Ebola and Learning Lessons from Moral Failures: Who Cares about Ethics?

Maxwell J. Smith*, University of Toronto
Ross E. G. Upshur, University of Toronto

*Corresponding author: Maxwell J. Smith, Dalla Lana School of Public Health and Joint Centre for Bioethics, University of Toronto, 155 College Street, Toronto, Ontario M5T 3M7, Canada. Email: max.smith@utoronto.ca

The exercise of identifying lessons in the aftermath of a major public health emergency is of immense importance for the improvement of global public health emergency preparedness and response. Despite the persistence of the Ebola Virus Disease (EVD) outbreak in West Africa, it seems that the Ebola 'lessons learned' exercise is now in full swing. On our assessment, a significant shortcoming plagues recent articulations of lessons learned, particularly among those emerging from organizational reflections. In this article we argue that, despite not being recognized as such, the vast majority of lessons proffered in this literature should be understood as *ethical* lessons stemming from *moral* failures, and that any improvements in future global public health emergency preparedness and response are in large part dependent on acknowledging this fact and adjusting priorities, policies and practices accordingly such that they align with values that better ensure these moral failures are not repeated and that new moral failures do not arise. We cannot continue to fiddle at the margins without critically reflecting on our repeated moral failings and committing ourselves to a set of values that engenders an approach to global public health emergencies that embodies a sense of solidarity and global justice.

Introduction

The exercise of identifying lessons in the aftermath of a major public health emergency, and then of course actually learning those lessons, is of immense importance for the improvement of global public health emergency preparedness and response. For instance, such exercises were carried out by local, national and global health authorities following the outbreak of severe acute respiratory syndrome in 2002–2003 and the H1N1 influenza pandemic in 2009–2010 (Health Canada, 2003; World Health Organization, 2003a; Campbell, 2006; Chan, 2009a; Hine, 2010; Public Health Agency of Canada, 2010; World Health Organization, 2011). Notwithstanding some substantive disagreement on the lessons themselves, there is no doubt that there are lessons to be learned from these crises, and, apart from what the most steadfast cynics might argue, that we are capable of learning at least some of them.

Despite the persistence of the Ebola Virus Disease (EVD) outbreak in West Africa, it seems that the Ebola 'lessons learned' exercise is now in full swing. A search of the PubMed database conducted on 22 July 2015, using a combination of the terms 'lesson*' or 'learn*' and 'Ebola' for literature published after 1 March 2014, retrieved 84 results, with many more expected to be added in coming months. Hundreds of additional 'lessons learned' articles and entries in popular media can be returned through a similarly constructed web search. The lessons that have been articulated thus far vary widely in content and scope and permeate numerous domains, from lessons for global outbreak surveillance and governance (Kalra *et al.*, 2014; Gostin, 2015) to lessons for the livestock industry (Clarke, 2014), the role of outer space (Asrar *et al.*, 2015) and investing in Ebola drug and vaccine stocks (Ward, 2015).

Many who have weighed in thus far have framed the exercise as 'lessons learned' (e.g., 'What Ebola has Taught Us'), as if the learning has already occurred. In the sense that learning can minimally be understood as the acquisition of knowledge, there is no doubt that learning has commenced; however, the act of identifying failures and areas for improvement, while crucial, does not necessarily constitute a meaningful cultivation of such insights. Therefore, we suggest that it is perhaps more accurate to frame this initial exercise as 'lessons identified', which leaves outstanding the task of understanding and embodying those lessons, their implications and how they ought to be translated into actionable guidance

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and ultimately constructed or incorporated into institutional structures, policies and practices. While the initial exercise of identifying lessons is not insignificant, the tasks required to learn those lessons in a robust and meaningful manner presumably involves disproportionately more effort by the numerous and varied organizations and institutions that participated in the response. Learning these lessons such that we are then able to improve upon the prevention of, response to, and recovery from the EVD outbreak in future scenarios will ultimately require the interrogation and understanding of not just where and how the prevention, mitigation and response to the EVD outbreak was inadequate, but also *why* these inadequacies existed and what factors created, and may perpetuate, these failures.

