

A Qualitative Analysis of Newspaper Response to the Ebola Outbreak in Central Africa

by

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Abstract

This study utilizes a qualitative interpretive descriptive analysis to evaluate the construction of an Ebola outbreak narrative in a corpus of news articles from mainstream Congolese print media available both online and off. The prevalence of medical as opposed to superstitious or alarmist linguistic usages, and types of metaphor employed in media representations were identified and categorized. Hence, three themes emerged from a dominant metaphor of warfare as used in the selected articles, namely that the general population was depicted as a potential victim, while public institutions were portrayed as heroes or warriors fighting the Ebola Virus Disease (EVD), the invaders or offenders. And it was concluded that controlling outbreaks of diseases in low-income countries requires an effective preventative strategy that both underscores patterns relevant to the spread of the disease and is culturally appropriate to the affected population, and that future interventions against EVD in Africa may therefore benefit from using a media strategy similar to the approach used in Congolese print media as part of a wider campaign to decrease risk factors associated with the spread of EVD.

Key words: Ebola virus, Democratic Republic of the Congo, West Africa, Outbreak, Media

Introduction

The 2014 outbreaks of Ebola in the West African countries of Sierra Leone, Guinea, and Liberia have prompted the media to inundate audiences around the world with reports about the impact of the disease (Househ, 2015). This epidemic, which began in March of 2014 and has since killed over 9,000 people, is the deadliest outbreak since the discovery of the virus in 1976 (CDC, 2014c; Househ, 2015). Compared to HIV, the 2014 Ebola virus strain may well become the next pandemic disease due to the speed of its transmission if containment does not occur in a timely manner (Keneally, 2014).

Amongst these news stories, reports about a present EVD outbreak in the Democratic Republic of Congo (DRC) were included as well. Consequently, media representations about Ebola outbreaks, whether in West African countries or in the DRC, have tended to lump them all into the same qualitative category, despite the fact that both the past and the present of EVD outbreaks in the DRC differ significantly from the Western African countries' current experiences.

Historically, investigators in 1976 simultaneously encountered the Ebola virus for the first time at two places in central Africa: the Democratic Republic of Congo (DRC) (formerly Zaire) and Sudan (Breman et al., 1978). The discoverers named it after a river in a village located in the DRC where the first cases were found (WHO, 1978). The 1976 outbreak caused a considerable number of casualties both in the DRC and Sudan, with a case fatality of 88% and 53%, respectively. In West African countries, the current outbreak has caused many more casualties with only a 50% case fatality on average (WHO, 2014a). Undoubtedly, the massive media coverage of the recent EVD outbreaks contributed to the increasing number of its reported casualties (Fritz, 2015; Househ, 2015).

In contrast, over the past half century, the DRC has experienced seven EVD outbreaks, all of them in various remote areas of the country and each with different case fatality rates (WHO, 1978). During the first EVD outbreak in the DRC in 1976, drastic preventative measures including quarantine, discontinuing all needle or syringe injections, the wearing of protective clothing and respiratory devices, and proper disposal of contaminated excreta and fomites were used to help contain the disease (WHO, 1978). As with previous outbreaks, the 2014 outbreak occurred in various villages, with case count of 66, a 74% case fatality rate, and a total of 49 deaths (CDC, 2014c). Official containment of the outbreak on 21 November 2014 occurred approximately three months after its initial announcement (CDC, 2014a).

Considering the DRC's long experience with EVD outbreaks over the years, the country has addressed considerable difficulties involved in trying to contain the disease. This includes inaccessibility to some areas of the country, the lack of a strong landline phone network, and a lack of infrastructures (Heymann et al., 1999).

Facing these difficulties during the 2014 outbreak, the DRC Health Ministry and the Congolese print media took a ‘polemic’ approach to the problem when reporting EVD and its consequences for the country (Matshi, 2014). For example despite the fact that researchers generally advise declaring EVD contained only after a 42-day gap period without any newly diagnosed cases since the last known one (Global Alert and Response, 2014; Lusimana, 2014), Congolese officials nonetheless declared the outbreak contained on 24 September 2014 (Matshi, 2014). Some four weeks later, on 21 November 2014, the WHO officially confirmed the DRC’s EVD outbreak as contained, (WHO, 2014b, 2014c).

