A Rhetorical Analysis of the Narratives Present in the World Health Organization's "Ebola Diaries"

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Health communication between public health organizations, their departments, and their audience is essential. It is able to improve individual and community outcomes during crises and through prevention (U.S. Department of Health and Human Services, 2020). Although extremely helpful in allowing the spread of information, the current technological environment also provides unique challenges as evidenced through misinformation, conspiracy theories, bots, and trolls, highlighting the need for more health communication research (Managanello, 2020). More research in this area will assist the improvement of public health communication in future public health crises as it will allow for more deliberation and understanding when approaching communities, altering the public health outcome.

Health communication started to come to the forefront in the early 2000s, as emphasized when the topic was allocated a chapter in the United States of America's Healthy People 2010 objectives. Health communication was defined as,

> the art and technique of informing, influencing, and motivating individual institutional, and public audiences about important health issues. The scope of health communication includes disease prevention, health promotion, health care policy, and the business of health care as well as enhancement of the quality of life and health of individuals within the community. (Parrott, 2004, 751)

This definition highlights that communication is vital to health outcomes and shows that health communication, not only encompasses individuals' daily health and emergency responses, but also includes environmental health, workplace health and safety, environmental health, injury and violence prevention, and mental health.

The strategies utilized to communicate public health have also evolved with the advent of technology from only being available via authoritative sources like physicians and books in the 19th century to mass media campaigns in newspapers and film in the 20th century. However, there was an initial struggle in altering the language and information for a non-scientific audience: Some texts were rejected on the basis of being too technical (Salmon & Poorisat, 2019). Furthermore, much of this public-facing communication focused on an appeal to pathos by generating fear which, while sensational, had "extremely little effect upon the sexual behavior of the men who see it" (Lashly & Watson, 1922, p. 72). Now, public health communication has taken to social platforms and must contend with an influx of information and perspectives. But the goal of health communication remains the same. Marjorie Young, a professor of Public Health at Harvard, describes "the ultimate objective of most health education activities is to change individual, group, community, or societal behavior so that optimum health will be obtained and maintained" (Young, 1967, p.7). Some have argued that this means accounting for socioeconomical and cultural differences and personalizing public health communication, highlighting that how we communicate matters (Bol, Smit, & Lustria, 2020; International Federation of Red Cross and Red Crescent Societies, 2015). But, to personalize these messages, we must understand and have previously engaged with these communities.

In addition to affect societal norms and behavior, health communication supports and creates "cultural narratives of self and other, stranger and enemy, morality and immorality, risk and safety, and cleanliness and contamination" (Finnegan & Keränen, 2011, p. 228). (Finnegan & Keränen, 2011)

Although public health communication impacts our daily lives, pandemics provide a prism through which we can review the efficacy of and current strategies in health

communication. Therefore, performing a case review of the Ebola outbreak in West Africa will help to gain a more comprehensive understanding of the effectiveness of health communication by allowing us to understand the impact of narratives on the outcome.

The 2014-16 outbreak in West Africa was the "largest and most complex Ebola outbreak since the virus was first discovered in 1976" (World Health Organization, 2020, Ebola virus disease). Ebola virus disease (EVD) is an RNA virus that causes a type of hemorrhagic fever with comorbidities including destruction of internal organs and internal bleeding from various body parts such as eyes, gums, and nose (Hoyle, 2008). In past outbreaks, case fatality rates have varied from 25% to 90%; however, the EVD case fatality rate during the West Africa outbreak averaged 50% (World Health Organization, 2020, Ebola virus disease). According to the Centers for Disease Control and Prevention (CDC), the initial outbreak was traced to a bat infection in Guinea, but "weak surveillance systems and poor public health infrastructure contributed to difficult surrounding the containment of this outbreak," causing it to spread quickly to Liberia and Sierra Leone. As this was the first time that EVD spread to a densely populated area, it led to unprecedented transmission, as evidenced not only on the rate of infection it the three countries but also through its proliferation in other countries: Italy, Mali, Nigeria, Senegal, Spain, the United Kingdom, and the United States (Centers of Disease Control and Prevention, 2019).

