

Factors Associated with COVID-19 Low Risk perception among urban dwellers in Malawi

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Factors Associated with COVID-19 Low Risk perception among urban dwellers in Malawi

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Abstract

Introduction: Malawians have yet to broadly adopt COVID-19 mitigation measures despite having overwhelming evidence about its infectivity, morbidity, and fatality. Understanding why the general population is not proactive in reducing the spread of this illness is critical to learning how to address this issue. This study explores Malawian COVID-19 risk perception and the associated constraints in the adoption of mitigations. A Health Belief Model (HBM) approach was used to understand factors that undermine COVID-19 messages to achieve behavior change.

Methods: The study applied a rapid appraisal and photovoice methodology in this qualitative inquiry to better understand individual risk perception regarding COVID-19. We selected 33 participants from three major cities in Malawi. We transcribed verbatim audio interviews and videos. Transcripts were coded manually to derive key themes and concepts.

Results: Religious and political beliefs strongly influenced COVID-19 risk perception. Critical religious factors included the coming of Christ, the wrath of God, and the coming of the beast. Politically, participants believed that COVID-19 lockdown measures were a ploy by the ruling party to remain in power.

Conclusion: The study suggests that religious beliefs and political environment undermine self-perceived risk of contracting COVID-19 among urban dwellers in Malawi. We recommend that diverse actors in Malawi should collaborate to promote the dissemination of accurate COVID-19 discourses and reduce the severity of the pandemic's impact on the Malawi populous.

Keywords: Risk perception; religious and political beliefs; COVID-19, Urban Malawi

Introduction

The world is fighting the coronavirus pandemic (COVID-19), which is greatly impacting health, social and economic welfare globally. The World Health Organization (WHO) predicts that developing countries will severely be impacted by the pandemic if tailored mitigation measures will not be in place (WHO, 2020). Malawi is one of the few countries in Africa that registered late cases of the COVID-19. It wasn't until April 2, 2020 that the then President of Malawi put in place various global measures to mitigate its spread. These include declaration of a national state of disaster, instituted a COVID-19 ministerial task force, indefinite closure of schools, and

minimizing the number of public gatherings to a maximum of 100 people. The government also declared a full lockdown to minimize people's contacts (Anderson et al. 2020).

In reaction to the impending lockdown, many Malawians took to the streets to protest against the president's directives (Khamula 2020). Consequently, a grouping of human rights defenders obtained a court injunction preventing the government from enforcing a lockdown prior to addressing the basic needs of the people. The COVID-19 crisis management in Malawi provides a scholarly risk perception, discursive research to inform implementation of precautionary behavior among the population at risk of contracting the disease.

COVID-19 disease is caused by SARS-COV2 and was first diagnosed in Wuhan city, China in December 2019 (Gilbert et al. 2020). Within a month, the disease rapidly spread across the globe that prompted the WHO to declare the outbreak as a public health emergency of international concern on 30th January 2020 (WHO, 2020). The WHO further declared COVID-19 outbreak as a pandemic on March 11, 2020. Globally, as of 03 July 2020, over 10, 845, 275 cases of COVID-19 have been reported with about 521 113 deaths (European Centre for Disease Prevention and Control 2020). To avert COVID-19 epidemic related catastrophes, health experts on COVID-19 pandemic convened in Geneva on 11 to 12 February 2020 to identify key knowledge gaps (WHO 2020). Eight research priority areas were identified focused on virus diagnosis, therapies, disease prevention, and communication strategies.

The R&D Blueprint epidemic experts acknowledged the critical role of the field of Social and behavioral sciences in addressing the sociocultural challenges related to COVID-19 epidemic (Bavel et al. 2020). Globally, there are emerging COVID-19 social concerns that undermine its mitigation. For instance, the pandemic has perpetuated racism and stigma (Coates 2020), and undermined the means of livelihoods for many people (Zandifar and Badrfam 2020). The

pandemic has exerted both physical and mental health challenges (Jakovljevic et al. 2020) and affected the elderly population across the world (Jarynowski et al. 2020). We carried out this study to contribute to the understanding of social factors that undermined the adoption of COVID-19 preventative measures by specifically focusing on risk perception of contracting the disease among urban residents in Malawi.

