Ebola and the Struggle to Respond: Source A

"Cuts at W.H.O. Hurt Response to Ebola Crisis" by Sheri Fink

Published by *The New York Times*, September 3, 2014. Full text available at http://www.nytimes.com/2014/09/04/world/africa/cuts-at-who-hurt-response-to-ebola-crisis.html.

With treatment centers overflowing, and alarmingly little being done to stop Ebola from sweeping through West African villages and towns, Dr. Joanne Liu, the president of Doctors Without Borders, knew that the epidemic had spun out of control.

The only person she could think of with the authority to intensify the global effort was Dr. Margaret Chan, the director general of the World Health Organization, which has a long history of fighting outbreaks. If the W.H.O., the main United Nations health agency, could not quickly muster an army of experts and health workers to combat an outbreak overtaking some of the world's poorest countries, then what entity in the world would do it?

"I wish I could do that," Dr. Chan said when the two met at the W.H.O.'s headquarters in Geneva this summer, months after the outbreak burgeoned in a Guinean rain forest and spilled into packed capital cities. The W.H.O. simply did not have the staffing or ability to flood the Ebola zone with help, said Dr. Chan, who recounted the conversation. It was a fantasy, she argued, to think of the W.H.O. as a first responder ready to lead the fight against deadly outbreaks around the world.

The Ebola epidemic has exposed gaping holes in the ability to tackle outbreaks in an increasingly interconnected world, where diseases can quickly spread from remote villages to cities housing millions of people.

The W.H.O., the United Nations agency assigned in its constitution to direct international health efforts, tackle epidemics, and help in emergencies, has been badly weakened by budget cuts in recent years, hobbling its ability to respond in parts of the world that need it most. Its outbreak and emergency response units have been slashed, veterans who

led previous fights against Ebola and other diseases have left, and scores of positions have been eliminated—precisely the kind of people and efforts that might have helped blunt the outbreak in West Africa before it ballooned into the worst Ebola epidemic ever recorded....

The outbreak began close to the borders of three neighboring countries—Guinea, Sierra Leone and Liberia—and spread surprisingly fast. Since then, the W.H.O. has engaged more than 400 people to work on the outbreak, including employees of other agencies in its network, and in August the agency declared the epidemic an international emergency....

The current outbreak has killed more than 1,900 people and spread to the point that the W.H.O. warns that more than 20,000 people could become infected. Sick people are dying on the street. Some feel the entire model the world uses to fight outbreaks needs to be rethought, so that an agency like the W.H.O. has the structure and mandate to take command.

But Dr. Chan said that governments have the primary responsibility "to take care of their people," calling the W.H.O. a technical agency that provides advice and support. Still, she noted that her organization, like many governments and agencies, was not prepared....

A Shift in Emphasis

The W.H.O., founded in 1948, is responsible for taking on a wide range of global health issues, from obesity to primary health care. But since the world's health needs far outstrip the financial contributions of the W.H.O.'s 194 member nations, those priorities compete.

The threat of emergent infectious diseases jumped high onto that list 20 years ago, when an outbreak of plague in India created a panic, sending about 200,000 people fleeing. The next year in Zaire, now the Democratic Republic of Congo, Ebola killed about 245 people. With fears of cross-border infections high, a new urgency arose: improving the world's ability to stop outbreaks.

The W.H.O. took the lead, at the request of its member nations. A crew of passionate outbreak veterans assembled a unique department, using an early form of electronic crowdsourcing to detect outbreaks and dispatching experts to the field. Three years after the effort solidified, the W.H.O. played a big role in responding to a cluster of deadly pneumonia cases in Asia. The new virus became known as SARS, and it was contained within the year, with most cases occurring in China.

To aid the fight, wealthy individuals offered the W.H.O. "literally hundreds of millions because their businesses were affected," said Dr. Jim Yong Kim, president of the World Bank and a former director at the W.H.O. "But as SARS burned out, those guys disappeared, and we forgot very quickly."

