
Ebola: How the World Escaped a Pandemic

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19 January 2017

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Introduction

From December 2013, the largest Ebola outbreak in history swept across Liberia, Sierra Leone and Guinea, claiming thousands of lives. The international community predicted a pandemic affecting millions of people, yet when, months later, a sustained and coordinated response was put into place, the outbreak was in decline, reflecting the importance of local and regional efforts.

At this event, which launched Paul Richard's book, *Ebola: How a People's Science Helped End an Epidemic*, the speakers examined local and international responses, and analysed the importance of local expertise and knowledge in combating epidemics.

The meeting was held on the record. The following summary is intended to serve as an aide-mémoire for those who took part and to provide a general summary of discussions for those who did not.

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Paul Richards

Ebola is an infectious disease. It is not contagious; it cannot be spread by airborne transmission. It can only be contracted through the transfer of bodily fluids. There is no immediate cure for the disease and the strain that affected upper West Africa in 2014 has a historical death rate of up to 90 per cent. The only treatment available is palliative and this means ensuring patients are rehydrated. Introducing this treatment enabled death rates to be lowered to 30 per cent. Like with cholera, those infected not die of the disease itself but of dehydration. Since 2015, a vaccination, rVSV-ZEBOV, has been created. However, this was developed too late for use in the outbreak in West Africa. While a vaccine now exists, Ebola has historically been confined largely through local interventions, particularly quarantine measures.

The outbreak in upper West Africa mostly affected three countries: Liberia, Sierra Leone and Guinea. The presumed spillover event took place exactly where the three countries meet, so the disease spread very quickly via the national road networks, swiftly reaching the three capital cities of Monrovia, Freetown and Conakry. This resulted in the first outbreak of a major disease in an urban environment, and nobody knew how this would play out. The urbanization of Ebola actually turned out to be advantageous, as it allowed responders to implement control programmes quickly and efficiently due to their ability to use existing infrastructure, such as road networks to reach patients and electrical grids. Those hardest to access were isolated rural populations.

The international response to Ebola in West Africa was triggered very late, in August 2014, but the epidemic had been ongoing since at least December 2013.

In September 2014, the Centers for Disease Control and Protection (CDC) estimated that, by the end of January 2015, there might be 1.4 million cases of Ebola in Sierra Leone alone. By then, however, the epidemic had gone into reverse and the actual number of cases in January 2015 turned out to be 10,491 in Sierra Leone. The modelling improved over time, with a key paper published in December 2014 pointing out that a straight-line model was not much help. The paper emphasized that the social reality in the case of Ebola is that those intimate with the patient are at very high risk but that others in the neighborhood are at low risk. Once the models were adjusted to reflect this, estimates of cases were much lower. This is an important lesson from the epidemic in West Africa.

¹ This summary was written by Andrew G. Smith.

There are various possible explanations for why the decline occurred. First, the outbreak may have burned out because respondents acquired immunity after prolonged exposure. Second, better treatment and nursing techniques were implemented. From October 2015 onwards, the death rate dropped to 30 per cent, as Médecins Sans Frontières started routinely rehydrating patients. Third, survivors, now immune to the disease (at least in the short term), were recruited into local community care centers (CCCs) and were critical to controlling the outbreak thereafter.

The book argues that the international response was very slow and that not enough attention was paid to the local response. The evidence that to support this conclusion is that the decline of Ebola occurred first in those places where the epidemic began. The speaker said it took a social learning process of approximately six weeks for people to establish what was causing the spread of the disease. Communities realized that those actively performing their social duties by attending funerals and washing the bodies of the dead were the ones becoming infected, so as a result they modified their behaviour. There was particularly strong and successful local action in the area of quarantine, but the international community was slow to learn lessons from this.

Local task forces (LTFs) for case finding, quarantine and safe burial were established long before there was any training. They were based on the knowledge the communities gained from their observations. The LTFs were similar to the civil defence forces (CDFs) created during the civil wars of the 1990s to repel government and rebel forces, which played a crucial role in ending the conflicts. The same mobilization modality was being used in the villages.

Interviews conducted with two young men from a very isolated village further demonstrated that informed and timely action was essential in preventing the spread of Ebola. The two men destroyed a bridge, preventing those from their village from travelling to assist affected relatives in other locations. Some in the village condemned them, but they were praised for this approach by the paramount chief, and those who were angry ultimately conceded that this was the right course of action.

