Remembering the "Pan" in "Pandemic": Considering the Impact of Global Resource Disparity on a Duty to Treat

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While Malm and colleagues (2008) do a fine job of considering the limits and merits of a duty to treat in the face of pandemic disease, they do so in the developed-world context. Developing world healthcare providers face infectious diseases as virulent as anywhere else in the world, often being on-site for initial outbreaks of global and regional pandemics. They do so with fewer resources and at greater risk to themselves, a fact I contend must be accounted for in any formulation of pandemic duty to treat whether or not it alters that duty. Here, I introduce some of the salient conditions resulting from global resource disparity and offer a brief consideration of how they might affect formulations of a duty to treat.

Consider the following case. In December of 2007, an outbreak of Ebola occurred in Uganda. Its epicenter was the town of Bundibugyo, a city to which there is only one road, which has no electricity, and in which the hospital treats 65,000 patients per year on a budget of only $250,000. By December 11, 2007, 18 people were dead, four of whom were healthcare personnel at the hospital (Ehrenkranz 2007). This is hardly surprising as healthcare providers are most likely to have direct contact with the virus-bearing blood of Ebola patients, nor is it surprising given the lethality of Ebola: the least lethal of the Ebola subtypes, EBO-S has a mortality range of 41%–65%; EBO-Z, the most lethal, can range as high as 89% (King 2008). In short order, the Ugandan Medical Workers Union (UMWU) (Uganda) advised their people in Bundibugyo to vacate their hospital jobs. But this was no simple failure to fulfill a duty to treat, and was very different from the failure of some Toronto healthcare workers with access to modern infection control procedures to show up for work during the severe acute respiratory syndrome (SARS) outbreak (Malm et al. 2008). Why? Because workers were *willing* to return to work even while the disease still raged unabated. The UMWU had very simple conditions for doing so: better protection and sanitary measures (Ehrenkranz 2007). Conditions standardly available in the developed world are simply absent in a region where hypodermics can rarely be fully sterilized, individual isolation of patients from each other is not physically possible, and universal precautions such as double-gloving and eye protection are prohibitively expensive. While the risks for Toronto healthcare works were high—Malm and colleagues (2008) point out that approximately 50% of Toronto SARS infections were in healthcare workers, three of whom died—they are far higher in places where resource disparity leads to poor infection control.

Just how bad is access to such protections? So bad that the medical system, itself, is a major site for transmission. Unsterilized needles and syringes are frequently reused in administering treatment and commonly draw from multi-dose vials, thereby contaminating the vials such that even subsequent use of sterile equipment will convey contaminated medicine (Peters 2005). The conditions on the ground and the shortages of supplies mean that ostensibly disposable plastic equipment, which has prevented cross-contamination in the developed world, is being reused. This has proven to be worse for the developing world than older medical supplies such as glass syringes which can be heat sterilized: easily-melted disposable plastics are usually simply rinsed and reused. Where sterilizable sets of syringes and needles are available, they may be hard to come by and closely rationed.

This is only one way in which the resource disparity between the developing and the developed world changes the face of pandemic disease for healthcare providers. Other basics of infection control such as barriers are also in serious shortage, resulting in inadequate use by nursing and other staff: "Gloves are used only rarely—often not even during surgical procedures—and gowns are not commonly available. Thus, hospital personnel often bear the brunt of these epidemics and participate in the dissemination of disease" (Peters 2005, 2572). Such infection control procedures and individual use of gowns, gloves, masks, and goggles are recommended by the World Health Organization for infectious diseases and Ebola, in particular, without any regard for how resource-poor regions are to acquire them. Compare this with the experience of hospital staff in the developed world where adequate resources mean that nurses and

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physicians rarely have unprotected contact with infected patients.[1]

There are many ways to account for these facts when formulating a duty to treat. Let us consider the following two: we can maintain that the duty to treat is an absolute moral imperative, or we can allow that it is narrowly defeasible.

Viewing the duty to treat in an epidemic or pandemic as an absolute duty from which there can be no exceptions is appealing as it sets clear standards for behavior in a time when medical care may be all that stands between a pandemic brushfire and a pandemic conflagration, and when personnel shortages are already likely. However, this imposes a disproportionate burden on people whose work conditions and resources intrinsically put them in greater danger than those with access to adequate supplies and equipment. What's more, those bearing this burden tend to live in the lower-latitude developing countries with limited disease monitoring from which infectious diseases most commonly emerge (Jones et al. 2008). Such regions thereby suffer a triple cocktail that affects both the duty to treat and the likelihood of a pandemic escaping early detection and early response: poor disease monitoring, inadequate resources for infection control, and an increased likelihood of emerging infectious diseases. An absolute duty to treat thus demands more of those who have less. Equally troubling, this demand disproportionately benefits those who have more: because emerging infectious diseases are liable to emerge in resource-poor areas, those who are being asked to take the greatest personal risks will potentially be stopping the pandemic at a regional level or at least slowing it down before it goes global. The result of their sacrifice may be to prevent the well-equipped personnel from tapping out or even using their resources. This rather appalling scenario—that the poor would die to preserve the wealthy and be more likely to do so precisely because they are poor—may be both regrettable and acceptable on a strictly utilitarian basis of considering the good of the many to outweigh the good of the few, but is on its face so unjust as to be morally undesirable and to render questionable an absolute duty to treat.

This leads me to consider a second way to account for resource disparities when formulating a duty to treat: We might say that a duty to treat is not absolute, but is defeasible by particular narrow circumstances. I have in mind circumstances such as an inability to effectively treat combined with a high risk to the care provider's own safety, though this is only a preliminary proposal. This seems to be the case in Bundibugyo with Ebola, though not everywhere with all infectious diseases. Recall the high mortality rates of Ebola. These are not due to lack of treatment, but rather to ineffectiveness of treatment. Most commonly, only supportive care can be offered (Peters 2005). These may be precisely the kind of conditions in which a duty to treat is defeasible, conditions in which the little treatment that can be offered is largely futile for anything except the patient's comfort *and* the care provider is at high risk of becoming infected and thus both dying and serving as a vector. Yet hospitalization is a key part of infection control, isolating infected persons from the general population if not from other patients, and is difficult in the extreme without hospital personnel in place. In such situations, more likely to obtain for those healthcare personnel who lack resources but possible in any setting, is treating infected patients no longer a duty but above and beyond duty? Whatever circumstances we might delineate for a defeasible duty to treat, we must be cautious that we do not thereby universally eviscerate a duty to treat in precisely the circumstances where it is most necessary such as pandemics where healthcare personnel in short supply might desire not to report for work.

I do not have the scope, here, to settle this issue. But we must consider the possible effect of resource disparities on a pandemic duty to treat lest we forget that in a global *pan*demic, everyone is involved and not everyone will be equally affected by implementing duties of care. Whether we formulate a duty to treat as an absolute or as defeasible under particular narrow circumstances, it would be a moral failure to give no account at all of the impact of global resource disparity on such a duty. ■

1. It should be noted that the scarcity typical of developing countries could occur even in developed world clinical settings during a pandemic with high incidence and prevalence; this scenario of a resource-rich system overwhelmed by demand for care is depicted by Malm and colleagues (2008).

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