Soon, the global financial crisis struck. The W.H.O. had to cut nearly \$1 billion from its proposed two-year budget, which today stands at \$3.98 billion. (By contrast, the budget of the Centers for Disease Control and Prevention for 2013 alone was about \$6 billion.) The cuts forced difficult choices. More emphasis was placed on efforts like fighting chronic global ailments, including heart disease and diabetes. The whims of donor countries, foundations, and individuals also greatly influenced the W.H.O.'s agenda, with gifts, often to advance specific causes, far surpassing dues from member nations, which account for only 20 percent of its budget.

At the agency's Geneva headquarters, outbreak and emergency response, which was never especially well funded, suffered particularly deep losses, leaving offices that look, one consultant said, like a ghost town. The W.H.O.'s epidemic and pandemic response department—including a network of anthropologists to help overcome cultural differences during outbreaks—was dissolved, its duties

split among other departments. Some of the main outbreak pioneers moved on....

The W.H.O. hoped to balance its budget cuts by strengthening the ability of countries to respond to public health threats on their own. It put out new regulations for nations to follow to help contain outbreaks. But by 2012, the deadline it set, only 20 percent of nations had enacted them all. In Africa, fewer than a third of countries had programs to detect and stop infectious diseases at their borders....

"There never were the resources to put those things in place in many parts of the world," said Dr. Scott F. Dowell, a specialist formerly with the C.D.C.

A Disease Finds Its Opening

The Ebola virus took full advantage of these poorly prepared nations and the holes at the W.H.O.

Given the weakness in surveillance, the outbreak was not identified until March, in Guinea, roughly three months after a villager was believed to have contracted the virus from an animal, possibly a fruit bat. The delay allowed dozens of cases to spread through villages and even to Conakry, a capital of more than one and a half million people. Right away, Doctors Without Borders declared the outbreak unprecedented in its reach, the only group to do so.

Hastening the spread, hospitals lacked basic infection-control essentials like running water, protective gowns, and gloves. Many doctors and nurses caught the virus from their patients, passed it to others, and died. The vulnerability and collapse of medical facilities revealed how far there is to go in achieving the W.H.O.'s top priority—ensuring basic global health care....

It was not that responders were not trying. Victims' contacts were spread across a wide area, hours away on bad roads. The payment of local workers had somehow been overlooked, so they stopped doing vital, risky jobs. Essential protective equipment was not delivered to many who needed it. Bottles of bleach were given out without buckets. The W.H.O.

lacked relationships with some longstanding organizations with large networks of health workers in the region....

In late July in Liberia, two Americans working at a missionary hospital fell sick and were soon evacuated home. A Liberian-American brought the virus by plane to Nigeria, Africa's most populous nation. Suddenly, the world seemed to understand the threat.

The question now, experts wonder, is whether the leaner, retooled W.H.O.—heavy on technical know-how, light on logistical muscle—can surge in a way that will help lead the world in bringing one of the most challenging health crises in recent history to a close. W.H.O.'s road map calls for \$490 million from donors, and thousands of foreign and local health workers to contain the outbreak. Yet few foreign medical teams have answered the call so far.

"It is incumbent on the international community to really respond now," said Dr. Kasolo, a W.H.O. director in Africa. "Otherwise history will judge us badly."

Ebola and the Struggle to Respond: Source B

"Ebola: What Lessons for the International Health Regulations?" by The Lancet

Published by *The Lancet*, October 8, 2014. Full text available at http://www.thelancet.com/journals/lancet/article/PIIS0140-6736%2814%2961697-4/fulltext.

With more than 3000 deaths since the first case was confirmed in March, 2014, and after months of slow, fragmented responses, the international community has recognised Ebola as a public health emergency of international concern and a clear threat to global health security. It is the subject of a high-level UN Security Council resolution, and has triggered the creation of a UN Mission for Ebola Emergency Response. Despite these efforts, Ebola is staying ahead of efforts to contain it. In such a situation, although it is understandable to focus on urgent actions, it would be a mistake not to reflect on how we arrived at this situation and what we need to do to prevent it from happening again.

