AL-DYAS
Jurnal Inovasi dan Pengabdian kepada Masyarakat

p-ISSN : 2964-4992
e-ISSN : 2964-4984

Terindeks : Dimensions, Scilit, Lens, Crossref, Semantic, Garuda, Google, Base, etc.

https://doi.org/10.58578/aldyas.v5i2.9411

BRIDGING THE GAP BETWEEN CULTURAL AND RELIGIOUS PRACTICES AND CHOLERA EPIDEMIC MITIGATION IN LUSAKA-ZAMBIA

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Article Info:

Submitted:	Revised:	Accepted:	Published:
Mar 19, 2026	Apr 16, 2026	Apr 28, 2026	May 3, 2026

Abstract

The cholera epidemic has remained a recurring public health challenge globally, across Africa, and in Zambia. This study aims to identify the gap between cultural and religious beliefs and practices and public health initiatives in cholera control, as well as to propose strategies for bridging this mitigation gap in response to the 2023–2025 cholera epidemic in Zambia. A qualitative case study design was employed, focusing on Lusaka District as the epicenter of the epidemic. The study involved 15 participants, consisting of five health workers, five religious leaders, and five community members from selected cholera-affected areas in Lusaka. Data were analyzed using the cultural theory of risk and religious coping theory. The findings indicate that cultural beliefs and practices, including communal eating, drinking, and gatherings as cultural observances, contributed to the spread of cholera. Religious beliefs and practices, such as reliance on healing through prayer over recommended medical treatment, the use of traditional medicine, and funeral rites involving the washing of corpses, also hindered efforts to combat the cholera epidemic in Lusaka District. The study concludes that addressing cholera requires stronger alignment between public health interventions and the cultural and religious contexts of affected communities. It recommends that religious

organizations, faith communities, and health agencies work collaboratively to promote positive attitudes and behaviors that support epidemic mitigation. The study contributes by developing a Culture-Health Action-Based Framework to guide more culturally responsive and religion-sensitive cholera mitigation efforts.

Keywords: Cholera Epidemic; Cultural Practices; Religious Beliefs; Public Health Initiatives; Mitigation Framework

INTRODUCTION

The cholera epidemic has been a major public health issue in Zambia, Africa, and globally. Focusing particularly on the cholera epidemic in Zambia, the study aims to reveal how religious-cultural beliefs influence attitudes and behaviours towards epidemics and how these impede palliative and mitigation efforts and contribute to the spread of cholera. Bracquemont et al., (2019) argue that to effectively prevent and control cholera outbreaks, public health agencies must consider cultural context and the perceptions of risk and disease in both individuals and communities. This calls for a critical consideration of the religious and cultural factors in the fight against the cholera epidemic (Schaetti et al., 2010). Therefore, it's critical to consider critically both the scientific accounts for cholera based on the insufficiency of safe drinking water and sanitation in some African countries and the accounts of religious and cultural beliefs and knowledge as we endeavour to bridge the gap. It is in this light that Mintz and Guerrant (2009) argue that cholera in Africa creates a notable healthcare and public health challenge.

Cholera is a type of acute diarrheal disease that is caused by a bacterium named Vibrio cholerae, as stated by the World Health Organisation (WHO, 2022). The Vibrio Cholerae bacterium causes the severe diarrheal disease known as cholera. Cholera disease transmission can occur through contaminated food or water (WHO, 2024). Cholera outbreaks are often observed in regions where there is a lack of access to health care, poor hygiene, and sanitation, according to the same research. Cultural factors are likely to have a significant impact on the spread and exposure to cholera (Ngwa et al., 2017; Ghosh, 2021; Duarte and Ferreira da Silva, 2022).

The Zambia Ministry of Health (ZMH, 2024) reports that the cholera outbreak began in Zambia in October 2023 after detecting case clusters in Lusaka's Matero and Kanyama suburbs. As of January 19, 2024, 11,304 cases and 448 deaths have been reported across 47

districts in nine provinces. Currently, 821 people are admitted to cholera treatment centres across the affected provinces, with 660 (80%) of those cases reported in Lusaka. According to the ZMH (2024), the government declared a cholera outbreak in October 2023, which began in Lusaka province. As of January 18, 2024, nine out of ten provinces had reported 10,887 cases and 432 deaths. According to the US Mission in Zambia (2024), there have been 13,246 cholera cases and 512 deaths in Zambia as of January 23, 2024. With 7,783 suspected cases of cholera since October 2023, the situation in Lusaka has been difficult. According to UNICEF (2024), the outbreak affected all 10 provinces in Zambia, with 62 out of 116 districts reporting outbreaks. Despite these measures, Zambia, mostly Lusaka town, has been relentlessly affected by cholera outbreaks.

