HOUSE OF COMMONS

International Development Committee

Oral evidence: Humanitarian crises monitoring: impact of Coronavirus, HC 292

Tuesday 15 September 2020

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Watch the meeting

Members present: Sarah Champion (Chair); Mr Richard Bacon; Brendan Clarke-Smith; Mrs Pauline Latham; Navendu Mishra; Kate Osamor; Mr Virendra Sharma

Questions 187 - 219

Witnesses

I: Professor Francesco Checchi OBE, Professor of Epidemiology and International Health, London School of Hygiene and Tropical Medicine; Dr Timothy Russell, Research Fellow, London School of Hygiene and Tropical Medicine; and Professor Azra Ghani, Chair in Infectious Disease Epidemiology, School of Public Health, Imperial College.

II: Linh Schroeder, Deputy Regional Director, Africa Region, International Committee of the Red Cross; Selena Victor, Senior Director, Policy and Advocacy, Mercy Corps; and Kate White, Medical Emergency Manager and Covid-19 Medical Technical Lead, Médecins Sans Frontières.

Examination of witnesses

Witnesses: Professor Francesco Checchi, Dr Timothy Russell and Professor Azra Ghani.

Q187 **Chair:** I would like to start the evidence session of the International Development Committee's hearing into the impact of coronavirus. We are particularly looking at the humanitarian angle of this. I would like to start with our first panel made up of three experts, who are going to talk to us about the epidemiology aspects. Could I ask the panellists to introduce themselves?

Professor Ghani: Good afternoon. My name is Professor Azra Ghani. I am an infectious disease epidemiologist based at Imperial College London and I am part of the Covid-19 response team there.

Professor Checchi: Hi, I am Francesco Checchi. I am a professor at the London School of Hygiene and Tropical Medicine. I mainly specialise in humanitarian crises, but I have been working on Covid for the last six or seven months.

Dr Russell: Hi, I am Tim Russell. I am a research fellow in the centre for mathematical modelling at the London School of Hygiene and Tropical Medicine and I have been working on the Covid response from the start as well.

Q188 **Mr Bacon:** I would like to direct this question to Professor Ghani. We have a lot to get through so, if the panel feels that one answer is enough, please let us leave it there. If others have something to add, please do. This is the first thing I would like to know. What are the questions that epidemiological research has been asked to answer in relation to the Covid pandemic?

Professor Ghani: Early on, the key questions for epidemiologists are what the likely scale of this pandemic is going to be and how severe it is. These two factors together really get us a sense of the purpose of reacting to it and what level of implementation of different interventions is appropriate to the scale of the response.

Knowledge on that has accrued over time. The main focus of our work now, particularly looking at humanitarian settings as well as low and middle-income countries, is to understand the evolving and complex patterns we are seeing in the data that is emerging, particularly trying to interpret trends, for example, in case reporting and deaths in places where surveillance is relatively weak.

Q189 **Mr Bacon:** Do you think DFID has been asking you the right questions to tackle?

Professor Ghani: Certainly, they are very much aligned with what we would think of as epidemiologists and the conversations we have with our global health partners in WHO and other agencies.

Q190 **Mr Bacon:** How significantly has the focus of the work changed since the summer review of the aid programme?

Professor Ghani: I have only been working specifically on this since the middle of March directly with DFID, so I cannot really comment on previous changes to the structures.

Q191 **Mr Bacon:** I meant because of the announcement of the abolition of DFID and its merger into the FCO. Have you seen any particular change or have you just carried on?

Professor Ghani: We have just carried on as usual. We are having the same weekly meetings with the same group of staff, so we do not see any change at the current time.

Q192 **Mr Sharma:** My question is to Professor Ghani. What are the main challenges you have encountered in gathering the data needed to answer the key Covid-related questions?

Professor Ghani: There are a multitude of challenges, and I will again focus on the lower-income settings, where the data is potentially weaker. All the groups have had a lot of connection directly with different in-country partners, both Ministries of Health and research partners, to try to gather important information. The main challenge is the weakness of the surveillance system, so trying to understand who is getting tested and how many tests are performed. We look at the test positivity rate as an indicator of how many tests are being performed on negative people as well as positive, and that is very helpful.

We focus particularly on looking at reported deaths, because we know that cases tend to be underreported. Not everybody will be seeking tests or treatment, but even those are very challenging in places that do not have vital registration systems in place. We are starting to look for other sources of data, for example media reports of funerals or other information, particularly looking at excess deaths if that information becomes available, to try to get a better handle.

The reason for wanting to do this is that we need to understand the stage of the epidemic in different countries. In some places we seem to have had very few Covid cases and very few deaths. This may not indicate that the transmission has not happened, but rather that it has happened and has been hidden by the weaker surveillance system.

Q193 **Chair:** Professor Ghani, we had DFID's chief scientific adviser, Charlotte Watts, come to the Committee session in July and she was estimating about 10% of the cases for sub-Saharan Africa were being reported. Has that figure stacked up for you?

Professor Ghani: It is in the right ballpark. We are looking at different indicators. Work we are doing in different places suggests 5% to 10% might be a good ballpark. It varies significantly from one country to another. We see, for example, a larger epidemic in South Africa. That

may not indicate that it is just confined to South Africa, but it may be that the surveillance is better there.

The other source of data that we are trying to look at now, and there are studies coming out, is what we call antibody tests, so seroprevalence surveys. A recent survey, for example, in Kenya suggests that 5% of people nationally have been infected, which rises to 8% to 9% in the major urban areas. That is very similar to the levels we are seeing in the UK, so that indicates there has been a degree of transmission happening.

Q194 **Chair:** Is the rate still about the same at 1.5% of deaths of those infected or is that variable?

Professor Ghani: We know that varies by age, and we know that the risk is much higher in older populations. We also know that in lower-income settings the demography is very different. There are far more children and far fewer older individuals. If we just adjust for age, the expected infection fatality ratio in lower-income settings is probably around 0.3% to 0.5% compared to around 1% in a higher-income setting.

There are other remaining uncertainties, for example other important comorbidities. We have seen recent research showing the importance of obesity as a risk factor for Covid-19 and that is far less prevalent in some of these poorer nations. These are still poorly understood and we need to get better data from the local populations to assess that.

Q195 **Navendu Mishra:** Dr Russell, your research produced a list of countries with estimated underreporting of cases. Could you please explain what your research tells us?