The International Health Regulations (IHR) represent the system designed to prevent national public health emergencies from becoming international crises. WHO's historic responsibility has been to control the spread of disease. The IHR were adopted in 1969 (IHR 1969) and focused on smallpox, plague, cholera, and yellow fever. In 1995, in the wake of plague in India and Ebola in DR Congo, a resolution was passed in the World Health Assembly (WHA) to revise and update the IHR. In the late 1990s a new way of working within WHO was created to detect and respond to infectious disease outbreaks...creating a network of over 120 partners to respond—called the Global Outbreak Alert and Response Network.... In 2005, a revised IHR (IHR 2005) was adopted.... The IHR 2005 are not limited to any specific diseases and they oblige countries to notify WHO of "events that may constitute a public health emergency of international concern" and to develop "core public health capacities."... Although all WHO member states have agreed to the IHR principles, countries were left to self-report their progress

on core capacity development, such as surveillance, diagnostic, and containment demands.

With no additional financing in place and no proper accountability...this laudable vision has become a huge missed opportunity. Today, every person newly infected with Ebola reminds us of this lost opportunity. Whereas most developed countries certainly have the capacities to implement such a framework, many low-income and middle-income countries, and especially fragile states, do not. It was only on Aug 8, after a meeting of the International Health Regulations Emergency Committee, that WHO declared the outbreak a "public health emergency of international concern". Such delays have probably enabled the outbreak to spread rapidly.

Several commentators have questioned the capability of WHO to address international threats, such as Ebola. Acknowledging gaps in global governance, and with its distinctive interest in global security, the U.S.A. has taken the lead....

In view of the seriousness of the crisis, U.S. leadership should be welcomed. However, the U.S. Government is not a multilateral health agency. The final responsibility to prevent the international spread of disease rests with WHO and its IHR. But WHO has been poorly served by its member states and governing bodies. Member states have failed to invest in WHO to ensure the agency has full capacity to address its global mandate. And WHO's Executive Board and WHA failed utterly to keep the promise they made in 2005 to scale-up attention and investment in crucial surveillance and reporting systems so necessary to prevent the kind of epidemic that is Ebola today.

Two priorities stand out. First, an urgent donor conference must be convened to discuss

the implications of the Ebola epidemic and the international community's failure to invest in the IHR. That conference must end with substantial financial commitments.... Second, a robust mechanism must be put in place to guarantee independent monitoring and review of country implementation of the IHR. Self-reporting is an unreliable way to protect the world's peoples from new and dangerous epidemics.

Ebola and the Struggle to Respond: Source C

"Ebola: How We Became Unprepared, and What Might Come Next" by Vinh-Kim Nguyen

Published by *Cultural Anthropology*, October 7, 2014. Full text available at http://www.culanth.org/fieldsights/605-ebola-how-we-became-unprepared-and-what-might-come-next. In this article, letters like "M" and "ABC" are used in the place of names to respect the anonymity of people and institutions

On September 4th, a twenty-three-year-old Guinean student, M, arrived at ABC, a busy Paris hospital, complaining of fever, night sweats, and fatigue. He had recently returned from Conakry [Guinea], and it was established that he had been in contact with an ill relative now being treated as a confirmed Ebola patient. A call to the Regional Health Agency, which runs public health surveillance, established that M was a suspected Ebola case, triggering a plan carefully prepared beforehand.

At ABC, M was isolated in a room taped off with warnings. Trained paramedics bundled M into a special ambulance and sped off to a designated treatment unit at the sprawling DEF University Hospital. There, the plan was put into place: a crisis unit of hospital managers activated a phone tree, the infectious disease ward was emptied, and M. was brought to his room as gowned staff members drew blood to test for Ebola and other tropical diseases. A standard [treatment] was started....

