person in front of you with a visible wound will be okay, they can hang on. So that's the principle indeed that we use in our emergency departments all the time. Indeed, our emergency departments at the moment: falling over. Why are people waiting for hours, often not seeing the people who are getting ahead of them? Why are they people getting ahead of them? Well, if they're getting ahead, if they're managing to get in, they're not waiting in an ambulance outside, it's because they they're in more urgent need and they potentially will benefit. So that's the basic principle of triage. There's a short and a long answer to the question of, of ventilator triage in the pandemic. The short answer is because we expanded ICU capacity because there was a huge effort put in to expanding the ability to care for patients with life-saving technologies we avoided some of the very most...

**MH [00:42:50]** I mean, we kind of avoided the scenes we saw in Lombardy.

**DW [00:42:52]** To a degree. Yeah. The long answer is the reality is that triage occurs every day in intensive care because we have a limited number of capacity. We can't admit to intensive care every patient who might potentially benefit. We make these battlefield decisions, and it's like a battlefield sometimes, in winter, in the NHS, there is a kind of battlefield and difficult decisions have to be made. What the people you've talked to were alluding to is actually the decisions that were made in COVID were not radically different from the decisions that are made every day. They weren't having to make some of the more difficult choices, but decisions were still made. And even if they weren't being made for ventilators, they were being made for some even more sophisticated, even rare forms of life support: ECMO is a heart lung bypass machine. It's in critically short supply. It was absolutely lifesaving for a small number of patients during COVID, but they had to make very difficult decisions. They had to move their age cut off - they have an age cut-off as a component of their normal decision making - they moved it down

**AA To what?**

**DW** So I can tell you what, and it probably depends, on it depends on the individual centre, but they had to move it down because they had many young patients… for example, in the
second wave, many young pregnant women who were critically ill and who would have died without this therapy.

MH [00:44:23] Well, it's a good example of the sort of calculations that were being made, because a younger person, it's a very invasive therapy, but they had a better chance of benefiting than perhaps someone more elderly.

DW [00:44:34] It's both their chance of benefiting, but also the prospect that if they if they survive, they would potentially survive for a longer period of time.

MH [00:44:42] When you talk about, there's this calculation of quality of adjusted life years, which is used in the rational allocation of scarce health resources, do you think it's morally right that doctors should be making these decisions, or should we, as was proposed at one point early on in the pandemic, we should actually draw up a rational basis for triaging between different patient groups and almost to the point where you would award points to people in different categories, whether they're elderly, that, what pre-existing health conditions they have, and use that as a basis for saying you will, this will be used to decide whether you get through the doors to the ICU and the ventilator.

DW [00:45:23] Well, I think it's very clear that what we need are medics to be making the decisions, and ultimately, there's no way of avoiding that. You have to have health professionals with the relevant expertise, but they need to be equipped with the value basis for making those decisions, because these are not simple technical, scientific decisions. They don't come out of a textbook. You have to make a judgement and you have to decide between different competing ethical values, most simply between benefit and equality: So do you give everybody the same chance, or do you, say, look, this individual, for example, the young pregnant woman, we're going to give priority to? One of the, the failings of the UK, was that there was no guidance produced for health professionals to tell them what to do if they were in.

MH [00:46:13] There was a clinical decision making instrument issued by the Infectious Care Society, I believe, but only after it was passed down from, after the expert committees was supposed to prepare that guidance at Whitehall level ducked that , right?.

DW [00:46:28] So well was in the very early stages NICE produced a very simple schema which drew on something called a frailty score, and it pointed to something that's been known for a very long time, which is that if you're super unwell and potentially going into intensive care, if you're more frail, you're less likely to survive, and if you survive, you're likely to survive in an even more frail state and for a shorter period of time, shorter life expectancy than somebody previously fit who, for example, just fell over.

MH [00:47:01] Which is why we have ‘do not attempt resuscitation orders’ for some extremely frail patients, right?

DW [00:47:06] And usually in that setting, on the basis of their own wishes and their best interests. When we're thinking about triage, it's not necessarily on the basis of their wishes, or their best interests, it's about who can we most benefit. And so there was a NICE guidance in the early stages which was challenged. And actually it didn't it never said, ‘thou shalt not admit somebody who's more frail,’ it just said, assess frailty and consider carefully, in a person who's more frail, whether it's actually beneficial. But that was challenged, legally, on the basis, on the concern, and the concern was that it would be used to exclude individuals who were physically disabled, who weren't actually frail.
Frailty: we're kind of, we have a folk sense of what it involves: Individuals who are usually older, have multiple illnesses, have progressive decline in their ability to cope with illness, or injury. Somebody who has a stable long term disability is not, could be frail, but is not necessarily frail. But the scoring, which was pretty simple, designed to be applied very quickly, might mistakenly classify someone as frail, for example, if they were in a wheelchair or…

MH [00:48:18] You remind me, there was actually a very well publicised case of a young woman, not young, woman in her fifties with Down's syndrome, who was assessed as frail even though, she she competed in the Special Olympics.