Dr Russell: It is similar to what Professor Ghani was saying before, using the hidden information in the reported death data to infer or get a better handle on the true number of cases available. The way in which that works is relatively simple. You have well-controlled studies that estimate the percentages of people you would expect to die, the IFR or the CFR depending on whether you are talking about infections or cases. Then you can use those estimates to get an idea of how many cases you should expect to have had from a certain number of deaths. In that, you assume that the deaths are roughly well reported and, again, those can also be under-ascertained, as we are learning. It is probably happening in certain LMICs and elsewhere.

There are limitations to that approach, but we use the hidden information in the reported deaths data to get an idea of how many cases are being missed. We can do that in a relatively crude way that is scalable across the whole world, so we can make the same assumptions for the whole world. That induces a certain level of error, because there is massive variability between different countries, so we can use sensitivities to get an idea of how correct or how incorrect those are, but it allows you to use the same framework in a scalable, flexible way, which is what we have

been doing. We are also working on improving those estimates using estimates for excess deaths, where we believe the deaths data is also under-ascertained.

Q196 **Navendu Mishra:** On the point about deaths, does your research cover underreporting of Covid deaths as well as cases, or does it just cover the cases?

Dr Russell: Version 1, which is the currently available version, just talks about under-ascertainment of cases using the reported deaths as assumed to be true. When we are working on under-ascertainment of deaths it is a bit more complicated. There is not the same central resource of data available for excess deaths. In fact, only a certain number of countries have such data available and that is the main approach we are taking at the moment. It is a much more difficult and piece-wise challenge that we are facing to estimate under-ascertainment of deaths, but we are working on it.

Q197 **Navendu Mishra:** Can you talk a bit about the factors that give rise to underreporting? You talked about barriers in some countries. The quality of data coming in from countries will vary, but what factors give rise to underreporting?

Dr Russell: It is an incredibly complicated question that is very variable between different countries, but testing capacity is a very large factor. If you are unable to test on high scales, you are bound to miss some cases. It depends whether you are talking about missing cases or missing infections, but there is a certain proportion of infections that do not show symptoms and, therefore, are very unlikely to seek a test and will never be recorded as a case.

The estimates for those proportions also vary between locations, but there are now living reviews that put estimates of asymptomatic infections within the region of 20% or 30%, and some say 40%. The estimates are very variable as well, so a living review has a massive range in that estimate. Testing capacity, overwhelmed healthcare systems and a big spectrum of severity of symptoms all contribute.

Q198 **Navendu Mishra:** What could be done to fill the gaps in reporting of cases? What does it mean and how much does it matter?

Dr Russell: It is incredibly important to get a handle on the number of cases. It is one of the most important estimates you have of how many people have the disease and how effective your interventions have been. There are relatively simple ways to get a handle on it. We have two kinds of tests. We have the antigen test or PCR test, and the antibody test. Using them in combination is a very wise way to get a good idea, because they both have limitations, but they can complement each other in ways that allow you to get a good idea of the true number of infections. If you have an estimate of the percentage of your population infected from the antibody test, a seroprevalence study for example, along with regular

testing, you can get a good idea of how accurate the two are and how they complement each other in that way.

In general, it is one of the most important ways, because a lot of other estimates depend on the accuracy of those estimates, for example the reproduction number. Most reproduction number estimates, at least in some way, depend on numbers of cases and/or deaths, so if those are incorrect you are fitting a statistical model to something slightly wrong and you will end up with reproduction numbers with large uncertainty or that are just incorrect.

Q199 **Navendu Mishra:** My last question is about Yemen. The Department for International Development took from the work by the London School of Hygiene and Tropical Medicine that there could be 1 million cases of Covid-19 in Yemen, as opposed to the 2,000 or so currently being reported by the World Health Organisation. Is this a fair statement, in your view?

Dr Russell: I would, if possible, pass over to Professor Francesco, because he is probably a lot more knowledgeable on that topic.

Professor Checchi: The figure of 1 million cases was taken from a standardised report that the London School prepared for every low and middle-income country, which basically saw us implement the very same model that, broadly speaking, we are using to forecast cases in the UK, but with adaptations for every country, such as taking into account, for example, age distribution. That 1 million figure refers to a forecast of what we would expect might have happened in Yemen in the absence of any controls, over the first three months since the known first introduction of cases.

Is that realistic or not? It is interesting you ask about Yemen, because it is really quite an interesting case study that we are working on quite a bit. It is one of the few countries, to my knowledge, where almost no prevention of Covid transmission has taken place, unfortunately, and the anecdotal reports we are getting from inside Yemen are pretty consistent that the epidemic has "passed". There was a peak in May and June across Yemen of cases and of hospitalisation facilities being overwhelmed, and that is no longer the case now.

We are currently analysing satellite imagery data, where we have looked at graveyards in the city of Aden in the south of Yemen. Even though I do not have the final results of that analysis, unfortunately, along the lines of what Azra and Tim were describing earlier, that points to considerable excess mortality with a peak in May in that city. It once again illustrates to some extent that, where you look for excess deaths as a key, very robust and very fundamental measure of what the epidemic is doing, you do tend to find excess mortality. The challenge is replicating that across many countries.

Navendu Mishra: It is quite unfortunate, what has happened in Yemen

with the humanitarian crisis. Thank you for that.

Q200 **Chair:** Professor Checchi, you said that in Yemen there has been almost no preventive intervention. Why do you think, with no intervention, things seemed to peak in May and why did it not just escalate and escalate?

Professor Checchi: A very simple explanation, and one that does not require revisiting any of our current model assumptions, is that quite simply the epidemic burned out. It is possible to imagine that it was introduced into Yemen earlier than initially recognised. Remember, this is probably among all countries on earth one of those with the smallest testing capacity, particularly in the north. Let us imagine that the virus was actually introduced in February as opposed to April, when it was first recognised. You could predict that essentially the epidemic took off, ran its course and has now reached a situation where, at least temporarily, the population has accrued some kind of herd immunity.

My colleagues and I are starting to look at other explanations for why epidemics are potentially peaking a bit earlier than expected in some of the low-income countries we are tracking. These range from the effect of age to some sort of role for pre-existing immunity, due to exposure to other infections, and a few other potential hypotheses. As my colleagues highlighted, it is not a straightforward analysis, because there are all these co-existing reasons that one could name for why we are not seeing the pattern we would expect. Some of those reasons are not necessarily to do with how humans interact with the virus.