Religious and cultural beliefs and practices create a divide in the fight against cholera by creating perceptions, attitudes and behaviours that hinder the mitigation efforts for disease control. Some of these beliefs are that eating soil, God's will, and evil air in the community are responsible for cholera outbreaks. According to Che (2021), cultural practices and traditional and religious beliefs are associated with cholera outbreaks. Similarly, in Haiti, the belief that cholera was deliberately spread for political reasons or was related to religious factors such as voodoo practices caused tension and impacted the public health response (Grimaud, 2011). These studies highlight the significant impact of religious factors on the perception, spread, and control of cholera. Cultural factors play a significant role in the persistence and spread of cholera. Some of the common myths and beliefs surrounding cholera in Nigeria include religious factors, witchcraft, eating soil, god's will, and evil air in the community (Ujah et al., 2015). Superstitious beliefs can affect how people perceive and respond to cholera, which can impact the spread and control of the disease (Schaet et al., 2013). Beliefs related to cholera that fall under superstition include thinking of it as a curse or punishment from God or ancestors, leading people to seek traditional or spiritual healers instead of medical treatment (Msyamboza et al., 2014).

Religious beliefs and practices can contribute to the spread of cholera by influencing community perceptions and responses to the disease (BBC, 2024). Ujah et al., (2015) established that during a cholera outbreak, wrong perceptions and myths about the disease can prevent affected communities from receiving effective intervention and treatment, leading to delays which further hinder the acceptance and accessibility of effective operational responses to cholera outbreaks. Also, wrong beliefs about infectious agents and disease outbreaks can impede the promotion of accurate information and community participation through proper

education (Malaeb et al., 2022; Ujah et al., 2015. But, on the positive side, religion can play a helpful role in increasing awareness and promoting preventive behaviours within communities, particularly when religious leaders are involved in cholera response activities (Innocent et al., 2015).

WHO (2022) emphasised the significance of dispelling superstitions and myths surrounding cholera and providing accurate and reliable information to the public. To educate the community about cholera, accurate information must be provided, myths dispelled, community leaders involved, culturally appropriate messages used, feedback encouraged, and concerns addressed respectfully. Preventing cholera effectively involves focusing on both individual behaviour and public health practices (DuBois et al., 2006). Furthermore, promoting accurate information and dispelling myths through education can help improve cholera control in Nigeria (Ujah et al., 2015; Nuhu and Yusufu, 2018). It is important to understand the religious beliefs and practices of affected communities and engage with them culturally sensitively to ensure effective and sustainable cholera prevention and control (BBC, 2024). To effectively prevent and treat cholera, Ananya (2009) argues that it is necessary to address superstitious beliefs when designing strategies that aim to educate individuals and communities about the disease and its causes. Mwale and Chita (2020) argue that the church's role during epidemics is to safeguard people's well-being through charities and the dissemination of positive information. As a result, UNICEF (2018) underscores the necessity for religious leaders to obtain expertise and competencies to address the concerns of community members. Additionally, they should engage in dialogue with the community to promote optimal hygiene practices and disseminate evidence-based information on the importance of vaccination.

Navigating the Epidemic: Cultural Theory of Risk

Culture shapes how people perceive and behave towards dangers such as disease (cholera) and uncertainties. So, in order to understand Lusaka inhabitants' thoughts and attitudes about the cholera pandemic, it is necessary to understand how individuals perceive risks and how they impact risk-taking and risk avoidance. The cultural theory risk of 1982 by Mary Douglas and Aaron Wildavsky is a framework to understand how societal conflict related to risk arises. The theory proposes that cultural worldviews (beliefs) significantly impact on how individuals perceive risk. An individual's values, collective experiences and standards shape these worldviews, resulting in unique risk perceptions that are influenced by the cultural context of specific societies and groups (Kahan, 2012). The social amplification of risk theory

investigates how societal factors, such as beliefs and practices, can affect the perception of dangers, either by enhancing or diminishing them. Arguably, risk information culturally shared in media, traditional knowledge about illnesses and social gatherings, apparently play a crucial role in shaping the perception of risk. Cultural factors can influence how people evaluate risks (Kahan, 2012). According to this theory, an individual's perception and evaluation of risks is a result of a complex interplay among cognitive, emotional and cultural factors (Kahan, 2012; Wildavsky and Dake, 1990; Douglas, 1992; Douglas, 1985).

