



Episode 1,741: Harvard Medical School Prof. Martin Kulldorff: Lockdowns Not the Answer

Guest: Martin Kulldorff

WOODS: I was delighted to see your interview in *Jacobin* magazine, which I've been familiar with for quite some time. And I think it's an important step in trying, probably in vain unfortunately, to depoliticize the discussion of the virus and the lockdowns. I guess maybe I'm naive, but I was shocked at how quickly this issue became politicized. There's no reason for it. Not only is there no reason for it, it shocks me further that there are people who do think of themselves as being on the left who really will not admit any dissent on the subject of the lockdowns, even though it does seem to hit vulnerable people disproportionately hard. So I was very glad to hear your voice, and I know that you are trying to be nonpartisan in this, which is very, very important. We just can't afford to let partisan bickering get in the way of sensible public policy in this matter. So my first remark to you is thank you for that.

KULLDORFF: I agree with what you said. I think it is very surprising that it's become so political. It's a public health issue, and we share the joys of life but we also share the viruses, so it's something that we have to deal with together, all of us.

WOODS: That's right. That's right. So let me start with a question that's been bothering me. Some people who oppose lockdowns have been saying something like this. If you lock people down, eventually, when inevitably you have to let them resume some form of normal life again, they're just going to encounter the virus once again. The virus will be, as they say, out there waiting for them. But my question for you is, suppose we had the most relentless, inhumane, monomaniacal lockdown imaginable. And our only public health goal was fighting the virus. Nothing else mattered. Is it conceivable that you could suppress a virus, not just flatten the curve, but actually move on to full suppression if you had a long- and tough-enough lockdown?

KULLDORFF: If you had a very, very strict lockdown, then probably it's possible to suppress it, but as soon as you lift the lockdown, it will come back.

WOODS: So even then, so even then, no matter how inhumane you are, you still will have to reckon with it at some point.

KULLDORFF: Yeah, but I mean, the only alternative would be complete eradication, but that's not going to happen with COVID. There are only two diseases in world history that have been eradicated. One was smallpox, the other one was rinderpest, and both were done with vaccines. So this is going to be endemic. It will be with us for a long time. But right now we are in the pandemic phase, which is not so nice. It's terrible. But eventually it will be sort of

much milder, and most people are going to get it when they are young as a child without any major consequences.

WOODS: Well, that leads me to my next question. You have favored, along with many of your colleagues, an age-specific kind of approach to how to handle this, given that we had no right to expect that the people who would be vulnerable to it would be so heterogeneously distributed, so that it's the older folks who in particular tend to be the most vulnerable. And you would think the public policy response would take that into account. But the response to that has been, yes, it's true that younger people are not really very much at risk of dying from this; the problem is, if you go let them lead their lives, then they're going to bring it home to their grandmothers and that's going to be the problem. So what's been your response to that concern?

KULLDORFF: Live their life, but don't visit grandmother. But to take it more seriously, with COVID, there's more than a thousand-fold difference in risk between the oldest and the youngest. So among the old people, this is much worse than annual flu, but among children, it's much milder than the annual influenza. So we really have to use that feature of the COVID to beat it. And what happens is, sooner or later, we're going to reach herd immunity. That's not a strategy. It's what every pandemic or epidemic of this type will eventually lead to, either through a vaccine or through natural immunity or a combination of the two. So we will eventually reach there.

And the question is, then, how do we minimize the death until we get there? Well, we do that by protecting the elderly. So we don't know what percent is needed for herd immunity, but among that percent, let's say it's 40%, if a lot of old people are in that 40%, then we can have a lot of mortality, a lot of deaths, because they are much more higher mortality if they get infected. But if it's mostly young people in this 40%, then we're going to have very few deaths. So the key to minimize the mortality from COVID-19, number one, is to protect the elderly in various ways – some of them are easy to do and some of them are harder to do, but we have to do them if you want to minimize mortality – while we let younger people live fairly normal lives. They should still take general precautions like washing hands and making less shaking hands and so on. But we should let them live more or less normal lives. And then we reach herd immunity, and then the old people can also assume their normal life.