I should mention another factor that perhaps Tim did not quite allude to, which is a very consistent pattern of stigma and reluctance by patients and communities, particularly in humanitarian crises, to come forward for treatment and testing. That has a lot to do with how humanitarian actors and Governments, to some extent, have communicated and engaged with communities.

Chair: Thank you, fascinating.

Q201 **Mrs Latham:** The coronavirus and Covid-19 are relatively new problems. This is probably directed at Professor Azra Ghani, but I do not mind if others feel they need to contribute. What lessons have you learned from previous diseases and infections like Ebola?

Professor Ghani: We have learned a lot about surveillance and the importance of acting early from Ebola, and that is not just us. That is the community and, indeed, the countries. The Ebola example is very informative when you look at the responses that Ebola-affected countries made. They responded very rapidly. They put in detailed contact tracing and various things that were early compared with many other countries in the world. They were very successful at that early control of transmission.

The difficulty has been that this is a global problem, so it is having a global impact. Borders are having to remain closed and the wider economic impact that it is having on these countries is tremendous. Therefore, they have struggled to keep a lot of this in place, partly because you are looking at this risk-benefit of putting some very severe interventions in place compared with the wider impact it is having on people's livelihoods and the economy. That has been particularly helpful.

I would mention one other thing in terms of working in lower-income settings and surveillance. We know from other diseases that surveillance is relatively weak. For example, I was looking back at the *World Malaria Report*. It is an area I work on closely. If we look at the reported deaths compared to the estimated deaths by WHO, we are often looking at a reporting rate of around 5%. This seems to be really akin to what we are seeing now.

The reason for this is that births are not registered in many places, so there is no registration system. Those births are not registered, so the deaths are not registered. If you take into account community practices, I know, for example, colleagues in Senegal are very aware that, if there is a death in a village, that person will be buried the next day. There will be no notification of that to the health system or the Government. This is just standard practice.

That has been happening and, therefore, we may well, as Francesco has said, have seen infection sweep through to quite high levels in many settings. That is something we really need to get a better handle on, because it influences the appropriate response going forward. If infection has already swept through and there is a degree of immunity in the population, it would be possible for those economies to open up a little more safely than we would think if they were still really quite naïve to this infection.

Q202 **Kate Osamor:** I just wanted to ask Professor Francesco a question. Is it fair to say that the coronavirus pandemic has not unfolded in the global south in the way that was expected?

Professor Checchi: With many provisos, perhaps we can broadly say that, yes. We are certainly observing a pattern that confounds us a little bit, certainly in the African continent, which is where I have worked most of my life. I use very cautious language, as you will appreciate. What is becoming reasonably well established in a few important case studies, for example in Kenya, is that in some countries the epidemic may be peaking earlier than our naïve models would predict. That requires us taking a step back and considering the factors that may explain that. That is relatively good news or very good news.

Has the epidemic been less severe or less lethal on a per capita basis? Azra already explained how that already to some extent would happen simply because of the younger population in some of these countries. If you go beyond that, I am still not quite sure that I can say with certainty

whether that is likely to be the case, because, where we look for excess deaths, I am afraid that so far we tend to find them.

There have been some good studies as well from Peru, for example, or other places that have looked in depth at excess mortality. My colleagues in Imperial have just published today a study of Damascus, Syria, which I would encourage you to read. It is really well done and really fascinating. It shows that the extent of underreporting in that city, with regard to deaths, is on the order of 1% to 2% basically.

There is a lot to be done, I am afraid. We need to keep an open mind as regards our starting assumptions, because what is at stake is pretty important. It is about these countries' situational awareness and it is not just knowing what has happened in the past. That is really important for recording, documentation and what have you for review, but it is also about where you are with your epidemic. As Azra was saying, is it the case that most of the population is already immune, at least for a while?

That has radical implications, because Kenya, for example, is still hesitating to send pupils back to school. That is a major decision. It is a major burden on families. It is a major constraint for childhood development. Are they really justified in doing that? That is something that perhaps groups such as ours and others can contribute to.

Kate Osamor: Thank you, Professor. I appreciate that it is a fast-moving situation and it is very difficult for you at this point to pinpoint whether it has unfolded in exactly the way you would think, considering that a lot of people are living in poverty and there are lots of factors involved. I thank you for your answer and I appreciate the work that you guys are doing.

Q203 **Chair:** Professor Checchi, could you describe the common wave that you are seeing? Are you seeing a timescale from start to finish that is becoming typical in these countries or is it totally random depending on which country you are looking at? I am particularly interested where you have areas of high population, for example in refugee camps. Are we seeing a different wave there?

Professor Checchi: I am going to defer to Azra and Tim. Let me perhaps add what I know. There are a number of countries that I have followed quite closely or that I know very well for family reasons. I am thinking of Tanzania, Sudan and Somalia, where most of the information points to a pretty rapid epidemic curve that occurred earlier than pretty much anyone has recognised. I am talking about sometime in March, April or at latest May. By rapid, I mean that essentially transmissibility appears to have been pretty high, but the epidemic may have peaked earlier than expected. I am speculating here a little.

Then you have interesting and rather tragic situations, such as the Rohingya refugee camps in Cox's Bazar, Bangladesh. I recently read a fantastic anthropological report that basically documents the extent to which the Rohingya community felt so threatened by the Covid response

that they essentially decided to not bring any of the patients forward, not report deaths and not even come forward for regular routine care. There has been a drop by 60% in common pneumonia presentations, for example, in the camps. Anecdotally, people say that there was a big peak in flu events in April and May, and not now, as one might have expected it to happen.

There are lots of individual instances like that, which illustrate in part the problems we have reconciling our initial modelling assumptions with what is happening, but also the potential role of human factors, stigma and reluctance to come forward, not because people do not want to seek care, but they are afraid because they have good reasons to feel that they cannot seek care. I wonder whether Azra or Tim has a better answer than mine. Sorry I have taken so long.

Q204 **Chair:** Professor Ghani, hearing what we have just heard, could it also be that, when we were predicting what would happen in the global south based on the data we had in April and May, we thought that was the beginning and extrapolated on from that, whereas it sounds as though that could have been the high point?

