

The International Health System and the Ebola Epidemic

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The management of the Ebola epidemic by the international community has revealed the deficiencies of health development aid, as well as long overlooked structural problems. Yet it may also be an opportunity to establish long-term mechanisms of international solidarity and improve the basic health capacities of affected countries.

Contradictory Perceptions of the Contagion

While the official count of the World Health Organization (WHO) refers to 15,145 cases, including 5,420 deaths, as of November 19, 2014, the Ebola virus epidemic currently afflicting western Africa has led to a resurgence of the ancient fears of contagion that have punctuated human history. The fact that there is no medical treatment for the Ebola virus disease; its high level of lethality (around 50% on average for every epidemic since 1976); the terrifying symptom of hemorrhagic fever; the large number of cases in which contagion has occurred through contact with patients exhibiting symptoms; the disease's spread beyond Liberia, Sierra Leone, and Guinea, the three countries which have been affected since the winter of 2014 (with one case in Mali, another in Senegal, and 19 in Nigeria)—all of this has been the source of much anguish as the world confronts a global epidemic.¹ The repatriation of Ebola patients to Western countries, combined with instances of indigenous contagion (two in the United States and one in Spain involving health professionals who cared for repatriated patients) was enough to ensure that media coverage played directly to the public's fears.

The current Ebola epidemic has one distinctive feature, and it is indeed its scale. It has already caused nearly four times as many deaths as all previous epidemics² as it emerged in December 2013, in a region of Guinea (bordering Liberia and Sierra Leone) with high levels of human mobility, allowing it to spread to these countries' urban areas and capital cities. Previously, since the virus was first identified in 1976 in what was then Zaire, outbreaks had always occurred in enclaved forest areas of central Africa, limiting the virus' diffusion and facilitating health monitoring. More recent epidemics in the Democratic Republic of Congo (in 2007, 2008, and 2012) and Uganda (2000, 2007, and 2011-2012) were quickly confined.³

The Western media did not really become interested until August 2014, when the WHO declared the Ebola virus a “public health emergency of international concern” (after

¹ By comparison, Lassa fever is a hemorrhagic disease afflicting western Africa that is far more endemic than the Ebola virus (it is estimated that around 300,000 are affected by it per year), yet with a lesser death rate (according to WHO, around 5,000 deaths per year).

² On October 31, 2014. Earlier outbreaks of Ebola virus disease between 1976 and 2012 resulted, according to WHO, in 1,590 deaths. (<http://www.who.int/mediacentre/factsheets/fs103/fr/>)

³ On lessons from the Ugandan case, see Anthony K. Mbonye et al., “Ebola Viral Hemorrhagic Disease Outbreak in West Africa—Lessons from Uganda,” *African Health Sciences*, vol. 14, issue 3, September 2014. 495-501

more than 900 deaths) and following the repatriation to the United States of two American doctors who had contracted the disease. Since then, representations of the disease in the Western media have oscillated between two sets of images. On the one hand, the media present the virus' spread in Africa as primarily connected to "traditional" practices that are not found in developed countries, thus minimizing the risk of contagion. For example, they have emphasized contact with the dead at burials and people tending to their own sick, despite the fact that the sick may be exhibiting symptoms and that corpses have extremely high viral levels.⁴ These practices are presumed to be uniquely African—as if, in the West, loved ones never have access to corpses in hospitals or in mortuaries, bodies were not prepared for burial or cremation, and if it were out of the question, when a child or parent is sick, to touch them or hold their arm. On the other hand, as if to offset this security-obsessed hubris (that is, a sense of security anchored in a belief in one's own superiority, which keeps others at a distance), media representations also play on the fear of contagion, disregarding or pretending to disregard the fact that, in the North, any epidemic would likely be contained by robust health systems. The media portrayal, which has alternated between such security-obsessed *hubris* and paranoid *nemesis* (i.e., fear of an avenging epidemic that nothing could stop), reveals the ambiguous ways in which the epidemic has been managed at the international level. It shows that the epidemic has generally been framed as a security problem and presented as a threat, in the face of which one could feel either vulnerable or protected.

The International Reaction: A Traditional Security Response

On September 18, 2014, the United Nations Security Council unanimously adopted a resolution declaring the Ebola epidemic in western Africa a threat to security and international peace, calling for an international emergency effort to contain it. This resolution was co-sponsored by 134 countries, meaning that it was supported on a rather unique scale. It is rare for the Security Council to take up health issues. The only precedent was in 2000, relating to the HIV/AIDS pandemic. The UN Security Council resolution, framed as a security matter, turned the Ebola epidemic into an international priority, called attention to it, and raised hopes that significant resources could be mobilized to fight it.

