

Emmanuel Baron: “The Covid-19 epidemic is an extremely harsh reminder of the inequalities in health”

Are there any lessons to be learned from the way the response to the Covid-19 pandemic is being managed in Europe? What tools can our field teams rely on? For Epicentre’s general director, Emmanuel Baron, the Covid-19 epidemic questions the way medicine has developed in the North and in the South, as much as it forces us to find emergency solutions.

In your mind what characterizes an epidemic like Covid-19?

First off, we at MSF and Epicentre in our activities are seldom faced with an epidemic that affects us in our daily lives in Paris as much as they do in the field. Right at the start of this interview I and the Epicentre teams would like to send our warmest thoughts to all of our co-workers who have now been affected by the disease.

One of the most telling characteristics of Covid-19 is the time patients spend in resuscitation for the most serious cases, about two weeks. The epidemic is mobilizing a lot of hospital staff, materials and beds. All that congests our health systems, and from that point of view I don’t see how things can improve in France in less than two months.

Another critical point in this outbreak is the lack of information and quantified, precise data. These gaps considerably limit the range of our thinking about possible actions in the countries where we’re working. Because although we have the experiences described by our colleagues treating patients, we are still very ignorant about certain elements. For example what do we know about the coronavirus’ impact on HIV-positive patients? That is probably part of the information gathered in the countries located at the heart of the epidemic, but we are having a hard time understanding it today.

Regarding associated pathologies, we can also wonder if the element of age is the only determining factor in the severity of Covid-19 cases. We know that younger people develop the serious forms of the disease less often, but what does “young” mean? There are a lot of places in Africa where co-morbidities of people aged between 40 and 45 have not been screened. And when they are, they are not necessarily properly treated by the treatments available. These people certainly constitute a fragile population although relatively “young” according to our criteria. This is a decisive point because it is probably a priority population to which we should turn our information, screening and medical-care efforts. So we can hope that young people may be spared from the worst effects of Covid-19 on the condition that we take it for what it is, just a hope.

Another issue is the lack of understanding of the disease’s clinical evolution. When and according to what criteria should we fear that a patient’s condition is getting worse? That will have an importance when we have to monitor patients who initially present with mild symptoms.

These questions are more part of an observation than a criticism levelled at European and Asian clinicians and epidemiologists. I gauge the difficulty of getting this information in nearly real time all the more in that we in the field are sometimes rather ignorant of our patients’ stories, their profiles, their social and medical itineraries.

And lastly, this epidemic is an extremely harsh reminder of the inequalities in health. Again, we realize the extent to which the advances in medicine and care techniques have different realities in the North and the South. This observation should, in passing, lead us to reflect on the notion of access to care when in Africa we see from this epidemic that the problem is less one of patents than the lack of oxygen or skills.

Lifting isolation: a critical moment

“A large part of the population remains very “naive” about isolation because some people have not had much contact with the virus. This is true, for example, for those living in western France. And if so many Parisians recently fled to Brittany, it was to self-isolate. So it is not certain that there the virus will spread (another common misconception but plausible that remains to be proved). But what will happen when millions of people are once again allowed to move about freely and they mix with a more naive population than them? Several parameters will dictate the date for lifting the confinement, e.g. the level of social acceptance of the confinement, the availability of diagnostic resources, the availability of an effective treatment, the evolution of the epidemic curve, especially the number of cases admitted to hospital and modeling projections of the epidemic’s spatial and temporal dynamics, and so forth. This means a very serious political decision that will be hard to implement and still require a minimum of social acceptance.”

Based on the present situation and the public discussions it causes, especially in Europe, are there any elements we might use to orient our field operations?

Generally speaking we cannot rely on very solid information to design our operational methods of tomorrow. For example, in France we have no official data about the risk factors or for determining Covid-19’s fatality ratio in hospital. The timeframes for announcing cases and deaths are very random. The cases are only those confirmed, and the deaths – recently admitted by the General Director of Health – are only part – “a small part”, he added – of the reality. In other words the picture is vague. Now, we know from experience that not centralizing information or investing in the required resources deprives us of absolutely crucial indicators. When I hear the questions about the policies applied by the South Koreans, the British, the Spanish, the Swedish, the Italians and the Germans, I say to myself that to clarify the differences, we have to have a minimum of solid, unified and available information. But there isn’t any, or very little. How, for example, do you explain the discrepancy between the number of deaths recorded in Germany and France? Is the cause of death sought the same way everywhere? Does it make sense to calculate and [compare death rates](#) when the testing policies are or have been so different? Especially as not one of us can say for sure that we have had a bout of Covid-19. On the Diamond Princess cruise ship it was estimated that 18% of the positive cases were asymptomatic. Today we don’t know much more, and when experts are publicly questioned, they are unable to answer a lot of these questions.