Conceptual framework

A Health Belief Model (HBM) was used to understand the attitude of urban Malawians concerning their perception about the extent on how they feel at risk of contracting COVID-19 (Champion and Skinner 2008). The HBM, developed in the early 1950s, has been used to describe change and sustenance of health-related behaviors. The model is used to guide health related behavior interventions which constitutes the following aspects: (1) susceptibility to illness as perceived by an individual, (2) the its severity (3), perceived behavioral change benefits, and (4) perceived barriers towards taking an action (Green and Murphy, 2014). Thus, the central idea of this model is that individuals make their own self-assessment regarding the risks and benefits associated with behavioral change under direction of the so called authorities or experts (Green and Murphy, 2014). In COVID-19, there is a need to adopt the HBM to predict the reasons people act or refuse to prevent and control the disease (Carico, Sheppard, and Thomas 2020).

Drawing from the key constructs of the model, we explored whether Malawians believed that they are at risk of contracting COVID-19 and their feelings about the clinical severity of the disease. We explored participants' perceived benefits and barriers to change their behavior in line with COVID-19 prevention guidelines. Participants' access and their trust in media and government campaigns were examined. We assessed self-efficacy by focusing on people's competency to overcome barriers to COVID-19 prevention behavioral change. The HBM

construct has been used in COVID-19 mental health related studies (Mukhtar 2020) and our study extends it to the area of risk perception.

A risk can be either real or perceived and like a study in the United States of America (Bruine de Bruin 2020) our interest in this paper is to examine the perceived risk of the research participants in contracting COVID-19. Risk perception refers to the subjective judgement and its underlying reaction against a specific threat. It represents threats and uncertainties that rise due to some changes in the health, social, or the political nature of the society (Ye and Lyu 2020). Any piece of information that updates people about incoming diseases such as COVID-19, triggers a perceived risk analysis. People's perception of risk helps to decide about their actions to prevent the risk (van der Weerd et al. 2011). The levels of perception of being at risk to Covid 19 varies globally and within a country as result of several factors. A study conducted in ten countries shows the highest levels of perceived risk to COVID 19 among people in the UK compared to other developed countries such as the USA citing trust in government as one of the influencing factors (Dryhurst, 2020). An evaluation of the perceived risk to COVID-19 among college students in China revealed that females, knowledge of the disease, students from Hubei and non-medical students perceived themselves at higher risk of contracting the disease (Ding et al., 2020). Similarly, Hedima et al. (2020) found that risk perception was significantly higher among female, health workers, and young adults in Nigeria. However, a study conducted in Ethiopia using a Health Belief Model revealed that over 66.6% of the participants perceived COVID 19 as not a threat expressing no concern about the dangers of the disease (Geda et al., 2020). Meanwhile, it is worthy to note that high-risk perception results in a better response, and low risk perception reduces the probability of taking preventative actions (Bond and Nolan 2011). Therefore,

understanding COVID-19 risk perception is a critical piece of information, as it can help inform preventative measures.

Political situation in Malawi related to COVID-19.

Malawi has witnessed political unrest since the 2019 general elections (Anon 2020b). Citizens protested against the chairperson of Malawi Electoral Commission Dr. Justice Jane Ansah, who pronounced Peter Mutharika the winner. The Human Rights Defenders Coalition, an organization that champions human rights, spearheaded the Anti-Jane Ansah Movement as it enrolled millions of Malawians into the streets. As the number of demonstrations swelled, leaders of the opposition side appealed to the high court in demand for justice. On February 3, 2020, the high court nullified the presidential outcome of the May 2019 general elections and granted a 150 day period for fresh elections (Anon 2020a) in which Dr. Lazarus Chakwera, the opposition leader was officially declared a winner. The change in power took place on 27th June 2020 (Anon 2020c).

It is during this period of political unrest that COVID-19 emerged in Malawi (Patel et al. 2020). Politicians had a temporal ethical dilemma on whether or not to conduct public political rallies. They opted for massive open public rallies disregarding COVID-19 mitigation measures (figure 1), demonstrating a low risk perception (Banda et al. 2020).

Figure 1: Tonse alliance political rally in Lilongwe city, Malawi amidst COVID-19 epidemic



Photo credit: research participant, June 20, 2020.

The failure by the Malawi government to reinforce COVID-19 mitigation measures has resulted in a surge of the cases of the disease in June as the local transmission surpassed imported cases. At the time of writing this paper, (4th July), there were 1,613 documented cases with 17 fatalities (Phuka 2020). There is a high likelihood that these numbers represent COVID-19 cases in Malawi as only 15,724 people have been tested across the country. The government is warning Malawians that they need to regard everyone as the carrier of the SARS-COV2. Although COVID-19 infections have been found in all the 28 administrative districts of Malawi, the three major cities of Blantyre, Lilongwe and Mzuzu (figure 2) are the epicenter of the disease (Phuka 2020). Examining community adherence to COVID-19 preventive measures is critical as Malawi health facilities cannot manage influx of critical cases due to the limited infrastructure (Sonenthal et al. 2020).

