

ANDREW MARR SHOW, 27TH SEPTEMBER, 2020

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EPIDEMIOLOGIST and SPI-M member

AM: Professor Mark Walhouse, from the University of Edinburgh is on the government's Advisory Body that models pandemics, SPI-M. I asked him earlier, does he think that the cavalry is coming?

MW: Well, the government's strategy is to sit this out for another six months, that's what we're told. Implicitly in that the expectation is that after six months something will be different and the obvious something is there to be a vaccine available. I have to say that most people I've talked to who are involved in vaccine development think that we may have a vaccine in six months but it's doubtful that we will have been able to roll it out on a mass scale by that time. So we're in a difficult situation for some months to come, I'm afraid.

AM: And of course the great debate at the moment is whether endless more restrictions and lockdown measures are the only way forward. Jeremy Farrar has said that we need a big debate about this and political decisions because it is in effect a binary choice. He said today: "You either open up society and the economy but you accept higher transmission, hospitalisations and deaths, or further restrictions are implemented now and you reduce transmission and reduce the Covid illnesses and deaths." Is it a simple binary choice like that do you think?

MW: Well, Jeremy's right to put it in tones of a scientific debate. I think there is a middle ground as well where you could have some of both and the way you find that middle ground is by focussing your efforts not simply on suppressing the spread of the virus through the whole population, but concentrating on protecting the people who most need protecting. We know who those people are. The elderly, the frail, the vulnerable, those with a set of co-morbidities. They are enormously more at risk of this

virus than the rest of the population and if we can protect them that gives us some wiggle room to relax measures elsewhere for the rest of us.

AM: I suppose therefore the next question is how can we protect them and can we really protect them, because the Prime Minister himself said this week: "If you let the virus rip through the rest of the population it would inevitably find its way through to the elderly as well." And Nicola Sturgeon, up in Scotland has said something very similar. So can you really protect these people?

MW: Well, he's exactly right, but there's no question of letting this virus rip through the rest of the population. This is a very unpleasant virus; it can cause very severe illness and hospitalisations even in a healthy population and we're seeing problems with non-Covid, the sequelae of infection as well building up. So there's no question of doing nothing to suppress the virus. The question is whether it is so serious in that population that the right thing to do is shut down society to stop it spreading and in that context that probably does seem too much. But then, as you quite rightly say, it is very difficult to protect the elderly population, the frail population is the virus is rampaging through the rest of us. The best way to keep yourself safe from this virus is that everyone you come in contact with is virus free and the way you establish that is by testing. But we're not yet at the position where we could test on a regular basis twice weekly or whatever it may be a very large number of people with either the carers of the vulnerable, informal carers, the family members, the household members. So we can't get test on that scale. So right now we don't have that option.

AM: Now you're an Edinburgh University man, one group of people who are having a really, really hard time at the moment are students up and down the country. Was there any modelling done about the effect on spreading Coronavirus of the universities coming back in the first place?

MW: Yes, there was and this situation, I'm afraid, has been entirely predictable. I mean the first thing to say is that students didn't start this current phase of the epidemic. This began way back in August in Scotland and the rest of the UK and the students just got caught up in it. Now because a university involves students coming in from many different parts of the country and congregating very close proximity, then it's inevitable there's going to be some spread among the student population and that's what we're seeing. There was some very nice modelling done of this by our SPI-M colleagues at the University of Bristol and what they showed quite clearly that the risk areas were particularly first year students in halls of residence as well as face to face teaching. So this was very predictable and it was modelled.

AM: Going back to the beginning of all of this did the government model anything other than a lockdown right at the start?

MW: Basically no and that is a worry because when we started modelling this way back in March, before the first lockdown, it was very apparent from the work that my group did and many other groups did that all a lockdown ever did is defer the problem. It solves an immediate crisis because it reduces transmission quickly, but it doesn't actually solve the problem in the long term. It doesn't make the virus go away. So in the middle of march we were modelling scenarios where it was entirely possible that we'd need to lock down again in September. And that's exactly the position we find ourselves in. Lockdown just defers the problem, it doesn't solve it.

AM: So that implies that there was only ever one option being looked at by ministers seriously, which was the lockdown. The next question is when they were looking at the lockdown were they modelling the economic consequences of it and the consequences for other health problems of the lockdown?

MW: Well, I've been told that they were but this wasn't done in the same way that the epidemiological modelling was done and

the results of the epidemiological models were up there and discussed publicly, they were very visible, they were heavily critiqued as they should be, so we knew what we were seeing on the epidemiological side. There wasn't any equivalent, from my point of view, not just on the economic harms but the other kind of harms that lockdown causes and those include the drastically reduced access to health care provision that happened during the first lockdown. There was a tremendous fall off in people going to hospitals and GPs when they needed to. The mental health problems and of course the educational harms that it caused by closing schools and universities.

AM: Speaking about modelling, you, like me are probably just about old enough to remember the old closing times and the binge drinking that went in before last orders were called. Was modelling done about the effects on Coronavirus spreading of closing pubs at ten o'clock?

MW: Not to my knowledge and the models don't have the sort of granularity that you can explore in detail different closing times of pubs, or even different versions of the rule of six that we have around the country, the differences between indoor and outdoor transmission or involving children or not. They don't have that level of granularity. So those sorts of things have to be judgement calls based on the public health evidence rather the models.

AM: So there isn't a real solid scientific basis for closing pubs at 10?

MW: Andrew, there isn't a proven scientific basis for any of this. When we introduced lockdown in the first instance that was an unproven intervention. By the time we introduced it in the UK on March 23rd, only one city in the world, Wuhan, had actually demonstrated it was possible to turn this epidemic around using lockdown. So because this is a new challenge we're having to use interventions that we've never tried before. All of this has very much been ad hoc interventions that we're learning as we go.

AM: Now I remember right at the beginning you were predicting a second wave, or as you called it, a second bump of the virus. Is there going to be a third one do you think?

MW: Well that's entirely possible. The scenario I mentioned earlier does actually include this possibility and this is just another demonstration of what I was saying earlier, that lockdown doesn't solve the problem, it defers it. And that is why we need some kind of cavalry on the horizon, or, alternatively, if we think that vaccine is not going to be available in six months or 12 months or two years or whenever it may be, that we do need alternatives. The alternatives that have been mentioned so far are things like moon shot programme, that mass testing and there may be others on the horizon too.

AM: And we also – a different way of looking at all of this was what happened in Sweden and we know that the Swedish scientists who led that have been advising the Prime Minister over the last few days, do you begin to see a sort of opening up of a possible debate about an alternative to lockdown coming?

MW: Well I certainly hope so, but we shouldn't be so binary as to say it's an alternative lockdown. Sweden does have a number of restrictions in place and I'm afraid I don't see a way through this for the coming months and even years where we don't have some restrictions in place. This is the new normal. We're going to have to operate differently until we've got this virus firmly under control. The advantage of what Sweden has taught us I think is two things. First of all that it is possible to turn an epidemic around without a strictly enforced lockdown, and people will argue about whether or not that model is transferable from Sweden to other countries, such as the UK, but they've shown it's possible, but perhaps more importantly what Sweden have emphasised and the epidemiologists have emphasised is the importance of sustainability. That we are in this for the long term and the

measures that we implement have to be ones that we think we can live with until the cavalry comes.

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