So, what then is to be made of these emerging 'lessons learned'? Are common themes emerging? Who is responsible for learning the lessons? Do the lessons concern the fundamental factors contributing to our failures or only those factors that can be remediated given current stakeholder interests, power relations and institutional structures? Are the lessons novel or at all insightful? If lessons emerging from this crisis resemble those that we were meant to learn in the wake of previous outbreaks (e.g., Heymann *et al.*, 1999; Dickmann *et al.*, 2015), is there reason to believe that the 'wake-up call' this outbreak purportedly serves will somehow be different in catalyzing change? These are questions that must be answered if the lessons learned exercise is to impart useful knowledge, guide our learning process and ultimately inform the modification of policies and practices in global outbreak prevention, preparedness, response and recovery.

On our assessment, a significant shortcoming plagues recent articulations of lessons learned, particularly among those emerging from organizational reflections. In this article we argue that, despite not being recognized as such, the vast majority of lessons proffered in this literature should be understood as *ethical* lessons stemming from *moral* failures, and that any improvements in future global public health emergency preparedness and response are in large part dependent on acknowledging this fact and adjusting priorities, policies and practices accordingly such that they align with values that better ensure these moral failures are not repeated and that new moral failures do not arise.

Ebola: Lessons Learned

As mentioned, there have already been considerable contributions to the Ebola 'lessons learned' exercise, and there are sure to be many more. Indeed, the most important lessons may only be exposed after the outbreak has finally ended. Thus, it would be foolhardy at this point to attempt any sort of summative assessment. For the purposes of the arguments we would like to make in this article, it is not necessary to synthesize and package the lessons that have been proffered thus far in an exhaustive and systematic manner. Doing so would be critical to ensure that important lessons for future efforts are not neglected, but this is not our ambition. Rather, the purpose of this section is illustrative: to get a sense of the content and scope of emerging 'lessons learned' that have been advanced by key players in the global response to the EVD outbreak in order to emphasize the inherently ethical nature of many of these lessons. Acknowledging the ethical underpinnings of the lessons from this Ebola outbreak should be considered a prerequisite for confronting and envisaging the moral pathways we must take to learn from past deficiencies.

To get a sense of the lessons emerging, we looked to key players in the global EVD outbreak response and recovery and to the global health community more generally who had published documents or statements containing lessons learned, or lessons to be learned, from the EVD outbreak. 'Key players' included the World Health Organization (WHO), Médecins Sans Frontières (MSF), United Nations (UN), Bill and Melinda Gates Foundation and others. Table 1 names the organizations and documents reviewed in our analysis, in addition to some of the key lessons identified therein. There are numerous others who have contributed lessons to this expanding corpus, and other important players will surely make valuable future contributions; however, we believe the lessons reviewed here paint a sufficiently representative picture suitable for our purposes.

An analysis of these documents resulted in the generation of seven cross-cutting themes representing major trends in the lessons identified. They are briefly presented here.

The first theme, which was central to all documents, is that health systems are fragile and must be strengthened if we are to prevent and successfully mitigate future outbreaks of this kind. There was consensus that the EVD outbreak was not quickly contained due to the fact that health systems in affected countries were dangerously under-staffed, under-resourced and poorly equipped to carry out fundamental public health activities. This leads into the second theme.

The second theme is that surveillance and response capacities must be improved locally, nationally and internationally. The WHO, its Member States and the