Methods

The study applied a rapid appraisal research approach (Beebe 1995) to develop a qualitative understanding of the barriers of COVID-19 mitigation measures in Malawi. This method uses many of the characteristics of qualitative research. The only three differences are that it involves two or more multidisciplinary researchers, team interaction is an aspect of the method, and as a result it produces faster and more comprehensive outcomes (Skillman et al. 2019).

Rapid appraisal considered a systemic perspective to understand factors that undermine adoption of COVID-19 mitigation guidelines at community and individual levels. This approach also allows triangulation of multiple data sources such as in-depth interviews and photovoice (Murphy et al. 2018). The approach also allowed us to have an iterative data collection and analysis process as the COVID-19 management procedures were evolving in Malawi. Therefore, the approach provided us with a flexible but rigorous approach to the collection and analysis of qualitative research data related to COVID-19 risk perception among urban dwellers in Malawi.

Study location

We conducted the study in three urban cities of Malawi namely Mzuzu, Lilongwe and Blantyre where cases of COVID-19 are high (Phuka 2020). Malawi is situated to the southern part of Africa and is boarded by Tanzania to the north, Mozambique to the southeast, and Zambia to the northwest (Figure. 2). Malawi had a population of over 17.6 million people in 2017 (Malawi National Statistical Office [NSO] 2017). Poverty is widespread across the country as more than half of the population lives below the poverty line (<\$1.90) and about 25% are ultra-poor households (Phiri 2017). The vast majority of the population work in the agricultural and informal

sectors, which forms the backbone of Malawi's economy in addition to over reliance on the foreign aid.

