

# Crucial Role of Medico-Anthropological Factors in Management of Pandemics: A Historical Analysis

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## Abstract

As the entire planet grapples with the COVID-19 pandemic, there is a disproportionate attention on finding an effective vaccine and pharmacological agents that would provide us with the armamentarium to take on the offending virus. However, when we look at the historical management of infectious pandemics, it becomes very clear that any effective strategy to contain a pandemic of the nature that we are confronted with now would necessarily have to factor in the medical anthropological dimension.

**Keywords:** Pandemic, medical anthropology, Ebola, Cholera, global health

In the last century, the world has witnessed a multitude of pandemics which have resulted in a catalogue of catastrophes. Devastation of colossal magnitude in these conditions is inevitable, but its damage can be limited to a very large extent if certain measures are put in place. These measures call for a more thorough approach factoring all the different dimensions that can influence the prognosis, which necessarily would have to include the socio-cultural variables.<sup>[1]</sup> There have been formidable challenges with managing outbreaks in some parts of Africa due to the strong influence of deeply held traditional beliefs on the response to the epidemics and to the endeavors to contain them. The challenges in certain parts of the globe are that much greater because responses to an outbreak of this kind are very strongly influenced by traditional beliefs prevalent in that part of the globe. We noticed how the outbreak of the Zika virus presented unanticipated healthcare challenges. The experience with Ebola virus in West Africa also provides us some very valuable lessons.

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## A Brief Literature Review

Agusto, Teboh-Ewungkem, and Gumel<sup>[2]</sup> in their ground breaking research have examined the effect of customs and traditional beliefs on the transmission dynamics of Ebola epidemics. They have argued that “in the early stages of the Ebola pandemic in Africa, cultural beliefs played an important role that contributed to the spreading of the disease” and emphasized the importance of cultural parameters of an epidemic. Similarly, Manguvo and Mafuvadze<sup>[3]</sup> in their paper also ponder “a general lack of awareness and a very rudimentary healthcare provision”. Deep commitment to certain religious and cultural practices by some of the West African communities were also found to influence the course of the outbreak. For instance, there is a common belief that ‘outbreaks are a consequence of transgressions against God and for which God strikes people with diseases’. A World Health Organisation (WHO) monograph maintains that in certain tribes, “the Ebola outbreak is God’s punishment for indulgence in adultery and homosexuality.”<sup>[4]</sup> The belief system seriously affected implementation of several strategies as some of the West African communities “could not readily accept all science-based interventions owing to the prevailing belief that the disease was a punishment from the ancestral spirits or God for various transgressions such as breaking taboos.”<sup>[5]</sup> The community generally

believed strongly in traditional and spiritual healing, a factor that served to complicate the situation further. As this monograph suggests, “even though modern medicine has become the healthcare norm throughout Africa, there is also still a heavy reliance on traditional medical practices among many African communities.

Shamans and other local healers may fail to understand that Ebola is a viral infection with the potential of causing numerous deaths within a short time”.<sup>[6]</sup> This unsatisfactory understanding of the epidemic inevitably leads to further complications, such as unsafe handling of remains that become a source of contamination of the water supply by unburied dead bodies, or burial practices, which propagate the illness. Like every community, African communities tend to have specific burial rituals.<sup>[5]</sup> During the period of epidemic disasters, it becomes challenging for health professionals and researchers to investigate dead bodies because burial rituals run into conflict with the norms of modern medicine, which makes it difficult to determine the cause of death or to approximate the risks to the rest of the population. Scientifically proven public health methods are to be preferred to combat outbreaks of a highly infectious disease such as Ebola.<sup>[7]</sup> Failure to factor in cultural and contextual factors would limit the degree of success in controlling the spread of diseases. Simultaneously, during the outbreaks, it was noted that there is an initial resistance to the evidence-based approaches to limiting the spread of Ebola in some of the affected communities.<sup>[3]</sup> The authors therefore recommended that “the best approach to promote health in such disasters lies in understanding and, to a reasonable degree, embracing both traditional and religious practices”.<sup>[3]</sup> A recent study has convincingly demonstrated that traditional and cultural beliefs can significantly contribute to the challenges that the health practitioners had in managing the outbreak.<sup>[2]</sup>