Table 1. Lessons learned: organizations and documents

Documents/sources	Among the lessons[a]
WHO	
• Final Report of the Ebola Interim Assessment Panel (July, 2015) (World Health Organization, 2015a) • WHO leadership statement on the Ebola response and WHO reforms (16 April 2015) (World Health Organization, 2015c) • Report of the Ebola Interim Assessment Panel (Report of the Secretariat, 8 May 2015) (World Health Organization, 2015d) • WHO Regional Office for Africa: Ebola virus outbreak in West Africa: Update and Lessons Learnt (Report of the Secretariat, 5 November 2014) (World Health Organization, 2014)	• WHO does not currently possess the capacity or organizational culture to deliver a full emergency public health response. • The fragility of health systems in the face of outbreaks. • The importance of capacity. • The necessity of adequate engagement with community and culture. • The recognition of shared vulnerability. • The challenges of coordination. • The disparities and inadequacies of market-based systems to deliver on commodities for neglected diseases. • The importance of transparent and inclusive communication. • Member States have largely failed to implement the core capacities required under the International Health Regulations.
MSF	
• Ebola Response: Lessons Learned (Remarks by MSF International President Dr. Joanne Liu at the Gates Foundation Global Partner Forum, 6 May 2015) (Médecins Sans Frontières, 2015a) • Briefing Document—European Union High Level Conference on Ebola (Brussels, 3 March 2015) (Médecins Sans Frontières, 2015b) • Pushed to the Limit and Beyond: A year into the largest ever Ebola outbreak (Médecins Sans Frontières, 2015c)	• The needs of patients and communities must be placed at the core of any response. Trust must be restored at the community level. • The WHO lacks the capacity and expertise to respond to epidemics. • Hard questions must be confronted by Member States and major donors in order to set WHO priorities. • There was almost no information sharing for tracing Ebola contacts between the three most affected countries. Samples of human tissue, blood and semen have been taken from patients and dead bodies and shipped around the world. • Outcomes of R&D should be a global public good. There is a need to support strong R&D efforts and ensure that the fruits of innovation are fit for the affected countries, and are equitably and transparently shared. • Lack of available treatments for infected staff, coupled with the high mortality rate, created fear among staff. • There was a tension between curbing the spread of the disease and providing the best clinical care to each patient.

(continued)

Table 1. Continued

Documents/sources	Among the lessons[a]
	• Difficulties in organizing medical evacuations, fighting travel bans, and managing fear all diverted attention away from the critical needs in the field. • Health authorities in Guinea, Liberia and Sierra Leone now possess the knowledge to detect, investigate and tackle Ebola; however, political will is crucial to put this knowledge into practice.
UN, UNDP, World Bank, EU, African Development Bank	
• Recovering from the Ebola Crisis (2015) (United Nations Development Programme, 2015a) • Getting Beyond Zero—Early Recovery and Resilience Support Framework: Guinea, Liberia and Sierra Leone (2015) (United Nations Development Programme, 2015b)	• Existing institutions, health systems and governance systems were fragile. What was considered 'normal' before the crisis was unsustainable over the long term. • There is limited capacity of national and sub-national systems in the face of complex and novel challenges. • The poor state of liquidity in the nations' banks limited formal education, illiteracy and inexperience with formal financial services pose challenges. • Pre-existing low levels of trust in state institutions hampered the response. • Early recovery interventions should ensure that local economies continue to function, that affected persons have jobs and livelihoods and that health systems rebound. • Supporting peace-building and social cohesion is a key component of the recovery process. • Lack of knowledge of the geography, poor access to basic services by the population and population-movement patterns prevented responders from factoring this into response planning at an early stage of the outbreak. • A communication gap between governments and communities undermined the efficacy of the emergency response. • Investment in preparedness is key.
Bill Gates (co-chair, Bill and Melinda Gates Foundation)	
• The Next Epidemic—Lessons from Ebola (New England Journal of Medicine, 9 April 2015) (Gates, 2015)	• Health systems must be strengthened. • An adaptable international funding system and approval process for diagnostic tests, drugs and vaccine platforms must be developed.

(continued)

Table 1. Continued

Documents/sources	Among the lessons[a]
	• Plans must be developed for effective communication to counter confusion and panic. • Early warning and response systems for outbreaks must be improved through the improvement of disease-surveillance and laboratory-testing capacity, whose data must be made publicly available. • Rapid deployment capacity and coordination for response must be improved, and should include a range of stakeholders including community leaders.

[a]The lessons identified in this table are simplified for the sake of clarity and presentation. Furthermore, this table does not list all lessons found within these documents, as this would be unwieldy. Readers are encouraged to consult the documents/sources listed for a more robust reading and understanding of lessons proffered.

global community in general are ill-prepared for a large and sustained disease outbreak. Both novel and existing diseases emerging in new contexts must be treated with humility, and response efforts to contain and mitigate their effects must be swift. Surveillance systems with strong regional networks, as well as early warning and response systems for outbreaks, must be improved. Greater surge capacity in terms of both human workforce and resources at the regional, national and international levels ultimately contributes to a flexible, rapid and effective response. As such, outbreak prevention, preparedness and response must be kept at the top of national and global agendas, and must not slip as it has in recent years. The International Health Regulations, and in particular the capacity to assess, plan and implement preparedness and surveillance measures, internationally and locally, must also be strengthened.

