Five Observations on Impact of the Pandemic

Christopher J. L. Murray

I would like to reflect on five things about how I think COVID-19 will change global health in the coming years.

First, I believe that the way the global community has been thinking about pandemic preparedness will change very substantially. If you think about the joint external evaluation process from WHO and other partners, those scores were not predictive at all of how well countries managed COVID-19. In fact, there is no correlation between those scores and subsequent COVID deaths, at least to-date.

I think as the global community reflects on why what went wrong in the Joint Admissions Exercise (JAE) process and other scores, like the Global Health Security Index, which is also weakly correlated with what happened, that will lead to a very major re-thinking about both monitoring rules of the content of pandemic preparedness.

Second observation. I think we will see an increased focus, maybe perhaps paradoxically, on some of the major non-communicable disease risks: obesity, diet, diabetes, high blood pressure, because what we have learnt during the COVID pandemic is that those risks, when poorly managed in health systems, actually leads to a more vulnerable population. One of the strategies, certainly not the only one, but one of the strategies that I think we will see more discussion of in the coming year or two is how do we help countries better manage those risks and be in a better position if and when there is another pandemic, particularly one that attacks those that are more vulnerable.

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Third observation is that we have seen just as Noncommunicable Diseases (NCD) risks have been a major determinant of how bad COVID has been in each country, we have also seen within each country that COVID has struck at a much higher rate in terms of transmission and to some extent also in terms of death rates amongst those who are most vulnerable, which has put a light, an intense light, on existing inequalities. So, for example, in the United States, although Hispanic populations generally have a mortality advantage in the US compared to non-Hispanic whites, for COVID they have a death rate that is about three times higher. The same is true for Black Americans, the relative risk of death is about three but of course they have a mortality disadvantage compared to non-Hispanic whites. But these relative risks for COVID are much higher than for all courses and again it points to the importance of thinking about and studying in much greater focus, I believe, in the coming years or a reinvigorated focus on understanding inequalities in societies and thinking about policy strategies that could reduce inequalities.

A fourth topic or change that I think will come from COVID will be a much greater interest in places like the institute for global health and development but around the world in understanding the behavior of both government and individuals. So if you think about what has been some of the most important determinants of death and transmission, it has been the action of governments early or even once broad-based community transmission has occurred, the biggest determinant right now as we speak of transmission is the imposition of social distancing mandates by governments, and that is very different across different jurisdictions. I think there will be a lot of interest in why there is already a blossoming of quantitative political science analyses of these, and I expect we'll see much more of this given how powerfully important different types of mandates have been in controlling the transmission.

Likewise, we have seen enormous variation in individuals' behavioral response. Some individuals in society, some societies more than others, people have worn a mask, have avoided contact. Even when you control for many other factors, there is a considerable amount of behavioral response that we don't understand, and that's what economists and other people who study behavior can help provide some key insights I think in the future. Better models, understanding human behavior. Of course the one human behavior that is now front and center is vaccine hesitancy, and we see enormous variation within countries, by educational attainment, by gender, by socioeconomic status, and particularly across countries or even regions within countries in people's willingness to accept a COVID vaccine, and that will probably dominate our considerations around COVID in two or three months from now.

A last reflection on COVID is about the change in the way we think about data. So what COVID has done, in a way that I think very few saw coming, has been this explosion of data provided by the private sector. So everybody who tracks the epidemic right now, who models transmission, is now heavily dependent on data collected by the private sector and less so on data collected by government. The ways in which data have been particularly useful have been, for example, cell phone-based mobility data. Cell phone-based mobility data route to where those phones go to, so you have datasets that were almost unimaginable a year ago where we can count the number of people who have been to a religious ceremony given with about

a one-day lag. How many people have been to a restaurant, to a bar, to a department store, a level of detail with about a 24-hour lag…that seems extraordinary!

Then you combine that with the role that Facebook has been playing surveying people, two million people a week around the world, providing the main source of data for mask use, for behaviors around COVID, for willingness to take a vaccine.

You just have a very different landscape around global data collection with a much more increased role played by the private sector. There will be many issues that will come out of that. I think when people understand how much detail you can purchase publicly—a dataset that will let you track most cell phones or smartphones around the world, it's really quite extraordinary detail. There will be some backlash, I believe, around privacy, but I do think we will see a lot of discussion in the coming years about the role of data that's been collected by the private sector for public health surveillance and a new direction.

We live in very interesting times. I think like a number of speakers have said before, we expect in our modeling that with human infections today, vaccine scale-up, seasonality, that the large Northern Hemisphere epidemics may be coming to very low levels by the Northern Hemispheres summer with no reasonable possibility of a third wave. It's less clear in other parts of the world. But definitely heading, after the next two and a half months into a period where I think the topic will shift to how do you prepare better for the future and what are the broader implications like the economic effects.