WOODS: I guess based on your comments that you consider the question to be still open, which it clearly is because of the debate on it. But do you have any sympathies in the discussion about exactly what it would take to reach herd immunity in this case? Because we're hearing figures as high as 60%, and then there's a there's a minority school that says it seems like something appears to happen as low as 15 to 20%. And then we've got discussion of T-cell immune responses, and I read one doctor saying that maybe the T-cell protection that people have is heterogeneously distributed around the world, which helps to account for why some places seem to do better than others. Do you come down on this anywhere?

KULLDORFF: Yeah, so I'm not an expert on immunology, but antibodies will just give you the lower bound on the number of people of herd immunity, because as you say, there's also T-cell immunity and a study in Sweden shows that the number of people with T-cell immunity was just as big as the number of people with antibodies. And then there might be innate immunity also and cross communities. So I think no respectable epidemiologist will actually state what percent of a population is immune currently.

And the same is true with herd immunity. We don't know what the threshold is to reach that. We do know a few things. We know that the threshold is higher in urban areas, because infectious diseases tend to spread more in urban areas because you have more contact. So the level needed for herd immunity is going to be bigger, higher in urban areas than in rural areas. But it also depends on who gets infected. If an older person who stays mostly at home is infected, that doesn't really contribute much to herd immunity. But if a traveling salesman or the pizza boy or the hairdresser, if they are immune, because they see a lot of people all the time, if they are immune, that contributes a lot to herd immunity. So that means that if all those who spread it more, if they get immune, a much lower percentage is needed to reach herd immunity. But if it's the older people who mostly stay at home who get to be immune because maybe some caregiver is going from one to the other infecting all of them, then that doesn't really help with herd immunity very much.

WOODS: Staying on this topic for a minute, when we look at the numbers coming out of Sweden right now, where it's almost as if COVID-19 is not even a factor at all in terms of deaths, hospitalizations, the ICUs are pretty much emptying out – we could say the same thing about New York and a number of other places. And then where I live in Florida, we were part of the Sunbelt spike, but we didn't lock down during that spike in Florida. They did close some bars in some jurisdictions, but really what happened is the bars pretended they were restaurants and kept opening. So really, very, very little changed. And yet the spike ended.

So something's going on here that, at least to let's say a layman like me, seems hard to explain. If this virus were to behave the way we'd been told it would behave at the beginning about exponential growth and you have to take all these non-pharmaceutical interventions in order to stop it, it seems like almost no matter what we do, eventually in various jurisdictions it subsides. Whether we locked down or don't, no matter if I look at different graphs of different jurisdictions and I look at case counts, deaths, hospitalizations, and I try to pick out which are the ones that locked down, which ones locked down earliest, when did they stop locking down, when did they institute a mask mandate, did they institute a mathematic, I can't tell the difference. It looks the same everywhere. Why is that?

KULLDORFF: So if we take here Florida and New York City and Sweden, there is clearly a lot of immunity in the population, for sure. And that's what's driving down the hospitalizations and mortality, because in all these cases – well, in Florida, they kept it open, so it's not going down because more countermeasures are put in. So that leaves that it's going down because the immunity in the community is increasing. And the same with Sweden. It has been going down and it's very close to zero now, and it's been doing that at the same time as the country was relaxing the restrictions. So it's clear that it is because there's an increase in the immunity in the population. Now, the question is, is that immunity enough so that when you open up everything completely to normal that you won't have another little bump? That is impossible to know. But for sure, there's a lot of immunity in Florida, in New York City, as well as in Sweden.

WOODS: What numbers do you think we should be watching? There's been a lot of controversy about whether we should be tracking "cases," and some people say that these case numbers can be enormous and sometimes inflated because of the PCR testing problem. That's another matter. Should we be looking at hospitalizations, deaths, percent positive rate? There are all these numbers being thrown at us. What are the ones we should look at most closely?