Navigating the Epidemic: Religious Coping Theory

Kenneth Pargament developed the religious coping theory in 1997 (Denney and Aten, 2020). This theory argues that people use religious beliefs and practices to deal with difficult life situations and seek solace, significance and support from their religious communities and leaders. Pargament (1997) suggests that during pandemics and crises, people tend to rely on religion as a means of coping with these uncertainties. Religion is often used to explain suffering, illness and death, while religious practices like texts, rituals and prayers can provide hope and comfort. Religious communities can offer emotional support through social connections and congregations (Pargament et al., 1988). Prayer groups and religious leaders can provide empathy, solace, and a sense of belonging. People use positive religious coping strategies, such as seeking spiritual guidance, praying for healing and drawing strength from religious teachings, to manage stress (Tix and Frazier, 1998). Arguably, handling situations such as cholera outbreaks effectively, balancing faith and taking practical actions, such as following health protocols, is necessary. People's cultural backgrounds influence the religious coping methods that people use, and various religious traditions offer distinct approaches (Fox et al., 1998; Duarte and Ferreira da Silva, 2022). We may argue then that acknowledging religious coping mechanisms in public health messaging, collaborating with religious leaders to promote preventive measures and displaying respect and sensitivity towards different beliefs and practices are critical in understanding the implications of the pandemic response.

The study explores the intricacies of the relationship between religion, culture and epidemics. It intends to bridge the gap between religious-cultural beliefs and public health efforts to combat the 2023-2024 cholera epidemic in Zambia, taking the case of Lusaka district as an epidemic epicentre. The study aims to establish how religious-cultural beliefs and practices influence attitudes and behaviours towards epidemics, how these create a mitigation gap by impeding palliative and mitigation efforts, hence contributing to the spread of cholera

and how to bridge the gap and provide a framework to guide the efforts of combatting cholera. Consequently, the study aims to thoroughly examine both the scientific explanations for cholera and the influence of religious and cultural beliefs and practices on the existing gaps in cholera mitigation, to narrow this gap.

METHODS

This study engaged the qualitative research method. It employed a single case study to investigate how religious and cultural beliefs and practices of the Zambian people influence their attitudes and behaviours towards cholera in the Lusaka district. The paper used this study approach to establish and bridge the gap between religious and cultural beliefs and practices of the Zambian people in the fight against cholera in the 2023 and 2024 outbreaks. A random sampling method was used to choose the sample (Yin, 2003). The study had a sample size of 15: Five 5 Health workers from the cholera facilities, five 5 church leaders from Bread of Life International, the Catholic Church, the United Church of Zambia, Seventh-day Adventist and Pentecostal Assemblies of God from the affected communities and the victims from the cholera-affected areas of Chawama, Matero and Kanyama townships in Lusaka were sampled for this study. Health workers' codes: HW 1 to HW5, Religious leaders' codes: RL1 to RL5 and Local Residents' codes: LR1 to LR5. Interviews and observation methods were used to collect data.

Qualitative data was examined using thematic analysis. According to Creswell (2009), thematic analysis is a technique that prioritises the identification, analysis, and interpretation of patterns of meaning found in qualitative data. This technique helped in identifying recurring patterns and themes. Preliminary codes were assigned to the data, and patterns and themes were identified across multiple datasets. The themes were formulated with precise definitions and designated names. Through double-checking and member-checking, data were presented and validated. The study ensured the confidentiality, privacy, trustworthiness, and reliability of both the data and the research participants by assigning each participant a unique code.

RESULTS

The study has established that some cultural and religious beliefs and practices such as sharing water sources and food hygiene practices spread cholera, social gatherings, religious

and cultural ceremonies also spread of cholera, religious coping also spreads cholera, traditional funeral and burial practices spread cholera, traditional healing practices and reliance on alternative medicine, traditional worldviews and perceptions of risks and risk factors contribute to the spread of cholera. The spread of cholera results from the combination of beliefs about the disease and those who have it, and the spread of myths, superstitions and misconceptions about the disease.

Religious and Cultural Beliefs and Practices and Their Implications on Combating Cholera

In response to the questions on what local cultural and religious beliefs and practices exist about cholera and their implications for combating the disease, HW5 mentioned that communal water sources such as shallow wells, traditional rituals and ceremonies lead to the contamination of water sources and create environments conducive to the spread of cholera. According to HW3, cultural norms regarding water collection, storage, usage and poor sanitation facilities also impact the risk of cholera transmission within communities. Additionally, HW1 argued that such practices also spread cholera. HW1 argued, "Communal dining at the funeral house is a cultural practice." Additionally, HW2 highlighted that cultural practices such as eating with hands or communal sharing of food increase the risk of ingesting contaminated water or food. This was supported by HW5, who emphasised that cultural practices, such as sharing food from communal dishes or eating with unwashed hands, contribute to the spread of cholera bacteria. According to HW1, certain cultural or religious practices, such as sharing meals and using unclean water in rituals, contribute to the spread of cholera if the food or water is contaminated. HW3 added that communal eating practices or sharing utensils make it easier for cholera to spread.

