Received: 24 February 2023 | Accepted: 22 May 2023

DOI: 10.1002/hcs2.58

ORIGINAL ARTICLE

HEALTH CARE SCIENCE

Exploring COVID-19 from the perspectives of healthcare personnel in Malawi

Chúk Odenigbo | **Eric Crighton**

Department of Geography, Environment and Geomatics at the University of Ottawa, 60 University, Ottawa, Ontario, Canada

Correspondence
Chúk Odenigbo, Department of Geography, Environment and Geomatics at the University of Ottawa, Simard Hall, Room 036, 60 University, Ottawa, ON K1N 6N5, Canada.
Email: coden075@uottawa.ca

Funding information
Mitacs, Grant/Award Number: IT19260

Abstract

Background: The Coronavirus 2019 disease (COVID-19) brought many healthcare systems around the world to the point of collapse all the while putting the lives of healthcare workers at risk. This study forgoes an institutional look at healthcare to center individual healthcare personnel in Malawi to better understand (1) how the worldviews of healthcare workers impact their work in the context of COVID-19, (2) how COVID-19 impacted healthcare workers, and (3) the unique conditions faced by being a healthcare worker in a low-income nation.

Methods: This research uses a hermeneutic phenomenological approach to qualitative methodology involving in-depth interviews ($n = 15$) with healthcare workers, traditional healers, and hospital leadership. The data collected were inductively coded and analyzed using the framework method, producing rich descriptions on how COVID-19 impacted the lifeworlds of healthcare workers in Malawi.

Results: The findings reveal many of the struggles healthcare workers faced due to misaligned government policy and perceived proximity to COVID-19; outline their needs such as wanting better resources, funds, wages, and public health communication; and, exemplify the significant role that personal biases, worldviews, and sense of fear played in how healthcare workers perceived and interacted with COVID-19.

Conclusion: Much of what was said echoes beyond borders, reflecting common global sentiments felt by healthcare personnel, and offers directions to explore building policies, strategies, and plans in preparation for any future disease outbreaks.

KEYWORDS
COVID-19, pandemic, healthcare workers, fear, Malawi, discrimination, violence

Abbreviations: COVID-19, the Coronavirus 2019 disease; SFHC, Soils, Food and Healthy Communities.

[Correction added on 24 August 2023, after first online publication: In the previous published version of the article, corresponding author erroneously mentioned 8 men and 5 women in third paragraph of Materials and Methods section, that is now corrected]

1 | INTRODUCTION

As the world seeks to comprehend the Coronavirus 2019 disease (COVID-19) pandemic and its impacts on human society, there is a need to understand the ways in which the disease has shaped (or reshaped or is reshaping) healthcare [1]. With limited information about the disease, doctors and nurses around the world have had to try and manage COVID-19 symptoms and treat the sick, all the while promoting public health measures to impede the spread of the disease and protect the larger populus [2, 3]. As the front line of defense in the event of any health crisis, healthcare workers across the world have had to deal with a series of obstacles and challenges as they put their health (and oftentimes, the health of their families) at risk for the wellbeing of society [3–5]. While no story is objectively more important than another, the stories of healthcare workers come with a sense of urgency to act because they are the first human line of defense against a disease and so should they fall, the risk against the collective health of the society increases [6, 7].

Koontalay et al. [8] completed a meta-analysis of 10 qualitative studies focusing on the psychological and emotional impacts of COVID-19 on healthcare providers. They looked at studies published in China, the United States, the United Kingdom, South Korea, Brazil, Iran and Lebanon, where four emergent themes became apparent: healthcare providers across the world were dealing with (1) inadequate preparedness, (2) emotional challenges, (3) insufficient information and equipment, and (4) burnout [8]. Their discussion reveals that although the themes remain consistent across geographic scope, the root cause of each theme was different. In Lebanon, for example, psychological distress stemmed primarily from 'conflicts that they encountered between their professional duties and their duties toward their families' whereas in the United States and South Korea, the same feeling of psychological distress came from 'the unpredictability of COVID-19' [8]. This study demonstrates that even where there are similarities and synergies between findings, results cannot be generalized across borders. The healthcare workers in each country have their own stories to tell.

