Where There Is No Kit

Where there is no kit and no infrastructure, there is vulnerability. Peter Redfield explores the role of medical humanitarian response in the Ebola crisis.

AT LONG LAST, DOOMSDAY HAS ARRIVED. Ebola's Atlantic passage may have mixed genres of tragedy and farce—real human suffering and cable news—but finally a sense of urgency matches years of apocalyptic prophecy. We were prepared, until we were not. And now the emergency is indeed upon us (Lachenal 2014; Nguyen 2014; see also Caduff 2014; Lakoff 2014).

I approach this crisis moment after years of following one group cast in a leading role: Médecins Sans Frontières (MSF; Doctors Without Borders).[1] As a private, medical organization with global humanitarian ambitions, MSF is paradoxically both technically well-primed and constitutionally ill-suited to take the lead with such an outbreak. On the one hand it possesses a well-developed set of protocols and a logistics system designed for emergency response. On the other hand it operates as independently as possible, engages on multiple fronts worldwide and issues moral exhortations, not commands. Like an emergency physician, MSF primarily seeks to stabilize patients, deferring responsibility for their future well-being to existing authorities. The current outbreak, however, reveals the full extent to which this approach presumes the existence of political, as well as technical health infrastructure.

From the perspective of medical humanitarianism, Ebola appears a relatively exotic problem: deadly and disturbingly unknown, but also thankfully rare and usually delimited in its geographic scope. Relative to such common concerns as malaria, malnutrition, and AIDS, it affects comparatively few people, and only in episodic flashes. Even cholera, a classic epidemic disease, appears with depressing consistency around the world when people find themselves displaced, and thus plays a far more significant role in humanitarian portfolio. In 2013 (a low year), MSF treated 27,900 patients with cholera, many times the total number who had ever experienced Ebola in the past, and still more than official numbers for the current outbreak. Indeed, the regular appearance of cholera helped inspire the group's logistics system, built around standard kits of prepackaged materials stored in anticipation of emergencies worldwide. In the case of cholera, the kit system generally succeeds in saving lives. A rapid, prepackaged response of public health sanitation usually eradicates the immediate epidemic, if not, sadly, its root causes.

Despite the relative rarity of Ebola, MSF developed a measure of familiarity with the condition after responding to a series of African outbreaks over the last two decades. Along with the World Health Organization (WHO) and the U.S. Centers for Disease control (CDC), the group can even claim a certain expertise with the disease. It is important to note that this expertise derives from internal initiative, not any formal mandate. If not a major threat in statistical terms, Ebola did appear in exactly the settings where humanitarians frequently found themselves: largely rural landscapes in countries such as Democratic Republic of Congo, Gabon, and Uganda. This was MSF's home turf, so to speak, as much or more than any other medical entity. Thus, by the turn of the millennium, the organization also had developed a kit for Ebola—or rather a set of three kits—described in a briefing document from November 2001 (Baert 2001:65).[2] In addition to a standard package shipped from Belgium in seven modules, including a full complement of medical and protective supplies, the document outlines two smaller configurations, one designed for initial assessment of potential outbreaks and another for local health centers. With regard to the latter, its author emphasizes the need for proper training, without which the equipment might provide only a false sense of security.

Ebola, after all, remains unnervingly at the edge of medical capacity. Here it is important to distinguish between the protection of public health and the provision of clinical care. Until now, intervention has focused on setting up a quarantined treatment center in an effort to arrest the spread of disease and safeguard the surrounding population. All previous Ebola responses ultimately achieved this goal of preventing future infections. For existing patients who arrive at one of these centers, however, the treatment has been distressingly minimal: medical staff endeavor to provide basic supportive care (rehydrating, maintaining oxygen status and blood pressure, treating any complicating infections) and essentially hope that the patient recovers. The uncomfortable fact is that they have had little more to offer, however well trained they might be. Although varying by viral strain and treatment context, the disease has unnervingly high death rates, often higher than 50% and running as high as 90% (CDC 2014). Moreover, while Ebola may not be especially infectious as far as viruses go, the manner in which it disrupts a host body—multiplying as the patient declines and increasingly oozing out in bodily fluids—places caregivers at particular risk. Both treating an infected person and tending to a corpse become hazardous acts. Indeed, care itself becomes a primary vector of transmission. As a consequence, Ebola eats through the very bonds of human compassion, infecting those who offer assistance: relatives, mourners, and health care professionals.