Since the onset of the infection, health care professionals and officials struggled with combating high public fear, anxiety, rumors, and misperceptions in addition to having the capacity to diagnose, prevent, and contain rising cases of EVD. According to the CDC and the WHO, there was a slow initial response to the Ebola outbreaks in Liberia, Sierra Leone, and Guinea due to "weak infrastructures and underfunded health systems which were further compromised during the epidemic" (Marston, 2017). As a result, the local governments'

outbreak responses received assistance from organizations like the WHO, African Union, CDC, United Kingdom, and Public Health Agency of Canada in the form of policy assistance, supplies, and personnel (Marston, 2017; World Health Organization, 2015).

The Ebola outbreak was exceptionally demanding not only for the fatality rate but for the challenges faced on the ground. Difficulties arose when attempting to manage the outbreak, such as lack of resources (at the beginning, professionals were only able to run 50 tests a day), language barriers, boarders, and social resistance (Hugonnet, 2015). During the outbreak, there were violent protests in Liberia, Sierra Leone, and Guinea in the forms of "rocks thrown at Red Cross vehicles to a massacre leaving eight dead at Macenta" (Cohn, 2016, p. 1). Mistrust was also personified in concealment of EVD cases, unsafe burial practices, and disruption at clinics, stemming from "failures of communication, lack of engagement with local communities, adverse publicity, and strained relations between local populations, government authorities, and outside agencies" (Cohn, 2016). This is emphasized in an "Ebola diary" from Stéphane Hugonnet: "For some, they understood only that their loved ones had been taken to treatment centres and never returned. Infected people refused to be hospitalized; some of them fled hospitals. We recognized the great need for more of a "human touch" (Hugonnet, 2015).

From March until October 2014, the WHO published 19 Ebola diaries from a variety of scientists, doctors, and public health officials. The diaries—which are, arguably, a public health strategy—were used to introduce professional perspectives into the public sphere, documenting what they saw on the ground and allow a glimpse into their thinking. By preserving their observations, we are able to see what these workers and volunteers thought of the West African communities that they worked with, what stood out to them, and what they felt. These diaries add to the argument that the Ebola outbreak in West Africa is an extremely rich area to study

health communication because the outbreak was well-documented, emphasized many of the existing tensions evident when Western countries attempt to intervene, and the outcome of the pandemic is known.

By evaluating the themes present across the accounts of 19 different individuals, I hope to analyze what narratives are present and evaluate their differences. My research looks to answer the following question: What were the narratives apparent in the WHO "Ebola diaries," and how did the different narratives between health care workers (international and local) compare? This project will be situated in the Rhetoric of Health and Medicine literature, which uses critical theory and rhetorical criticism to understand how language and power affect social constructions of health. Thus, the completion of this project will help to increase the understanding of the factors contributing to public-facing communication by health professionals in the age of social media in addition to providing recommendations for future communication.

The majority of the work completed have focused on how the communication of EVD developed in comparison to other diseases such as Zika and Yellow Fever (Cohn & Kutalek, 2016; Toppenberg-Pejcic et al., 2019). Studies have also emphasized the different narratives apparent in the U.S./U.K. and West African media during the EVD outbreak: The U.S./U.K. focused on how their countries were helping an *inadequate* government drawing on ideas of colonialism and the "white savior," whereas the African media looked at the cooperation the longstanding impacts of the pandemic (Louisi, Barker, & Geanea, 2018). Although, there has been other work done on these communications and press conferences performed by experts for the public, there is not any known work solely focused on the impact, audience, and narratives of the Ebola diaries. Therefore, this will be able to provide a helpful analysis of this particular public health strategy, informing future actions and contributing to the understanding of health

communication in the digital world. Furthermore, it will provide a unique opportunity to evaluate health care experts' public-facing communication.

This study is meant to increase understanding of health communication not to criticize the global response to the West Africa Ebola outbreak. We acknowledge the work done by the WHO and that they are an underfunded organization.