HW3 argued, "Social gatherings, such as cultural ceremonies, contribute to cholera's spread because of crowdedness and shared resources such as water, food, and sanitary facilities." For LR3, religious and social events are vital in his culture, but they can also create opportunities for cholera to spread. In LR4's view, weddings also pose a risk for cholera transmission as they involve food handling and eating from different sources. Funeral-related rituals and cultural obligations also contribute to the spread of cholera. According to HW2, traditional burial practices involve washing the body of the deceased. HW2 argued that communal meals during funeral rites also facilitate the spread of cholera. Additionally, HW4 emphasised that funerals are a high-risk environment for cholera transmission. While LR5

asserted that, in their culture, washing the body of a deceased person is a significant practice, HW1 argued that this behaviour could increase the risk of infection.

LR5 alleged, "Religious practices provide us comfort during pandemics, and we often rely on our religious leaders for guidance." HW5 contended that avoiding medical treatment and relying solely on prayers and religious rituals could lead to severe health consequences, including worsening of the illness and even death. According to HW4, some cultural beliefs may discourage people from using modern sanitation practices such as proper handwashing and safe water storage. Similarly, HW2 argued that cultural norms around food preparation and consumption may increase the risk of cholera transmission. Additionally, RL1 contended that some taboos or traditions may prevent individuals from adopting hygienic practices essential for preventing cholera. In HW5's view, some religious and cultural beliefs and practices may lead to stigma and discrimination, hindering efforts to control transmission and provide support to affected individuals. According to HW3, myths and misconceptions about cholera lead to a reluctance to adopt preventive measures like boiling water, using oral rehydration solutions, and seeking medical treatment.

LR1 stated that some people in communities do not trust healthcare providers, while others do not believe in modern medicine. HW1 asserted that these behaviours, including mistrusting healthcare providers and modern medicines, make it harder to control the spread of cholera. HW3 maintained that religious and cultural beliefs lead to mistrust of Western medicine, making people hesitant to follow guidelines from the health agencies, leading to a lack of adherence to preventive measures like vaccinations or hygiene practices. These behaviours lead to delayed or inadequate treatment, exacerbating the severity of cholera cases and contributing to further spread within communities, argued HW5.

Traditional healing practices and reliance on alternative medicine, as argued by HW4, deter individuals from seeking timely medical treatment for cholera symptoms, leading to delays in diagnosis and treatment. LR4 stated, "Sometimes we rely on traditional healers to provide medicines to prevent and cure cholera." While LR3 asserted, "Some people in our community believe that traditional remedies or rituals can prevent or treat the disease, which is not always the case."

Bridging Religious-Cultural Beliefs and the Fight Against the Cholera Gap

Towards an Effective Role of Religion in the Fight against the Cholera Epidemic

Different participants argued that religion can help change people's attitudes towards cholera by using its influence on communities in several ways. HW1 asserted, "Religious leaders can use their platforms to teach communities about the causes, prevention, and treatment of cholera, handling messages about hygiene, sanitation and health practices in their religious teachings." HW2 added, "Religious communities can support and help those affected by cholera, providing clean water, medical care and emotional support." While RL1 said, "As religious leaders, we can promote understanding, empathy and inclusivity within our congregations and broader society to fight the stigma associated with religious-cultural beliefs." HW3 pointed out, "Religious institutions and leaders can advocate for improved infrastructure, healthcare services and government policies to prevent cholera outbreaks and ensure access to clean water and sanitation facilities for all members of society." While RL3 asserted, "With our impact and means, religion we can help change attitudes towards cholera and promote behaviours that lead to better prevention, care and support for those affected by the disease."

A New Approach to Community Engagement by Health Agencies and Stakeholders

Acknowledging how defiant religious and cultural beliefs and practices may be in spreading and hindering efforts to prevent epidemics, HW5 argued, "Religious practices can help support emotional well-being, promote mental health, and encourage community solidarity." However, HW2 expressed, "Addressing these cultural barriers requires a comprehensive approach that involves community engagement, culturally sensitive communication strategies, and collaboration with local leaders and influencers to promote behaviour change and acceptance of preventive measures against cholera." Moreover, HW4 argued, "Efforts to educate communities about the importance of early detection, prompt treatment and seeking care from trained healthcare professionals are essential in combating cholera effectively." Furthermore, RL4 reiterated, "Addressing misconceptions, promoting empathy and understanding and engaging community leaders in destigmatising cholera can help create a more supportive environment for prevention and care." HW1 argued, "Community engagement and health education programs play a vital role in raising awareness about cholera prevention strategies." For LR2 health workers, religious leaders, and other stakeholders, educating community members about the symptoms of cholera, proper hygiene

practices, and steps to take in case of illness can empower individuals to protect themselves and their families from the disease. Additionally, LR3 asserted, "Community leaders and local organisations must be engaged to help mobilise resources and support prevention efforts."

