Lessons from the Ebola Outbreak in Sierra Leone

In this article, Samuel Boland and Gillian McKay of the London School of Hygiene and Tropical Medicine express their concerns over the blog post, <u>What will happen when there is another epidemic? Ebola in Mathiane, Sierra Leone</u>. This blog includes a response from Professors Melissa Parker and Tim Allen.

In February 2018, a piece titled *What will happen when there is another epidemic? Ebola in Mathiane, Sierra Leone* was posted on the *Africa@LSE* and *From Poverty to Power* blogs.

In the blogpost, Professor Parker and Professor Allen tell us the tragic story of what happened in the village of Mathiane, Sierra Leone during West Africa's recent Ebola outbreak. In that village 56 people contracted Ebola, 38 of whom died.

Reflecting on what led to this situation, the authors write that "in the end, it has been argued, it was not the soldiers, the humanitarian INGOs, or the World Health Organisation that played the most important role in containing the spread of the disease. Instead, it was the people themselves and the public health measures imposed by paramount chiefs and their subordinates... which turned the situation around. As Paul Richards, author of the book, *Ebola: How a people's science helped end an epidemic*, has put it: 'the paramount chiefs played a blinder!' Our research confirms that was the case'".

Being part of the international response to the outbreak of Ebola, we agree that the changed practices and behaviours of Sierra Leonean people were pivotal in stopping the transmission of Ebola. However, we disagree with two underlying premises of the blogpost, namely 1) that the interventions of national and international agencies were somehow unhelpful, secondary, or separate to community-led interventions, and 2) that community leadership was consistently effective. These points draw on conversations with 15 of our Sierra Leonean colleagues who were also Ebola response workers (from a different district to Mathiane's), with whom we discussed this blogpost as part of ongoing research. The story of Mathiane presented in the original blog does not reflect their experiences of the response or the lessons they draw from it.

In their piece, Professors Parker and Allen describe a dichotomy between insider and outsiders in the village of Mathiane. The people of Mathiane are categorised as 'insiders' at odds with those 'outside' their community, implying that the Ebola response workers are 'outsiders'. This is surprising given that the vast majority of response workers were Sierra Leoneans, who worked in their own communities to stop the outbreak. These were often regular community members ('insiders') acting as response workers. They were recognised by the Sierra Leonean government and trained by the World Health Organisation and both national and international groups to safely respond to the Ebola outbreak within their own communities. They performed community engagement and social mobilisation activities, conducted disease surveillance, managed contact tracing, and buried the dead. These Sierra Leoneans often did this work without (or with highly fragmented) pay, and at great risk to their own lives. The *Ebola in Mathiane* blogpost would have benefited from the perspectives of some of these response workers, as they are as much an integral part of the community of Mathiane as those interviewed by Professors Parker and Allen. These workers could be well-placed to help inform our understanding of Mathiane's unique story and to highlight lessons from the Ebola response. The voices of the villagers give us the starting point for how the outbreak and the response played out in this location, but we believe that without the response workers voices, the story of Mathiane is incomplete.

Date originally posted: 2018-08-08

Permalink: http://blogs.lse.ac.uk/africaatlse/2018/08/08/lessons-from-the-ebola-outbreak-in-sierra-leone/

Blog homepage: http://blogs.lse.ac.uk/africaatlse/



An Ebola response worker Credit: shutterstock

A key lesson from the Sierra Leone Ebola response is that every community experienced the outbreak in a different way. The character of a response within a particular community often depended on timing. Communities affected early in the outbreak did not benefit from a well-resourced response as this was not yet available. This often led to households in quarantine going without food, water and health care, which itself led to completely understandable acts of "resistance" as people sought to survive and maintain their livelihoods during that long 21-day quarantine period.

However, there was a vocal recognition among response workers that comprehensive community support and engagement were crucial – this need was seen as an urgent priority at daily coordination meetings. Indeed, it always formed a central tenet of Ebola response planning and operations at both the National and District levels. Therefore the failures referenced by Professors Parker and Allen in Mathiane do not, as implied, reflect an unwillingness or disinterest within the Ebola response to engage transparently and effectively with communities. It is only that despite such recognition and intent, Ebola response activities were often highly fragmented and stretched too thin, especially early in the outbreak. This was a painful and distressing reality, one of which many response workers were acutely aware, and worked overtime to mitigate as far as they could. In fact, towards the end of the outbreak (when only a handful of cases remained and there were thousands of responders working to end transmission), Ebola-affected communities were often overwhelmed with community engagement and support activities.