Given the lower prevalence and fatality statistics for EVD in the DRC during this last outbreak compared to the Western African countries’ experience, the DRC’s relatively more successful containment may be linked to the effectiveness of well-tailored preventative measures, including print media campaigns against the disease. The aim of this study is to explore the construction of an Ebola outbreak narrative in mainstream Congolese print media as part of that preventative or containment strategy.

Material and Methods

The current study conducts a thematic analysis of media representations of EVD in the DRC utilizing a qualitative interpretive-descriptive analysis pertinent to health-related and nursing inquiries (Thorne, Kirkham, & O’Flynn-Magee, 2008).

Sample and Data Collection

Limiting our selection of stories to the time period of the most intense media coverage of EVD outbreaks, i.e., from 26 August to 31 October 2014 (CDC, 2014a), two researchers analyzed print-media stories and articles from nationally or regionally distributed newspapers to create a database of keywords associated with the outbreak, e.g., Ebola, virus, Democratic Republic of the Congo.

Purposive sampling was used to aggregate newspapers articles. Criteria for selection were: inclusion of the article in ‘Le Fouineur’ (www.rd-congo.info), an online Congolese database, as a way to identify and aggregate traditional and online versions of newspaper stories published in the DRC. We also collected local print editions of newspapers. Articles originally in French were translated into English and then back-translated into French to reduce the introduction of discrepancies (Sperber, Devellis, & Boehlecke, 1994) and to ensure the functional equivalence of the translated articles (Brislin, 1970).

Further inclusion criteria—based on the analysis of newspaper content to establish reliability (Lynch & Peer, 2002)—associated with the sampling pool collection included: the article had to be a complete story (i.e. not a promotional reference for a full story contained elsewhere); the article had to be written in complete sentences with a central theme; the article could not be part of a paid advertisement; and the article had to be longer than two print-inches in length (Lynch & Peer, 2002).

Data Analysis

Similar to Burnett, Johnston, Corlett, and Kearney (2014), our study analyzed Congolese newspapers thematically and summarized the content in light of a previously validated newspaper coding form (Kitzinger, 1999) in order to increase the reliability for this type of analysis (Crabtree & Miller, 1992). By providing both a summary and in-depth interpretive findings from print media aimed at preventative efforts during the 2014 EVD outbreak in the DRC (Hunt, 2009), our study aims to shed light on the explanatory force of data as it relates to the comparatively low spread of EVD in the DRC.

First, relevant terms were extracted from qualified articles and coded to identify patterns of language that addressed the containment, eradication, or elimination of EVD in the DRC. Following Ritchie and Spencer (2002), we analyzed the articles' discourse by

- reading and re-reading the newspapers in order to familiarize ourselves with the contents
- identifying a thematic framework through conceptualization of the terms
- indexing the thematic framework
- mapping and then interpreting the data to define concepts, create typologies, and find associations
- and producing a final report of the findings.

Second, and in light of Seale's argument—that mass media may impartially report, distort, or exaggerate statistical findings based on what fits into the existing media interests (Seale, 2010)—we analyzed the rhetoric of Congolese print media for the way that it created an identity for the topic of interest, in this case EVD. Using NVivo 10 for analysis of the codebook and print newspaper data, we identified three broad categories containing different codes and sub-codes around media discourse addressed to the containment of the EVD outbreak. This included ten themes, each with an explicit identification, i.e. a definition and a description of the themes, described below.

Rigor

The current inquiry applied the techniques of persistent observation and peer debriefing as mediums to establish trustworthiness and credibility (Lincoln & Guba, 1985). Persistent observation involved the identification of characteristics and elements of the print media narratives that are most relevant, while peer debriefing involved the process of inviting a disinterested peer to parallel the analysis, method, and interpretation. According to Lincoln and Guba (1985), the purpose peer debriefing involves exploring aspects of the research that might otherwise remain only implicit within a researcher's reasoning.

Results

Our analysis included a total of fifteen (15) Congolese newspaper articles that focused on EVD containment during the 2014 outbreak.

Creation of Identities

Seale (2010) has noted how discourse creates identities. Our research captured three overarching categories around identity-creation: victims, offenders, and heroes. In other words, while reporting the EVD outbreak, journalists created specific identities addressed to the population at large. The scenario generally created by these representations was that the population should consider itself a potential victim and that individuals and institutions needed to become heroes or warriors in order to fight the EVD offenders or invaders (Gabriel, 2014; Le Soft, 2014; Nkutu, 2014b).