Establishing robust health systems and implementing improved surveillance and response systems were identified within these documents as necessary conditions to better protect global health, but it was widely recognized that these steps alone are not sufficient. Fear, panic, denial and mistrust/distrust led to the rejection of public health interventions in many instances during this EVD outbreak. It should not be surprising, then, that the third theme emerging among the lessons is that community engagement and building trust are essential for successful global public health emergency preparedness and response. It was demonstrated that communities were capable of changing their approach to the disease (e.g., burial practices) when involved in planning. The needs of individuals and communities must be placed at the core of outbreak response, and this can only be accomplished by engaging with affected communities at every turn: in prevention, preparedness, response and recovery.

Accordingly, the fourth theme is that communications must be improved. Both risks and needs must be communicated early, clearly and transparently. Consistent, coordinated and transparent messaging will help to build and retain trust, which will facilitate a more effective outbreak response. Involving communities and their leaders in communications is also essential.

The previous four themes are imperative, and the fifth theme recognizes that achieving these goals is all for naught if they are not achieved universally. The fifth theme is that the global surveillance and response system is only as strong as its weakest link. Shared vulnerability to infectious diseases requires shared responsibility, which necessitates collaboration and the sharing of resources and information, including data generated from surveillance, contact tracing and research.

In recognition of the immense challenges of successfully coordinating and implementing these lessons, the sixth theme concerns global governance. An effective and rapid response will not take place without leadership at the international, national and local levels. This links back to the importance of involving communities and their leaders in decision-making. Organizational and governmental efforts must utilize partnerships and coordination, and must ensure that accountability mechanisms are built in. Absence of these mechanisms undermined people's trust in public health services and

ultimately hindered health care utilization during the EVD outbreak.

The seventh and final theme is comparatively longer-term in its reflection, indicating that market-based systems do not deliver on commodities for neglected diseases. This means that incentives are required to encourage the development—the *routine* development—of new vaccines and therapies for diseases that disproportionately affect the worst off or are not immediately profitable. This relates to the notion of shared vulnerability and shared responsibility. We must therefore confront difficult questions about how governments and organizations fund and set global health priorities. Beyond having the means to develop such medical products, the political will is also crucial to put knowledge into practice.

Who Cares About Ethics?

It will be clear to anyone minimally familiar with public health ethics, and infectious disease/pandemic ethics in particular, that the lessons and themes described above are steeped in ethics; they concern values, wade into areas where well-established value-conflicts exist and ultimately involve questions of, and 'insights' into, what is morally right and wrong. Indeed, beyond these organizational 'lessons learned' documents there have been several recent contributions to the bioethics literature on ethical issues and learnings from this EVD crisis (Donovan, 2014; Kass, 2014; Schuklenk 2014; Upshur, 2014; Benatar, 2015; Presidential Commission for the Study of Bioethics, 2015). Yet, explicit attention to the ethical character of the EVD lessons and the normative challenges that will invariably exist in correcting our failures in the future is either lacking or altogether absent in the reviewed organizational 'lessons learned' documents. There is no affirmation that many of the failures, as well as the improvements required to redress them, require the embrace and promotion of ethical values that may not yet be embodied by leading actors and organizations operating in global health (Benatar, *et al.*, 2010; Benatar, 2013). For instance, of its 29 pages, not a single reference is made to 'ethics' in the final report of the World Health Organization Ebola Interim Assessment Panel, nor is there an explicit acknowledgment of the value-laden and rigidly contested nature of global health decision-making and activities (World Health Organization, 2015a). Furthermore, in these documents there is no recognition that many if not all of the themes identified above have been previously identified as important ethical lessons for outbreak preparedness and response. Indeed, these lessons reflect ethics knowledge that has been promulgated in various ethics guidance documents for outbreak/pandemic planning and response (even within the organizations sampled) (Kass, 2005; University of Toronto Joint Centre for Bioethics, 2005; Lemon *et al.*, 2007; US Centers for Disease Control and Prevention, 2007; World Health Organization, 2007a; US Centers for Disease Control and Prevention, 2008; Calain *et al.*, 2009; World Health Organization, 2009).