KULLDORFF: In terms of sort of the current situation, like current awareness, I think that hospitalizations and mortality are the key measures. And of course, they come a little bit after cases, but the problem with looking at cases is that it depends so much on testing. So if you increase testing, you're going to increase cases. If you decrease testing, you're going to decrease cases. So it's very sensitive to that. So therefore, I think hospitalizations and deaths are the thing of interest in the short term. In the long term, when we look at this, I think it's excess death. We have to compare what were the deaths this year versus the average of the last five years or so. And of course, adjusted for population changes, so basically mortality per population, and also adjusting for age. So ultimately, that's going to be the gold standard way of determining the seriousness and the effects of this pandemic.

WOODS: Now, I don't know for sure that this is in your area of expertise, but there was a story probably three to four weeks old now that came out of *The New York Times* about the sensitivity of the PCR testing and the cycle threshold being used. And the argument was, it's so sensitive that it's giving people a positive result when they're not infectious and when they probably should be getting a negative result. And my question is, number one, do you think that is a problem? And number two, if that's a problem, does it have implications for the death count? Are people being assigned a cause of death of COVID because they got this positive result that they shouldn't have gotten? Or is that not a problem?

KULLDORFF: I think it depends, because testing is used for different purposes. So the most important purpose of testing is if somebody is sick and they have the COVID symptoms and they need treatment, the doctor needs to know if it's COVID or something else. So there you need a test that's very sensitive because you don't want the false negatives. So for those type of testing, you need to have sort of one threshold in terms of the sensitivity and specificity of the test. On the other hand, my view is that it is also important to test, for example, nursing home staff and nursing home visitors, so that you protect the residents in the nursing homes. And there, I think you also want to be more safe than sorry, so you want to have a very sensitive test, because the consequences are much more grave if somebody who actually is infected visits these older residents who are very much at high risk, versus not letting a staff member work for a few days or so on. So in those settings, you will want one threshold for the tests.

On the other hand, if you go and test the general population, it's a big problem if you go and test and you have extremely sensitive tests and then you say they have COVID, when in fact they might have had it some time ago and they're not infecting anybody else and they have no symptoms, etc. But in those situations, actually I will take it one step further. In schools and universities, I don't think it makes any public health sense to do testing. If a child is sick, send them home, whether they have COVID or something else, and have them come back to school when they feel well. But don't start testing and then sending people home who are asymptomatic, and then sending their friends home and so on. School is important, so I think there's no public health reasons to do mass testing in schools and colleges. And I wrote an op-ed about that a few weeks ago in *The Wall Street Journal* with a colleague of mine from Stanford, Dr. Jay Bhattacharya.

WOODS: Oh, I've seen a number of interviews that he's done and I like him very much, again, as just a layman. So it's interesting that your position is very much not a one-size-fits-all, whether it comes to lockdowns or the public health response, the testing. We have to look at the individual situation. And testing college students makes less sense than testing people who are about to visit their elderly relatives. And that brings me back to the issue of trying to

protect the elderly, who were particularly vulnerable here. At the same time, I mean, I realize there's no easy solution to this, and that there are sacrifices that need to be made. But at the same time, it seems that in some cases, the elderly are being subjected to such extreme isolation that it's a kind of death. And I wonder is there some less blunt instrument that we can use that would still allow them to have a little bit more human contact than a lot of them have had?

KULLDORFF: Yeah, so that's a very important issue and a very sad issue for many older people. And one thing is that, the longer we drag this out, so the longer we sort of prevent younger people to get the disease and build up the herd immunity, which they can do with very minimal risk to themselves – the longer we drag that out, the longer the older people are going to have to self-isolate. And there's two problems with that. One is, that's very difficult from a psychological and social perspective to do that for month after month after month. You can do it for two or three months, maybe, or for longer, but to do it for a whole year or more, that's brutal. And the other thing is, it is harder to protect older people if you drag it on, because they need to go to the dentist and so on at some point. So the longer you sort of drag this out, the harder it will be to protect the elderly and for them to protect themselves.

So that's one point. The other thing is that I think there are some ways to do it so that it is less severe in terms of a social impact. For example, to do more frequent testing of nursing home staff and visitors that would actually allow more visits to the nursing home. So that's something that both protects them and allows them to have more of a social life and social visitors. Also, I think maybe older people shouldn't go to the supermarket themselves because it's risky, but they can be more liberal in terms of seeing family and close friends.