Due to this heightened risk of transmission, medical personnel themselves feel acutely vulnerable. They don an elaborate second skin of protective equipment before attending to Ebola patients. Once done with a shift they shed this shell, laboriously adhering to strict protocols and nervously hoping to avoid exposure. Commentators often note that the outfit strongly resembles a space suit, and similarly signals a primary need for self-preservation.[3] Seeking to seal themselves from the hostile environment of their patients, caregivers effectively become

1 For current information on MSF, see the international site at www.msf.org and the U.S. site at http://www.doctorswithoutborders.org. See also the MSF Ebola blog page at http://blogs.msf.org/en/staff/blogs/msf-ebola-blog. For recent profiles of the organization, see Redfield (2013) and Fox (2014).

2 See also http://www.medbox.org/ebola-outbreak-preparedness-management/preview?q=baert

3 The connection to space contains a historical thread, since early astronauts underwent precautionary quarantine in a converted trailer following their return from the moon: http://life.time.com/history/ebola-vs-apollo-11-quarantine-after-splashdown/#1. This thread in turn loops back to the genre of outbreak thrillers, setting the script for later nonfiction writing: http://www.thecrimson.com/article/1969/8/12/infectious-pbtbhe-andromeda-strain-by-michael/. See also Wald 2008.

PHOTO PREVIOUS PAGE: LUNAR RECEIVING STATION BEING UNLOADED AT DOBBINS AIR FORCE BASE, GA IN 1976; TO BE USED IN THE EVENT ONE OF THE CDC TEAM MEMBERS BECAME ILL WHILE WORKING WITH THE FIRST EBOLA VIRUS OUTBREAK. PHOTO BY CDC.

otherworldly figures, frightening as well as frightened. As widely reported earlier in this exceptional West African outbreak, Ebola teams can incite suspicion and arouse resistance. The appearance of ghostly aliens who keep patients at arms' length, spray everything with disinfectant, and then hurriedly spirit them away to a distant location where they often die does little to inspire confidence. Staff from several organizations, including MSF, found their vehicles pelted with rocks, and members of a Guinean education team were murdered (Wilson 2014).

Such extreme distrust and violence becomes less surprising in light of the longer history of the disease. Earlier responses to outbreaks likewise provoked a swirl of rumors, active mistrust, and attempted flight by patients (Hewlett and Hewlett 2008:56–57; see also McCoy 2014). They also inspired misgivings and soul-searching on the part of caregivers. A report from a 2001 workshop on "Justice and MSF Operational Choices" addressed the Ugandan outbreak of the previous year at some length. It noted that while MSF had been invited to help on the basis of its clinical experience to reduce hospital infections, the very practice of aggregating patients together might have had the opposite effect:

> *The public health response was probably being dealt with in the traditional (local) way by shutting people away in the barn and not feeding them or looking after them. Such a response traditionally would probably have broken the epidemic as quickly as anything we did, but the motivation for MSF was the alleviation of individual suffering. Alleviation of suffering and dying with dignity was enormously important. We know we saved very few lives (MSF-Holland 2001:26).*

Whether or not the report accurately represents local response, it does recognize the possibility of iatrogenic harm, a somber possibility that extended beyond care itself.[4] Even the group's desire to reduce stigma related to the disease had encountered an unexpected obstacle in overexposure, as "we felt that the world-wide publicity probably made things look worse" (MSF-Holland 2001:26).

If not saving that many lives, then what did MSF's response achieve? Did the supportive care at least have palliative effects, easing suffering and allowing patients to die with dignity? At an annual meeting of MSF-France in 2005, debate surfaced about recent treatment of Marburg virus (closely related to Ebola) in Angola. As recounted in the section's internal newsletter:

> *A member of the audience described that we were reduced to "health police", while another expressed regret concerning the remote, paranoiac attitude of the majority of caregivers, increasing the gap already exists between doctor and patient. Most ultimately agreed that the brutality of the operation was regrettable, and concluded that in future anthropologists and psychologists should be involved to a greater degree in such circumstances, since caregivers' actions consist here in particular of supporting the patients and their loved ones through the dying process (MSF 2005:14).*

In later operations, MSF would attempt to some degree to recognize the humanity of its patients. A 2008 edition of MSF guidelines calls for efforts to demystify Ebola treatment centers by allowing people to see inside them, as well as providing survivors and relatives of the deceased with a "solidarity kit" to compensate them for items destroyed for fear of contamination (Sterk 2008). And, as reported in academic and nonacademic media, both WHO and MSF have belatedly recognized a role for anthropologists in navigating responses (Hewlett and Hewlett 2008; Sáez et al. 2014). Yet all proved too little, too late for the current outbreak. When the virus unexpectedly appeared in West Africa, humanity took a backseat to security. The breach in the larger social membrane, however, ran deeper and wider than any gap in protective clothing (Frankfurter 2014).