Professor Ghani: The picture is a little more complex. When we are talking about the global south, at the moment we seem to be focusing mostly on Africa, which is probably the exception, rather than the rule. We will all be very aware of what happened in Latin America. In Latin America and across the globe, actually, in the middle of March, as it was really taking off in Europe and there was clearly global media, nearly all countries went into some sort of partial or complete lockdown, in response to that global situation.

What that meant for Latin America, Africa and Asia was that lockdown happened early in relation to their epidemics and, therefore, appeared very successful initially. As that has been relaxed, in Latin America we have seen really rapid growth epidemics, not dissimilar to what we are seeing in Europe or North America. Similarly, in the Asian subcontinent, India and Pakistan also experienced quite severe epidemics. We are seeing that elsewhere in Asia in countries that have not managed to really contain the virus.

If anything, interestingly, Africa is slightly the outlier, but we did see a very similar pattern of epidemic in South Africa, and clearly there is better surveillance going on in South Africa. This is the puzzle, really. A lot of it may well be to do with surveillance. It may not be the whole picture. There may be other factors that have kept this one particular region more protected than others, but it is not just those simple patterns of a few weeks earlier or a few weeks later. The models were very flexible in how they fitted that.

We have been tracking every low and middle-income country, and in fact every country across the world, and updating our model fits daily. Those estimates suggest that transmission is a little slower, so the reproduction

number seems to be more around 2, rather up at the 2.5 or 3 level that we have seen in Europe. That may be related to contact patterns in more rural areas. We are not certain.

It is a moving picture. It is important to bear in mind that we are still at a very early stage of this global pandemic. We are seeing that in Europe now. Infections are coming back and we cannot be complacent in these countries unless we really, truly understand the epidemic that has happened and the existing immunity levels.

Q205 **Brendan Clarke-Smith:** You mentioned being at an early stage, Professor Ghani. At this early stage, what conclusions or indications can be drawn from your work that can maybe improve the effectiveness of interventions to prevent the spread of disease or reduce its impact in the event of infections?

Professor Ghani: The world is focused at the moment on non-pharmaceutical interventions. That is why we wait. We have new therapeutics coming through and hopefully a vaccine. Given the timescales with which those therapeutics and vaccines are being developed, it is imperative to try to keep transmission in all settings as low as possible, given that those should be available sometime hopefully in 2021.

We have learned that early action everywhere is better. The more you can keep transmission to a low level and act quickly, the better the outcome. We have seen a lot of countries in south-east Asia that have done well. I would single out Malaysia as a middle-income country that has very successfully contained the virus. Those settings that have done particularly well have strong local public health, surveillance and contact tracing in place.

The broader measures that have been applied in the higher-income countries of social distancing are challenging to do in each setting. While we can generate generalisations of what might work, when it comes down to it, it is very local and context-specific. Therefore, countries are having to work through this and work out different combinations of intervention they can put in place to best manage this as they can.

Professor Checchi: First and foremost, I would reiterate that, unless situational awareness of the progression of the epidemic improves, deciding on the appropriate response strategy from here on will be necessarily a very fraught exercise. From the very start, a few colleagues and I have suggested that the appropriate response strategy for low-income countries probably should heavily consider the harms of lockdowns and extended constraints on society and the economy.

The recommendation we have consistently given is yes to lockdown, as long as the time that is thereby gained is used purposefully to prepare for the next phase. Beyond lockdowns, when societies find they have to reopen in order not to essentially encounter a negative harm-benefit ratio

overall, in terms of the balance of harms and benefits from non-pharmaceutical interventions, we have advocated trying to distance as much as possible, going along with what Azra was saying, to an extent that is not incredibly harmful for economies. We have also looked a lot at the shielding approach, where you very strictly try to isolate vulnerable populations. We have done a lot of work on that.

It is very important that Governments communicate extremely effectively, openly and transparently with their communities, which is another lesson from Ebola, so that, to some extent, people understand what the overall strategy actually is, whatever it may be.

Dr Russell: I would reiterate what Francesco just said. Situational awareness is key. It was clear from the beginning of the outbreak in Europe that the way in which we were able to estimate the effectiveness of the interventions relied on having good enough data that we could run many different models many times and estimate the reduction in the reproduction number, for example.

It has been very difficult to do that with accuracy elsewhere, so it is much more difficult to estimate the effectiveness of such interventions. We need to be able to estimate those in a very complicated way, because each one has a very difficult-to-estimate effect on the overall epidemic in the country. Closing schools, lockdown and shielding all have very complicated effects on the overall epidemic. Without situational awareness, estimating those things becomes very difficult.

Chair: Thank you to the first panel. That has been absolutely fascinating. You have given us a lot of information, which we need to digest, but I appreciate you being so open and candid. I really appreciate the work that you are doing.

Examination of witnesses

Witnesses: Linh Schroeder, Selena Victor and Kate White.

Q206 **Chair:** We have Linh Schroeder, Selena Victor and Kate White, all of whom are from humanitarian organisations. Would you like to introduce yourselves and your organisations?

Linh Schroeder: My name is Linh Schroeder. I am the deputy director for the Africa region of the International Committee of the Red Cross. Thank you for having us today.

Selena Victor: Hello, I am Selena Victor, senior director for policy and advocacy for Mercy Corps based in London. It is good to see you all.

Kate White: Thank you for having me. I am Kate White, medical emergency manager, and for the last six months I have been the Covid-19 medical technical lead for Médecins Sans Frontières.

Q207 **Mr Bacon:** Could I ask each of the witnesses to say how their experience of dealing with the pandemic has differed from the expectations they had at the beginning of the crisis earlier this year?

Linh Schroeder: I am going to focus on our work and our experience in Africa. As already reported widely but also in the first session, Covid has certainly not spread out as quickly and as much, and was not as deadly, in Africa as elsewhere. That said, the number of cases continues to grow and the virus is reaching new areas.

The threat is still real for Africa and Africans. It will have devastating effects if it takes hold on areas affected by armed conflict and violence, and where those threats overlap with persisting environmental, health and economic crisis issues. For us, the past months have shown that Covid is just an increasing layer to the devastation caused by conflict that we have witnessed so far. As an example, in Libya and northern Mozambique, we have recently seen increased attacks and escalation of conflict between armed groups and national forces. There has been forced displacement of hundreds of thousands of people into Pemba, which is already overcrowded and is a hotspot for Covid.