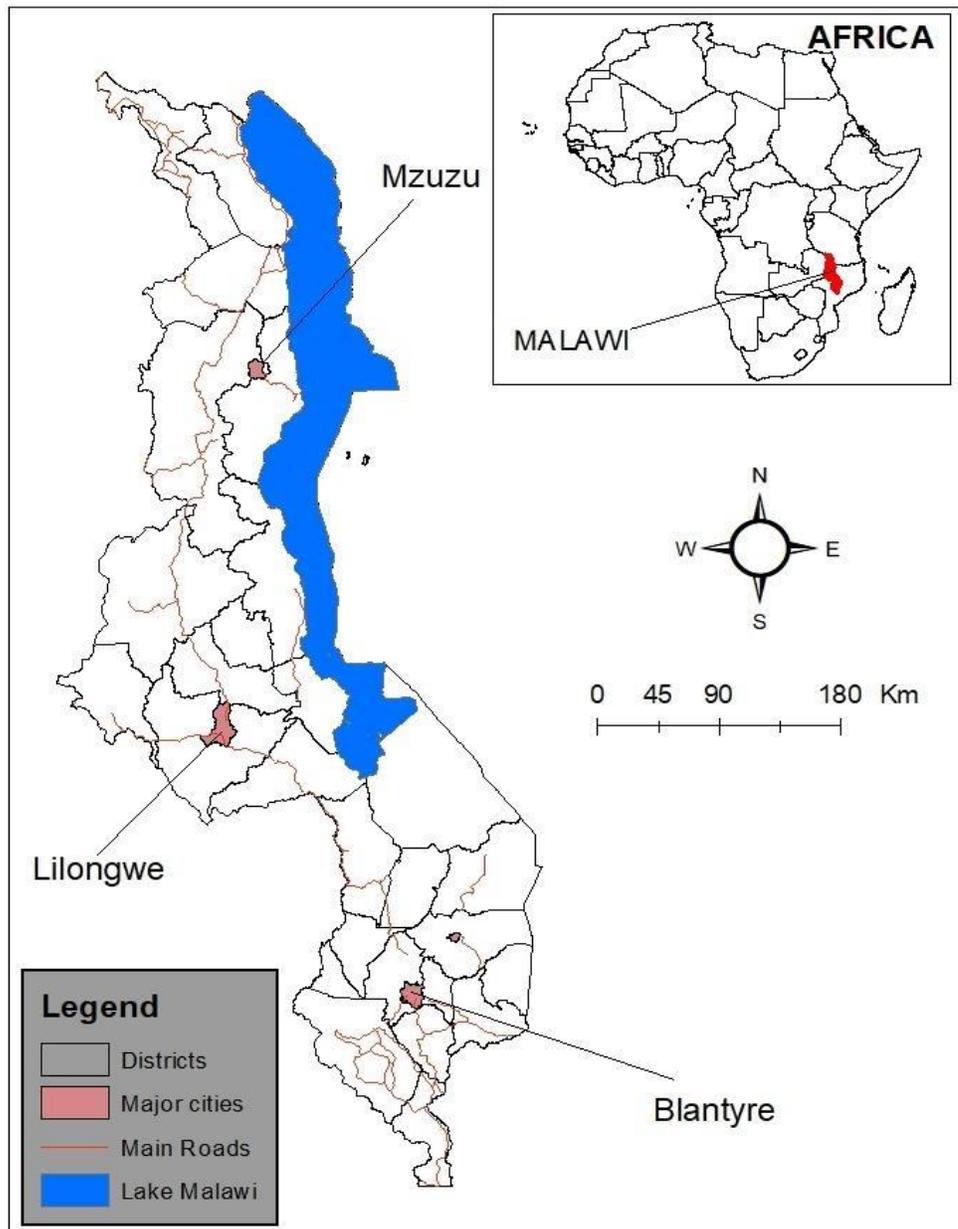


Figure 2: Location of study cities in Malawi

Data collection and analysis

We selected the research participants based on the principle of maximum variation (Palinkas et al. 2015) to document diverse variations relating to the risk perception of contracting COVID-19. Thirty-three participants (n=33) were identified and interviewed from Mzuzu, Lilongwe and Blantyre cities in Malawi. Our local collaborators who were in academia and local community organizations identified the participants. To mitigate the transmission of COVID-19 during the research study, WhatsApp mobile platform was used to conduct and record all interviews. WhatsApp technology has become an important platform in developing countries where internet connectivity is a challenge (Henry et al. 2016).

An adapted standard risk perception of an infectious disease outbreak interview guide was used to collect data (Sridhar et al. 2016). The questions explored the views of the respondents about their knowledge of COVID-19, and if they perceive themselves to be at risk of contracting the disease. Interviewers also asked respondents about their willingness to adopt COVID-19 preventive measures such as hand washing, wearing of face masks, and physical distancing. The audiotapes were transcribed verbatim into Chichewa and Chitumbuka local languages. Later, we translated them into English.

To ensure continued immersion and rigor in our qualitative data (Miles and Huberman 1994) the transcripts were analyzed using hand-coding. First, each author read and reread the raw data line-by-line and then derived codes relevant to our research questions (Crabtree and Miller 1992). We compared the codes for consistency, and later we organized and linked emergent codes into four broader themes. For data triangulation, photos and videos were used to elicit participants' imagination on how they perceived themselves at risk of contracting COVID-19. This helps us to

have multisensory experience of participants' narratives (Capous-Desyllas and Bromfield 2018). Member checking with local collaborators was used to incorporate gatekeepers' insight (Moon 2019).

Research Ethics Review

Ethics approval to conduct this study was obtained from the University of Livingstonia research ethics committee in Malawi by the second author (protocol number: UNILIA-REC/1/CUP 2/01). We sought written permission from all city assemblies. We obtained written consent from the participants prior to the interview.

Results

During the interview, participants ranged in age from 21 to 64 years. A total of seventeen women and fifteen men were included in the study. They had diverse professional backgrounds including local chiefs/block leaders, food and secondhand vendors, health professionals, teachers, and manual workers. The results of our study are presented with exemplary quotations to illustrate how participants attached meaning to each emerging theme. The quotations were selected using the criteria suggested by Kerr et al. (2016) that include: (1) the ability to represent divergent perspectives; (2) typical views expressed by many respondents; and (3) the depth or clarity with which the ideas are conveyed. Pseudonyms have been used to protect confidentiality of the research participants. Our study identified four overarching themes that have been categorized according to participants' orientation regarding factors that undermine their risk perception of COVID-19 epidemic. In this paper, we employed the health belief model to understand people's perception of risk and their action to prevent the disease. According to the principle of the HBM, a person's likelihood to take preventive action depends on their perception of risk and the believed consequences of the infection. If the perceived consequence of the diseases is threatening and the

perceived risk is high, people tend to follow health preventive behaviours. However, people's healthy beliefs determine the perception of risk. In the finding of this research, we observed that people held various health beliefs that impacted their perception of being at risk of the COVID 19 infection.