Creation of the EVD Identity

Throughout the outbreak coverage, EVD was assimilated to the notion of an invader or offender. Terms like 'invisible enemy' (Le Potentiel, 2014b) and 'war' (Muzola, 2014) were used in several newspaper articles to portray the impact and perceived severity of EVD (Bukasa, 2014; Le Phare, 2014; Nkutu, 2014b). This representation of EVD as an invader (especially an invisible one) captures the challenge associated with trying to identify the Ebola microbe in one's environment, as well as characterizing the threat it represents for people and communities. For instance, Le Potentiel (2014b) reported,

“We must save what need to be saved. We need a synergy able to barricade the way to this invisible enemy”.

Moreover, a significant number of newspapers aimed at increasing awareness by referring to the EVD outbreak as a war (La tempête des Tropiques, 2014; Le Potentiel, 2014b; Muzola, 2014). A sub-headline reads, ‘Two strategies to win the battle of Djera’ (Muzola, 2014), which invoked a war-zone situation while reporting,

“With the threat that Ebola represents, the health minister is coordinating efforts aimed at winning the battle against Ebola”.

Headlines were found to be metaphoric in their use of war zones and natural disasters such as earthquakes in reference to EVD. Muzola (2014), under a headline of ‘Ebola: Mbandaka Trembled,’ reported,

“The government has launched a challenge to eradicate the epidemic within 45 days. The minister of health has confirmed that everything has been put in place to win this tough battle in a timely manner”.

When reporting on the impact of EVD outbreak in Liberia, another EVD afflicted country, Cyprien (2014) referred to that situation metaphorically as a ‘civil war’ since the population of Liberia was agitated not only due to the increasing number of EVD victims but also by its collateral damages like the soaring costs of goods and eatable products. The rhetorical and haunting value of the phrase ‘civil war’ when used in a DRC context, where armed conflict has impacted many lives, helped to underscore the urgency of the situation (United Nations High Commissioner for Refugees, 2015). The phrase heightened the impact and thus supports the ultimate purpose of the reporter: to increase awareness and leverage willingness, especially within the population in general, to participate to help contain the outbreak.

The onset of the 2014 EVD outbreak also coincided with the African Cup of Nations—one of the most popular sports events on the continent. Because of the outbreaks, officials of the African Football Confederation relocated the tournament due to the potential threat EVD represented (Langanda, 2014). Thus, when Langanda (2014) in *Le Potentiel* published an article on the subject, it not only emphasized the severity of the situation but leveraged both the general popularity of soccer and a context of ‘combat’ to make rallying around the ‘defeat’ of EVD a national goal.

Creation of Individuals' Identity

People who contracted EVD were identified as victims. Reporters described them as poor people living in remote villages, as bushmeat eaters—one of the potential reservoirs of the disease—and as hunters (Muzola, 2014). Consequently, the population began to avoid the consumption of bushmeat (Muzola, 2014). People living in impoverished or remote areas with limited access to potable water were also identified as potential victims (Le Phare, 2014), as were individuals with no formal education (Le Phare, 2014; Nkutu, 2014b). Reporters also identified people who lived in the capital city (Kinshasa) and other Congolese cities as potential victims via the migratory movements of people connected to or coming from outlying EVD endemic areas. For instance, Le Phare (2014) reported,

“Outside of Kinshasa and some major cities, the danger of ‘unwanted’ visitors or hosts carrying the virus continues to hover. As everybody knows, the state of the borders remains mostly porous because of the armed groups operating there, sometimes with the support of neighboring countries”.

Creation of Institution and Agents Identity

Newspaper articles also created identities for offenders, to refer to people and local entities such as local governments, the health ministry (including doctors, nurses, and health professionals), and international organizations as responsible for the outbreak. For instance, international organizations were pinpointed as failing to recognize the EVD outbreak earlier, while Congolese local government officials were targeted as slow to respond to the first cases of the disease and for not allocating enough funds to contain the disease (Le Potentiel, 2014a).