Ali et al. [1] demonstrate the learning that can be achieved from an in-depth place-specific qualitative study by interviewing 20 physicians in Pakistan on the impacts they faced during the COVID-19 pandemic. Through their study, we learned not only of the mental health challenges doctors faced but also of the important role that religion, biomedical science, rural versus urban landscapes and professional status played in how COVID-19 was perceived and acted upon. Ali et al. [1] were able to confirm the significance of, and call for, further ethnographic studies on dealings of frontline care providers with COVID-19 and the way these conversations can inform policy. Ali et al. (2021) emphasize the role of place in these conversations, centering Pakistan, specifically the Sindh province, in the story that they piece together, recognizing that healthcare workers in other places may hold different perspectives and influences.

Malawi is a low-income nation whose healthcare system faced challenges similar to many other African and South American countries whereby they had to contend with COVID-19, while managing ongoing epidemics and eclosions of transmissible diseases such as malaria which accounted for 34% of outpatient visits before 2020 [9]; cholera, due to only 60% of the population having access to proper sanitation facilities [10]; and HIV/AIDS where an estimated 10% of the entire population live with the virus at any given time [11]. In addition to transmissible diseases, healthcare workers also have to navigate the growing burden of chronic illnesses including cancers, diabetes and hypertension [12]. Malawi, for example, demonstrates the highest incidence rates of cervical cancer in Sub-Saharan Africa [13].

The aim of this research is to expand on existing COVID-19 literature and knowledge by looking at the impacts that COVID-19 has had on frontline healthcare workers in Malawi. Using qualitative methods, we question what it meant to be a healthcare worker in a low-income nation during a global pandemic, looking for and listening to the stories, concerns, fears, wishes and hopes of the healthcare workers on the frontlines of the fight against COVID-19 in Malawi. Specifically, we want to understand (1) the impact that COVID-19 had on healthcare workers in Malawi, (2) the influence of individual healthcare workers' worldviews on their work in the context of COVID-19, and (3) the unique circumstances and conditions faced by being a healthcare worker in a low-income nation. The findings of this study seek to inform further targeted exploration of policies, measures and systems necessary to ensure that healthcare workers feel supported and valued in their work, thereby strengthening healthcare in the advent of a new disease outbreak.

2 | MATERIALS AND METHODS

Data were collected through semistructured in-depth interviews ($n = 14$) with healthcare workers from across Malawi between September and December 2021. A follow-up unstructured interview ($n = 1$) with hospital leadership

was conducted in June 2022 to help contextualize and better interpret findings. This study is part of a larger, qualitative research project ($n = 44$) examining the COVID-19 pandemic in Malawi.

To meet the research objectives, we used a hermeneutic phenomenological approach to qualitative research where our data gathering process focused on the relationship between the healthcare workers and their *lifeworld*, based on Heidegger's understanding where 'lifeworld referred to the idea that "individuals" realities are invariably influenced by the world in which they live' [14]. Hermeneutic phenomenology is built on the assumption that people are experts in their own lives and lived experiences, therefore allowing us to explore the worldviews that influenced how COVID-19 was perceived, received and handled (objectives 1 and 2), as well as the realities that they operated and lived within (objective 3). Bynum et al. [15] successfully demonstrate the importance of hermeneutic phenomenology in the context of health research.