Psychiatric sequelae generally tended to present late and in this regard Ebola was not very different from the other illnesses.<sup>[8]</sup> Mental symptoms post Ebola after an outbreak were very common throughout the region. The WHO instituted a mental health capacity building program for survivors<sup>[9]</sup> which initially showed a lot of promise, but fiscal problems prevented its implementation beyond. Traditional practices vary from country to country and each may have a role to play in the instability in that particular region. Fareg *et al* <sup>[9]</sup> mention “Guinea’s cultures are rich in oral histories, the supernatural powers, dreams, and contracts with ancestral spirits. The people trust their elders, seeing them as the custodians of culture. They also de-

pend on traditional healers and the Griots (storytellers) who guide them regarding the rules by which they live”.<sup>[9]</sup> There has been a recent flurry of interest in the anthropological traditions; some previous researches have shown that such cultural preservation may constitute a protective factor in mental and physical health and promote social harmony.<sup>[9]</sup>

It is very evident that epidemics of the developing world present differently from epidemics of the developed countries. In certain parts of the globe afflicted by poverty, armed conflict, natural calamities and massive unrest, epidemics are ubiquitous. Dengue outbreaks in Latin America where the total number exceeded 2 million -Brazil itself reported more than 1.5 million cases.<sup>[10]</sup> Two years later, there were reports of dengue in Bangladesh, Cambodia, India, Myanmar, Malaysia Pakistan, Philippines, Thailand, and Yemen. Cholera outbreaks have been prevalent for the past 200 years. WHO report on Cholera indicates a total of three to five million cases of cholera occur worldwide annually, and 100,000 to 120,000 of these result in Death.<sup>[11]</sup> Lethal outbreaks of cholera killed millions of lives from time to time in many regions of the world. This very exhaustive report suggests : “Between 1817 and 1860, deaths from a cholera outbreak in India are estimated to have exceeded 15 million people. Another 23 million died between 1865 and 1917, during the next three outbreaks. In recent times, the world witnessed another cholera outbreak 10 months after the January 2010 earthquake in Haiti. This outbreak that killed at least 10,000 people may have actually been brought on by those who came to Haiti to help a community in distress – UN workers.”<sup>[6]</sup> Some local communities suspected even that cholera was being deliberately spread by international agencies, or that it was related to religious aspects such as voodoo practices. Grimaud *et al*<sup>[11]</sup> in their classic study have shown that psychosocial support interventions may play a critical role in response to such epidemics.

## Addressing the Challenges of Religious and Cultural Practices

Burial practices are very important in African societies. Equally it is the burial practices that are responsible for the spread of infectious diseases. Washing the dead body with bare hands is a common cultural practice. Coltard *et al*<sup>[12]</sup> in their research found that the burial workers who dressed in protective suits would dress the dead in outfits of the family’s choice before placing them in body bags. Jewelry, money, and other items considered to be of sentimental value to the de-

ceased would also be included in the body bags.<sup>[12]</sup>

Some countries in the region notably Ghana have put into place formidable vigilance regarding the psychosocial aspects of the EVD outbreak. Adongo's<sup>[1]</sup> paper mentions: "in Ghana a government committee in the country cooperated with the country's development partners to establish a preparedness and response plan at the national level. There was also the constitution of EVD response teams at the national, regional, and district levels. The government's efforts aimed at mitigating an EVD outbreak due to cross-border travels to and from countries affected by the crisis.

Given the impact of certain cultural factors and spread of the infection, the Ghanaian government was keen on exploring the influence of those factors in its prevention, also on preparing its population better in case of an outbreak."<sup>[1]</sup>

### Prevention Strategies for the Rest of the World

Southall *et al*<sup>[13]</sup> found that delay in international aid and proper coordinated strategy was very noticeable in handling the Ebola epidemic in West Africa. Lessons have been learned and many international bodies are actively involved in helping the governments implement programmes to ensure optimal protection. United Nations and its arms, in particular the UNESCO have made commendable efforts utilizing its vast experience in combating HIV. The WHO has brought out a strategy document based on its experience dealing with pandemics.<sup>[14]</sup> It strongly recommends taking into account all the cultural practices without which it would be very difficult if not impossible to get the transmission rate down to zero.

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