Literature Review

Communication and Public Health

Effective health communication is essential for improving individual outcomes and promoting safety and prevention (U.S. Department of Health and Human Services, 2020). Emergency risk communication has received the greatest amount of attention in this area, however. This emphasis is likely due to the immediate and tangible nature of health emergencies in addition to novel challenges, such as limited preparation time, that emerge in particular crises. Additionally, like all of health communication, crisis communication can impact the social norms, behaviors, and the spread of information. The importance of public health communication in crises and importance of grasping context—"social, economic, political and cultural factors influencing people's perception of risk and their risk reduction behaviors"—is emphasized by the publication of the WHO Guideline for Emergency Risk Communication (ERC) (World Health Organization, 2018, p. ix)

The multiplicity inherent to public engagement with the health and medical practice is most apparent in the increased interest in bioterrorism and biodefense post-9/11. The government and media utilized the "rhetoric of risk" to emphasize the "biological vulnerability" of the U.S. and argue for increased national security in the 1990s by generating fear (Keränen, 2011). This example helps to showcase the impact that health communication has in determining policy and

affecting social norms, thereby suggesting that emergency situations where emotions may be increased are much more precarious. Therefore, more attention should be paid to the public health communication.

Furthermore, particular diseases and catastrophes receive more attention than others, suggesting that the public and/ or media pay attention to certain populations more than others. As evidence, of this, in an analysis of the diseases with the highest rates of mortality between 1980 and 1998 in the U.S., Armstrong, Carpenter, and Hojnacki (2006) found that broadcast media paid less attention to diseases that had a higher burden on black populations versus white. This emphasizes the impact of social and cultural behaviors on public health that influence the progression of a disease. As a result, it can be inferred that there are certain prerequisites necessary for a crisis to receive widespread media coverage, for instance, the conformation with existing narratives which highlight whose opinions' matter in the public sphere and, consequently, whose lives matter. For example, Armstrong, Carpenter, and Hojnacki (2006) suggest that racial scripts play a large part in media attention in that,

> …blacks [are] largely absent from the content of coverage of a disease that greatly burdened them, other diseases such as heart disease, stroke, and diabetes that also disproportionately affect blacks are given less attention by television and print news. (Armstrong, Carpenter, & Hojnacki, 2006, p. 759).

This shows that the racial gap in media attention to disease reflects the existing health inequities and racial scripts apparent in the United States.

Outbreak Communication

Outbreak narratives have social and political consequences through the narratives that they create, outstripping the epidemiological nature (Weldon, 2001). Therefore, by

understanding the persistence and appeal of narratives created and supported by epidemics, we are able to understand how it affects social values and norms of morality, outsider, and safety to name a few (Finnegan & Keränen, 2011).

A review performed by Toppenberg-Pejcic et al. (2019) compared the emergency risk communication of Ebola, Zika, and yellow fever and emphasized the importance of having existing lines of connections with the regions and altering the individualizing the messages for a specific region This is key to establishing engagement and trust which can affect the response time and disease progression as evidenced by the "turning point [of the West African Ebola outbreak] was reached before the full-blown response was operational (Toppenberg-Pejcic et al., 2019, p. 439). As emphasized by the International Federation of Red Cross and Red Crescent Societies (IFRC), it is important to be able to engage local communities actively to build trust (i.e., respect local culture, language circumstances, listen to local concerns) and help safeguard against the disease (Toppenberg-Pejcic, 2019; International Federation of Red Cross and Red Crescent Societies, 2015). For example, in the case of the Ebola outbreaks in West Africa, communication was necessary to help people understand how to protect themselves and why certain cultural practices such as burial rituals could not be maintained (i.e., the bodies had to be disposed of in other means as it was a biohazard; International Federation of Red Cross and Red Crescent Societies, 2015). This is emphasized in a quote from Birte Hald, the head of the International Federation of Red Cross's (IRFC) Ebola coordination team:

> There's no point coming here thinking: why don't these people just stop all their dangerous practices? If you do, you will fail because you don't understand. You'll never get rid of the virus. You must get to the root of what people believe, what they are all about. You listen to them and then you have a chance of getting your

> strategies correct. (International Federation of Red Cross and Red Crescent Societies, 2015, p. 15)

The need to personalize health communication can be exemplified through the national language of Guinea being French and the majority of individuals practicing Islam which favors washing dead bodies as part of burial rites (Oloke & Kochha, 2018). Other sources emphasize the need to tailor health communication in order to affect and promote safe and healthy behavior (Bol, Smit, & Lustria, 2020; International Federation of Red Cross and Red Crescent Societies, 2015). This means that individualized communications must be created for specific locations. Not only are these supposed to be related to the specific communities' needs, cultural practices, and past and current political realities, but the specific communications must also be aligned with the goals of the health communication. This need was illustrated by the outbreak in West Africa. All three regions—Guinea, Sierra Leone, and Libera—had recently experienced civil war, existing tensions between ruling parties, legacies of colonialism, corruption and a lack of local representation in government, and attempts to remove traditional religion (Toppenberg-Pejcic et al., 2019; Miller et al., 2016).