Yet there is nothing new with this conception of epidemics as threats to state security. It has even been a major incentive for intergovernmental cooperation. The first systems of quarantining ships, designed to prevent the spread of infectious diseases like the plague, were adopted in the fourteenth century. In the 1830s and 40s, the creation of the Sanitary Councils of Constantinople, Alexandria, and Tangier transformed the Mediterranean into an area where the cholera epidemic, which originated in India, was monitored. By the mid-nineteenth century, the growth of international trade made it necessary to expand protective measures, resulting in the first international health agreements. The latter were consolidated in 1951 in the International Sanitary Regulations (ISR), which were adopted under the WHO's authority. Revised in 1969 and again in 2005 (following the SARS epidemic of 2003), they sought "to prevent, protect against, control and provide a public health response to the international spread of disease in ways that are commensurate with and restricted to public health risks, and which avoid unnecessary interference with international traffic and trade." To this end, states were expected to establish monitoring mechanisms and WHO "contact points," which were responsible for reporting public health issues.

In response to the security threat represented by the spread of the Ebola virus, governments adopted various measures. In the first place, some resorted to military measures,

⁴ Thus WHO estimates that around 20% of new infections occur during the burials of individuals who had contracted the virus. (<http://www.who.int/mediacentre/news/notes/2014/ebola-burial-protocol/fr/> (23/11/2014))

which were requested by NGOs on the ground, such as MSF (*Médecins Sans Frontières*, or Doctors without Borders). The United States sent 3,000 soldiers to Liberia and China recently announced that it would send an elite military unit. Exceptional health measures were also put into place. “Treatment centers” were established in Liberia, Guinea, and Sierra Leone, which were primarily designed to quarantine populations rather than to provide medical assistance (as in a hospital). For instance, in September, the entire population of Sierra Leone was confined for three days to make it possible to identify the sick. Furthermore, health checks were conducted in public areas and upon entering and leaving the country (including temperature-taking, questionnaires, and so on). In 2003, during the SARS (severe acute respiratory syndrome) epidemic, China took exceptional measures that were kept more or less secret and which its authoritarian regime made possible: a large number of quarantine centers were built in a matter of days, to which those suspected of being sick were forcibly confined.⁵ Finally, for many states, the response was simpler still: they closed borders and monitored their population’s movements. Canada and Australia, for example, chose to deny visas to residents of countries afflicted by the Ebola virus. In the United States, the debate raged over whether volunteers who had traveled to affected countries should be quarantined upon their return and even whether flights to western Africa should continue. Some African countries refused to allow assistance or equipment destined for afflicted countries to transit through their territory or NGO volunteers to rest on their soil.⁶ Only Ghana allowed its territory to serve as an air bridge.

These measures aimed at closing borders and limiting population movements are traditional responses, which some states adopted in no particular order. These were offset, however, by concerns about keeping the peace (in other words, not encouraging panic) and commercial interest (i.e., not blocking trade). These same concerns resulted in the first international health agreements. In this spirit, the American government reaffirmed before the public and Congress (where some legislators called for banning travel to and from the affected areas) that border closings, in addition to creating a false sense of security, would undermine the effort to fight the epidemic, as they would make it more difficult to deliver aid to western Africa. Every study conducted following the banning of long-distance flights (such as after 9/11 and during the SARS and H1N1 epidemics) have shown that, at best, outbreaks (for instance, the flu) were postponed by only a few weeks.

The Shortcomings of International Mobilization and of Health Development Aid

While states’ reactions to the Ebola virus threat may at first seem very traditional, differing little from what has been seen in epidemics since the late Middle Ages, several aspects of this response are nonetheless astonishing. Why was no mention made of international health regulations, which are supposed to regulate these types of epidemics and help coordinate responses? Furthermore, why was the reaction so late and ineffective in rapidly containing the epidemic’s advance? The WHO did not declare a state of emergency until August, the Security Council resolution was only approved in September, and resources were still being organized in late October, despite the fact that the first cases in Guinea had been identified in December 2013 and an epidemic had been declared in Sierra Leone and Liberia in March 2014. Is the international community so incapable of innovation that it must rely on a “colonial division of duties”—the idea that Great Britain is primarily responsible for intervening in Sierra Leone and France in Guinea, their former colonies, while the United States should focus on Liberia, the country founded as a home for emancipated American slaves? Furthermore, even since the 2003 SARS epidemic, followed by concerns connected to

⁵ Laurie Garrett, “How to Shut Down a Country and Kill a Disease,” *Foreign Policy*, October 22, 2014.