Selena Victor: I would certainly second all of that. Throughout the crisis, we have been conducting analysis in each of the 40 countries where we work, so we have quite clear data on all of this. I am afraid we have seen exactly what we expected, so majorly deteriorating food and economic security, particularly for vulnerable groups and in fragile and conflict-affected states.

It is particularly the case for the most vulnerable and those least able to access support, so, hardly surprisingly, the informal sector and microenterprises, which are dominated by women, young people, displaced people and people who are vulnerable for other reasons, so we have that compounding effect. They are also less likely to be able to access any kind of Government assistance, social safety nets or social capital in order to recover.

We have seen employment rates go down in 70% of our countries each month. It has levelled off in August, but let us be clear that it has levelled off in a terrible state and we are now seeing lockdowns. Throughout August, the lockdowns were somewhat easing. They are now recurring. As cases begin to spike, exactly as we are seeing in Europe, the lockdowns happen again and people have now lost all their coping mechanisms. There are no savings. They do not have the backup that they had, so we can only predict that it will worsen.

Following on from the point made by Linh, in terms of those indicators of social cohesion and the drivers of violence in conflict, we measure five areas: intergroup tensions; state-society relations and trust; misinformation and disinformation; the actions of armed groups; and economic scarcity and resource competition. Every single one of those indicators is increasing consistently across the countries where we work.

Meanwhile, the response is getting more difficult, because we have fewer funds available, more constraints, linked to the pandemic and otherwise, and reducing humanitarian access. Even though all humanitarian organisations across the board have done an incredible job to innovate, pivot, find new ways of working, adapt, work on a shoestring and do whatever they need to do, it is getting more and more difficult to respond to those growing needs.

Mr Bacon: Kate White from MSF, what is your view?

Kate White: It is not so dissimilar from my two colleagues. Indeed, our surge capacity has been extremely limited, due to the inability to move staff, not only international staff into countries, but staff within countries, to go to the places of most need. The public health measures have given challenges in terms of not only us accessing populations, but populations accessing health facilities. On top of that are issues such as stigma, which Francesco Checchi has already mentioned.

There are massive problems in terms of global shortages of supplies, particularly around personal protective equipment. It was almost a fight to get enough to carry on our regular activities, let alone look at responding to the pandemic itself in many of the countries we work in.

On top of the many challenges that the other two witnesses have mentioned, there are issues for companies that are integral in producing products for other high disease burdens, such as malaria, in the countries where we operate in pivoting their products to engage in what has become a surge in Covid-19 products. For example, Abbott has ceased to manufacture its malaria rapid diagnostic test and has pivoted to trying to manufacture a Covid-19 rapid diagnostic test, which has a massive impact on the malaria burden in some of the countries we work in, so very similar to the other two.

Q208 **Mrs Latham:** We have talked a little about the fact that the coronavirus has not unfolded in the global south in the way that was predicted. Do any of you have any idea why that might be the case? We had expected a devastating impact on the global south, but it does not seem to have happened. Why?

Linh Schroeder: I will speak very briefly, because it would be a guesstimate, but what concerns ICRC most is the very weak state of healthcare structures that are not able to test, but even to provide basic healthcare. Kate has mentioned the different diseases. To give a comparison with the Ebola outbreak as a pointer, more people died from complications of childbirth and malaria than died of the Ebola virus itself, and this is in a constrained area. With regard to Covid, we also look at that, knowing that in Mali 20% of healthcare facilities have been shut down; 93% have been completely destroyed in the north. This is also a reality that influences and affects the healthcare of people in those areas.

Kate White: This builds quite nicely on what Linh said. First, as a preface, this is the third outbreak in a row that I have been working on with MSF. If we look at the history of outbreaks, we seem to be unable to learn that you cannot focus solely on the disease itself that is presenting, because the majority of the time it will not be the sole or the main priority in terms of health of the populations you are working in.

We learned this during the diphtheria outbreaks in 2017. We learned this during multiple Ebola outbreaks and now we have a global pandemic, where in the majority of the countries in the global south other disease burdens are actually killing the most people and have the greatest impact on those populations. Yet the way we balance what is happening with the other health priorities adversely impacts this population, in terms of mortality, morbidity and their overall health and wellbeing, in a way that is extremely devastating in some areas.

I am going to turn your question a bit, in saying that it should not be about how Covid-19 has not rolled out in the way we expected, but what has been the adverse impact on maternal mortality and women being able to access delivery services? What has been the impact on the malaria burden in countries, where people cannot seek treatment and many health actors and other actors have stopped their malaria prevention activities? What has been the burden on under-fives and their ability to access services in relation to respiratory tract diseases?

The impact in the next six to 12 months in terms of vaccine preventable diseases, because so many places stopped their supplementary immunisation activities, is going to be extreme. We have already seen massive measles outbreaks in the last year in Central African Republic and DRC. We will see that in more and more places in the next year or two, so it is really important that we do not see Covid-19 in isolation from all the other health burdens in the humanitarian sector.

Selena Victor: I know you have had three expert epidemiologists, so I will not speak over them, but I was just looking at my data. South Africa is still registering 60% of the confirmed cases in Africa. It is not an accident that they have good systems, monitoring systems and capacity for testing. Certainly, our field teams are saying there just is not testing. Nobody is testing. No one is checking it. They are much more concerned about not being able to earn enough money to eat, so that is what people are focusing on.

Q209 **Mrs Latham:** If we look at confined populations, such as the Rohingya in Cox's Bazar, would you say that the coronavirus has behaved as expected in such confined spaces?

Selena Victor: I pass to the medical agencies for that one.

Kate White: In terms of what we know now, a lot of which is in retrospect, Francesco Checchi hinted at it. Indeed, it is a fantastic anthropological paper on how it seems that the epidemic peaked there

earlier and the population was hiding any form of respiratory illness from the rest of the camp's authorities and healthcare workers. We will never truly know, unless we do some form of seroprevalence study, that it has behaved in the way we expected, but it is not unlikely. It is an extremely densely populated area with poor water sanitation and hygiene, and a host population that has been marginalised and is now encroached upon through the refugee camp.