DW [00:48:30] So that's obviously a mistake in application of this particular concept. There was an attempt back in March of 2020 to generate some national guidance, which would include frailty, but also an individual's age and their degree of underlying illness, into something that could be applied consistently, because one of the worries was, if the health system reaches capacity, if, if health professionals are having to make decisions (a) are you going to be sure they're all making it in the same way? Is the, are the the doctors in one hospital, doctor's in another hospital, are they going to make the same decision? (b) Are they going to make the right decisions? And (c), are they going to be able to live with those decisions? Those were the really strong reasons why people like myself, and many health professionals, the BMA, thought it was really important that there was something to provide a basis for health professionals if they had to make these most difficult decisions, these beyond-normal-circumstances decisions. The government decided not to publish those guidelines, not to, to publish them partly because the story was that the shape of the curve was was changing and the capacity wasn't going to be reached, the capacity had been expanded. I think largely because they weren't willing to make that very difficult choice. They weren't willing to put their name to that.

MH [00:49:54] Do you think that it would be a good idea, as we look forward to future pandemic planning, to draw out more rational, explicit guidelines on triage?

MM [00:50:03] I'm a bit uncomfortable with the word rational here because it does assume, it infers, maybe implies, that there is some almost a mathematical way of doing this. And we know from previous experiments and with rationing in Oregon, for example, that you can't really do this because there are values that are involved and it depends on the value that people put on different outcomes, for example, disability, or death, or whatever. But it is quite challenging to do it in practice. And I think that whatever you do has to command broad public acceptance. Now, there are ways of doing this in deliberative democracy like Citizens Assemblies, getting a clear at getting publicly accepted values, recognising that clinicians cannot just go through an algorithm, they have to make the decision and they have to apply their judgement, but also being aware that that judgement should not incorporate any biases that they might have.

AA [00:51:01] I find the lack of explicit discussion a little bit distressing, actually. And the reason for that is because it means that the decisions that are being made are staying in the shadows and they're not articulated. And you almost wonder if that that's deliberate thing, because we do know that COVID disproportionately affects those on lower incomes, affects ethnic minority communities, affects those in frontline, often poorly paid jobs. It affects the exposed poor and not the shielded rich. And so, by saying that we, you know, that some people are going to have to die of COVID, which, I guess, I suppose, we are saying because that's we all gravitating towards that outcome now, we are saying that it is okay for most of the people that are going to die, to be poor, to be the exposed, you know,
to be those exposed communities, to be from minority ethnic communities, to be from marginalised communities. And I feel really, really uncomfortable with that. We're not articulating that, the truth of what is going on. And I think, I think the idea of a Citizen's Assembly to discuss who we prioritise and whose lives we consider saving, I think would be a very, sort of, beneficial thing to do. And, and I think we, you know, it goes back to this idea that was encapsulated on that whiteboard, it's 'Who do we not save?' And I just wish there was a little bit more transparency about that phrase. Because I think we would all think a little bit harder if it, if they were people from our communities and our families that are going to be the lives that are not saved.

MH [00:52:56] So I think this is a good moment to hear from Ceinwen Giles (CG) from Shine Cancer Support. Our producer spoke to Ceinwen about the impact of COVID 19 on people with other long-term conditions.

CG [00:53:08] We're a charity that supports people in their twenties, thirties and forties with a cancer diagnosis. I started Shine about 12 years ago with my colleague Emma Willis, and both of us had had cancer at a young age. So I was 34 when I was diagnosed with cancer. I just had a baby and just didn't know anyone my age who'd had cancer. We felt there was a gap and we started Shine. As a result of my cancer treatment, I had a type of blood cancer, I have an immune deficiency and so that, I mean, it made life a little bit difficult before the pandemic because I don't respond very as well to vaccines and that kind of thing. But I get treatment on a regular basis. So it was kind of a well-managed condition and then was enjoying a relatively stable period. And then obviously the pandemic came along. And it's been really difficult because an immune deficiency isn't what you want in a pandemic, or when there's a new virus out there.