The one exception among the documents reviewed was found in the joint UN, United Nations Development Programme (UNDP), World Bank, European Union (EU), and African Development Bank (2015a) document, *Recovery from the Ebola Crisis*, which states that '[t]he recovery process is an opportunity to bring issues of governance and ethics to the negotiation table so that recovery efforts are prioritized according to the needs of the most vulnerable and the most affected, including of children, who, by definition, are not organized to lobby for themselves' (p. 60). While ethics should be prominently considered in prevention, preparedness and response in addition to the recovery process, we agree that now is an opportune time to bring issues of ethics to the fore. We can begin by emphasizing the ethical nature and parameters of the lessons emerging in these documents.

That health systems in resource-poor nations are fragile, and particularly fragile in the face of outbreaks (Theme 1), is not a terribly insightful lesson—it is one that is routinely taught in global health (Travis *et al.*, 2004; Marchal *et al.*, 2009; World Health Organization Maximizing Positive Synergies Collaborative Group, 2009; Balabanova *et al.*, 2010; Jonas, 2013; World Bank, 2013). A critical reframing of this lesson is understanding *why* health systems are fragile in many counties; that is, what factors have led to, and will likely perpetuate, their fragility? The answer to these questions requires careful examination of the social, political and economic determinants of health systems' fragility, which is where remediation should be primarily (but not solely) focused if substantial and sustainable change is to be achieved (UN Platform on Social Determinants of Health, 2013; Benatar, 2015). There is a voluminous literature theorizing and empirically exploring the myriad causes of health system fragility in different states, but it suffices here to reiterate that health systems are *political* and *social* institutions (World Health Organization, 2007b), and therefore their fragility should arguably be considered a symptom of many separate, but mutually reinforcing, moral failures stemming from global injustice, inequitable global

health priorities, inequitable international agreements and institutional structures and a lack of global solidarity (Ruger, 2012; Gostin, 2014). Identifying health systems fragility as an area in need of redress for the purposes of global public health emergency preparedness and response carries the risk of focusing myopically on each systems' fitness for outbreak management. Instead, examining and seeking to redress health systems fragility beyond its role as a threat to global security, but rather as an obstacle to well-being and a failure of global health justice, may be what is required to address these failings in a substantial and sustainable manner. However, this requires significant political will and a challenging reorientation for sovereign nations, multinational corporations and international agreements toward addressing the fundamental health needs of those most vulnerable populations in our global community; in short, a new paradigm for global health governance (Theme 6) (Benatar *et al.*, 2009, 2010). This will not occur without explicitly acknowledging the moral character of these failures and the values that must motivate and guide future global health activities (Ruger, 2012; Benatar, 2013). If accomplished, though, this should involve a shifting of global health funding priorities and mechanisms that could in turn address the scope of other lessons, such as the creation of universal accessible primary care systems integrated with public health, which will aid in the development and effective delivery of new vaccines and therapies for diseases that disproportionately affect the worst off (Theme 7).

Even when robust health systems infrastructures exist, it is certain that improvements in essential public health functions like outbreak response capacity are still required to address global outbreaks of the magnitude seen in this EVD crisis (Theme 2). As such, any effort to improve global outbreak response capacity is laudable. Though, there is a potential for dissonance between Theme 1 and Theme 2. If the global community is willing to spend over $4 billion USD on the Ebola response (Save the Children, 2015; United Nations Development Programme, 2015a), we ought to also be willing to commit the equivalent (or more) on health systems improvement, which will act to *prevent* such large-scale outbreaks from ever occurring in the first place. If plans are now underway to commit a hitherto unknown amount of money to the improvement of early outbreak warning systems, rapid outbreak response capacities and international structures and programs for global outbreak response, will a commitment also be made to spending at least as much on health systems improvement in developing countries? A relevant and prescient ethical learning followed the severe acute respiratory syndrome (SARS) outbreak in 2003:

> The surveillance responsibilities of individual countries may be beyond the capacity of many developing countries. These countries are being pressured to improve their existing surveillance infrastructure. However, doing so may divert resources from areas in which needs are much greater in order to achieve goals that are more in the interest of developed countries. Developed countries must be aware of this trade-off and take measures, most suitably in the form of increased investment, to ensure that enhanced surveillance does not occur at the expense of managing the multitude of ongoing public health threats many developing countries face. (University of Toronto Joint Centre for Bioethics, 2005: 19)