Unbeknownst to the specialized team mobilized by the case of M, two days earlier, a seventeen-year-old girl, J, was brought to the emergency room of another Paris hospital. She had arrived with her mother after a trip to West Africa to visit relatives. Feverish for five days, she was delirious. After landing at Charles-de-Gaulle, her mother brought her home and when a cold shower didn't help, decided to bring her to XYZ University Hospital. A nurse whisked her into a resuscitation bay where she was met by Dr. A, who ordered bloodwork, an IV, and an intubation kit. Meanwhile, J had deteriorated. A blood-tinged fluid had begun to foam at J's mouth. It took twenty minutes before she was stable enough to be transferred to intensive care, twenty minutes

in which no one had time to think beyond the "ABCs" of critical care (airway, breathing, and circulation) drilled into emergency workers. In the hectic resuscitation, many were splashed with bodily fluids. No one initially gave thought—and many were unaware—that she had just arrived from West Africa. The next day, life support was withdrawn and J died; by that time, tests confirmed that she had died from cerebral malaria.

The first case above was in fact a drill I attended—an elaborate role-play conducted by the crisis team of the Paris hospitals trust (APHP), a sprawling network of almost forty hospitals totalling 25,000 beds that dates from Napoleon's decision in 1801 to centralize control of hospitals in the French capital.

The second case at XYZ University Hospital was tragically real—and probably the more likely route by which an Ebola patient might encounter the French health care system. The case haunted many of the workers involved, not because of the imagined threat of Ebola, but because the death was so tragic and avoidable had J gotten treatment for malaria while still in Africa.

The point here is not to feed anxieties about an Ebola outbreak coming "here" from "there." As many have pointed out, this is an unlikely scenario—health care systems in the North are structurally disposed to contain epidemics even without any special preparation. The basic apparatus of public health... is built into the system, so that even if a [case is not detected] early..., a needlestick injury occurs, or a glove rips, contamination will be contained by levels of redundancy. In West Africa however, Ebola spread unnoticed for three months.... By then it was too late....

Ebola happened despite, and indeed as a result of, over a decade of pandemic preparedness efforts costing billions. These efforts not only failed, they produced this Ebola epidemic.... [B]illions poured into a national security apparatus in the name of Global Health were devoted to "preparedness," a nebulous construct that highlighted surveillance and simulation as key to readiness for bioterrorism and other epidemic threats. Huge sums of money were spent on vaccines for epidemics that never materialized. Yet there were already clear and unambiguous signs that the key to preparedness would lie in hospitals. All those efforts devoted to pandemic preparedness did not involve investing in health systems at the front line of epidemics: hospitals.

When Ebola struck, health care workers sickened and died in large numbers. Lack of basic infection control equipment—such as gloves and masks—doubtlessly played a role. Front line workers will inevitably come into contact with Ebola patients since the majority of patients in West Africa come to health care centers with fever as their chief complaint, and, in an epidemic setting, it is difficult to

screen out potential [Ebola] cases without a systematic...mechanism. Hospitals are therefore particularly vulnerable, even more so when understaffed and underequipped.

When Ebola hits, a vicious cycle ensues as health workers fall ill or are quarantined, those left are even more vulnerable. No wonder then that in Liberia the health system has all but collapsed....

So what comes next?...

Having failed to bolster the region's hospitals, efforts to eradicate the epidemic should now be substantially shaped by the legacy of HIV. Ebola is a very different epidemic from HIV. But central to both efforts is a focus on mobilizing survivors and those affected by the epidemic. EVD survivors are immune and therefore constitute the perfect pool of caregivers to replace those who have not recovered. There will be strong pressure to use survivors not only as goodwill ambassadors for prevention and treatment efforts but also as front line personnel for ongoing diagnosis and treatment of EVD patients.