The original 'Save Lives' mantra was also quite specific in whose lives they were saving. You know, I can remember watching television with my daughter and they always said, 'Oh, this many people are sick or this many people have died, but it's only people who are elderly, or who have underlying health conditions' And it always made me feel like, 'Oh, okay, so do we just think elderly people and people with underlying health conditions are expendable?' And that is pretty much the approach that's been taken. And obviously, it's hard to balance all of those things. But I do think, yeah, from a social justice perspective that we haven't really taken into account how we could support people better and how we could look after the most vulnerable. I feel the most vulnerable were really, fairly expendable. And every time somebody says, 'Oh, it's only someone with a pre-existing health condition that's at risk,' you're making a value judgement about their worth, I think, to society. I think that there is a perception that people who fall into this clinically-vulnerable category are somehow not as economically or socially active or worth as much as people who aren't. And that I think, is a, is an explicit judgement that we make in society often, over and over again. It's basically saying if you're between a certain age and completely physically fit and you're full-time employed, then we don't want you to die. But pretty much everyone else is less valuable.

MH [00:55:38] Throughout the pandemic, I was appalled at the number of articles that would appear trying to discount deaths of people in the official statistics who died with some other condition, whether, whether or not it was like a concrete, you know, physical condition, like, you know, having had heart attack, or having hypertension, or whether it was that previously diagnosed with Alzheimer's or maybe dementia or a mental health condition, right? And you had to ask yourself, well, you know, why are we distinguishing between, are we are we really saying that some deaths matter less than others and what
really counts as a precipitating condition towards a greater risk? You know, everyone has, most people have, some sort of pre-existing condition.

AA [00:56:26] I think there was an element of moralising about people who deserved to get COVID and people who didn't, or people who deserve to die almost, you know, or whose deaths are, ‘Oh, it's a shame they died, but...’ It's that ‘but’ isn’t it that’s the killer, literally. And the thing about that is, is when you think about the kind of people that did have the higher risk and did have poor outcomes once they were infected, those are often the very same groups that, for whatever reason have had bad experiences with health care. They they come from a place where they're already sort of starting two steps behind everybody else in terms of looking after their health or having their health prioritised. We know that those same communities, poorer, poorer communities have poor health outcomes, minority ethnic communities have worse health outcomes. They don’t fare very well in the health system. So, it seemed as though they were, you know, they were, there was the double whammy of existing poor health and COVID 19. And I think, you know, that's something that often gets glossed over when we talk about now living with COVID. Well, actually, who are the people that are going to have to live with COVID? Oh, you know, it's not going to be the kind of people who are in power, who have middle class jobs, who, you know, vote a certain way. And, and I think I think that's, that's the unarticulated bit. That's the danger. That's really what I'm referring to is this it's all under the surface. We don't really talk about who's, who are the ones that not only are going to be living with COVID, but who are going to be dying of COVID.

MH [00:58:06] Martin I want to come to you quickly. I think I was really struck by the phrase you use earlier in our conversation is that some people didn't accept the need for lockdowns and these other restrictions because they, they, they their value that they applied was I want to be free, I want to be ‘free to be foolish’. I have freedom to be foolish. But I think what we've heard is not, you know, for some people that freedom exposed them to less of a risk. If they were living in a big house in Holland Park Avenue or, you know, a country home in Suffolk, you know, they're free to do foolish, didn't necessarily expose them to the same risks as a bus driver in central London.

MM [00:58:41] And they created a narrative in which other lives simply did not matter. So, they wrote off a large number of people who had, as they described them, underlying conditions, forgetting as Anj has said, the people who were most likely to have underlying conditions were those who were already disadvantaged, who had suffered after a decade of austerity, after neglect, after failures of our social safety nets and so on. And what was even worse was, I think in the case of children and, this was a narrative that was promoted by some very influential paediatricians, who were basically saying, ‘Well, if we look at the children who died, most of them had underlying conditions’ as if those children were not precious to their parents, to their families, were valued, were contributing to life. And I find that absolutely horrific, that a health professional should come out with that sort of discourse. I really don't know how they live with themselves.

DW [00:59:46] I mean, just to respond on behalf of paediatricians, as a paediatrician, I mean, one of the things that that many paediatricians were very keen to do was to respond to very serious anxiety among parents about the well-being for the children, for, for their own children and for many parents. Their greatest fear was not for themselves, but was for their children. And of course, one of the very positive elements of this pandemic was that it spared, for the large part, our young. So that was wonderful. And it was in appropriate public messaging to parents to say your child's likely not at risk from COVID. They're extremely unlikely to become seriously ill. And of course, that fed into the debate that we
alluded to a little bit earlier about when do we choose to vaccinate our children? So, one of the one of the bits of policy response that actually did get some ethical debate was about whether, or when, we ought to extend our vaccination to the youngest in our community, who were themselves at that lowest risk. And at that point in time, I made the argument, as did others, that it was a difficult question about the balance of benefits and unknown risks for children, but there was a very clear different question, which was that there were other people who are at much, much higher risk who were still missing out. And in fact, many of them are still failed to have access to a vaccine. They just weren't in our country.