Whereas it is important to individualize public-facing health communication in order to increase health behavior, there has also been a study suggesting that how the information is presented is more important than what information is presented (Bol, Smit, & Lustria, 2020). Both arguments highlight that a "one-size-fits-all" approach is likely to be ineffective, however, emphasizing the need to understand and work within local communities.

Media and the 2014 Ebola Outbreak

The media play an important role in dissemination of information, including that during a public health crisis, directly affecting how its audience reacts (Ihekweazu, 2017). As a result,

how information is presented is incredibly important. Perhaps unsurprisingly, western media outlets focused coverage on what their countries' governments were doing. This was what affected the majority of their audience and fit within the existing narratives of colonialism and the "white savior."

By focusing on the differences in coverage in Western countries and West Africa, one study emphasized the agreement with preexisting conceptions. An investigation of the narratives supported the idea of western newspapers sensationalizing Ebola by painting an image of Africa that needed intervention: "poor, war-torn and diseased" (Duru, 2020, p. 113). This sensationalization is evidenced through the emphasis on the recent civil wars, poor infrastructure, and weak government. This coverage helps to reinforce ideas like the white savior complex—"the notion that Westerners are the solution to African problem"—and justify involvement in these countries, as West African countries were portrayed as unable to contain the disease themselves (Duru, 2020, p. 115). However, the n emphasis on how Western countries helped and little attention paid to the local government may have also been done to increase viewership through sensationalizing the stories surrounding EVD in West Africa (Ihekweazu, 2017).

Conversely, the West African media suggested another perspective. Local governments were working with national and international bodies to fight the outbreaks, and the media focused on more salient effects of the virus: economic, travel restrictions, curfew, and a lack of resources (Duru, 2017). As rhetoric is constitutive, it can be inferred that the rhetoric evident in the Ebola outbreak influenced how individuals and populations thought about and interacted with the disease. This idea is developed more in the following section.

Rhetoric and Ebola

In addition to the rhetorical role played by the media, Louisi, Barker, & Geanea (2018) argues that the WHO exacerbated the Ebola epidemic through the emphasis on scientific knowledge. By emphasizing the scientific advances and understanding, it painted civil unrest as emotional and irrational. This portrayal created a barrier between the health care personnel and the communities that they were working with and led to the downplaying of health care sites and officials as vectors of transmission, prolonging the infection (Condit, 2016).

The ethos, character, of the public health officials also played an integral part in the epidemic's progression (Condit, 2019). The complexities that arose as a result of the international and national dimensions as well as the progressing scientific knowledge created a gap between the interests, the information necessary, and what was available, impacting the credibility of health workers in the eyes of the local populace. This arose partially due to varying expectations and misunderstandings about the information and resources available. These experts had to make scientific concepts accessible and addresses emotional and social concerns that were only exacerbated by politicization of the health experts in media (Condit, 2019).

This hesitancy and fear towards disease is also evident in popular culture and accounts of the 1976 Ebola epidemics. The subgenre of apocalyptic plague films proliferated fear through its graphic imagery and popularity. It has enlarged the dangers of an infectious disease in the minds of its audience despite viruses "actually compris[ing] such a small threat to humanity" (Weldon, 2001). Furthermore, accounts like those seen in *The Hot Zone: A Terrifying True Story* by Richard Preston focused on the "predatorial virus" rather than the effects of actions such as poor implementation of public health policy. This paints the virus as the agent (who) and the *helpless* patients as a means to an end (agency) (Weldon, 2001).