Religious perspective

The coming of Christ was one of the common themes that undermine the perceived risk of contracting COVID-19 disease in this study. Participants that self-identified as more religious claimed that the outbreak of COVID 19 marks the end of the world according to biblical teachings. The Christian community holds a belief that Jesus, the son of God, warned the world about his return to judge humanity. Among various features that would signal his coming was the global pandemic. Therefore, some respondents ascribe to this prophecy and believe that COVID-19 is inevitable as it is fulfilling the Holy Scripture. The following excerpt by a pastor in Mzuzu city illustrates this view.

“This is not a real virus like HIV; rather it is a disease from the darkness. The evil spirits have brought this disease to attack only those who are not righteous. This is a sign of the coming of Jesus to redeem righteous people in the world” [Jere, pastor, 47 years].

This was a consistent finding with multiple participants who said that those who do not pray and have little or no faith in God are likely to be infected by COVID-19 unlike those who believe in him (God). According to one local leader, the only way to avoid COVID-19 is to repent which is a perception in sharp contrast to scientific preventative measures.

Some participants ascribed to the theory that COVID-19 has emanated from the wrath of God. They claimed that the sins of the world have angered God. Furthermore, they reported that

God wants to wipe out humankind from the earth through the epidemic. They substantiated their line of narrative regarding the biblical stories of Noah and the fate of Sodom and Gomorrah. In all these given scenarios, they claimed that God used heavy rain and fire to destroy the sinful people. It is through this line of thinking some participants perceived that COVID-19 fulfills the purpose of destroying the sinners in the world. One key respondent from Islamic faith explained this view:

‘This pandemic is Kiamah (punishment) from Allah to humankind for their sins. Allah has been tolerating the sins that people have been committing such as stealing of government funds, prostitution, and murdering of albinos in this country. God has seen that people are not repenting and he wants to punish them’ [Chejuma, 36, sheikh, Blantyre].

Religious ideologies undermined perceived risk of contracting COVID-19 among the participants. According to half of the participants, the onset of COVID-19 fulfills the book of revelations in the bible. According to one participant, the book outlines that believers in the days prior to the coming of Jesus will experience many horrible things. One of such things is the number of the beast 666 that antichrist people will force upon Christians. The following excerpt illustrates a purported connection between 666 and COVID-19 pandemic.

The government last year told us we should get the national identity cards so that everyone should have a number. They said that without that number we can’t access social services. This year they say there is COVID-19, which is claiming the lives of people. To avoid it, the government has shut down churches. This is strange as God commands us to pray all the time. This government wants us to stop praying perhaps the numbers on the national cards will work now. I cannot follow their advice, as I do not want to get the 666 number [Chisomo, 21, food vendor, Lilongwe].

Some participants delved into the debate of COVID-19 vaccination research. They supported that God's followers should not take part in the trials. One participant suggested that the COVID-19 vaccine would induce a mark of triple six that will test the belief of Christians. Another respondent assumed that COVID-19 is a disguised Roman numeral number 666 that has come through this epidemic. He suggested that antichrists have deliberately mixed the roman numerals C=100, VI = 6, D = 500, and minus 19 to prevent people from understanding that it is the number 666. Religious beliefs determined how participants viewed the pandemic of the COVID 19. Such a view held a significant impact on the participants' definition of risk of infection. The participants possessed a remarkable knowledge of risk. They expressed that somebody was at risk when there were chances of getting infected. Many participants understood specific behaviours that increase risk of infection. They also understood that preventive measures such as wearing masks, social distancing and hand washing lowers down risk of infection. Due to religious affiliations, however, some participants never considered themselves at risk because of the belief that the pandemic came to smash the sinful population. So long they maintained good terms with God, the COVID 19 was not a threat to them. Those who believed to live sinless life, regarded themselves immune to infection and hence, not at risk by all means.

Political perspectives

Two polarizing views emerged from Malawians based on their political affiliation concerning their risk perception of contracting COVID-19. These views derived from the principle of cost and benefits within the broader HBM framework. High risk of COVID 19 was beneficial to the former ruling party as its leadership would remain in power. However, the high risk meant a loss to the opposition party due to the government's strategy to cancel presidential elections of June 2020. Participants that ascribed to the former ruling party claimed that COVID-19 is real and the

prevention measures that the government planned were in the best interest of Malawians. In this example, the participant held the view that they are at high risk of contracting the disease and that the former government justifiably imposed lockdown measures. The following scenario exemplifies this line of thinking.