It is really important that, in places like these, we continue to support the refugee population, and I will probably link this to Linh, but particularly around protection. There are a lot of protection issues at that camp. There have been since long before the influx in 2017. I was on the ground in 2017 and saw the issues particularly faced by young women and girls. We see Governments like the Bangladeshi Government not wanting to acknowledge the protection issues that exist. It is important that we make sure those services do not get dropped in order to respond to other issues surrounding the pandemic.

Linh Schroeder: Definitely, there are protection issues in general, not only in IDP camps and places where you have marginalised populations, but we see a worrying increase of violent actions, whether it is abuse or excessive use of force by security forces in response to or to force implementation of confinement measures. The number of arrests is also increasing. As was repeatedly pointed out, the stigmatisation of patients and their families, but also of healthcare workers, is everywhere.

With regard to closed spaces, I will make a little detour on places of detention, where ICRC works quite a lot. In Africa, we have been engaging over the long term with detaining authorities, which allowed us to work in more than 400 places of detention to develop standard operating procedures to prevent outbreaks, in addition to providing hygiene and cleaning items and PPE to the detainees and prison staff. They are also closed spaces and we hope the preventive measures were constructive and allowed them to contain the spread of the diseases within the penitentiary system, but also possibly as a public health issue when it comes out, with families and prison staff being affected. There is in that regard a link to not only the disease itself, but the fact that it has multiple layers to take into account.

Q210 **Mrs Latham:** You have mentioned Ebola and other diseases. Do you think that is one of the reasons why there have been relatively few cases in many places, because they have learned lessons from things such as Ebola? Do you believe developing countries have learned any lessons at all from more developed countries, such as in Europe? Has that affected the way they have handled the cases in their country?

Linh Schroeder: With regard to Ebola, as was mentioned already, a lot of lessons were learned about preventive measures and acting very rapidly. Communication with communities certainly can be improved, but there is a lot of effort in there. With Covid, African institutions such as the Africa CDC have engaged and started very early on to engage with all

their member states, including with organisations such as ICRC. We held, for example, webinars to address Covid issues in places of detention.

Selena Victor: I was thinking about it more from a non-medical perspective. There has been a certain instinct to apply the same processes that we have been able to apply in Europe, which is very difficult in some of these economies. It might be fine for those who are connected to the formal sector and to social safety nets, but we saw the riots in Nairobi. "We would rather die of Covid than starvation". You cannot apply lockdown in the same way.

It has been interesting, in that in some ways it has led to innovation in the aid response. People are completely accepting of the idea that you need to get cash to people, shore up the economy and build those safety nets, because otherwise whole communities and even whole countries could drop into that poverty trap with conflict and with economies breaking down. There has been some learning about getting in quick and investing: "We will do whatever it takes". But there has not been the money or the speed to actually deliver on it. The principles are there, but I am not sure we have actually been able to do it.

Kate White: I am going to agree in the main part, but slightly disagree. There are a number of things that, indeed, we have learned. There are a couple of issues around the principles that we continue to make mistakes on. One is true community engagement. There are many things that communities themselves can do to protect individuals, families and the wider community. In the effort to be fast with responses, Governments have a tendency to want to put measures in place without enough consultation and communication. We see that fail many times. It is also about the flexibility of responses when something is not working and learning how to pivot it, so that it can.

Leading into what Selena was saying, at many points I saw things being pushed that worked in more-resourced countries but, for a number of reasons, are not going to work for communities in low and middle-income countries. Shielding is a good idea in principle. We discovered, as we explored this option in many of the places we work in, that there are not the social supports to ensure that the people who are shielding have everything they need to continue with their lives and that it does not put them at greater risk for what is an already vulnerable population.

Q211 **Kate Osamor:** I have a question and I want to start with Kate White. What do you think the key secondary impacts have been from the pandemic and from the measures taken to stop it spreading so far?

Kate White: The first big key impact for me, due in large part to stigma around the disease and the potential impact for an individual if they are considered a suspect, is a lack of willingness to access formal health facilities. If you couple that with a general focus on formal health systems, we need to move past that in terms of engaging an effective

response, particularly in many of the countries where we work, so that informal health actors are included in the response.

Selena Victor: Our real focus is on individual and community resilience, in the real sense of the word—so food security, some kind of economic security and some kind of coping mechanism. Even if people manage to ride out lockdown or a health crisis in their family, wait until you get the next flood. People have been weakened so much. Because it is global, they have also lost the social networks that they rely on. It is not like they can call their cousin. Remittances have shrunk. That is the biggest fear for us.

Linh Schroeder: I totally agree with both speakers, but of most concern to ICRC are definitely the multi-layered fragilities that Covid brings, which add to existing ones. We are talking about structures in countries that are at half of their capacity. Access is not only about stigmatisation, but simply because they do not exist any more, so people cannot go. It means that in those places people have no choice, but resources are not effective to respond to those other needs, which continue and are adding to each other.

Q212 **Kate Osamor:** From what you have said, do you think that developing countries generally took mitigating measures at the right time and tend to have eased them appropriately or too early?

Selena Victor: It is hugely varied by region, by country and even by area within country. Asia has been reasonably measured and data-driven. In the countries where we work, it is not extensive. The Middle East has tended to be quite severe and we are already seeing new rounds of lockdown coming through, but then there is more of a tradition of curfews and control measures around these things. It has been massively varied from country to country, unfortunately.

Q213 **Chair:** Selena, with the two examples you gave, what has the response been to the spread of the pandemic with those countries' measures towards it?

Selena Victor: The response of the population or the original response of the Government?

Chair: How did the Government's response impact on the spread of the disease?

Selena Victor: That I do not know, because I am afraid I am not an epidemiologist. I do know that opening up has been somewhat data-driven. It has been a reaction to the slowing of the spread of the disease, so it is linked somewhat to the science, but I am not an expert on the impact, unfortunately.

Kate White: To touch on the impact on the spread, there are two issues. In order to define which measures are going to work at the right time, like all the epidemiologists said, you need to have a really robust

surveillance system. The majority of these countries do not have a really robust surveillance system. They have varying levels of surveillance. In some of the countries where it looked like the public health measures in terms of control were really working, but for whatever reason they released them, we now start to see a surge of cases. That in large part is perhaps due to the assumptions that were made around the surveillance they had in place.