Therefore, as rhetoric has an impact on how humans construct their reality, we are able to evaluate the impact of the Ebola diaries on transmission during the 2014 epidemic. Outbreak communication provides a good opportunity to examine the political, social, and cultural factors that impact health communication and its ability to inform and impact individual, group, and societal change. However, as emphasized by the WHO guideline for emergency risk communication and recent papers, it is essential that these messages are personalized for the geographical audience (Bol, Smit, & Lustria, 2020; International Federation of Red Cross and Red Crescent Societies, 2015). Work has focused on comparing outbreak responses (i.e.,. Zika, Yellow Fever, Ebola) and the publications in Western and West African media. There has not been any work done on the "Ebola diaries" specifically which provide an opportunity to evaluate the narratives present as well as assess public-facing health communication by experts.

Narrative criticism is used as the theoretical and methodological framework for this analysis of the narratives present in the WHO "Ebola diaries." Relying on the interpretative paradigm, this centers on the idea that narratives help us to understand how people construct their social realities through the "central belief that humans are storytellers" (Merrigan & Huston, 2020). Unlike quantitative research, this paradigm emphasizes the idea of multiple realities and perspectives (Merrigan & Huston, 2020). As a result, narratives can be utilized to understand how the speakers make meaning and understanding, under the assumption that their that experiences are meaningful, human, and represent an experience (Squires, Andrews, & Tamboukou, 2013). Furthermore, narratives exist on a continuum, allowing them to have affects after formation. Despite the diaries only being published between March and October 2014, the narratives themselves do not follow such deadlines. The context within which they operate—for example, colonialism—predate the Ebola outbreak. Furthermore, these narratives are a snapshot

since they able to inform dialogues past October 2014, implying that public-facing health communication must fit within the existing cultural narratives.

In a way, the WHO diaries are a public health strategy. They are a way to increase awareness of the disease while introducing alternative narratives to the ones seen in media that emphasized fear and the deadliness of EVD. As these were written by local and international scholars, I am expecting to see two different groups of narratives emerge similar to those seen in the differing narratives present in U.S. and U.K. media compared with the West African media (Duru, 2017). I estimate that the Western officials will focus on the civil unrest and lack of support from local governments, echoing sentiments of colonialism and the "white savior," whereas the local writers will highlight the cooperation between the institutions and long-term impacts.

To analyze this, I am performing a narrative criticism analysis of the "Ebola diaries," to identify the narratives present and focus on which ones dominate and, likewise, which ones are silenced in the public sphere. This will help to highlight what narratives and themes are important as well as who is important through the eyes of these writings. Furthermore, it may allow us to gain an understanding of which narratives the volunteers and workers perceive, highlighting the narrative apparent and their differences and, perhaps, alluding to mental and ideological barriers present between the health care workers and populace and the international and local populations.

This can be seen in the first "Ebola diary" from Dr. Pierre Formenty, an epidemiologist for the WHO focusing on viral and hemorrhagic fevers, on March 2014. It emphasizes a disconnect between what the locals believe that the disease is (Lassa fever) and what Formenty thinks (filovirus, hinting at either Ebola or Marburg) and a difference in what information they

send him (case and mortality statistics) and what he is looking for (more detailed description of symptoms, infection, etc.). Furthermore, he states that, "it [Ebola] was the worst case scenario for the country, the good news was that we have in principal good control measure that have been effective in many countries" (Formenty, 2014). This suggests that there is stigma surrounding EVD—however, I am currently not entirely sure how this manifests—and that Guinea requires intervention by the WHO in order to control the outbreak, suggesting that they do not have the resources or infrastructure to do it themselves. While there may be factual validity to this statement, it also supports the narrative of the "white savior."

By understanding the narratives and thematic elements evident, I hope that this can inform how we create public health campaigns, specifically what needs to be addressed when personalizing a public health campaign for an audience.

Conclusion

It has been shown the health communication plays a vital role in our construction of public health ideals related to daily life and emergency response, emphasizing the importance of the narratives that the first responders and other professionals undertake. As rhetoric is constitutive, it can affect how health workers perceive their patients and the communities that they work with, suggesting that there are also implications in their interactions. Thereby, this likely has an effect on how the local community understands and responds to these individuals, influencing how they respond to their health recommendations.

My hope is that this research will help to highlight the importance of health communication in informing, influencing, and motivating public audiences as evidenced through the impact of identified narratives in the Ebola diaries on the public health response. Furthermore, I hope to emphasize the necessity of specifying messages for their intended

audiences in order to obtain the effectiveness in public health measures and making recommendations for future public health communication.

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