Alongside these allegations, most articles identified the local entities (e.g. local government, health ministry, doctors and health care professionals) as heroes, since they were in charge of containing initial cases and prevented their wider spread into the country (Le Potentiel, 2014a). Reporters highlighted the quality of response that the government and health ministry took to address this issue. For instance, the Congolese health ministry rushed a cohort of experts to the remote village named Djera where cases of EVD had been identified (Nkutu, 2014b), recommending preventative measures there that originate specifically out of the Congolese experience of the disease (Muzola, 2014; Nkutu, 2014b). Nkutu (2014a), referring to a Congolese epidemiologist professor as one of the heroes, reported:

“In 1995, the epidemiologist named Muyembe suggested that in order to cure a person with EVD, the usage of the blood of a healed EVD patient could be an avenue to consider. At that time, no one considered his option but nowadays, that is what Americans are doing. This said that Congolese have the expertise of this epidemic”.

By using the renowned Congolese scientist as a reference, reporters managed to put the Congolese effort at the forefront of defending the country during this health emergency. Reporters declared it the government’s responsibility to educate, to offer Ebola testing kits, and to support Ebola victims and the population in general (La tempête des Tropiques, 2014). In doing so, the reporters took a positive tone toward the government in part to show their solidarity with efforts to contain the situation in the DRC.

Table 1 (below) summarizes the number of newspapers articles that met the selection criteria published during the period of EVD high coverage. Especially intensive coverage occurred during the first two months—from August to September 2014—and dropped off dramatically in October.

Table 1 - Newspaper Articles Reporting the 2014 EVD Outbreak (August – October 2014)

	Authors	Newspapers	Headlines
August 2014	Le Phare	Le Phare	Ebola: Central Africa threatened
	A. Langanda	Le Potentiel	Due to Ebola: Sierra Leone had to relocate its home matches
	T. Bukasa	Le Phare	Ebola: WHO in the arena of hitting Back
	La Conscience	La Conscience	The Ngobila port and Ndjili airport have been equipped with Ebola detection kits
	La Tempête des Tropiques	La Tempête des Tropiques	The first Congolese experts' team in Djera to hit back the Ebola virus
	B. Lusimana	Public Health Ministry Newsletter	No reported new case of Ebola
	J.P. Nkutu	Le Phare	Ebola: The clarification of a physician present in the "battlefield"
September 2014	Le Potentiel	Le Potentiel	Increased vigilance
	Matshi	Le Potentiel	DRC: Approximately 27 Ebola cases healed in Equateur
	J.P. Nkutu	Le Phare	Ebola: Media and teachers equipped for the prevention
	Le Potentiel	Le Potentiel	Ebola: The public health ministry Denounces
	N. Gabriel	Le Potentiel Online	Population health: A telecommunication provider is involved in the fight against Ebola
	M. Muzola	Le Phare	Ebola: Mbandaka has trembled
	K. Cyprien	Le Potentiel Online	Liberia: Ebola or the civil war
	Le Soft	Le Soft	In New York, the good news of Congolese team
October 2014	--	--	--

Discussion

This study describes both how Congolese media portrayed the spread of EVD and also its role in attempting to control the outbreak in the DRC. Results of our study highlight how EVD coverage in Congolese print media differs from similar coverage of EVD in the Western world, particularly as it highlights death tolls and foments fear (Basch, Basch, & Redlener, 2014; Dugan, 2014; Newport, 2014). Though the Congolese media reported death tolls, greater focus was placed on narrative styles that increased awareness, rather than fear, among the population.

Moreover, unlike media coverage of the 2014 Ebola in the United States, this review of Congolese newspapers underscores the presence of militaristic metaphors regarding EVD (Basch et al., 2014). It appears that the strategy of EVD personification used by the Congolese print media was opportune given the relatively swift containment of the outbreak. Congolese print media may have covered EVD using these military metaphors in light of the fact that the country is still recovering from armed conflict and that this proactively reaffirmed a national need for urgent action and care.

Massive coverage of the Ebola outbreak by media outlets can also create a *moral panic*, a concept that emanates both from the sociology of deviance and the sociology of mass media (McRobbie & Thornton, 1995). According to Goode and Ben-Yehuda (1994), the threat agent—i.e. in our case EVD—is stereotyped and classified as deviant by the target population. *Moral panic* is widely used in newspaper reports, as distinct from other forms of media (Altheide, 2009). We argue that the *moral panic* was a prime mover that led to an emotional involvement by the Congolese population in mobilizing against the disease. As a result of the massive involvement stemming from the narratives used and other factors (such as prior EVD experiences in the DRC), the containment was done in a timely enough manner that the outbreak failed to gain greater ground, in contrast to other areas where outbreaks occurred.