Following cultural norms, recruitment was conducted via a referral process led by community leaders. In this case, we partnered with Soils, Food and Healthy Communities (SFHC), a research-centered non-profit organization based in Ekwendeni, Malawi, that acted as a community liaison. SFHC was tasked with identifying potential participants through their national networks and ensuring a diversity of perspectives based on occupation, location, gender and ethnicity wherever possible. A total of 14 participants were recruited for the semistructured interviews, 8 men and 6 women, from a wide variety of professions in healthcare: clinical officers, nurses, traditional healers, students, dentists, outreach officers and lab technicians. Eleven participants had either completed or were in the process of completing postsecondary education, while three did not complete secondary school. Majority of the participants identified as Tumbuka ($n = 10$), with the remainder identifying as Ngoni ($n = 3$) or ethnically mixed ($n = 1$). There was a diversity of socioeconomic statuses, with most of the respondents living in urban areas ($n = 8$). Eleven interviews were conducted in English and three in Chitumbuka. Given the scarcity of health professionals in Malawi, the locations where the participants came from will not be revealed to better protect their anonymity. While each participant brought forth unique points and perspectives, we stopped after the 14th interview because we noticed that many of the same ideas were being repeated and judged that we had reached theoretical saturation.

The interviews were conducted using an interview guide that was co-created by the authors and field tested for cultural compatibility by the lead researcher before being translated and implemented by a team of four experienced Malawian research assistants (three males, one female) who were recruited to carry out the semistructured interviews. The interview guide featured questions and probes that addressed themes on COVID-19 in Malawi including personal perspectives on the disease, and government and societal responses to COVID-19. Participants were asked questions surrounding their understanding of COVID-19; any feelings that the disease invoked; its impacts on their work and on their patients; their thoughts on the way their government handles the pandemic; vulnerable populations; and what could have been done better from their perspective.

Before participation, prospective participants were read a consent form describing the objectives of the study and asked to confirm their willingness to take part, and whether they could be audio-recorded for their interview to later be transcribed, and when applicable, translated to English. For the purposes of privacy, pseudonyms were used in the recordings and written text. Analysis was conducted through the ATLAS.ti software using the framework method [16]. Interview transcripts were evaluated for content, seeking emergent recurring themes through the words of the interviewees. An open code was applied to each paragraph describing what the lead researcher determined as important after each interview. Given the inductive nature of this research, the coding was impressionistic. Comparisons and contrasts were formed between the highlighted codes for the different interviewees, with re-coding as new themes emerged. From there, codes were thematically grouped to form a framework for evaluation. Initial interpretations were shared with SFHC for reflective feedback, and any gaps in knowledge, context and interpretation identified were addressed through an unstructured in-depth individual interview with the head of a hospital in Malawi (given that Malawi has few hospitals, the location will not be shared to ensure the anonymity of the interviewee). Final findings were sent to SFHC to inform their work and share with appropriate community and government partners.

To minimize the risk of the spread of COVID-19 throughout the data collection process, COVID-19 measures were implemented based on the most up-to-date guidelines offered by the World Health Organization, the Malawi Ministry of Health and Health Canada [17–19].

3 | RESULTS

Traditionally, knowledge in many African cultures is transmitted through stories, including in Malawi. Reflective of these practices, this results section has been

organized in the format of a singular cohesive story built from the collective experiences and anecdotes shared by the participants in this study. The story has been thematically sectioned off with subheadings to facilitate reading [20].

(a) UNDERSTANDING OF COVID-19

We opened the interviews by asking the participants to describe their understanding of COVID-19. The answers we received ranged from clinical approaches to discussing COVID-19 where interviewees talked about the disease, its symptoms, and how it spreads; to relational explanations, where participants focused on the changes that they have had to navigate as a result of COVID-19 in both personal or professional settings. Dwe, for example, works as a Health Surveillance Assistant. He described COVID-19 to us in the same way he would speak to someone who was concerned about the disease; his tone was reassuring and confident.

> *COVID is... I can say COVID is a preventable disease. Especially if you follow the instructions like isolation, social distancing, and wearing a mask, it is preventable.* (Dwe)

Addy, a radiologist, shares a more personal response, imbued with sadness as he reflects upon the toll that COVID-19 has had on human life. He mentions how his understanding (and the understanding of many of his entourage) of COVID-19 has evolved with time. At first they believed that COVID-19 was a disease for white people (*azungu* is the colloquial term used to refer to white people in Malawi), but they quickly learned that it was a disease that can and would impact all.