The opposition parties then, are reducing efficacy in government efforts towards combating COVID-19. If you can see, they challenged the presidential order of lockdown and they have started their public political campaigns. Our president is leading by example as he is on self- quarantine. Our presidential running mate is distributing facemasks whenever he is conducting political rallies [Richard, 47, Blantyre].

Participants that self-identified with political opposition parties claimed that there were no COVID-19 cases in Malawi, as claimed by the government. In Malawi there have been no public declarations of COVID-19 infections. Lack of COVID-19 disclosure undermines the perceived risk of contracting the disease by some participants. The following extract illustrates this point of view.

There is no COVID-19 in Malawi. Look in Britain, the Prime Minister Boris Johnson disclosed that he was suffering from coronavirus. We could see on television how his condition was deteriorating. What is so special with Malawi that even a single person has come to the open to say he or she is suffering from it? This is just government propaganda to shun away from the presidential election [Phiri, 26, Mzuzu].

Some opposition political leaders spoke this narrative as they encouraged people to patronize their political rallies. Some participants explained that the vice president of the coalition opposition parties Dr. Saulos Chilama encouraged political patrons to hug each other as a proof that there is

no COVID-19. This approach undermined risk perception among the people who were zealous supporters of opposition parties.

The interviews with health professionals show that they had a high-risk perception of contracting COVID-19 regardless of party affiliation. According to their understanding, COVID-19 is a contagious disease that attacks the respiratory system. It is a flu-like disease with symptoms such as coughing, pneumonia, fever and itching of the throat. Some individuals can experience mild symptoms and recover while others can experience severe symptoms with the most extreme cases resulting in death. The following excerpt illustrate the risk perception of one of the health worker:

The disease is dangerous and deadly hence the need to observe and follow all the precaution measures. For example, we need to practice social distancing -thus sitting 3 meters apart from each other, and no handshakes. People should always put masks on their face, and they should frequently wash their hands. [Neri, 31, Lilongwe].

Rampant corruption and lack of public trust in the government in Malawi also came out as one factor that undermines peoples' perceived risk of contracting COVID-19. Some participants claimed that some donor organizations were remitting COVID-19 funds to countries that registered the disease in Africa. In Malawi there was no case of the epidemic, the government colluded with health workers to claim that some people have tested positive of COVID-19. The goal was to get access to the COVID-19 funds and drew the allowances for self-enrichment. One participant recounted a record of two government Ministers who were caught on camera on national television discussing ways of concealing evidence that they are collecting COVID-19 allowances.

My suspicion that this government fabricated that there is COVID-19 in Malawi for them to get rich out of this epidemic was verified yesterday on MBC TV. The minister of health Mr Jappie Mhango and information minister, Mr Mark Botomani were not aware that microphones were turned on during COVID-19 briefing session. Believing they were speaking confidentially, Botomani warned Mhango that their tactic of withdrawing funds is about to be revealed to the public. I encourage you to access this link to understand more. <https://www.nyasatimes.com/hrdc-gives-cabinet-ministers-botomani-and-mhango-7-days-to-resign/> [Thandizo, University student, 34, Blantyre].

Thandizo's sentiments about the behaviour of the two ministers undermined her risk perception of contracting the disease. Other participants suggested that health experts were supposed to be updating the nation about COVID-19 issues to appeal to the public unlike politicians.

Discussion

Our study shows that participants' risk perception of contracting COVID-19 is affected by multiple social factors. Dominant religious and political beliefs are leading influences. Some of the religious ideologies that most influenced risk reduction measures were the belief that this disease is a punishment from God, or a fulfillment of biblical narratives, that healing and prevention can come from being steadfast in prayers. Furthermore, political affiliation to an opposition party seemed to lower self-perceived risk of contracting the disease. Our health belief model posits that people with strong religious faith did not see themselves at risk as they resisted to take preventive measures seriously as advocated by the health experts. This relatedly undermine government efforts to mediate the disease spread. Malawi is deeply a religious country with most citizens are affiliated to religious group. Therefore, we argue that the impact of religious influence on public health efforts cannot be understated or left unaddressed. Further worrying, our results

found that many religious leaders report that they consider themselves immune to the infection and the individual influences of religious leaders must be considered.

Our findings are consistent with a study by Lichtenstein, Ajayi, and Egbunike (2020) who found that religious beliefs and politics undermine COVID-19 management in many African countries. For instance, the study found out that in Nigeria, an Islamic scholar by the name of Abubakr Imam Aliagan challenged the Nigerian government's mitigation efforts specifically as it pertained to mosques and other religious institutions. He claimed that Muslims are endowed with spiritual power to fight the virus. The same study referred to President John Magufuli of Tanzania who proclaimed that COVID-19 is a pandemic from the devil. He recommended churches not only remain open, but that people attend in order to strengthening prayers and avert the epidemic.