⁶ Garrett, “We Could Have Stopped This,” *Foreign Policy*, September 5, 2014

bird flu (H1N1, H5N1) and bioterrorism, has the world not been obsessed with the threat of a major pandemic?

The Ebola epidemic has in fact revealed where two of global health policy's major shortcomings lie: in the research for "unprofitable" diseases (though they have received some attention due to the fight against bioterrorism) and, above all, in the strengthening of health systems.

Strengthening Health Systems: A Neglected Area and Hidden Problem

A security-oriented response (involving the mobilization of military resources, exceptional measures, confinement, and partial border closings) cannot compensate for a lack of structural resources. International aid was "behind" not by a few months, but by several years, even decades. An adequate response requires, in effect, the construction of functioning national health systems. Yet the countries that were hit hardest lacked medical infrastructure and personnel. According to the WHO, Liberia, for example, has only 0.1 doctors for every 10,000 inhabitants, or less than 50 doctors for the entire population (far below the regional average of 2.6 doctors per 10,000 inhabitants).⁷ Yet the strengthening of health systems remains a neglected domain of international health policy, which devotes its energies to quick and visible solutions in a spirit of immediate and measurable efficiency. This results in an approach that is centered on specific diseases or in providing treatment, as in the case of the three major diseases (AIDS, tuberculosis, and malaria) which have attracted attention since the 2000s. These targeted efforts are necessary, but they cannot replace the establishment of health systems organized around hospitals, care centers, medical supply and equipment systems, and trained medical personnel. Steps have been taken in this direction, as evidenced in the creation of a "health systems strengthening" category in the financing of the Global Fund to Fight AIDS, Tuberculosis and Malaria. But they remain insufficient, for their implementation requires work in multiple sectors, taking into consideration, for instance, the establishment of social protection systems, education, and long-term efforts to limit medical "brain drains." In Liberia and Sierra Leone, the growth of the Ebola epidemic also marks the failure of the international community's post-conflict rebuilding strategies.

This debate over the failure of international development aid, which has not allowed for adequate health systems to be built in beneficiary countries, is largely sidelined by the problem of the lack of a medical solution. This focus on medical research, and in particular vaccines, is tied to a technical conception of international health policy that can be traced back to the colonial period.⁸ This approach seeks a "magic bullet," a miracle-cure that makes possible vertical, targeted interventions overlooking the social context. It fully participates in the "pharmaceuticalization" of world health, which favors policies focusing on medication.⁹ Moreover, Africa has been, ever since the HIV/AIDS pandemic, an area of competitive research for a range of biomedical actors (pharmaceutical laboratories, scientific agencies, and so on) who have been organizing many clinical experiments on this continent.¹⁰ Thus research for specific medication, in addition to being profitable if successful, benefits from procedures and technical capacities that can be used immediately. The development of a

⁷ In Sierra Leone, there are 0.2 doctors per 10,000 inhabitants, or around 120 for the entire population: <http://www.who.int/countries>.

⁸ On medical research and vaccines during the colonial period, see, for example, the recent book by Guillaume Lachenal, *Le médicament qui devait sauver l'Afrique. Un scandale pharmaceutique aux colonies*, Paris, La Découverte, 2014.

⁹ João Biehl, "Pharmaceuticalization: AIDS Treatment and Global Health Politics." *Anthropological Quarterly*, 2007, 80(4), p. 1083-1126.

¹⁰ On this point, see the article by Fanny Chabrol, "[Sida: l'eldorado africain?](#)" *La Vie des idées*, December 1, 2014.

medical treatment would be beneficial in fighting the virus, but the debate over experimental medication and the acceleration of vaccine development masks other crucial problems: access to basic care remains indispensable in treating the virus and preparation for an Ebola outbreak during a bioterrorist attack has proved fruitless.

