

Message

From: Whitty, Chris [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0B3EE62E0CA04E978730B14F9B416A1E-WHITTY, CHR]
Sent: 11/03/2020 07:07:54
To: David Hunter [david.hunter@I&S]
Subject: Re: Coronavirus

Yes there is no doubt that the Chinese package has had a major effect and I am aware of your and others work on the Philadelphia etc in 1918.

Any papers you think I need to see please feel free to send them.

My main concern at the moment is sustainability if we go too early.

C

From: David Hunter <david.hunter@I&S>
Sent: Wednesday, March 11, 2020 4:32:01 AM
To: Whitty, Chris <Chris.Whitty@dhsc.gov.uk>
Subject: Re: Coronavirus
Hi Chris,

I asked my Harvard colleague [NR] and this is what he sent, albeit the first refs are flu not SARS-Cov-2:

<https://www.inquirer.com/health/coronavirus/coronavirus-st-patricks-day-parade-philadelphia-20200310.html> cites our 1918 study about the value of public gatherings etc. Another paper on the same topic around the same time reached the same conclusion

<https://jamanetwork.com/journals/jama/fullarticle/208354>.

Today we have a preprint about the Wuhan-Guangzho comparison which is very much like the Phila-St Louis comparison. They both shut on 23 Jan, but Wuhan had >20 deaths and >400 cases that day, while Gz had 7 cases and 0 deaths (reported). The earlier start, relative to the epidemic, relieved the pressure on health care enormously.

The link is here <https://dash.harvard.edu/handle/1/42599304> and a better graph (we are updating the paper with this clearer graph)

Another colleague (Xihong Lin) has this in preprint that seems to show a big effect on R0 of the Chinese Interventions as a package:

<https://www.medrxiv.org/content/10.1101/2020.03.03.20030593v1.full.pdf>

Finally, Roy Anderson has a paper in the Lancet that I am sure you have seen:

[https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(20\)30567-5/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30567-5/fulltext)

In the second para after the Figure they say "Government actions to ban mass gatherings are important, as are good diagnostic facilities and remotely accessed health advice, together with specialised treatment for people with severe disease."

Perhaps "ban" is too strong a word - but "advice" might be enough and people will vote with their feet...

I appreciate all these papers are indirect evidence and opinion, and you are faced with great uncertainty on timing. The question is whether to err on the side of caution, and there is always the danger that successful prevention leads to retrospective criticism that no intervention was needed. But I think this will be bad enough in enough other countries that this criticism is unlikely.

Finally, perhaps the Northern Italian doctors on my twitter feed are fake news or bots. HMG must be able to get the facts. They are describing a desperate situation and imploring other countries to act as early as possible.

all the best,
David

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From: Whitty, Chris <Chris.Whitty@dhsc.gov.uk>

Sent: 11 March 2020 00:12

To: David Hunter

Subject: Re: Coronavirus

Economics is not my issue.

But behavioural science is, as well as epidemiology. If we ask people to self isolate until, say, late June, for 7 days every time they get a minor urti infection, and elderly people to avoid all social contact for 3 months this is non trivial. The social cost kicks in from day 1 (including for the NHS which will lose workers). Whilst white collar workers with sick pay may be prepared to self isolate multiple times, those who are self employed may not, and I expect fatigue. Loneliness is already a major problem in the elderly. The interventions work best closest to the peak. Currently the great majority of urti are it coronavirus, in 2 weeks the ratio begins to

change. And there is no evidence i have seen (send it if you have it) that cancelling mass gatherings makes any difference at all.

I am really keen to get more science. If people have data to support this being the wrong approach I will read it with enthusiasm, and change course, But this is really tricky, and the only way to make it work is if we base it on data. I agree completely about models, but unless people send me better science I have to work with the science I have.

Chris

From: David Hunter <david.hunter@**I&S**>

Sent: Tuesday, March 10, 2020 11:47:46 PM

To: Whitty, Chris <Chris.Whitty@dhsc.gov.uk>

Subject: Re: Coronavirus

Dear Chris,

Thanks for getting back to me - I don't want to add bricks to your load and after this message will let you get back to your work.

I agree totally with being science driven but we both know that modelling is an imprecise science and 100% of models are right after the fact. The basic infectious parameters for the models are still uncertain.

I am sure you are getting better intelligence from Italy than I can pick up on Twitter. If it is true that they are converting Operating Theatres into ICU's and still don't have enough beds that is pretty bad news.

A minor factoid is that Harvard, a pretty staid institution, has told all students not to come back after Spring break and moved all instruction online for the rest of the academic year online.

Boston, advised by the local experts, has cancelled this Saturday's St Patrick's Day parade.

In other words, their experts are pushing the precautionary button.

I agree that if you pull the trigger too soon it will prolong the economic and social agony, and that hanging on for another month is attractive to get us beyond flu season.

However, I don't think I am an alarmist, and I don't advocate doing something for the sake of being seen to do something, but the consequences of being 1-2 weeks too late on this may be dire.

These are the most difficult decisions you will ever have to face. Its an anecdote but I am in London at an MRC Board meeting and based on the (non-ID specialist) people here, nobody would blame the government for moving sooner rather than later. It might actually be reassuring psychologically if done in a measured fashion with a focus on supporting the elderly.

Having said that, you have the available facts at your fingertips and I hope you can thread the needle between doing economic and mental health harm, and the possibility of a rapid increase in cases requiring admission and ICU...

with all best wishes,

David

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From: Whitty, Chris <Chris.Whitty@dhsc.gov.uk>

Sent: 10 March 2020 23:17

To: David Hunter

Subject: Re: Coronavirus

Dear David

Lots of modelling work by multiple good academic groups to get the interventions and timing right, referee by SAGE. These are not random choices. Once in we will have to be on for 13 weeks as a minimum, and come at a serious social cost including to health and mental, health, and risk fatigue if you go too early. If you would like to see it I can put you in touch with the relevant teams. We need to be science driven here. If you think the science is wrong then that's v useful. But some of our colleagues are getting into the 'something must be done, this is something, we should do it' space, and that way disaster lies.

Chris

From: David Hunter <david.hunter@{I&S}>

Sent: Tuesday, March 10, 2020 10:54:29 PM

To: Whitty, Chris <Chris.Whitty@dhsc.gov.uk>

Subject: Coronavirus

Dear Chris,

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You must be beyond busy so I don't expect you to answer this, and I have nothing but admiration for your response and demeanor so far.

The reports I am seeing from doctors in Lombardy who thought the authorities were over-reacting 2 weeks ago, but who are now saying they are obliged to deny intubation to older patients and young patients with pre-existing conditions because they don't have enough respirators to go around are extremely disturbing.

I respectfully suggest you move from "calm voice of authority" mode to "hair on fire" mode and have the UK move to social distancing and care for the elderly at home ASAP. For example, the idea there will be a rugby match Wales v Scotland this weekend is insane.

Even if this turns out to be an over-reaction, no-one will blame you and the Government if the UK dodges the bullet - many other countries will not.

with all best wishes,
David

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