For example, in Zaatari in Jordan, we are now starting to see an upsurge in cases again. It was a big time lag from previous cases, which were at a very low level, to now, where we are seeing a spike. We are seeing that in other places, such as Myanmar, which had fantastic control for a significant time and now we are seeing a surge in cases. So much is dependent upon testing and surveillance capacity. The brutal honesty of it is that low to middle-income countries do not have the financing ability to get the reagents or the cartridges they need to increase their testing capacity. Then the surveillance systems need to continue to be strengthened, even if they already have managed to do those over the last few years, in terms of lessons learned from other outbreaks.

Linh Schroeder: In terms of the variety of responses even on a continent like Africa, so not talking about the global scene, the political and security situation has a very direct influence in those countries. We see also that decision-making processes are not as easy in some places, so implementation of whatever confinement measures would be adopted is not the same everywhere when they are adopted. We cannot stress enough how it is still very early to see the real secondary impacts of those measures, coming back to the points that have been made already on the informal sectors, the lack of safety nets and so forth. That is touching huge parts of populations that are already under immense stress from other factors.

Selena Victor: I just want to add a point that we have not touched on, about the protection issues for women and girls. I do not know if this is the moment to raise it, but the gendered nature of these impacts is entirely predictable and really clear. We are seeing a rise in sexual and gender-based violence in the UK; we are certainly seeing it in the places where we work. Girls who are kept out of school are far less likely to go back than boys are. We have seen that from other epidemics. We are seeing women bear the brunt of household food insecurity and of having to take up the negative coping mechanisms. It is entirely predictable, but it is important that we keep raising it.

Q214 **Mr Sharma:** What are the current key priorities for humanitarian relief and support while the pandemic and anti-pandemic measures continue to have grave impacts? I am not going to choose who should be first. You choose among yourselves. Who wanted to go first?

Selena Victor: I am happy to take a first stab. For us, there is the humanitarian impact and then there is the context in which it is framed. We are working on the immediate response of helping people get through

the lockdown, the control measures and anything that folds out from it, so that will be breaking down food supply chains, breaking down local markets and rising conflict. That is what we are trying to respond to. It is similar to a lot of the work we have done before. The UK has been a leader in cash-based responses, and that is excellent in a lot of the places where we are working, but, if the informal markets collapse and the supply chains collapse, it is no good giving people cash. We also have to try to support the informal economy and those most vulnerable at the bottom end of those economies.

That will be absolutely vital to the supply chain, but we have to do it in a way that also looks at how this is going to play out into conflict, because it is exacerbating inequalities and reconfirming governance issues and that mistrust in Government. We need to not shift money away from those efforts to improve governance, to engage communities in the process and to address that. We know how to do that, but right now everybody is focused on the hard end and we need to make sure we keep that.

Kate White: I will try to be very quick, because Selena hit it on the head. On top of Covid-19, we see other things coming in terms of the humanitarian sector. There is the issue with the locust plague and food insecurity, particularly in certain regimes, and how that might impact. I will just drive home the point that, while this particular aspect does not necessarily impact on MSF because of our independent funding, in terms of ensuring funding of the humanitarian sector as a whole outside of Covid-19, we already see many actors leaving areas because of these issues. It is vitally important that all those actors are still able to address the humanitarian needs of these populations, because the rest of the issues have not gone away and the pandemic, as Selena said, is only highlighting the pre-existing gaps in the system.

Q215 **Mr Sharma:** In your experience, what positive and negative effects have arisen in your work in developing countries from the fact that this crisis is affecting the entire world?

Selena Victor: To me, there are two. One is incredible solidarity. It is so much easier for people to understand what the communities we work with are experiencing because on some level they are experiencing it themselves. In terms of the donations we are getting to our funds for that kind of work, I feel it has not led to a closing down in the public mind: "I have to look after myself. Charity begins at home". It has led to solidarity and a sense of this is a global problem and we have to fight it.

The other big shift is the shift in power away from the big western NGO headquarters people and the expats to the local responders, be they civil society, Government or communities, who have to be the front line because we have not been able to get there. We have not been able to travel. It could finally get us over that hump to where we properly localise humanitarian response.

Linh Schroeder: Building on that, ICRC has remained in those places where we work, in over 26 delegations in Africa, for example, but our work operations were impacted. The Red Cross and the Red Cross movement network, with 49 African national societies, are our natural partners. They are definitely the front-line responders to that. working with the Red Cross movement, but also their Governments. They have developed a lot of their response plans.

We have also seen greater solidarity, indeed, within the humanitarian world and within the Red Cross movement. We saw that we had to respond very quickly to this crisis that touches everybody. We are also looking to complement each other as much as possible. ICRC is focusing mainly on areas that are very hard to reach and populations that are off the grid, because they are living in areas affected by conflict, but also under the control of non-state armed groups, whereas we have other actors who work elsewhere. For us, there is still a lot to do and we would welcome much support and other actors, if possible.

Kate White: One of the positives, narrowing down on the solidarity aspect, is definitely the solidarity and transparency of the scientific community, in terms of building an evidence base as to how we can combat Covid-19. Together with that, a negative I am seeing more and more is around vaccine development, as we are seeing that come to fruition. The response of Governments around the globe to access that stock, and what it may mean for the ability of low to middle-income countries to access a vaccine, when it becomes available, for their vulnerable populations, concerns me. It is a potential negative that has not actually materialised yet.

Q216 **Navendu Mishra:** First of all, Kate White from MSF, I want to talk a bit about the vaccine that is being developed. Have your concerns about the availability of the vaccines being developed to the poorest countries, communities and individuals been assuaged by the various initiatives, such as CEPI work?

Kate White: We have a branch of MSF called the Access Campaign, which together with a few other people in MSF is engaged with CEPI, Gavi, the WHO ACT accelerator and a number of different mechanisms for this. It is quite a complex field but, despite continued big statements over what will happen once the vaccine is at the point of large-scale manufacture, we do not actually have a tangible mechanism for who is going to take the decision as to how it is distributed. We know the mechanism for how countries will put in their order as to the numbers they want, but who decides who gets what and at what point in time is very unclear. Who is influencing that?