Given the lack of a specific medical treatment for the Ebola virus, the best chances for recovery depend upon access to basic healthcare and functioning infrastructures, both of which are available in Western countries. For example, patients are often very dehydrated and equipment is needed to administer liquids intravenously or to rehydrate them orally. While death rates in countries affected by various Ebola epidemics exceed 50% on average, we have no idea what they would be if they had effective health systems. The American doctor and anthropologist Paul Farmer put forth the hypothesis, in a recent article in the *London Review of Books*, that with the kind of hospital conditions found in developing countries, mortality rates could be as low as 10%.¹¹ The search for a medical solution must not, of course, be neglected, but far more can be done, given the current state of knowledge, by improving health protocols and strengthening basic capacities. It is worth recalling, for example, that in the case of cholera, the existence of a vaccine is no substitute for traditional rehydration measures (80% of cases can be cured by quickly administering oral rehydration salts).

Yet though the development of a specific medical treatment (vaccines, serums, antivirals) has been accelerated, nothing guarantees that it will be available in the near future: the two most promising vaccine candidates are currently only in the first phase of development. The pharmaceutical company GSK has announced that, in the best of scenarios, its vaccine will not be available before 2016. The lack of a market for Ebola virus diseases explains in part why, since 1976, no specific medical treatment has been developed: only small groups of insolvent populations (between approximately a dozen and four hundred cases in preceding epidemics) were affected by the disease. The lack of research incentives in the pharmaceutical industry for finding medical treatments for so-called neglected diseases (river blindness, trachoma, and so on) has resulted in the creation, since the 2000s, of public-private partnerships, which are designed to find solutions to this problem as it relates to diseases affecting large numbers of people. This is not, however, the case for the Ebola virus disease.

Even so, it is not a neglected disease like any other, in particular because it has received attention from anti-terrorism programs. Since 9/11 and the anthrax attacks of the following week (when envelopes contaminated by *bacillus anthracis* were sent to the media and American legislators), the fight against bioterrorism has increased. Viruses causing hemorrhagic fevers (Ebola, but also the Marburg virus) are on the list of infectious agents against which the world must protect itself. Research programs and response plans have been drawn up. But the latter have concentrated on responding to targeted and specific attacks in Western countries. The international community should not have been caught unawares by the Ebola epidemic, but the planned scenarios based on anti-terrorism considerations were not appropriate. The conception of the Ebola epidemic as a security threat results in actions that ignore the need to focus on basic health infrastructure and to establish effective health systems on a global scale—as if the need for “security” and “basic capacities” were unconnected.

¹¹ Paul Farmer, “Diary,” *London Review of Books*, vol. 36, no. 20, October 23, 2014, 38-39.

WHO: The Perfect Culprit?

Critics of the inadequate response to the Ebola epidemic currently focus on the World Health Organization. Its role is “to direct and coordinate” international health policy. At a time when the WHO is already in the spotlight, an internal report was leaked in mid-October in which the organization identified a number of shortcomings, turning it into a perfect culprit. And there is indeed no shortage of problems in the way it has managed the epidemic.

Its main shortcoming was the fact that it was too late in calling the outbreak an epidemic and declaring a state of emergency. The first case appeared in Guinea in December 2013, but was not identified as such at the time. The WHO did not receive its first report on a case of Ebola in Guinea until March 22, 2014. By late March, an epidemic had officially been declared in Guinea and Liberia, as MSF launched interventions in both countries. In early April, MSF described the epidemic as “unprecedented” and notified the WHO that this was different from previous instances, in that it could extend with no effects. A WHO spokesperson then described the epidemic as “relatively small still.” In late May, the WHO reported the first cases in Sierra Leone. On June 21, 2014, MSF issued an alert calling the epidemic “out of control,” but the WHO did not describe the epidemic as “serious” in Sierra Leone and Liberia (77 cases and 19 confirmed deaths at the time) until a month later, on July 18, before declaring a “public health emergency of international concern” on August 8. A week later, it explained that the number of cases had been largely underestimated since the epidemic’s beginning. Several factors explain this belated reaction.

First, the mechanisms provided for by the International Health Regulations (IHR) did not function. The IHR, which were adopted in 2005 and went into effect in 2007, lay out the steps that should be taken to prevent and fight epidemics. But in 2013, out of the WHO’s 194 member states, more than half (109) demanded an extension in implementing basic capacities. A system for monitoring epidemics is, however, inseparable from building an effective health system. Next, shortcomings were identified in the management of local WHO offices, as well as its regional bureau for Africa (including the blocking of experts’ visas, failure to pass on cases to the Geneva headquarters, failure to organize immediate regional meetings, and so on). According to the internal report, it was not until June that Margaret Chan, WHO’s Director-General, received information on the organization’s deficiencies. The experts cited in the report criticize the functioning of the WHO’s African office, where nominations were based on “political” criteria rather than need or qualifications.¹² The WHO’s regional structure, which is the result of political imperatives stemming from its history (i.e., maintaining the Pan American Health Organization, which became the WHO’s regional office for the Americas), is regularly identified as one of the organization’s weaknesses.