Without further delay MSF is moving forward on the “pillars” of the response dictated by what we already know of the disease’s epidemiology. There is no need of evidence in order to treat patients who have no oxygen, to provide water and soap, to protect the care-giving teams and other players in fighting Covid-19 and to treat other causes of morbidity. As for defining a screening policy and isolating suspected (and, if possible, confirmed) cases, it’s a matter of knowing what to do in practical terms to be effective while remaining realistic.

Might the isolation policy widely applied in Europe be an effective answer to the epidemic’s spread in Africa?

Europeans are not the only ones applying this policy. Even India is at it! First of all the goal is to alleviate the load on our resuscitation services. But how can we think about isolation [about lifting isolation, see the box on the previous page] when we haven’t even got the capacity to treat? Of course isolation is a way to break the transmission chain and reduce the number of cases. But the abandoned experiment last week in the DRC (because of social

tensions) shows that it will not be easy everywhere. Confining families in certain places might also quickly lead to creating sizeable clusters.

The other ways of responding also represent a major challenge. We will need masks in astronomical numbers. The demand is now worldwide and is causing a logjam, which means that other production possibilities must be explored. We also know that we'll have to have massive amounts of intensive care that is not available in the field. For example, they only have 50 respirators in Uganda and no more than 10 resuscitators in Yaoundé, Cameroon. There are, of course, measures that have been learned over time in the face of epidemics, healthy reactions shaped by the experience of African governments, for example, but based on the condition that they are not themselves affected. And when we see that five ministers have now caught Covid-19 in Burkina Faso, it's a matter for concern. The international demand for new rapid diagnostic tests will also soar as soon as they are approved by the regulatory authorities.

In these conditions what are the possible options for the most deprived health systems in fighting Covid-19?

Beyond the blocking measures of prevention (remember the importance of water and soap) and protecting care providers (an absolute imperative), the ideal would be to use tests so as to isolate the sick. Without rapid tests, this is an illusion. For sure the general director of the WHO has pleaded with countries to do as many tests as possible, but you've got to have the resources and know who to target. To date the capacity to diagnose the presence of the virus (by a sophisticated method, the PCR) on a large scale is limited in most of the countries where we work. If we only test those patients with symptoms (and there too we must define what is a symptomatic patient), we can then think of confining them to home. But not only does that seem difficult in numerous contexts, we risk being overwhelmed by cases with few symptoms. And this is where the wave-effect comes in, a lot of people carry the virus and spread it around without even knowing they have it.

Moreover that is likely to be what happened in France with a percentage that hasn't been properly determined. We could find ourselves with hot-spots flaring up everywhere and completely overwhelming our diagnostic capacities.

For all these reasons one solution might be to make a treatment available in the areas where we work. When we haven't got resuscitation possibilities, we absolutely need a treatment that could work before a patient's condition becomes too serious. So we very rapidly have to test what might prove to be effective, although no single molecule dominates the debate today.

Is there any hope of finding a treatment in a reasonable timeframe?

Nothing can erase the tragedies already experienced and which we will probably experience some more. But we have to stress that the situation would have been worse ten, twenty or thirty years ago. Timeframes today are very short. For example, it only took a few weeks after discovering the virus in humans to discovering the genome thanks to extremely sophisticated methods and developing a PCR diagnostic test. Vaccine research has also shot off the blocks and is accelerating amazingly. In both cases there seems today to be an alignment between political will, public priorities, the work by scientific teams and, let's hope, industrial capacity.

However, the scenario for treatments isn't the same. There are a few leads, but some of them are probably out of reach for the countries we work in. [Remdesivir](#), for example, is a potentially interesting antiviral, but I just can't see how – if it works, that is – it can be used

on a large scale because of the constraints imposed by its use (by drip) and its unavailability (at present it cannot even be given on compassionate grounds in the United States). As for hydroxychloroquine there are some serious reservations about the way the studies have been conducted. But no stone should be left unturned, and that explains why we wish to examine this lead.

Nonetheless there are things we have learned from epidemics. The treatment of patients has to be both well described and documented, and we have to take the necessary time to do studies, otherwise we risk paying for it in the long-run. In the past MSF and Epicentre have conducted several studies in emergency situations, e.g. on treating shigellosis, meningitis, cholera and malnutrition. It's one of the strong points of our common culture. During the Ebola outbreak in West Africa in 2014, there were numerous research initiatives undertaken in the name of the emergency, but they were done imperfectly and didn't lead to any findings that could stand as a reference. On the other hand during the outbreak in the DRC in 2018 and 2019, a four-arm randomized study was carried out that showed two treatments to be effective. That's the difference! The concept of emergency should not lead us to down-scale research, and it should never be an excuse for botching studies.

Covid-19: three working pathways, three priorities for Epicentre

1. Offer monitoring strategies and modeling in support of operational roll-out.
2. Put in place, gather and analyze the data of patients treated, with a more refined research activity in certain projects and certain categories of patients (pregnant women, malnourished children, patients co-infected with HIV or tuberculosis, etc.)
3. Conduct research projects with scientific institutions and ministries for new diagnostic tests, the prophylactic treatment of care givers and the treatment of patients (Niger, Cameroon, Senegal).