> *I think we still feel very bad because this time around it seems the COVID-19 is taking a lot of people. In the past, we thought it's just for the azungu guys. But this time around, it seems to be very strong [...], it is very bad. I don't like it.* (Addy)

In fact, the idea that COVID-19 targeted a specific racial group was not unique to Addy. Other healthcare professionals held similar opinions. Ira, a Nursing Birth Technician, when asked to comment if there are certain ethnic groups or tribes who have been harder hit by the pandemic, she said:

> *I think the azungu are affected.* (Ira)

When pressed to explain why she believes that they are more impacted by COVID-19, she said:

> *I'm not sure, maybe because of their skin colour, I don't know.* (Ira)

Rani, a Community Health Worker whose work centers on family planning and data collection, takes a relational approach to describing her understanding of COVID-19. She explains that COVID-19 has had a large impact on the people that they work with, interrupting the necessary services that she offers through her work, and speculating as to why the disease is able to spread so easily amongst folk.

> *This COVID-19 has brought in a huge impact. Emotionally we are disturbed, because most of our days have been disturbed since COVID-19 has affected the delivery of our services [...]. Most of the people affected are affected because maybe they don't follow the hand sanitising, don't wash their hands, don't put on their mask. Yeah.* (Rani)

A key component of the frontline pandemic response in Malawi, many people will often opt to go to a traditional healer when they are feeling sick or unwell in place of a hospital. When asked to describe how they understood COVID-19, unlike the hospital workers who spoke of the disease as a novelty, some traditional healers like Qum related COVID-19 to other ailments. In doing so, they were able to provide traditional remedies to their patients.

> *[When steaming], I told other people that in that water they should be putting in lemons [because] this disease and coughing are the same so even in the past lemons were being used to cure a cough.* (Qum)

(b) FEAR OF COVID-19

There was unanimity in that everyone responded with fear; however, the reason for the fear differed from person to person. Some healthcare workers, like Ira, expressed fear of the disease itself.

> *On WhatsApp people were talking a lot about this COVID-19... I would say they were scaring us [...]. It was like they were bringing fear onto us.* (Ira)

Ip, a traditional healer, expressed fear of the unknown. This nuanced take recognizes that COVID-19 is new to the disease landscape and it is the lack of

familiarity with the disease that inspires fear in frontline healthcare workers.

> *[COVID-19 is] a disease that has come between us to cause fear [...]. This disease has confused us. What exactly causes this disease? We don't know. We just hear what the government is telling us.* (Ip)

Others, like Miko, who works as an HIV Diagnostic Officer, expressed a fear of the impacts of COVID-19, rather than of the disease itself. In Miko's case, he spoke to a fear of being on the receiving end of violence instigated by public response to the COVID-19 pandemic.

> *I was doing some business, but now I am no longer doing it because I'm afraid of travelling to other countries for fear of the violence.* (Miko)

The fear, like any other emotion, did not remain esoteric and open to ponder, but came to impact their daily personal and professional lives. Missuz, a Nurse Midwife Technician, speaks to how COVID-19 made it difficult to socialize and interact with her peers, but even further, it brought an element of fear into the workplace because she never knows who is and isn't carrying the virus.

> *Yeah, really, you can't freely socialise and even in the work itself, you know? Whenever you see someone, you just feel like this one is a carrier.* (Missuz)

Rus, a Clinical Officer, talks about how the fear of COVID-19 has impacted his performance at work. Like Mussuz, the danger of being in proximity to carriers of the COVID-19 virus has impacted his social and work relationships, which has in turn reduced just how much he is able to contribute in the workplace. Fear impacts how he shows up in the workplace and his capacity to do his best.