Renewed commitments to improve global outbreak response capacities must not come at the expense of abdicating our arguably prior moral responsibility to prevent these outbreaks and their tendency to decimate the health of vulnerable populations. While this Ebola outbreak and past outbreaks of other infectious diseases have attuned our attention to numerous deficiencies in the technical and operational aspects of outbreak preparedness, response and recovery, the failure to build robust health systems, strengthen resiliency (particularly in the relation between primary care and public health) and establish adequate mechanisms to prevent outbreaks from occurring should represent a moral failure to act (Selgelid, 2005; Faden, 2007). The lesson, if acknowledged and framed in this way, suggests that our moral outlook must change if we are to position ourselves to prevent and adequately prepare for these crises. This is not to suggest that we can altogether prevent or become immune to outbreaks. Rather, it is a claim that our perpetual surprise when deadly outbreaks emerge (often in the worst off corners of the world) reflects our failing of humility and inability to acknowledge history. It suggests that we are happy to recurrently receive the 'wake-up call' provided by global outbreaks but that we are reluctant to answer it. Bill Gates echoed the thoughts of many others when he stated that '[p]erhaps the only good news from the tragic Ebola epidemic. . .is that it may serve as a wake-up call: we must prepare for future epidemics of diseases that may spread more effectively than Ebola' (Gates, 2015: 1381). Again, following the outbreak of SARS a similar sentiment emerged: 'The SARS outbreak sounded a dramatic wakeup call about global interdependence and the

increasing risk to global human security from the emergence and rapid spread of infectious diseases' (Singer *et al.*, 2003: 1343). Middle East respiratory syndrome coronavirus, H5N1 and H7N9 influenza, emerging pathogens with antimicrobial resistance and many other threats have sounded similar wake-up calls (World Health Organization 2006, 2007c, 2015b). The need to correct our moral failures—to invest in global health such that the emergence of outbreaks is less frequent rather than merely increasing capacity such that we can respond more effectively when they do emerge—should be recognized as an ethical lesson of this outbreak. This is a lesson we repeatedly have the opportunity to learn but have as of yet largely failed to heed.

In one of the few examples where lessons learned from this EVD crisis referred explicitly to the need for a shift in moral attitude, the World Health Organization Ebola Interim Assessment Panel stated that '[w]e have learned lessons of solidarity. In a disease outbreak, all are at risk. We have learned that the global surveillance and response system is only as strong as its weakest links, and in an increasingly globalized world, a disease threat in one country is a threat to us all. Shared vulnerability means shared responsibility and therefore requires sharing of resources, and sharing of information' (Theme 5) (World Health Organization, 2015a). Those familiar with the public health ethics literature will recognize the centrality of solidarity as a central value in public health and to pandemic preparedness and response in particular (Kenny *et al.*, 2010; Prainsack and Buyx, 2011; Dawson and Jennings, 2012; National Collaborating Centre for Public Health Policy, 2015; Thompson *et al.*, 2015). After SARS (and surely before as well), it was recognized that pandemics can challenge conventional ideas of national sovereignty, and that traditional values of self-interest must be suppressed in order to protect global health (Kotalik, 2005; *The Lancet*, 2007; World Health Organization, 2007a; Córdova-Villalobos *et al.*, 2009; Kenny *et al.*, 2010; Buse and Martin, 2012). Indeed, very similar language to that found in the Ebola 'lessons learned' documents has been used to advocate for a shift in the global health paradigm in response to the HIV/AIDS pandemic ('the movement must continue to innovate and press for a more clearly defined and deeper commitment to shared responsibility and global solidarity among countries and development partners' (Buse and Martin, 2012: 2)), the SARS crisis ('Protecting global health requires governments around the world to show solidarity and to be open and transparent in the way they carry out health protection responsibilities' (University of Toronto Joint Centre for Bioethics, 2005: 19)) and the 2009–2010 H1N1 influenza pandemic ('An influenza pandemic is an extreme expression of the need for solidarity before a shared threat' (Chan, 2009b)). The emphasis on the common and collective good that is at risk in pandemics is in fact at the very center of the relational public health ethics perspective (Kenny *et al.*, 2010). The importance of solidarity has even been translated into guidance for how to actually realize ethical requirements in outbreak preparedness and response, such as for data and tissue sharing during a global infectious disease outbreak (Langat *et al.*, 2011; Crowcroft *et al.*, 2014). Yet, regressions on these ethical lessons appear to have occurred with little controversy during the EVD outbreak; travel bans and restrictions, trade restrictions, limited data and resource sharing and other practices geared toward protecting national self-interest were again adopted rather than accepting shared responsibility (World Health Organization, 2015a). This calls into question whether lessons of solidarity have been, or will be, learned, simply based upon a revived recognition of our shared vulnerability. Rather, the incorporation and realization of solidarity in global public health emergency preparedness and response requires the embodiment of solidarity in the global health paradigm itself. This requires explicit reflection on the ethical parameters and obligations of different global health actors, which must be institutionalized by robust structures and processes for governance and accountability.