DISCUSSION

Religious-Cultural Beliefs and Practices and Their Implications in Combating Cholera

The study has shown that religious and cultural beliefs and practices hinder public health efforts to fight the cholera epidemic. This was clear in the beliefs and practices held by people and what these implied for how the disease spread. Cultural and religious behaviours such as sharing water sources and food hygiene practices facilitated cholera transmission. Social gatherings, religious and cultural ceremonies also contributed to spreading cholera. Religious coping mechanisms, traditional funeral and burial practices, as well as traditional healing methods and reliance on alternative medicine, all contributed to the disease's spread. Additionally, traditional worldviews and perceptions of risks and risk factors increase the risk of cholera transmission. Beliefs, myths, superstitions, misconceptions, and cholera stigma further contribute to the continued spread of the disease.

Sharing Water Sources and Food Hygiene Practices and the Spread of Cholera

Sharing communal water sources is a deeply ingrained cultural practice for many in Zambia. However, this tradition can inadvertently contribute to the spread of cholera. For instance, communal water sources such as shallow wells, traditional rituals and ceremonies done near water sources lead to the contamination of water sources or create environments conducive to the spread of cholera. Cultural norms regarding water collection, storage, usage and poor sanitation facilities can also impact the risk of cholera transmission within communities. Some communities believe that natural water sources or holy water have cleansing or purifying properties that can cure diseases, which can be risky when the water is not purified with chlorine. Communities that share water are especially at risk of spreading cholera because everyone dips the same cup in open-mouthed pots (BBC, 20024).

Social Gatherings, Religious and Cultural Ceremonies and the Spread of Cholera

Social gatherings, such as cultural rituals, might increase the risk of cholera transmission due to crowding and shared resources such as water, food, and sanitation

facilities. Social gatherings, such as cultural ceremonies, contribute to cholera's spread because of crowdedness and shared resources such as water, food and sanitary facilities. Traditional rituals and ceremonies may also involve practices that facilitate the spread of cholera or contribute to the contamination of water sources. Cultural practices, such as sharing food from communal dishes or eating with unwashed hands, can contribute to the spread of cholera bacteria. Certain cultural or religious practices, such as sharing meals or using unclean water in rituals, can contribute to the spread of cholera if the food or water is contaminated. Sharing food from communal bowls or eating with unwashed hands can contribute to the spread of cholera bacteria. Weddings also pose a risk for cholera transmission because they involve foods from different sources. According to Che et al., (2021), some individuals continue to follow traditional and religious rituals that may contradict the hygienic standards required to avoid cholera.

Religious Coping and the Spread of Cholera

Although religious coping in times of difficulty is necessary, it hinders the development of behaviours that contravene the efforts of fighting and preventing cholera. Some communities have religious beliefs that discourage the use of soap or clean water for washing hands, increasing the risk of cholera transmission. Religious practices such as prayer and deliverance provide comfort during pandemics, often relying on religious leaders for guidance. However, avoiding medical treatment and relying solely on prayers and religious rituals could lead to severe health consequences, including worsening of the illness and even death. Cultural and religious beliefs and practices can significantly impact the acceptance and adoption of interventions aimed at controlling cholera. How people perceive the cause of the disease, the effectiveness of treatment and their trust in authorities can shape their willingness to adopt preventive measures. Traditional beliefs may discourage people from using modern sanitation practices, which can increase the risk of cholera transmission. The methods of religious coping that individuals use can be influenced by their cultural background, and different religious traditions offer unique approaches (Fox et al., 1998). During a cholera outbreak, wrong perceptions and myths about the disease can lead to delays in effective intervention and treatment, and undermine the credibility of foreign organisations conducting information campaigns in communities (Ujah et al., 2015).

Traditional Funeral and Burial Practices and the Spread of Cholera

Despite the significance of washing the body of the deceased in some cultures, it is crucial to acknowledge the potential dangers associated with this practice. The assertion by some participants that washing the body of the deceased is a significant cultural practice must be weighed against the arguments made by HW1 about the increased risk of infection. Furthermore, the communal dining at funeral houses also adds to the potential for cholera transmission in these high-risk environments. It is concerning to think that funerals, which are meant to honour and remember the deceased, can inadvertently become breeding grounds for infectious diseases like cholera. Communities need to reconsider these traditional practices and find ways to adapt them to minimise the risk of infection. While washing the body of a deceased person may be a part of the last rites in some cultures, it is essential to consider the health and safety of the living in these situations.