> *I think there's been a huge impact in my life because there are things which have been disturbed a lot because of COVID-19. I think the social interaction has been disturbed as well as our working space has changed in a way that maybe working has become a problem now because we always have a fear of COVID-19. Like, for me, as a clinical officer, I always have fear of maybe being in contact with a COVID-19 patient, so there's all that fear. So working has been difficult for me because there is that fear of being in contact with suspects [those suspected of having COVID-19] or the COVID-19 patients as well. So that has hurt my feelings as well. So my working contribution has been very... not my best as well. Because I've been with fear.* (Rus)

Part of this fear in the workplace would be alleviated if healthcare workers had access to appropriate protective equipment. Malawi ranks as one of the ten poorest countries in the world. Consequently, there is heavy reliance on international aid for necessities, especially in the midst of a global pandemic. Nafé, a Laboratory Technician, talks about a lack of adequate provisions from the government, which in turn puts the lives of both the staff and their patients in danger.

> *Some hospitals are lacking facemasks, and they have to ask for other donors to help them.* (Nafé)

(c) REACTING TO COVID-19 AND TARGETING HEALTHCARE WORKERS

Malawi has a very communal culture where relationality plays a big role in the vulnerability or resilience of communities in the face of adversity. Healthcare is no exception to this communal structure and operates at multiple levels of relationality, both as individual healthcare workers, as well as collectively as an institution within the society at large. During an unstructured interview with Taji who runs a private hospital in a small town in Malawi, she explains how COVID-19 created a shift in the way the general public saw hospital spaces.

> *Before COVID started, you could have a lot of clients, a lot of patients coming in with different conditions, different complaints, seeking medical attention, but soon after the COVID-19 [pandemic] started, people were afraid they would get COVID from the hospital. The number of patients coming to the hospital reduced.* (Taji)

When questioned further, Taji clarified that people weren't scared of arbitrarily getting COVID-19 from being in the hospital or from getting COVID-19 from a fellow patient. Their fear very much stemmed from the idea that healthcare workers themselves would be the ones to give them the virus.

> *Yes, they [people] feel like by interacting with the hospital personnel, they might get the COVID itself.* (Taji)

Even traditional healers noticed this change in how people saw hospital spaces. Like many traditional healers, Flora would often instruct her patients to go to the hospital if they were in a really negative state as a result of illness. COVID-19 was no exception.

> *Some [people with COVID-19] were indeed coming to me, but when they came and I saw that this one [COVID-19 patient] is worse [is in really bad shape], I was sending them to the hospital.* (Flora)

But very quickly, Flora began to notice that people would resist going to the hospital and would instead prefer to head home to hide away. To circumvent this, she would encourage them to take a walk with her, where she would then lead them to the nearest hospital.

> *They [COVID-19 patient] were not aware that I was going to the hospital with them. I was just telling them "let us go for a walk," then we were boarding cars off to the hospital.* (Flora)

Unfortunately, these perceptions of healthcare workers did not remain tied to the workplace (hospitals, clinics, and family planning offices). A couple of the participants shared stories that they themselves experienced, or that were experienced by a colleague, where the community mistreated them or acted with violence in fear of catching COVID-19 from a healthcare worker. Addy mentions hearing of healthcare workers being beaten when diagnosing people as having COVID-19.

> *In most of Malawi, I've been hearing [of] people [healthcare workers] being beaten just because they said "this is a COVID patient." If people [general public] are going to go to the hospital and the hospital people say "you are a COVID patient," we should accept this. If you [general public] don't, that's why people are coming in to say "you [healthcare worker] are lying," and then you [healthcare worker] are beaten till you [healthcare worker] are almost dead.* (Addy)

Ric, a biochemistry student, spoke to us about how nurses were often denied boarding on public transit because people were scared that they would catch COVID-19 from them.