The second part is how we then ensure appropriate rollout. I do not know how technical you want to get, but if we look, for example, at the Ebola vaccine, the logistical capacity required to roll it out on ground was quite significant. We need to make sure that there are enough actors on ground, between Ministries of Health and other health actors, that this

can happen for populations in a timely manner. That is really important, particularly when you look at the struggle that routine EPI programmes have in rolling out vaccinations. If you add this on top, it needs some pragmatism and some reality in terms of how that happens.

Navendu Mishra: Your concerns are noted and thanks for the detail.

Chair: We do like detail.

Q217 **Brendan Clarke-Smith:** Given that technically the pandemic was cited as a driver for the merger of DFID and the FCO, have you experienced any change working with Her Majesty's Government arising from that merger now it is complete, whether that is a positive or negative change?

Linh Schroeder: For us, it is way too early to be able to comment on the impact of the merger you mentioned, but in general, anyway, ICRC is very grateful to the UK Government, including DFID, for their continued support to ICRC operations worldwide, particularly in Africa, knowing that the UK has contributed already to ICRC global operations in 2020 of almost 200 million Swiss francs, and it is not only the UK. Unfortunately, ICRC operations in Africa are still very underfunded. It is our ability to respond not only to Covid, but to the impacts of other crises and conflicts, layered with other epidemics, climate shocks and so on.

Brendan Clarke-Smith: Kate, what has your experience been so far or, again, is it too early to say?

Kate White: It is important to note that MSF gets independent funding, so we receive no funds from DFID, but one of the things we are looking for in the future is to make sure that humanitarian programmes are addressed through need and that, with the merger between DFID and the FCO, it does not become driven through political desires rather than actual humanitarian needs on the ground.

Selena Victor: We are in the not-so-privileged position of being quite heavily reliant on UK Government money. Humanitarian organisations have raised a lot of concerns about the implications of the merger. Our worst fears are that humanitarian outcomes, need, humanitarian principles and the long-term sustainable development goals, which are in all our interests, would be subsumed under short-term security or British economic interests. The opportunity is that we could finally have an incredible joined-up Government strategy that brings together diplomacy behind those long-term outcomes.

The food security announcement is really exciting. That is a great first move. It is something that we really welcome. Appointing an envoy is a great step, because the diplomatic and political barriers are far greater than the financial or physical barriers to meeting these needs. If we can continue in that vein, it is good news.

It is also a major piece of work that needs to get done. We are looking at this departmental strategy and design. That is going to take six months,

so there is a huge time problem, capacity problem and confusion. We are concerned about that, but, if it plays out to achieve its potential, maybe it is a good thing.

Q218 **Chair:** Over the summer, there were cuts on existing DFID-funded projects. Selena and Linh, were you impacted by any of those cuts, cancellations or postponements of funding or have you seen the impact elsewhere?

Selena Victor: A couple, but relatively few, due to the nature of the work we do. We are in fragile and conflict-affected states and are doing a lot of Covid response and humanitarian work, which remain clear and urgent priorities. We have seen some cuts, but we are also going to see those longer-term programmes and the sorts of things that, when everybody stops focusing on Covid, are needed to help move societies away from falling back into humanitarian aid. That is where the cuts are going to fall, unfortunately. They are also falling somewhat disproportionately on direct funding to NGOs and civil society. As we move more and more to big cheques to the UN and to the Red Cross, of which I thoroughly approve, making sure that we are maintaining that civil society, international and national, is going to be really important.

Chair: I agree. Linh, is there anything from the Red Cross?

Linh Schroeder: We already feel the bite of those measures and cuts, but also delays in deciding on funding allocations, from different donors. Without timely, high-quality and—as ICRC is requesting and as Kate mentioned—needs-based funding, which means as little earmarked as possible in order to respond to what is developing on the ground, it is very difficult for us to have an adequate response.

Already at headquarters, we are looking at cost-cutting measures, starting now, which will of course affect our operations. At the same time, we are looking at being as efficient as possible, so that is also an opportunity, and we have also seen that by collaborating with others to do as much as possible. But there is only so far we can go with those cost-cutting measures and collaboration. Partnership takes time to develop and fortify.

Q219 **Chair:** Selena, I was interested that you said you had not noticed people being less generous and, because it was a global thing, they had more of an understanding. In terms of your bottom line from private donors and private individuals, have you seen any drop-off or has it maintained? Could I ask that of the rest of the panel as well, please?

Selena Victor: We do not have very significant private fundraising in Europe, because we have only been here a decade, if that, and we are not very well known, but we launched the resilience fund globally and had an incredible reaction. We raised more than we have ever raised through a private fundraising effort. Be aware that that is still relatively small because of who we are. We are seeing it, because our overheads are met

when we spend money in the field, so, yes, we are absolutely feeling the bite on the bottom line. In terms of generosity of the public, we have not seen any drop-off. MSF would feel it more sharply, I think.

Kate White: That is a nice link to me. It is a little difficult to tell at this point in time, given the number of countries we get funds from and how it is reported in the system. We have seen a slight decrease in some countries. However, in other countries we have also seen an increase in funding a little bit. It will probably average out to be relatively the same, if not a fraction less, but nothing of massive difference in terms of private funding.

Chair: That is a real blessing and I am very glad to hear it. I hope it continues. As the economic impacts start biting, it is going to be quite a dark place globally going forward, so I hope we continue to all work together on that.

Thank you very much to the second panel and to the Committee for your questions. It has been an absolutely fascinating session. It is safe to say that the Covid-19 pandemic is not responding as we expect it to. It was very interesting to me when we had the epidemiologists in the first session talking about patterns emerging, the spreads and the number of deaths. When they seemed to get an understanding of it, in a different country it was very different. They cited the differences between Latin America and the Asian subcontinent, and the stark difference with what is happening in Africa, but they do not know quite why, whether that is just a lag in data or whether there are other factors they have not factored in.

Hearing from all of you, what resonated most with me was talking about the countries you are working in and how any capacity that they had to fight against disasters has now been used up, as indeed your humanitarian organisations are running pretty much on empty. We heard loud and clear in the Committee your fear of the next big thing that comes, whether that is famine, floods or another disease. I was also interested in the last bit where we spoke about the vaccine and the distribution of that, both in terms of who gets it in the world, but also physically how that is rolled out.

There is an awful lot of information that you have given us. We are looking to have our report on this out by the end of the month and then we will do a second report, which is looking very much at how the NGO response and the development and humanitarian response has helped or hindered containing this disease going forwards. Thank you all very much again.