The disastrous precedent of the H1N1 epidemic was another factor. In 2009, the WHO’s management of this health crisis was vigorously challenged. The WHO’s (overly) rushed decision to declare the outbreak a “pandemic” led governments to purchase millions of ultimately useless vaccine doses. Subsequent investigative reports called attention to the lack of transparency and poor management of conflicts of interest with the pharmaceutical industry, placing the organization under a cloud of suspicion.

Finally, the WHO had to deal with budgetary restrictions and new priorities set by member states, notably the fight against noncommunicable diseases like cardiovascular ailments. The 2014-2015 program-budget (written and approved in May 2013 by member

¹² Associated Press, “UN: We botched response to the Ebola outbreak,” (October 17 2014), available online: <http://www.dailymail.co.uk/wires/ap/article-2797269/UN-We-botched-response-Ebola-outbreak.html>

states) provided for a 20% budget increase for noncommunicable diseases. The funding for interventions in the case of epidemics or crises, however, decreased by more than 50% compared to the previous budget of 2012-2013, declining from \$469 to \$228 millions. The idea was that, given the difficulty of predicting financial needs arising from epidemics, the WHO would appeal to member states for extraordinary funding should the situation arise. Moreover, the WHO would increasingly focus on building national capacities for fighting epidemics at the level of individual countries. The amount of money earmarked for this project did grow by 32%—or \$62 million—an ultimately fairly small amount. This is particularly the case since, if one compares the decreased funding for emergency interventions in the event of epidemics and crises (minus \$241 million) to the increased budgets for health systems and preparation, monitoring, and intervention (\$69 plus \$62 million, or \$131 million), the total amount of funds allocated to health crises and epidemics declined by \$110 million.¹³ Budget contributions and organizational priorities are determined by its member states, leaving the WHO with relatively limited discretionary powers (and these are all the more limited given that nearly 80% of the organization's budget comes from member-state contributions that are "voluntary," meaning that they are allocated to specific programs; the Secretariat only controls the allocation of 20% of the organization's budget, which is known as the "ordinary" budget). When a health crisis occurs, the WHO is thus forced to beg from its members.

Scarcer funding also explain the more modest scale of the WHO's response, as it has neither the resources nor the flexibility needed to handle such a crisis. Undoubtedly a report will be published in several months that will shed light on some of the organization's failures. But will member states be subject to the same scrutiny? There is every reason to doubt it, given that, by late October, only about 40% of the funds promised to the UN for fighting the epidemic had been received.

Conclusion

Since November 10, MSF reports a decrease in the number of patients with the Ebola virus in its Liberian centers, where the state of emergency has been lifted, though it is unclear for now if this is a temporary or permanent decrease and if the epidemic is on the verge of being contained. It has not, however, been brought to an end: incidences and deaths will continue to occur in western Africa, at least in upcoming months (while Senegal has reopened its borders with affected countries, Mali has, for its part, experienced its first fatalities). The Ebola epidemic has revealed the state of national health systems and the shortcomings of international health aid, of which UN Secretary General Ban Ki-Moon's efforts to remind member states of their financial commitments is symbolic. In particular, the international community proved incapable of implementing long-term action and learning from previous epidemics. The action that is currently being pursued is often presented as inevitable: managing contagion primarily by establishing treatment centers emphasizing confinement rather than care, and through partial border closures; giving priority treatment to international health providers in order to ensure the continuity of aid to affected populations; recourse to "northern" countries with the strongest ties to particular "southern" countries, in the hope that they can be effective quickly; and focusing on the search for a vaccine. Such actions are, however, only the consequences of a lack of long-term international solidarity and the need to compensate for a dearth of basic health infrastructure in very poor countries. Disease and epidemics always offer deep insights into social tensions and cleavages. One can nonetheless hope that, as in nineteenth-century Europe, when their combination with social and political

¹³ WHO, "Proposed Programme Budget, 2014-2015," A66/7, April 19, 2013, available online: http://www.who.int/about/resources_planning/A66_7-en.pdf.

upheaval accelerated processes of health and social reform, the Ebola virus disease is an opportunity to achieve these goals on a global scale.

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