> *And there was this other time when COVID-19 was discovered and it was spreading at a higher rate, hospital personnel, especially nurses, were being denied from boarding taxis. When a nurse would like to go to the hospital, she tries to stop a vehicle, a taxi, and she would be denied, with people saying maybe "oh I know those ones can transmit COVID."* (Ric)

This progressive alienation of healthcare workers was further exacerbated by government COVID-19 policy which required that hospital staff bury the dead as a means of circumventing funeral culture in Malawi. Funerals in Malawi are a collective moment of grief and celebration of life for the entire community. It is not just the immediate friends and family of the deceased that attend, but every member of the community, who come together in often confined spaces for long periods of time. When asked if she knew of any cultural practices that could help transmit or hinder the spread of COVID-19, Bez, a Nursing Midwife Technician, explains just how risky funerals are with people remaining together after the ceremony for up to a month in collective grief:

> *Maybe I can say funerals. After all the ceremony, some people, they will still remain there even for a month.* (Bez)

With the onslaught of the COVID-19 pandemic, the government sought to stem funerals as super spreader events. This put healthcare workers directly in harm's way where they dealt with the brunt of people's ire. Ric shares the story of an ambulance driver who was beaten for trying to pick up the body of someone who died of COVID-19 for the hospital staff to bury.

> *At first when the disease was just being discovered, people were failing to accept it. And we've had circumstances whereby people in the village end up beating up an ambulance driver who had come to pick up and leave the dead body with the hospital personnel. People, not believing them [about COVID-19], chased the hospital personnel, who ran away.* (Ric)

Taji explains the circumstances that Ric's story alludes to in further detail. She describes how patients may reject a COVID-19 diagnosis and head home, where

they then die and hospital staff who head to the home to retrieve and bury the body are then met with violence.

> *Yes, they [the general public] were really mean. For example, this time around, when you identify someone who has COVID-19, especially the ladies, they can deny that and go home. In this circumstance where the hospital personnel are the ones who bury someone who dies of COVID-19... once those people [hospital staff] go there to bury that patient, they will be beaten from there.* (Taji)

(d) RETALIATION TO THE COMMUNITY BACKLASH
To mitigate the discrimination and violence that their staff were having to navigate, hospital leaders met with village chiefs and community leaders to discuss solutions and strategize messaging and communication. According to Taji, some conversations were fruitful, with certain communities acknowledging their wrongdoing and ending the mistreatment of healthcare workers, whereas others did not act.

> *First, they [hospital leaders] invoked the chiefs from those areas [where acts of discrimination and violence were high], sitting them down and discussing that issue. But in some other areas, nothing changed.* (Taji)

For the communities where nothing changed, hospital staff started refusing to accept or treat patients who demonstrated signs of COVID-19. Rue, a priest who was interviewed as part of the larger study, shares a pertinent story from when he was traveling around some villages in Malawi, offering last rights to the dead and consoling the living.

> *Ignorance, I think, has killed many people [...]. When you ask the people, "what happened?" They respond, "ah no, yesterday, he just started coughing. Well, maybe two days ago, he didn't really get sick, but today we find that he has died." I was asking some people, I said "but you say he [...] started coughing on Thursday. Was he taken to the hospital?" They said "yes". "What happened at the hospital?" They said, "they just looked at him". I said, "Why do you think they just looked at him?" They couldn't explain but one clever lady, [NAME], said that "it's because you beat up health workers at some point in this area. Once they tell you that your relative has COVID, you start fighting them. So they just look at you." So that might have been a case of COVID-19. So some people do realise that maybe a number of people have died just silently without being recorded by the hospital. Unknowingly ignorance has killed us a lot.* (Rue)

Please note that in this context, "looked at him" is meant in the literal sense. Hospital staff refused to interact with, diagnose and treat the patient. Instead, they just looked at him while saying and doing nothing.

