

## Ebola: Context and Current Issues

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Over five thousand people have died of Ebola virus disease in this year's unprecedented outbreak in West Africa. Although initial cases were reported in March, misconceptions continue to circulate and an effective response has not been implemented. Ebola is a well-studied disease; its route of transmission and management are established, despite there being no cure. Transmission occurs through direct contact with bodily fluids, meaning it does not spread easily.<sup>1</sup> Nonetheless, Ebola is dangerous and precautions are necessary. The case fatality rate of this epidemic is around 70%.<sup>2</sup> However, by providing supportive care (hydration, nutrition, fever control, treating concomitant infections), this rate can be decreased substantially.<sup>3</sup> The problem with Ebola is not figuring out how to treat it, or how it spreads, which was the case with diseases such as SARS. Rather, a major complication for responders is the context in which it exists. This epidemic has many non-medical implications and it will continue to disrupt West Africa if these factors are not quickly addressed.

The spread of Ebola was facilitated by a lack of health infrastructure in Liberia, Sierra Leone and Guinea. These countries are all within the lowest 13 countries on the United Nation's Adult Health and Health Expenditures Index.<sup>4</sup> Before Ebola arrived in West Africa, the number of doctors per thousand people in Guinea was 0.1 (in 2005), in Sierra Leone it was 0.022 (in 2010), and in Liberia it was 0.014 (in 2008).<sup>5</sup> Ambulance services were almost non-existent in the region.<sup>3</sup> In addition, laboratory infrastructure has been insufficient to contribute to timely Ebola control, spurring the World Health Organization (WHO) to call for cheaper, faster and more readily available diagnostic testing.<sup>6</sup>

Ebola is taking a further toll on regional health infrastructure. Many health care workers have given their lives to Ebola, while hospitals and clinics have reduced services or closed due to lack of personnel and resources.<sup>3</sup> As a result, other diseases are being neglected as efforts are shifted to combat Ebola and resources dwindle. Lack of malaria prevention and treatment is a major concern, which has forced Médecins Sans Frontières (MSF) to focus additional efforts on anti-malaria campaigns.<sup>7</sup>

Humanitarian interventions have been criticized for being slow and inefficient. For many months, MSF was the primary organization treating Ebola. Now, many Western countries have contributed billions of dollars of funding, personnel, equipment and other expertise. Vaccines and new treatment trials are underway thanks to multinational efforts, yet these potential solutions could come too late. There may also be barriers to using these treatments and vaccines, such as restricted funds, production of the product at scale, or issues with large-scale distribution. Treatments and vaccines could play a positive role in addressing Ebola, but controlling it now still requires a strong focus on expanding strategies that are known to be effective. The EU Health Commissioner, MSF and scientists who have predicted the spread of Ebola based on current levels of aid have called for more support for established strategies including trained health personnel, improved public health measures (such as contact tracing), faster diagnostics, and more public education.<sup>8-10</sup>

Despite these calls, many nations, including Canada, Australia and the USA, are imposing increasingly strict forms of travel restrictions and quarantines, despite evidence suggesting these strategies are ineffective and may limit the ability for nations to monitor Ebola.<sup>11</sup> These policies may also deter health care workers from traveling to West Africa, whilst simultaneously augmenting global fear and misconceptions.

In West Africa, Ebola has escalated local fears and taken a toll on social support for survivors. According to UNICEF's estimates, 6515 children have lost either one or both of their parents.<sup>12</sup> Under other conditions, extended families would be willing to take orphans in. However, there is powerful stigma towards the victims of Ebola and their relatives. Fears of infection have left survivors isolated from their families and communities. The stigma has even led people to lie about sick family members for fear of losing their jobs.<sup>13</sup> Many Ebola survivors are fighting the stigma by acting as symbols of hope. They are also working in treatment centres and adopting orphans.<sup>14</sup> However, more local awareness programs to promote prevention and dispel myths could help to curb further social consequences.

Economic side effects are also being felt through the region. The Food and Agriculture Organization of the United Nations has stated that production of food has been reduced because of fear of contagion and mobility restrictions. Fewer farmers are working the fields and harvests may not make it to market.<sup>15</sup> According to the World Bank, nearly one in two

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Liberian workers who was employed when the Ebola outbreak began is now unemployed. Additionally, increased food scarcity has driven up prices beyond what an average person can afford. The World Bank also surveyed regions of Liberia that have not been affected by Ebola and discovered that food security is deteriorating due to falling incomes, increasing prices, and transportation restrictions.

Recent reports have indicated some improvements in the fight against Ebola. The outbreak in Guinea is now stable, according to the WHO. The Centre for Disease Control has reported that the spread of Ebola has decreased in Liberia. The World Bank's fear of a \$32bn economic loss has been revised to one tenth of the original estimate. Governments, the International Monetary Fund and the World Bank have pledged millions of dollars in loans, debt relief, and grants. However, varying percentages of the funds have been disbursed and deadlines for delivery remain unclear.<sup>16</sup>

The sensationalizing of Ebola has done little to educate the public, and is detracting from critical discussions of the real issues. Understanding the context of Ebola is just as important as understanding its biology. It is not enough to test vaccines and treat the ill. Attention must be given to the social, economic and political issues that exist in the region, and have been exacerbated by this epidemic. In order to ensure this type of crisis can be managed in the future, a balanced approach between resolving the immediate crisis and addressing long-term obstacles is essential.

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