Our thematic analysis revealed also that a large amount of information content in Congolese newspapers drew attention to external factors, including the West African outbreaks and the actions or inactions of international NGOs as well as other actors. Externally speaking, the factor of moral panic here may identify outsiders as part of the problem. Internally, this has its analogue as well. That is, an approach that presents EVD as an ‘invader’ or ‘offender’ runs the risk of (1) contributing to the ‘othering’ of Congolese Ebola patients, thereby increasing their potential risk of stigmatization; (2) of providing insufficient information on critical specific Congolese socio-cultural factors that contribute to the recurrence of the EVD in the region; and/or (3) of minimizing any role played by Congolese environmental factors such as heat (or any other non-identified causal factor), which can contribute to the spread of the disease in that area. By contrast, the strategy of supplying Congolese frontiers with pertinent medical and informational materials also helped to identify new cases of EVD (La Conscience, 2014).

Affirming that poor people were more prone to be ‘victimized’ may also seem questionable since EVD transmits through body fluid contact of any contaminated individual who shows specific symptoms regardless of economic status (CDC, 2014b; WHO, 2014a). Similarly, to consider institutions like local governments or the Ministry of Health as specifically Congolese ‘heroes’ or ‘warriors’ seems to rest on a possibly dubious nationalist chauvinism (Whembolua, Conserve, & Ilunga Tshiswaka, 2015). Here again, by identifying only a narrow selection of agents as heroes or warriors, this potentially overlooks all other causative or helpful agents who equally deserved a designation of hero or warrior.

Besides the numerous and alarmist media reports about how EVD spreads, major non-Congolese media stories tend to ignore or miss two major distinctions about the Western African outbreaks compared to those in the DRC. For one, researchers have found that the EVD strain involved in the present Western African outbreaks differs from the strain now found in the DRC (CDC, 2014a). Secondly, EVD outbreaks in the DRC have occurred only in remote rural areas, while the West African countries’ outbreaks have occurred in both rural and urban areas (WHO, 2014a).

In the DRC, although the 2014 outbreak occurred in a remote village, the entire population was vigilant in light of the threat posed by migratory movements of people that might transport the disease out of the sub-region to other areas (La Conscience, 2014; Le Phare, 2014). People were travelling to and from EVD endemic areas for various reasons, including business, personal, or professional (Le Phare, 2014). As such, the approach that emerged in the media to increase awareness and supply preventative measures against EVD had to be persuasive and relevant in order to help reduce the likelihood of spreading or contracting the disease.

Limitations of this study include its cross-sectional design as well as the limited time frame used. Nevertheless, this is the first study to describe coverage of the Ebola epidemic in Congolese newspapers. We also could not assess the effectiveness of the messages used by the print media among Congolese, as this was not within the scope of our inquiry.

The year 2014 witnessed one of the deadliest EVD outbreaks since its discovery in central African countries. The impact of the recent EVD outburst was noticeable worldwide due to the migratory movements even though countries such as Sierra Leone, Guinea, Liberia, and Democratic Republic of the Congo were the epicenter of the virus. Unlike other EVD afflicted African countries, the DRC had relatively few casualties and did a remarkable job with respect to the containment of the disease in part thanks to the role played by the print media messages and other factors.

The important number of print media using warfare narratives of victims, offenders, and heroes contributed to raising the awareness of the Congolese population around EVD containment. Our analysis brings out, then, the potential need specifically for media specialists on public health teams.

If the 'polemic' approach used by Congolese media has proven helpful as one of a battery of preventative measures to help contain the spread of EVD, then other areas of Africa and the world threatened by EVD or other diseases may similarly benefit from such an approach. And while a contribution by this media campaign to the containment of EVD in the DRC has been shown in this study, this does not minimize the importance of building health infrastructures as well or supply non-rhetorical or non-metaphorical information to populations about diseases. Lack of such information has been shown to be a main contributor to epidemics in other parts of the continent and world. A combination of rhetoric and education, infrastructures and relevant preventative strategies, are both salient.

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