WOODS: Another reason that's been cited as to why your approach is supposed to be unwise is that they say, although it's true that young people aren't generally dying from it, there is what some people have nicknamed "long haul COVID," that we don't know what the long-term results could be. And we have some initial evidence, they say, that even if in the short run there are not serious health problems, it does seem to harm people in the long run, they say, and so we can't just say, "Kids, go live your lives," because we could be inadvertently doing damage to them. Do you have an opinion on that?

KULLDORFF: Well, first of all, we don't know anything about the long-term effects beyond six months, for obvious reasons, because nobody has had it for that long. So that's an unknown question mark, so nobody knows. When it comes to more short-term, like 2, 3, 4 months, the adverse effects of having infection, what I have been told by my physician colleagues, is that it happens but it doesn't seem to happen any more than from other infections, like diseases like influenza. So I think we have to treat it similarly to influenza, which has similar long-term side effects sometimes.

WOODS: I'm curious about, because you've written about the collateral damage caused by lockdowns – and it's not necessary to be a physician or to be a scientist even to see what the collateral damage of lockdowns are. Just use common sense. And you can see that interruption of supply chains can lead to problems of delivery of food and other necessities. Or more than that, there were delays in necessary health procedures that people needed to have. And now we're reading in *The New York Times* that over the next five years, maybe over and above the normal number, another 1.4 million tuberculosis deaths. The collateral damage seems absolutely overwhelming and just gets worse and worse. But what public

policy, then – if you don't favor lockdowns, do you favor any type of invasive public policy to try to slow or stop this?

KULLDORFF: Well, I think the collateral damage done by the lockdown is huge, but a lot of it is not short-term but long-term. For example, the cancer screenings has gone down, and the number of cancer diagnoses that we have are down. And it's not because people don't get cancer anymore; it's because they're not detected, because less screening and less primary care. So that's a huge concern. But those are not things that we're going to see in the tallies of the mortality right now, because it's not that you're going to die this year because you don't get the cancer screening; instead, you will maybe die three or four years from now instead of 10 to 20 years from now. And there is a similar thing with cardiovascular diseases. Child immunizations has plummeted. So that's the concern, because maybe we will have outbreaks of childhood diseases now. And there's more houses evictions, and house evictions are not good for public health, in addition to all the other bad things that happen with them. So the collateral damage is big, and obviously hurts the working class the most, because they already have the worst public health situation. So that's a big concern of mine and should be a concern for everybody.

WOODS: So what would you would have done differently?

KULLDORFF: Well, I think if we had done the age-specific approach, then we would not have had this big collateral damage anymore and we would have been able to go back to normal life more quickly. So there would have been some interruptions, especially among the elderly, but there wouldn't have to have been any interruptions about childhood immunizations, for example, because children should still be going to the doctors as normally. And people shouldn't be afraid to go to the hospitals if they feel sick in any way. So, by having an age-targeted approach, we will not drag on the pandemic for as long; we will protect the high-risk elderly so that we would have fewer deaths by the end of this; and we would not interrupt the society as much, so we will have less collateral damage.

WOODS: I have two more questions before I let you go. The first one is a bit of a third rail, and I would not hold it against you if you did not want to answer this question, but I feel compelled to ask you. What is your opinion of Dr. Fauci?

KULLDORFF: Dr. Fauci is an immunologist and a very eminent immunologist. So if you have questions about immunology, then I think he is a very good person to ask those questions, and you shouldn't really ask me about them because I don't know more than you would be able to figure out by spending a week studying the subject. And so on those subjects, you should definitely listen to Dr. Fauci. If you're interested in issues of public health, then I'm very happy to talk about those things, because that's sort of my area of expertise. But immunology, I couldn't talk about.

WOODS: Well, I think what's happened at least in the US is that, because Dr. Fauci has gone beyond the area of his expertise, clearly, in recommending that, let's say football not starting – I don't even remember the sorts of things he's called for, but whether or not we should have schools, whether or not we should do this and that – is that people have said, Well, he's the expert, and so if you think we should open up this or that institution, then you're just defying the experts. And I feel like on things like that, he's no more of an authority than anybody else would be. Because, yes, he might know something about this particular virus, but he can't tell me that this particular virus is the only priority I'm allowed to have in life.