Since our findings support prior studies that religious faith and politics play a critical role in shaping COVID-19 risk perception in Africa, there is an urgent need for policy makers to work collaboratively with religious and political leaders and target these leaders with accurate information about the causes, prevention, and risk of the epidemic. We support the ideas of Ogola (2020) who claimed that many COVID-19 messages reaching the population are misinformation coming from several actors. In Malawi religious leaders and politicians are spreading this misinformation. It is important to note that a study in Korea found that religion affiliation is not a precursor of COVID-19 immunity as members of Shincheonji religious grouping were infected by the disease (Kim et al. 2020). Cases of religious institution-based outbreaks may be helpful in dispelling the claim that COVID-19 is a manifestation of God's anger and can be avoided by being a religious believer.

This study also underscores the dilemma that politicians and health experts are encountering across the globe to balance the individual rights of citizens while also promoting health and wellness (McCloskey et al. 2020). In Malawi, well documented political corruption created competing interpretations of COVID-19 reducing risk perception. People failed to adopt preventive measures due to the competing interpretations of the virus from politicians who misinform them. Our findings show that some politicians even confirmed the absence of the coronavirus in Malawi and encouraged people to enjoy their political rights by joining in large rallies. Such desire for political freedoms outpowered people's perceived risk of the coronavirus infection. It was the cost-benefits analysis, as stipulated in the HBM, that lead politicians to undermine the population's received risk of infection to gain political advantage over opponents. We, therefore, posit that the current Malawi government should strive to build public trust, work with journalists against misinformation, and work in collaboration with religious and community leaders to minimize competing interpretation of the disease.

We support the conceptual framework that Rosenthal et al. (2020) proposed on African COVID-19 management programs must ensure community ownership, addressing its economic impacts, and maintaining health services for non-COVID-19. The pandemic will test the legitimacy of many African governments (Khemani 2020). In Malawi, COVID-19 mismanagement by the former ruling DPP government has partly been attributed to its loss in the presidential election. Human rights and opposition parties took advantage of COVID-19 crisis to Malawians by suggesting the disease's negative impact was a result of the entrenched corruption and mismanagement of government resources by the ruling elites (Riley and Chilanga 2018; Viens and Eyawo 2020). The capitalization of a public health crisis for political gain represents a serious health risk. While the misinformation spread by various religious actors in Malawi remains another

important risk. We therefore appeal to the current government of Malawi to rebuild the damaged government reputation by ensuring that COVID-19 management is holistic, and people centered. Malawians like many Africans will be critical of the government on how COVID-19 funds are managed as it is a potential breeding ground for corruption (Estrada and Arturo 2020). Unless people build trust in the government and unless the government builds strategic partnerships with religious institutions public health efforts will be thwarted in Malawi (Gozgor 2020; Mohammadi et al. 2020).

Conclusion

Our study revealed that there was general perception of low risk towards contracting COVID-19 among urban dwellers in Malawi. The perception was mainly influenced by religious and political beliefs. These beliefs limit the government's ability to impose effective prevention methods. We implore the government to develop partnerships with religious institutions to help spread scientific approaches to the broad community. Furthermore, the current government could also put out genuine efforts to reduce corruption in all government institutions, including those funds tasked with the management of COVID-19 funds in order to rebuild public trust. Efforts towards reducing corruption and improving cross collaboration between religious institutions and medical experts would help to increase the risk perception of contracting the disease. The trust and high-risk perception will motivate people to adhere to COVID-19 mitigation procedures.

List of Abbreviations

COVID-19: Coronavirus disease 2019

WHO: World Health Organization

DECLARATIONS

Ethics approval and consent to participate

Ethics approval to conduct this study was obtained from the University of Livingstonia research ethics committee in Malawi by the second author (protocol number: UNILIA-REC/1/CUP 2/01)

Written permission was sought from all city assemblies. We got written consent from the participants prior to the interview.

Consent for publication

We informed the participants that they would disseminate the study through various mediums such as policy briefs, and scholarly journals to inform COVID-19 governance in Malawi. With a full understanding of the research and its intended purpose, all participants gave full consent for us to publish the findings.

Availability of data and materials

This study focused on a COVID-19 risk perception among urban dwellers in Malawi. For data accessibility, contact the corresponding author.