We argue that we must be careful when drawing broad lessons from one village's experiences; with the original blog speaking to a very particular scenario. The authors write that Mathiane's people were taking care of their own needs without external support. South-Eastern Sierra Leone, where Mathiane is located, was an early region to experience the outbreak. It is therefore likely that the community was affected at the time that external support was fragmented and inadequate. While responding by themselves in this way may have been necessary in this village at this early stage of the response, it was also exceedingly risky: Parker and Allen report that 56 people got Ebola and 38 died. When the response became better resourced, good surveillance, expertly trained burial teams, and appropriate supportive care in treatment centres often limited a communities' Ebola cases and deaths to only a few. So, while it might be true that the wider response failed Mathiane, it does not follow that external responses should be limited and local communities asked to take a major role in coping with epidemics without external support. Community participation and initiative should not be seen as a substitute to immediate and effective support by national structures and the international community in future outbreaks. Professors Parker and Allen also note exceptional community leadership from Mathiane's Chief, and the role this played in 'saving' Mathiane. Our experience and research tells us that this is far from a guarantee throughout Sierra Leone, where local leadership and governance structures are highly variable in their efficacy.

For us, the story of Mathiane shows that it was not less but *more and better* external support – working together with the community – that could have ended the village's Ebola outbreak. Communities facing a new and challenging disease in the UK would not be expected to cope independently – we would expect and be provided with leadership, support, care, and resources by a functional and well-resourced public health response system. If that support was not there, we would demand it. And if someone with a highly infectious disease became ill or died within our home, putting us at risk of exposure, it would be the government and external experts who would care for the sick or remove and bury a body. No householder should be expected to risk their own, and others' lives by managing this alone. So why would we expect anything different for rural Sierra Leonean communities? This is not to say that doing so does not present its own challenges. As stated by the authors, "*managing the final stages and the passing of a loved one is a hugely important aspect of social life*", something deeply appreciated by Ebola responders – hence as the response progressed, better Ebola care (including innovative video-calling facilities to talk to family at home) and 'safe and dignified' burial teams ensured that those who were sick or who passed away were provided with as much support from their families as possible while still adhering to infection prevention and control processes.

We are aware that there will be peer-reviewed articles published from this research which will include further information about Mathiane that will help contextualise their story and which may answer our questions and speak to our concerns. We also understand and think it important to note that our experiences are mostly limited to northern Sierra Leone – therefore, we do not posit that what we write here is generalisable country-wide. Further, we readily concede that interventions, particularly those in the Global South, carry enormous political, social, and historical complexities, and that any intervention is capable of causing harm unless (and sometimes even when) these overlapping milieus are considered and structured into responses.

However, due to the wide and practitioner-oriented audience of this blog's forum and the recent re-emergence of Ebola in the Democratic Republic of the Congo, we felt it critical to raise our concerns as soon as possible: instead of limiting external intervention in future outbreaks, we should continue to research and consider how best to learn from the experiences of communities like Mathiane to demonstrate the need for earlier, better resourced, more coordinated, and more engaged interventions. International, national and community responses should not be seen as separate: we believe that all these levels have a part to play in an effective response, one in which communities and their leaders are true partners in stopping transmission. In such a response, communities will be able to take advantage of the intervention's operational resources and technical expertise, and combine these with their own lived experience to ensure that the support they get is appropriate, acceptable and tailored for their unique situation and needs.

The fact remains that from 2013-2016, West Africa was facing a wide-spread epidemic of a highly contagious and deadly disease. It was through the work and interventions of tens of thousands of response workers, from the village through the international level, that just under 30,000 people became infected, a number that could have been so much worse.

Samuel Boland and **Gillian McKay** are PhD and DrPH students, respectively, at the London School of Hygiene & Tropical Medicine. Both individuals worked in Sierra Leone during the Ebola response, and now conduct retrospective in-country field research on the response and how communities and systems worked within it and how this could be improved in future.

Response from Melissa Parker and Tim Allen

The observations of people living in Mathiane, Sierra Leone, about their experiences of the Ebola epidemic have clearly troubled Samuel Boland and Gillian McKay, both of whom worked in the country at the time. In their blog they largely dismiss what Mathiane's residents told us as misleading or too locally specific to be of relevance, and they are disinterested in the fact that the wording of our blog was negotiated in a meeting with the whole village (a point taken up by Duncan Green). Boland and McKay also ascribe to us a range of views about 'insiders' and 'outsiders' that we have not actually expressed – perhaps the most peculiar being that 'local communities' should be 'asked to take a major role in coping with epidemics without external support'.



Researcher Tim Allen meets with the elders of Mathiane Village Image Credit: Melissa Parker

One of the key issues that emerged from listening to people in Mathiane was a lack of trust in those attempting to deliver government-sanctioned Ebola control and treatment measures. This not only applied to formal health workers and soldiers imposing quarantine measures, but it extended to their own paramount chief. Instead, they turned to other social resources and capacities, drawing on secret society arrangements, which are widespread in the country. They also listened to information on the radio and from relatives on the telephone (for example, from the capital city, Freetown); and they used their historical experiences – notably of hiding during the war in the forest, and of treating diseases in the past with rehydration. The latter was initially not done in the formal Ebola Treatment Centres, because staff were understandably terrified of becoming infected themselves. The situation later changed, after Ugandan medical personnel arrived in Sierra Leone and, drawing on their experiences from the 2000/2001 epidemic in Gulu, demonstrated how it was possible to safely rehydrate patients.