MH [01:01:20] Okay. So we had a very wide-ranging discussion, I think it's fair to say. We started with the question, the title of this programme, ‘How many deaths are too many?’ What are your conclusions? What are your take home points? Having, you know, heard the other panellists, really dug more deeply into the ethical issues behind some of the decisions that the government had to make. And are we saying that one death is too many? Can we actually put a number on it? Or is this really about, you know, how the pandemic has opened our eyes to issues that are always policy decisions we're making all the time? Maybe the background we're not having these explicit discussions about.

MM [01:01:59] So there is a principle in occupational exposures that we should be seeking to reduce the risk to, quote, 'as low as reasonably achievable'. And what that is will depend on the circumstances. And we could not have known that at the beginning. But it should be as low as we can get it. I think what we what I feel we have learned from the pandemic in the United Kingdom is a lesson actually, which has been learned before but has been forgotten, and that is about engagement, participation, of valuing the voices of everybody, including the most disadvantaged. I think that so much more could have been achieved if people in Whitehall had been listening, listening to the experts who, of course, were being derided at the beginning, listening to the frontline health workers, listening to the patients, listening to the experts in areas like procurement and laboratory working and so on. But that did not happen. And it, I think, is we see that in so many aspects of British life, the policies, legislation is implemented that is found to be unworkable, because nobody has properly engaged with those who have to implement it.

AA [01:03:13] If we go back to the initial question, which is what's an acceptable number of deaths, we're now not really talking about COVID. And so, I guess whatever the death rate is at the moment is probably seen by most people as acceptable. How that might change if new variants come along, or if the vaccines stop being as effective, or if we just get fed up, as actually a lot of people are: They've gone through a pandemic; it's been quite traumatizing; and it's naturally, you know, it's natural to want to forget and move on. What worries me about that is that maybe we're not shining a spotlight on who is continuing to die. So we're not looking at the circumstances in, you know, that that affects people, that put them at higher risk. Is there something we can do about that? Is there something that we can do to make supposed front line jobs safer? You know, it's very striking that early on in the pandemic, the government sort of thanked healthcare workers for their sacrifice. Well, I don't actually remember them consenting to be fodder for COVID 19. So that, so I'm, I'm interested because I think people are gradually beginning to learn to live with COVID, whatever that means. And my worry is, is that, and hopefully the COVID inquiry will bring something to bear on this, that we're not really looking at the kind of place it's left us.

DW [01:04:39] We will face this question again. How many deaths are too many? How many cases of sickness are too many? And whatever answer we give now won't necessarily be the right answer for then. How do we get to be in a better position? Well,
we want to be in a better position to be asking the question, and we can do that by address, by thinking about how much we invest in our health care system and how much capacity we have within it. That will affect just what we're able to flex, when things get difficult. We ought to be asking really serious questions about the structure of our society and inequality, because a more unequal society, and the UK's very unequal, will have a more unequal response to an acute threat, whether that's a bad winter or a pandemic. But we also want to be in a better position to address the difficult question: Whatever's happened in the past, we will have the NHS that we have at the time, and we'll have the inequality that we have, we're not going to be able to fix them when the next pandemic arises. How will we respond to the question? First, we have to recognise that this is an ethical question. It's not a scientific question, it's not a political question in the sense that it's just whoever's got the power. It involves reflection on things that are deeply important, deeply contested. We need to think about the value of life, different types of lives, on different types of values: Freedom, which we've alluded to already, is a fundamental value, and some people hold incredibly important, potentially even at the cost of their own well-being. So, we need to recognise it's an ethical question and therefore we need to engage with the public about the nature of the question, the reasons why we're making the decisions that we are, and seek their input into those decisions. All of those we missed out on, we didn't recognise the nature of the questions. Our government didn't articulate why they were making the decisions they were making, and of course they didn't engage with the community about values, trade-offs, difficult choices.

MH [01:06:42] Listening to you. I was actually reflecting as a historian of medicine that we didn't have these conversations in 1918 after the Spanish flu. And I don't think we've been very good at having these discussions, even after more recent pandemics within living memory such as HIV/AIDS, or indeed swine flu in 2009. So, thank you for drawing out the ethical issues and the values lying behind some of the decisions.

Thank you for listening to Going Viral. If you've enjoyed this episode, please recommend it to your friends and we'd love for you to rate us too. You can find us on Twitter at goingviral_pod and on Instagram at goingviral_thepodcast. This episode has been produced in collaboration with the UK Pandemic Ethics Accelerator, which was funded by the UKRI COVID 19 Research and Innovation Fund. I'm Mark Honigsbaum, and the producers were Melissa Fitzgerald and Kate Jopling.