Traditional Healing Practices and Reliance on Alternative Medicine

Traditional healing practices or reliance on alternative medicine may deter individuals from seeking timely medical treatment for cholera symptoms, leading to delays in diagnosis and treatment. In certain instances, individuals may opt for traditional healers in search of cholera remedies as opposed to formal healthcare providers, resulting in delays in accessing proper medical attention. Participants alleged their usual reliance on traditional healers to provide medicines to prevent and cure cholera. Traditional healing practices or alternative medicine may discourage individuals from seeking timely medical treatment for cholera symptoms, resulting in delays in diagnosis and treatment. Misinformation and myths about cholera transmission and prevention can impede efforts to educate communities about the importance of vaccination, sanitation, and safe water practices in preventing the disease. In some communities, traditional remedies or rituals are believed to prevent or treat the disease, which is not always the case. Some people in their community believe that traditional remedies or rituals can prevent or treat the disease, which is not always the case. This scenario is maintained by misinformation and beliefs regarding cholera spread and prevention. Arguably, these can also hinder efforts to educate communities about the importance of vaccination, sanitation, and safe water practices in preventing disease.

Traditional Worldviews and Perceptions of Risks and Risk Factors

Traditional worldviews on the disease influence the perception of risk and risk factors, and this in turn influences people's attitude and behaviour towards diseases such as cholera.

Some people in communities do not trust healthcare providers, while others do not believe in modern medicine. Religious and cultural beliefs lead to mistrust of Western medicine, making people hesitant to follow guidelines from the health agencies, leading to a lack of adherence to preventive measures like vaccinations or hygiene practices. Mistrust of government and healthcare practitioners can stymie attempts to battle cholera-like vaccine campaigns, water treatment programs, and sanitation projects. These behaviours lead to delayed or inadequate treatment, exacerbating the severity of cholera cases and contributing to further spread within communities. Some individuals may be skeptical of Western medicine, which makes them reluctant to follow health agency recommendations and adhere to preventive measures like vaccinations or hygiene practices. Mistrust of authorities and healthcare providers can hinder efforts to combat cholera through vaccination campaigns, water treatment programs, and sanitation initiatives. Delayed or inadequate treatment can exacerbate the severity of cholera cases and contribute to further spread within communities.

Beliefs, Myths, Superstitions, Misconceptions and Cholera Stigma

Religious and cultural beliefs and practices may lead to stigma and discrimination, hindering efforts to control transmission and support affected individuals. In some cases, people may be reluctant to disclose symptoms or seek treatment because of fear of social discrimination. Religious and cultural beliefs and practices may lead to stigma and discrimination, hindering efforts to control transmission and support affected individuals. Myths and misconceptions about cholera can lead to a reluctance to adopt preventive measures like boiling water, using oral rehydration solutions, and seeking medical treatment. Myths, superstitions and misconceptions about cholera can also lead to a reluctance to adopt preventive measures like boiling water, using oral rehydration solutions, and seeking medical treatment. Misconceptions about infectious agents and outbreaks of diseases can hinder the dissemination of correct information and community involvement through adequate training (Ujah et al., 2015).

Bridging Religious-Cultural Beliefs and Practices and Cholera Mitigation Initiatives Gap

With the existing gap between the religious-cultural beliefs and practices and the fight against cholera, the research has established that a more proactive role is required of religion, health agencies and other stakeholders to change religious and cultural beliefs and worldviews concerning the transmission, spread and treatment of cholera.

Towards an Effective Role of Religion in the Fight against the Cholera Epidemic

Religious leaders can use their platforms to teach communities about the causes, prevention and treatment of cholera, handling messages about hygiene, sanitation and health practices in their religious teachings. Religious leaders can promote understanding, empathy and inclusivity within our congregations and broader society to fight the stigma associated with religious and cultural beliefs. Religion can bring people together across different backgrounds, beliefs and practices. Therefore, religious organisations can facilitate collaboration between communities, governments and non-government organisations to address the root causes of cholera and work towards sustainable solutions. RL3 asserted, "With our impact and means, as a church, we can help change attitudes towards cholera and promote behaviours that lead to better prevention, care and support for those affected by the disease." These attitudes can promote collaboration between communities, governments and stakeholders to address the root causes of cholera and work towards sustainable solutions. As a result, religious leaders' engagement in cholera response operations can raise public awareness and encourage individuals to take preventative measures. Narra et al., (2018) have suggested that religion can exert both favourable and unfavourable impacts on the spread of cholera. As a result, religious leaders' engagement in cholera response operations can raise public awareness and encourage individuals to take preventative measures.