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As the disease escaped initial containment, panic began to set in. Protocols, kits, and hasty attempts at quarantine could not substitute for incapacity, poor judgment, and early inaction. In some settings (Senegal, Democratic Republic of Congo and—to great relief—Nigeria), public health efforts managed to smother local outbreaks, erasing them from the headlines. In others, however, disaster only grew. After initial eruption in Guinea, the patchwork, aid-based circulatory system of medical care in Liberia and Sierra Leone dissolved before the onslaught, itself endangering a much broader pool of patients (MSF 2014h). From the outset, MSF was working on the front lines. The organization's own news briefs, initially measured and businesslike, began to express alarm by the end of March, recognizing the geographic dispersal of cases was unprecedented; then, when hope of containment failed, it pronounced the epidemic out of control by mid-June (MSF 2014d; see also MSF 2014g; Wieners and Kitamura 2014).[5] The updates grew increasingly shrill as the summer wore on and conditions deteriorated. In early September, feeling overwhelmed, the group took the extraordinary step of calling for military support (though not forced quarantine). In a speech to the United Nations, MSF's international president Dr. Joanne Liu accused member states of joining a "global coalition of inaction" and challenged those that had invested in biosecurity to deploy their resources to stem the epidemic (MSF 2014c, 2014f).

Who, after all, was in charge? This core concern of security thinking grew increasingly unclear in the absence of effective national health care (Abramowitz 2014). Although WHO had global authority, its mission historically emphasized policy rather than direct action; even the Epidemic and Pandemic Alert and Response Program promised "support" to member states in the African region rather than overt leadership (WHO 2014).[6] The CDC ultimately remained an arm of another national

4 Hewlett and Hewlett (2008:44) suggest that a survivor or elder would care for the afflicted.

5 For a timeline of events, see http://www.cnn.com/interactive/2014/11/health/ebola-outbreak-timeline/

6 As noted in several news reports, WHO had also suffered budget cuts (Fink 2014; Sun et al. 2014).

government, however large and influential it might be. For its part, MSF would never claim a coordination role as a nongovernmental organization (NGO), and could not realize it even if they wished (MSF 2014a). Although the group found itself playing a prominent part, treating 3,500 confirmed patients by early November (of whom more than 1,400 survived), this was only about a fifth of even the suspect official numbers.[7] And when a handful of international volunteers themselves became sick, their return home for treatment sparked a resurgence of nationalist concerns about borders and quarantines. While no expense might be spared in seeking to care for these lives (and the mortality rate for those evacuated to well-equipped settings appear much lower), the moral heroes of humanitarian medicine had become a potential threat.[8]

The story of Ebola is a tale of medical vulnerability—vulnerability not simply of patients, or even caregivers, but also of systems, including those that seek preparedness. Lulled by plans and simulations, the reflected glow of efficient logistics, and lives saved elsewhere, the global gaze overlooked the blindness of its own policies and a failure to establish or support infrastructure

7 See http://www.msf.org/diseases/ebola and http://www.nytimes.com/interactive/2014/07/31/world/africa/ebola-virus-outbreak-qa.html.

8 See Benton (2014) on the differential national/racial valuation of lives. As of December 2, The New York Times reported 20 cases of Ebola treatment outside of Africa, five of which ended in death (an effective mortality rate of 25%, including examples of last minute care) (see http://www.nytimes.com/interactive/2014/07/31/world/africa/ebola-virus-outbreak-qa.html?_r=0)

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(Beisel 2014). And here perhaps lies a moral: there is no packaged substitute for an effective health care system. When finally galvanized into action, other actors have sought to scale up MSF's approach, building more treatment units along the lines of the group's "gold standard" of care (Wingard 2014; see also Dixon 2014). Even if this tactic ultimately helps contain the outbreak, it only produces a temporary, specialized assemblage rather than a durable network of care (Cooper and Tavernise 2014). In addition to this scaled-up response, and a flurry of efforts to develop treatments and vaccines, the epidemic has also inspired a wave of technical innovation. From a retrofitted German passenger jet to ferry the fortunate few back to gleaming medical centers, to a solar-powered "mobile suitcase laboratory" developed at the Pasteur Institute in Dakar to offer test results in 15 minutes, to an improvised version of personal protective equipment created by a Liberian nursing student, the human capacity for ingenuity has produced an impressive display (*Deutsche Welle* 2014; Gallagher 2014; Park and Umlauf 2014). Yet the mode remains largely piecemeal and reactionary. Similarly, the home disinfection kits MSF began distributing in Liberia, like the clinical trials they have agreed to host, represent a desperate rather than triumphant mode of experiment. When fear and compassion meet, amid terror and chaos, best procedure reveals itself to be "an imperfect solution in a situation that is far from ideal" (MSF 2014e; see also MSF 2014b). It is hard to imagine a more painful illustration of both hubris and limits in global health. ■

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