Given the emphasis on quarantine and the separating of infected people from their loved ones, it is hardly surprising that people in Mathiane were terrified that if they reported cases to the authorities, their relatives would be taken away to die and their bodies not returned for burial. Such experiences were common – at least until the end of November 2014. In contrast, many of those they treated themselves survived (probably because they were continuously rehydrated from the outset), and those that did not, were buried with respect close to the village.

In addition to the lack of trust – and what they experienced as abuse, the people in Mathiane complained about something else too. They noted that suddenly they were a focus of interest, were visited by various delegations who made promises about the future, and were briefly given access to better facilities than they had previously experienced. Now everything has gone. They are left to their own devices, and wonder what will happen if there is another epidemic.

Boland and McKay suggest our blogpost would have benefited from including the perspectives of some of the Sierra Leonean response workers that were linked to the national control programme. They claim they are as much an integral part of the community of Mathiane as those we interviewed. Really? On what evidence?

Of course we interviewed scores of such response workers, including those who were nominally responsible for Mathiane. Their relationship with the population was, it would be fair to say, distant or fraught. They were unaware of the local treatment going on in the area, and were primarily focused on supporting the enforcement of quarantine for known cases. Their personal loyalties were elsewhere.

For Boland and McKay, the story of Mathiane shows that there was a need for more and better support. It is hard disagree that 'more and better' support would have been 'better', but this begs the question of what 'more and better' support entails. While there is a paucity of evidence, it is known that in Kailahun district, the outbreak was declining before the arrival of international responders; that the imposition of bye-laws by paramount chiefs was influential in containing the outbreak in some chiefdoms; and that, in the beginning, some externally driven approaches had very mixed results. The latter has been a focus of much discussion by medical professionals, with the Word Health Organisation and some iNGOs being much criticised at international meetings.

In terms of how the epidemic was contained, there is manifestly a need for further research to help us understand what shaped the course of the epidemic. As things stand, Boland and McKay's assertion that it was 'through the work and interventions of tens of thousands of response workers.... that just under 30,000 people became infected, a number that could have been so much worse', is open to question. In retrospect, it was a tragedy that Ugandan experiences of treating Ebola were not used earlier, and a lesson from Mathiane – as well as other parts of Sierra Leone – is that trust is a crucial aspect of public authority and cannot be readily replaced by pervasive enforcement of behavioural change, setting aside conceptions of moral probity and familial responsibility.

As Boland and McKay note, a new epidemic occurred in the Democratic Republic of Congo (DRC) in July. With respect to this outbreak they make the point that: 'International, national and community responses should not be seen as separate: we believe that all these levels have a part to play in an effective response, one in which communities and their leaders are true partners in stopping transmission.' That sounds fine, and concedes that the perspectives of people at the receiving end of interventions are worth hearing after all, but it suggests a rather optimistic conception of how such a process might occur. Whatever the rhetoric, the reality is that international and national public health programmes have often struggled to establish integrated systems, and engagement with target populations is commonly inadequate – especially when those populations are poor and politically marginal.

Nonetheless, it should be acknowledged that in DRC, the government, the WHO and supporting iNGOs have acted with speed, and have been able to draw on previous experiences with Ebola in the country (there have been nine previous Ebola outbreaks in DRC). Also, many of the international staff deployed in DRC have had recent experience of working in the West Africa epidemic, and have been able to use the newly developed vaccine. The confidence of affected populations in formal health care provision could not be assumed (for example, immunisation coverage is low in Equateur Province – where the outbreak has occurred). However, on 24 July 2018, the DRC outbreak was declared by the WHO to have ended. A total of 54 reported cases and 33 deaths were reported. If the data are accurate, it has been a remarkable achievement compared to the 28,616 cases and 11,310 deaths officially reported in West Africa between 2013 and 2016.

However, almost immediately afterwards a new outbreak has been reported in another part of DRC, over 1,500 miles away, in a region affected by widespread armed conflict. Fears are currently being expressed about refugees spreading infection to neighbouring countries, including Uganda – from where we are writing this blog. Surveillance will clearly be crucial for containment, but there is no sign of it so far.

Update 6 August 2018

Today, we have been alerted that surveillance is now being introduced in Uganda at airports and border crossings, and we have received a report that a Ugandan task force has been dispatched to affected districts of DRC. The Ugandan National Task Force for Ebola has been activated. So it seems that the government is acting quickly, and the country's experience in containing the serious outbreak in northern Uganda in 2000, as well as assisting in treating patients in Sierra Leone in 2014/15, is being drawn upon.

Melissa Parker is Professor of Medical Anthropology at the London School of Hygiene and Tropical Medicine.

Tim Allen is Professor of Development Anthropology at LSE and Director of the Firoz Lalji Centre for Africa.

The views expressed in this post are those of the author and in no way reflect those of the Africa at LSE blog, the Firoz Lalji Centre for Africa or the London School of Economics and Political Science.

Date originally posted: 2018-08-08

Permalink: http://blogs.lse.ac.uk/africaatlse/2018/08/08/lessons-from-the-ebola-outbreak-in-sierra-leone/

Blog homepage: http://blogs.lse.ac.uk/africaatlse/