Towards a Community Engagement Approach

Acknowledging how defiant religious and cultural beliefs and practices may be in spreading and hindering efforts to prevent epidemics. Religious practices can help support emotional well-being, promote mental health and encourage community solidarity. However, addressing these cultural barriers requires a comprehensive approach that involves community engagement and culturally sensitive communication strategies. More so, collaboration with local leaders and influencers can help promote behaviour change and the acceptance of preventive measures against cholera. Efforts to educate communities about the importance of early detection, prompt treatment and seeking care from trained healthcare professionals are essential in combating cholera effectively. Furthermore, addressing misconceptions, promoting empathy, understanding and engaging community leaders in destigmatising cholera can help create a more supportive environment for prevention and care. WHO (2022) also emphasises the significance of dispelling superstitions and myths surrounding cholera and providing accurate and reliable information to the public. Hence, the involvement of these

leaders can help effectively communicate the message to the community and ensure they understand the gravity of the situation. Appropriate campaigns and materials should be utilised to educate people about cholera, and these disseminations should focus on the causes, symptoms, transmission, prevention and treatment of cholera and aim to dispel religious and cultural beliefs that intensify the spread of the disease.

A New Approach to Community Engagement by Health Agencies

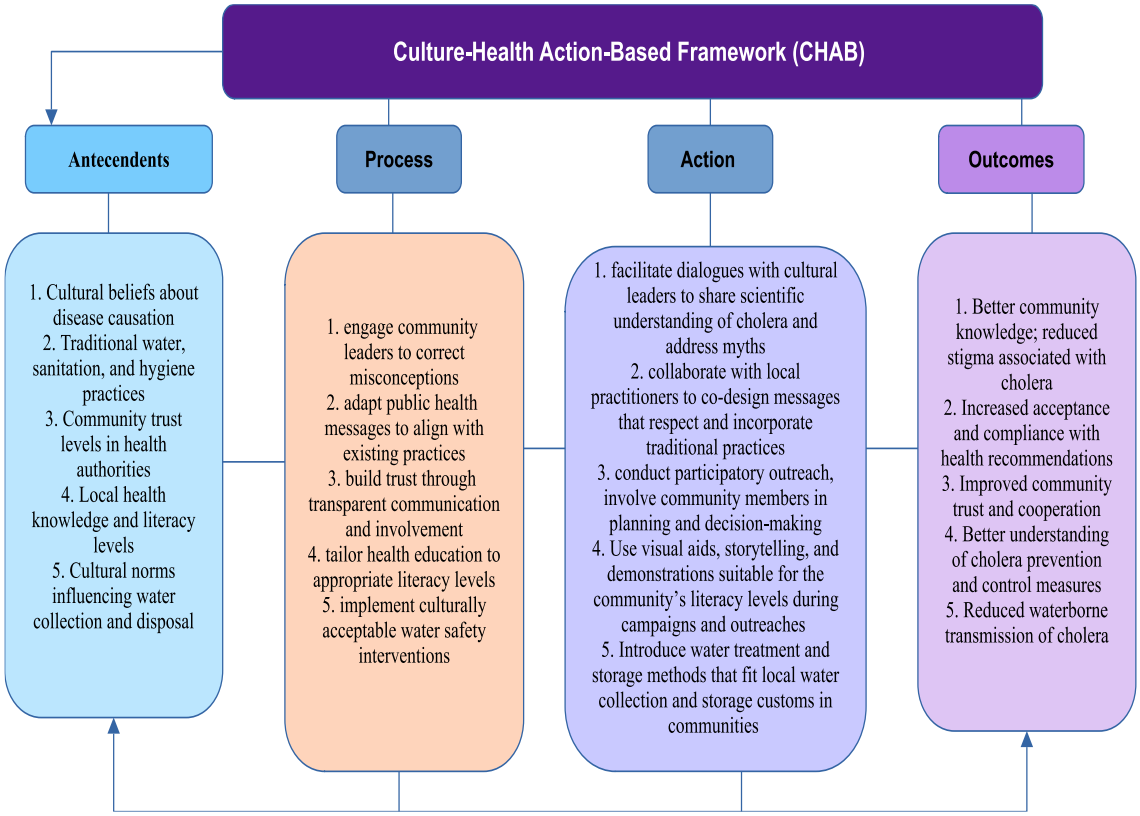
It is important to understand and address religious-cultural beliefs for the successful implementation of public health measures against cholera. To address the spread of cholera, public health campaigns should be culturally and religiously considerate of local practices and beliefs, insisted HW5. Healthcare agencies must work together with community leaders and control existing cultural structures necessary to spread information to enable behaviour change. The study observed that community engagement and health education programs raise awareness about cholera prevention strategies. Health workers, religious leaders, and other stakeholders must educate community members about the symptoms of cholera, proper hygiene practices and steps to take in case of illness. This education can empower individuals to protect themselves and their families from the disease. To address religious and cultural misconceptions about diseases such as cholera and improve their control, it is essential to conduct more research into the cultural beliefs surrounding cholera.