Competing interests

We declare no competing interests

Funding

The study did not have any external funding.

Authors' contributions

MD, EC, and PW designed the study, collected and analyzed the data and wrote the sections of the first draft manuscript. EC and AK revised the first manuscript. All authors read and approved the final manuscript.

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Figures



Figure 1

Photo credit: research participant, June 20, 2020.

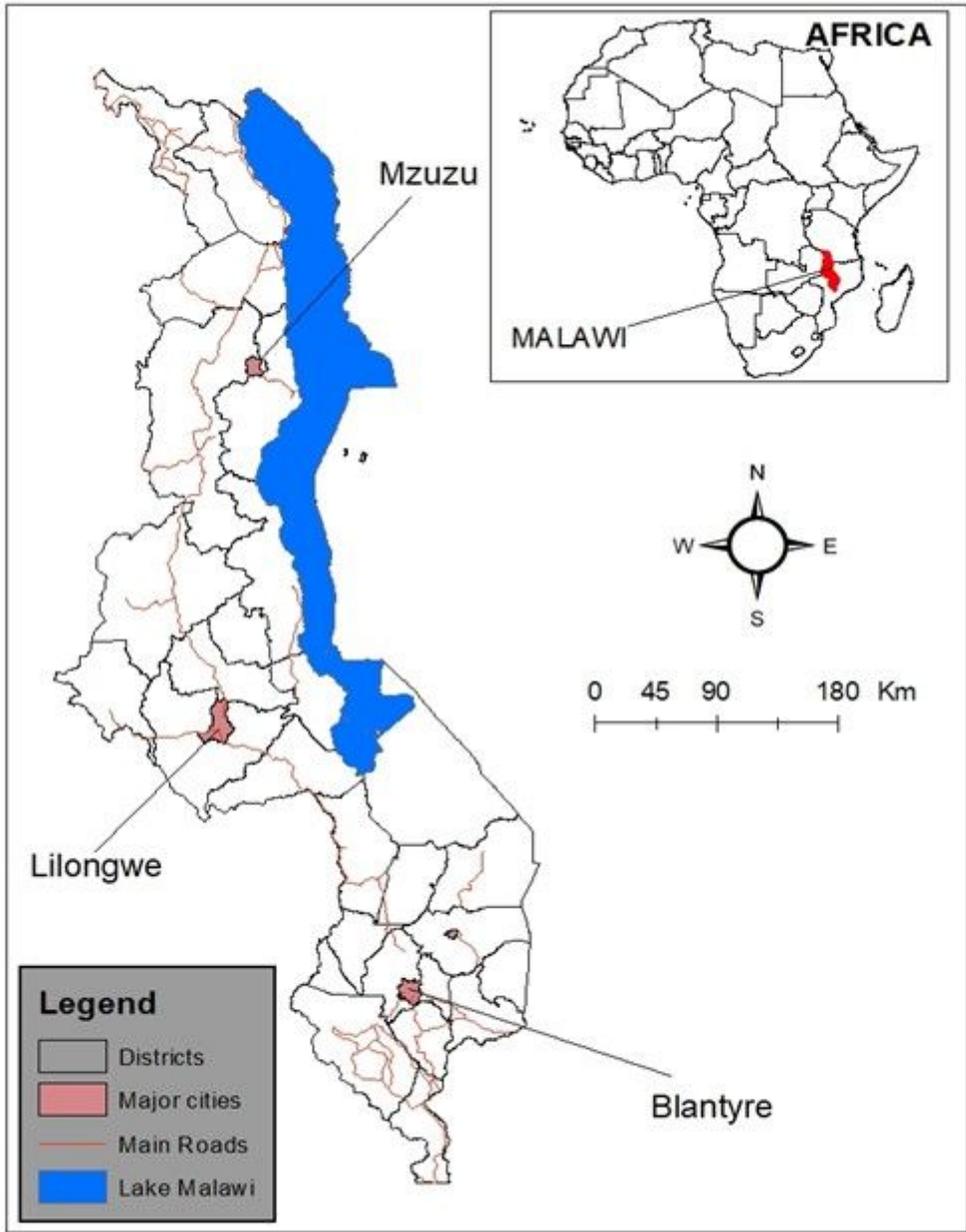


Figure 2

Location of study cities within Malawi. Note: The designations employed and the presentation of the material on this map do not imply the expression of any opinion whatsoever on the part of Research Square concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. This map has been provided by the authors.