Action on these ethical lessons requires an acknowledgement of our fundamental moral obligations and subsequent reflection on how they ought to translate into policy and practice. Other lessons, while still having moral bases, may at first seem considerably more straightforward as they pertain to particular tools considered necessary for effective outbreak management (e.g., community engagement and risk communication). What is important to note, though, is the centrality of *trust* to these lessons and the effectiveness of these tools. For instance, the WHO leadership statement on the Ebola response and WHO reforms stated that a 'significant obstacle to an effective response has been the inadequate engagement with affected communities and families. This is not simply about getting the right messages across; we must learn to listen if we want to be heard' (World Health Organization, 2015c). Similarly, the UN, UNDP, World Bank, EU and the African Development Bank, in its *Recovery from the Ebola Crisis*, stated that '[t]he low levels of trust in state institutions that existed before the epidemic hampered the response. Trust in public institutions could be strengthened through inclusive dialogue, efforts to enhance

accountability, and equitable and harmonized service delivery' (p. 11). The acknowledgement of the importance of community engagement and fostering trust in outbreak management (Theme 3) should be celebrated. Yet, the ethical imperatives to engage communities, build trust and increase accountability have long been recognized as important *moral* obligations for pandemic planning, and have even been incorporated into pandemic plans as guiding ethical values (Kass, 2005; Thompson *et al.*, 2006; World Health Organization, 2007a; US Centers for Disease Control and Prevention, 2008; Baum *et al.*, 2009; Institute of Medicine, 2009; Nigeria Integrated National Avian ad Pandemic Influenza Response Plan, 2009; Thomas *et al.*, 2009). For instance, the World Health Organization's (2007a) *Ethical Considerations in Developing a Public Health Response to Pandemic Influenza* specifically states that '[p]ublic engagement and involvement of relevant stakeholders should be part of all aspects of planning' (p. 3), and goes on to address its application in the context of communication: 'In order for public engagement in preparedness planning to be meaningful, effective modes of communicating with and educating the public about the issues involved are essential' (p. 4). This relationship between public trust, risk communications and community engagement has also been recognized for some time. Following the 2003 SARS outbreak in Toronto, researchers from the University of Toronto argued that '[t]rust is an essential component of the relationships among clinicians and patients, staff and their organizations, the public and health care providers or organizations, and among organizations within a health system. Decision makers will be confronted with the challenge of maintaining stakeholder trust while simultaneously implementing various control measures during an evolving health crisis' (University of Toronto Joint Centre for Bioethics, 2005, p. 7). Indeed, one of the major obstacles experienced during the SARS crisis, which was acknowledged in two major Canadian public health reports following the outbreak, was inadequate risk communication (Theme 4). The SARS Commission, authored by the Honourable Mr. Justice Archie Campbell following the outbreak, asserted that '[b]ad communication is a steel thread throughout the story of SARS. Poor communication exacerbated a confusing and terrible time' (Campbell, 2006: 1149). In a similar vein, the final report of the WHO conference on SARS concluded that 'information should be communicated in a transparent, accurate, and timely manner. SARS has demonstrated the need for better risk communication as a component of outbreak control' (World Health Organization, 2003b). Trust and transparency are even articulated as guiding principles in the World Health Organization's Outbreak Communications Planning Guide (World Health Organization, 2008). Yet, 12 years later, the same lessons emerge anew in the context of Ebola, as if they have been wiped from our collective memory.