Community leaders and local organisations must be engaged to help mobilise resources and support available prevention efforts. It is essential to encourage dialogue and feedback from the community and provide accurate and reliable information to the public, dispel myths and superstitions surrounding cholera and involve community leaders in response activities. Community participation and involvement in government-backed campaigns can also play a crucial role in addressing these misconceptions. This finding is related to Ujah et al., (2015) and Nuhu and Yusufu (2018), who argue that promoting accurate information and dispelling myths through education can help improve cholera mitigation efforts. To achieve effective and sustainable cholera prevention and control, a comprehensive understanding of the religious beliefs and practices of affected people and communities, and to engage actively with them at religious and cultural levels, is a must.

Culture-Health Action-Based Framework (CHAB)

Based on the findings of this study, the researchers have developed a framework to bridge the gap between culture and cholera control and guide the management of the epidemic

in areas where culture contributes to the spread and hinders prevention, thereby leading to recurrent epidemics. This framework emphasises the integrated action using the culture as a tool for managing the epidemic and public health education. The result is a culturally sensitive cholera epidemic management. The CHAB-framework is a tool that both community influencers, such as local leaders, community health promoters, peer health educators and public and environmental educators can utilise.



Own illustration

Figure 1: CHAB-Framework

Description: The diagram presents a framework to guide the mitigation of epidemic

The Culture-Health Action-based Framework establishes its foundation by recognising essential factors, which include ancestral cultural beliefs about disease origins, established water and sanitation methods, community trust levels, local health knowledge, and cultural norms regarding water collection and disposal. It establishes the required actions which must be performed for every identified factor. Community leaders will receive information through engagement, while health messages will be jointly developed through local practitioners who create the main health content based on current health practices. The

public health personnel must aim to build community trust through outreach efforts, which include providing transparent information and encouraging community participation, while they develop health education programmes that utilise visual materials and storytelling to suit the community's literacy levels. The local traditional methods of water collection and storage should become the basis for adapting water safety interventions. According to Ujah et al., (2015) and Nuhu & Yusufu, (2018) promoting accurate information and dispelling myths through education can highly improve cholera control.

The processes of these actions involve two core functions, which include making cultural leaders share their ideas through dialogue and allowing community members to take part in planning while using communication methods which respect local culture to educate people about proper water treatment methods and hygiene behaviours. Through these processes, the community gains a better understanding and acceptance of cholera preventive measures, which leads to outcomes such as improved knowledge, reduced stigma, increased adherence to health recommendations, stronger trust between communities and health authorities, and eventually, a decrease in cholera transmission. The framework demonstrates how participatory methods combined with understanding of cultural factor contributing and hindering cholera prevention and developing culturally respectful approaches can create better cholera outbreak management results through cultural antecedent control while maintaining respect for local community customs. As asserted by (Innocent et al., 2015) religion and culture increase awareness and promote preventive behaviours within communities, particularly when religious leaders are involved in cholera response activities.

CONCLUSION

The fight against the cholera epidemic requires a concerted effort from all stakeholders. We have argued in this paper that there has been a gap in the fight against cholera because of little or no consideration of the impact of religious and cultural beliefs and practices on the perception, attitude and behaviour towards cholera. Irrefutably, religion contributes to the fight against the epidemic; however, some religious beliefs and practices influence people's perceptions and attitudes towards the disease. This grey area either receives little or no attention before, during and after the epidemic. In this research, we have argued that there is a gap in the fight against cholera in Zambia because of the minimal consideration given to the power of religious beliefs and practices to hinder the efforts put in place by the health agencies

and stakeholders. Guided by the findings and the religious coping theoretical framework, this paper argues for the bridging of that existing gap and recommends critical observation of these factors. The study made recommendations to the health agencies, religious movements and organisations to consider emphasising the change in perception, attitudes and behaviours of people resulting from religious beliefs and practices towards cholera. With the guidance of the findings and the CHAB-framework, the study also emphasises the need to take critical consideration into cultural beliefs and practices that hinder the implementation of preventive and palliative measures against the spread of the disease. Therefore, the study has recommended the inclusion of messages of behavioural change and the use of culturally sensitive messages in the campaigns against behaviours, practices and attitudes that spread and hinder the mitigation of the disease.

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