There are people in the developing world who are suffering tremendously. I just talked to somebody who lived in Malawi for three years. They tried to lock down in Malawi. The people rose up, and the government had to relent. But there are places like Sierra Leone, where there's almost no trace of the virus, but because their one priority is COVID-19, they've devastated people who are living hand to mouth. So I think it's an abuse of his authority that he has to give the impression that, in addition to immunology, he also knows about whether you should stay in your house and whether you should have this institution open or not. Because it's making people think that *the experts have told me that the thing to do is to cut off all things that give my children joy and keep in my house*. That's done a lot of damage, in my opinion.

KULLDORFF: So infectious diseases are very complicated things, so there's nobody who is the expert on all aspects of COVID or all aspects of infectious diseases. So there is sort of the immunology and biology, people who know about viruses, and there's critical knowledge to, for example, develop a vaccine. So there are those who are experts in that area, and they are doing very, very important work to try to get a vaccine as quickly as possible. And then there's like a second area, which is how you treat patients and the doctors who are treating them at the hospitals. That's a very different set of expertise you need for that. And then the third area is the public health aspects of how do the infections spread in the community and how do you mitigate that as best as possible to minimize the overall burden of this pandemic on the population as a whole? So those are three very different areas of infectious diseases.

And nobody is an expert in all three areas. And in this area, we cannot only think about the COVID. We also have to think about whatever countermeasures we do, what effects do they have on public health in general, because we have to see it not short term but long term, and not a single disease but all aspects of public health, and not an individual patient but the population as a whole. So those are three very different things.

WOODS: My last question involves something that you've said on your Twitter feed, which I enjoy very much. I'm deeply grateful for your Twitter feed. Sometimes people will say to you that your opinion is some outlying, minority, heterodox, dissident opinion. And your response has been: no, within my field most of us think this way, that we should have an age-specific policy of dealing with COVID. Can you elaborate on that?

KULLDORFF: Yeah, so my colleagues, who are infectious disease technologists that I talk to, most of us think that the age-targeted approach is the right strategy. That includes, for example, Professor Sunetra Gupta at Oxford University, who in my view is the preeminent infectious disease technologist in the world. And it includes Stefan Baral at Johns Hopkins University. It includes Rebecca Chandler, who is an American infectious disease doctor and technologist who actually lives in Sweden, so she has sort of both the Swedish and the US perspective on things. And many more, including some who don't want to speak up in public because they have concerns about it, but we talk sort of privately. So it's not all infectious disease technologists who agree with this, but there are certainly very many, most of the people that I talk to. But among scientists in general outside of this specific field, at least among those that are vocal, I think most of them have a different opinion.

WOODS: As we wrap up, for ordinary layman without medical or public health background, who nevertheless want to stay informed – and they want the good news and the bad news, but they just don't want hysteria, they don't want panic, they just want a rational overview of what's really happening and what we're learning and so on – are there sources that we can

consult? News outlets, scientific ones, or are there ones that you rely on that a layman could use? Because I think a lot of people feel a bit adrift when it comes to staying informed.

KULLDORFF: I think one of the best sources are the various interviews and lectures given by Dr. Sunetra Gupta. I think she knows what she's talking about. They are very thoughtful, and she's able to explain things to a lay audience, but still talking about it without dumbing it down, so still talking about the key concepts of infectious disease technology. So I would encourage that both in the written interviews, as well as the YouTube video interviews, as well as YouTube videos of her talks, those I would recommend very highly.

WOODS: I found out about her because of you, and I've started to watch some of her videos and I agree completely with what you just said. So what I'll do is I'll link to some of her material, I'll link to some of the things that you've written, as well, at TomWoods.com/1741 for episode number 1741. I can't tell you how much I appreciate your time today, Martin, and thank you very much, and please keep doing what you're doing because the world needs it.

KULLDORFF: Will do so, and thank you so much, Tom, for having me on your show. I really appreciate that.