Failing to heed past lessons of building and fostering trust and neglecting to engage affected communities in outbreak preparedness and response is a moral failing, but this moral failing runs deeper. What many of these lessons fail to acknowledge is that, while community engagement and involvement in planning, decision-making and communications are critical to building and preserving trust, trust also has an historical and systemic component (Hardin, 1993). Trust relations are shaped by experiences that extend beyond interactions in the immediate context of a public health emergency. Decades of social and personal risk, vulnerability and powerlessness, which are likely to foster distrust, may precede and remain throughout public health crises if not rectified at a systemic level (Baier, 1986). Improving community engagement and community involvement in outbreak preparedness and response will therefore only scratch the surface of building robust relationships of trust. Rather, the creation of *trustworthy systems* should be our goal, where entrusted global health authorities embody a set of ethical values—e.g., solidarity, global justice—that proportionately reflect the trust placed in them.

This is not to suggest that the failures identified above must therefore reflect a singular breach of trust by global health authorities, like the WHO, or that responsibility for these failures lies solely with such an organization. Indeed, if no single global health actor possesses the leadership and authority to coordinate and command an effective global outbreak response (as many of the 'lessons learned' documents indicate), it seems there is no single actor to blame. That is, it is not that our trustworthy global health regime has breached our trust, but rather that such a regime does not yet exist. Moreover, given that many of these failings can reasonably be seen as stemming from broader social, political and structural global injustices, questions about where responsibility lies with respect to the failures in this EVD outbreak become much more complex. These failures ought to be understood as *collective* failures, where accountabilities lie, to an extent, with us all. As David Nabarro, UN Special Envoy on Ebola, stated eloquently, '[i]t's not somebody else's problem; it's our collective problem' (Beattie, 2014). True

solidarity entails an acknowledgment of our collective accountabilities.

Conclusions: Learning from Moral Failures

Despite ample ethics lessons and guidance documents emphasizing the importance of global solidarity in outbreak prevention and management, community engagement and fostering trust, developing and establishing global governance that is transparent, accountable and inclusive and correcting global inequities in health investment patterns, shortcomings in these areas were present in the EVD outbreak. What is troubling is that these shortcomings have been identified as 'lessons learned' from the EVD outbreak but their ethical dimensions have largely been neglected. This is perhaps the most conspicuous lesson: our inaction on previous 'lessons learned'. A crucial lesson to learn is why the cumulative ethics knowledge and careful reflection on values and guidance generated following previous outbreaks continues to not adequately inform our efforts in global outbreak management. What is the purpose of ethics guidance documents? Is this simply a failure of translating ethics knowledge to policy and practice? If so, what are the obstacles to successful translation of this knowledge?

This exercise has highlighted the importance of integrating values and ethics into policy and practice (Presidential Commission for the Study of Bioethics 2015). Clearly, there were significant moral failures in the EVD outbreak, with some requiring more analytic skill to identify their normative dimension than others. What we have attempted to illustrate in this article is that the examination and integration of values and ethics continues to be neglected among lessons learned, despite the inherently ethical nature of the lessons and the body of literature previously (and concurrently) identifying many of these ethical lessons. There is still much work to be done in order to imbue the approach to global public health emergencies with morally justifiable values and ethical directives. This can only occur, though, if we first acknowledge that our failings in the Ebola response were *moral* failings as a global health community, and that improvements in future outbreaks are predicated on a sea change in the values that undergird our attitude to global public health emergency preparedness and response. Perhaps even prior to this we must acknowledge that global health itself is a moral enterprise (Benatar, 2013). Given the increasingly abundant literature pertaining to ethics in pandemic and disaster planning and response, global health ethics and humanitarian health ethics, which includes explicit guidance for pandemic preparedness and response, we must redouble efforts to translate this research into policy and practice.

If we are to learn the most important lessons stemming from our experiences with the EVD outbreak, a moral reorientation must occur; for if there is no recognition and interrogation of the shortcomings in the values that have thus far informed and guided the current paradigm of global public health emergency preparedness and response, and, indeed, global health more generally—a recognition that the fundamental manner in which we approach such situations is morally deficient—then it is questionable whether future actions will differ substantially. We cannot continue to fiddle at the margins without critically reflecting on our repeated moral failings and committing ourselves to a set of values that engenders an approach to global public health emergencies that embodies a sense of solidarity and global justice.

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