The international community, rather than empowering these responses, such as localized quarantine measures, pursued a strategy of setting up advanced Ebola treatment centres (ETCs), and subsequently ignored their implications. One of the main tactics employed by the international aid agencies was the training of volunteers from urban areas and dispatching them to rural communities. However, residents of the villages were suspicious, viewing them as outsiders. They were not trusted to bury the dead, and sometimes bodies were hidden from them. Protective clothing should have been issued to locals to allow them to implement care and burial systems themselves. Only when the case of the Liberian nurse Fatu Kekula, who successfully improvised her own quarantine and care system for her family, was highlighted in the international media did the international community see the value in supporting local initiatives. International aid agencies eventually became better attuned to the dynamics on the ground, but mainly after the crisis had subsided. This is one lesson the international community needs to learn for the future.

Many benefits emerged from supporting local initiatives. The establishment of improvised, small CCCs made treatment more accessible and less intimidating than in the larger ETCs established by international actors. Furthermore, the creation of a home-care protocol allowed for the distribution of advice to more isolated communities about how to combat Ebola in the short term. Without this, many communities would not have received any form of external assistance.

When considering regions of the world that are associated with weak states and state failure, there is a tendency to overlook the fact that these same states often contain strong communities that rely on

themselves for security and protection; nobody is going to come and rescue them. In the case of Ebola, the disease was defeated partly as a result of community self-reliance.

To conclude, the local capacity for self-reliance was engaged in the Ebola response. Built on the mobilization of LTFs, themselves based on CDFs, community action against Ebola helped avert a global health-security crisis. Local capacity should be factored into any larger strategic framework for global health security.

Robtel Neajai Pailey

The book has many merits, and one worth drawing out from the start is that it does important work in demystifying the medical language and jargon around the technicalities of the Ebola outbreak, making it extremely accessible.

The attention to local agency cannot be overstated. He demonstrates not only that local people have the capacity to act, but also that they did act when it was required, using local ingenuity to respond to something that they had not encountered before. He goes so far as to name many of these actors, and goes beyond the attention that has been paid primarily to international actors. They were not the saviours; the saviours were Guineans, Liberians and Sierra Leoneans. Having a book validate that is incredibly important.

This is important in a broader context, as it moves local capacity beyond simply being an atypical data sample in a researcher's book, making the argument that local actors have the capability to respond long before international agencies, and in the specific case of Ebola in West Africa were largely responsible for limiting the contagion effect of the disease across the three countries. While the international media did highlight the impact of local initiatives towards the end of the epidemic, the book validates the effectiveness of the localized responses during the entirety of the outbreak.

Another key merit of the book is that it refutes notions that the traditional and cultural practices of local communities were responsible for the disease flaring up on so many occasions. This became a dominant narrative in the international media. It was precisely through the use of traditional techniques that locals were able to mitigate the impact that traditional and cultural practices were possibly having in the spread of the disease.

The central argument of the book that Ebola is less a disease of poverty than of willful ignorance must be contested, however. Taking a political-economy approach suggests otherwise. Taking the context of the three countries most affected into account, all have experienced some form of political instability in their recent history. Liberia and Sierra Leone have both experienced civil war since the turn of the 1990s, and Guinea has also experienced instability. All three have been subjected to neoliberal interventions by the IMF and the World Bank. In Liberia, efforts at post-conflict reconstruction emphasized privatization, deregulation and reducing state spending on social services such as education and health. Actually, what was required was more state intervention, as neoliberal structures from international actors led to a state in which the healthcare systems in these three countries could not function properly.

Liberia and Sierra Leone have strong extractives industries. Multinational corporations extract natural resources but do not invest in the countries and their social services. These countries should have the capacity to put more resources into their public sectors and services. The shortage of rubber gloves in Liberia during the Ebola outbreak was particularly ironic as it is a long-standing exporter of raw latex.

Regarding other limitations of the book, two issues are notable. First, the book is largely silent on the gender dimensions of the outbreak. There was little discussion of the roles and experiences of women, and how they experienced more adverse conditions than men, or gender-disaggregated data. Second, the idea of Ebola as an 'emerging disease' is a misnomer. When diseases affect poor people, they are considered 'emerging' and not considered are warranting much attention. Ebola was first detected in 1970 but it is only now the international community is discussing it and developing a vaccine. In the case of Ebola in West Africa, the outbreak only began to receive strong international attention when there was a possibility of the virus reaching the US and Europe.

In summary, the book is a great intervention, but there needs to be a greater discussion of the political economy context in any further discussion, research and analysis on the Ebola outbreak.

Summary of question-and-answer session

Questions

One lesson arising out of the Ebola crisis in West Africa was that there was complete ignorance of previous research and experiences accumulated over the past 40 years in Africa on the disease. The Democratic Republic of Congo has dealt with 10 Ebola epidemics alone since 1976. Is it not true that, had this knowledge been harnessed, many lives and resources could have been saved in West Africa?

How does the international community strike an effective balance between enabling local communities to respond to epidemics by allowing them the resources to do so and the implementation of a top-down messaging system or containment initiative?

How does the role of Nigeria compare in addressing the most recent Ebola crisis within its own borders?

What was the mental-health impact of the Ebola crisis on the ground, and how do we evaluate this in order to be better prepared for a mental-health response from the very beginning of a future crisis?

Paul Richards

Uganda's past experiences in addressing Ebola were crucial in the recent context of Sierra Leone. However, there needs to be greater respect shown towards local medical knowledge, as there is a lot of historical experience within the three crisis countries and sub-Saharan Africa more broadly. There also needs to be more comparative analysis of the effectiveness of the different national responders. Medical experts frequently discuss the relative strengths and weaknesses of national delegations, and it is important to have those documented to know which country, or countries, has or have the best capacity to respond in specific scenarios in the future. The challenge with this currently is that the world is transitioning to a period in which the international community is more fragmented and isolated, making cooperation and coordination to tackle global health crises more difficult.

Robtel Neajai Pailey

In Liberia, there is a top-down government approach corresponding with a local one that strengthened its capacity. Based in the southeast, Tiyatien Health is an organization that has deployed community health workers in rural areas that have rarely received primary healthcare in the last decade of the post-civil war

era.² The Liberian government recognized this by deploying 4,000 community health workers to the southeast to reinforce the initiative and put them on the government payroll. This was an acknowledgment through public policy that local capacity exists and needs support through increased funding. The lesson should be that the importance of strengthening healthcare systems cannot be emphasized enough. Healthcare systems must be bolstered in the long term.

Nigeria's response was exceptionally quick and it was able to prevent contagion through heightened quarantine measures, such as when a Liberian man in Lagos was discovered to have Ebola. This was critical in curtailing an epidemic in Lagos. Nigeria also demonstrated to the international community that Africa does have the capacity to respond in such crises.

Regarding the question on mental health, there is undoubtedly not enough focus on the subject, particularly in Liberia. For all governments, however, the aftermath of the Ebola crisis presents an opportunity to integrate mental-health care more meaningfully into national-health policies. One step that could be taken immediately is to create more budgetary allocations for individuals whose communities have rejected them because they were infected by Ebola. This approach could then be supported by regional and international donors, whether through targeted local initiatives or by international agencies with a focus on mental health within the three countries.

Questions

How were Ebola survivors incorporated back into their communities? Was there any use of traditional rituals?

What does a global policy that envisages a local response capacity look like? What is the sequencing of it and how does it engage with actors who have deep mistrust in their governments to ensure everyone is collaborating?

Paul Richards

At present, there is no clear picture of how survivors were reintroduced into their communities. There is a project underway that is conducting post-Ebola research at the local level, directed at understanding what people did, documenting this and identifying the lessons to be learned. This also encompasses talking to local people about the reintegration of survivors. Local communities have suggested there should be an initiative similar to the peace-and-reconciliation workshops of the post-civil war era for Ebola as it has created stigma and an environment of marginalization within communities. Communities are therefore in need of a form of social reconciliation as well as of medical attention.

In Sierra Leone, there have been efforts to try to remobilize and support the LTFs that have formed twice in recent history, once during the civil war and now as a result of the Ebola outbreak. No government-local approach exists in Sierra Leone as it does in Liberia, and to support similar efforts it would be useful to see documentation on how the Liberian initiative is working. It is too simplistic to suggest the provision of direct funding, however. This is not straightforward. Often in funding processes, aspects fall by the wayside and historically such projects witness 90 per cent of the money staying within the capital cities, with only the remaining 10 per cent distributed elsewhere. Of the LTFs that have already mobilized, there is a desire to be respected by larger national, regional and international actors, and they are indirectly

² Tiyatien Health is now known as Last Mile Health.

asking for material support. Evidently there is a need to establish interlocutors within government and civil society that are willing to proceed with the than previous experiences.

Robtel Neajai Pailey

In relation to a global policy response, one of the major lessons to take away is that the World Health Organization needs radical reform, as do national and regional institutions. There are obvious questions to be raised over the unilateral approaches of national delegations. For example, in the Ebola crisis, France supported only Guinea, the United Kingdom helped Sierra Leone, and the US assisted Liberia. In practical terms, it should have been the Mano River Union providing the regional response, and it should have been recognized as the institution worth strengthening. The need to establish an independent medical institution capable of developing researchers, doctors and nurses who can respond with more institutional and individual capacity is a key point that has arisen out of discussions between the governments of Sierra Leone, Liberia and Guinea, in order to respond more efficiently in the future. Beyond that, the US has suggested there needs to be a creation of an African Union centre for disease control. Local advocates of such plans need to bring their agendas to their individual constituencies to ensure African perspectives are heard. Discussions of regional institutions need to be brought back into the fold as they are the mechanism, more than an internationalized version, that will guarantee a more effective response to a large-scale outbreak of disease in the future.