(e) RAISING AWARENESS AND SENSITIZATION
In addition to the boundaries set where healthcare workers were only willing to interact with and help patients who came from communities that were not/no longer perceiving them as a threat, there were efforts to rebuild relationships and trust. According to Taji, one of the key messages to come out of their talks with the various chiefs and community leaders was the desire to be autonomous once again with their burials. It was important to people to send their loved ones off in a way that accorded them all the respect and love they had to give. For many people, they were not scared of dying of COVID-19, but of not being given a respectful send off if they died of COVID-19. Abu, a participant from the larger study who works in community organizing, describes this fear.

> *[COVID-19] sounded so scary, so it brought in a lot of anxiety, a lot of fear, a lot of discrimination, just because of the way those who have died have been treated or buried, you know buried in so fast, and you don't touch the body. And all that brought a lot of discomfort and unnecessary discouragement.* (Abu)

In response to these needs and concerns, Taji describes the compromise that they came to where instead of having hospital staff bury the bodies of folk who died of COVID-19, they would disinfect the body so that it is less likely to be able to transmit COVID-19, and then put it in a bag, then in a coffin, before sending the body back to the family to perform the remaining burial ceremonies and rites.

> *So what we've decided is, after someone dies, to disinfect the body so that someone cannot transmit it, to put it in a bag, then in a*

coffin. Then we give it to the family to bury them. (Taji)

Community outreach continued to be a large priority where buses and vans were sent to rural areas to educate the general public about COVID-19. This was especially useful in getting traditional healers onboard with COVID-19 measures as a point was made to educate them on the available strategies that had been confirmed to be effective against the disease. Vaccines were a key feature in this education and as such, many traditional healers incorporated the vaccine into the medicines that they gave their patients.

If they [people] come to me, I tell them that my [COVID-19] medicine is just a starter pack, [and that] the vaccine is important. (Qum)

According to Taji, relationships have largely been healed, and things are back to normal in and outside of hospitals. Nurses are able to board public transit, clinical officers are able to diagnose COVID-19 without fear of retaliation and people are generally respectful towards healthcare staff.

After discussing with the chiefs, the chiefs got the messages to the people there. And the hospital staff is just fine. There are no other issues. (Taji)

(f) GOVERNMENT (IN)ACTION

Healthcare workers in Malawi faced numerous challenges in navigating the COVID-19 pandemic, both at a personal level and in a professional capacity. Beyond the aforementioned psychosocial problems (the fear, the violence, and the discrimination), there were issues with access to resources, training, and public health communication that rendered their work more difficult. We asked the participants, after a year of dealing with COVID-19, what support they wished they had had from the beginning, which would have made navigating the pandemic a lot easier.

Miko would like to have seen more timely awareness campaigns and more in terms of communication so that people would understand the importance of better integrating COVID-19 measures into cultural practices. This sentiment is echoed amongst many of the respondents interviewed where they strongly believe that raising awareness would have really helped in reducing their workload and making their jobs easier.

I think, culturally, we believe in interactions, especially in Africa, like Malawi, we believe in being together in a group sharing stories together. So, it is very difficult for us to part away from each other [...]. I feel like [...] there might have been some shortfalls in terms of communication. Yeah, awareness campaigns. They came in late. (Miko)

Nafé spoke to the corruption and embezzlement of money destined for COVID-19 relief. He would have liked to see better use of government money, especially given the lack of resources that hospitals had available.

Some of the leaders the government put in place have betrayed our trust. I think about the embezzlement of some 60 something billion on COVID-19. Yeah. Those are the people that have broken our trust. (Nafé)

Dwe comments on how corruption led to people not trusting the government which made it harder for any public health awareness campaigns to be successful, which in turn impacted the work of hospital staff as there are more cases to contend with and fewer resources available in which to do it.

People don't trust the government because of the thought that maybe there's too much corruption. They have maybe been told that they're getting money; just getting money instead of [dealing with] COVID-19. (Dwe)

Rani comments on the limited resources, explaining that the government has done a "half job" since they have distributed masks, test kits, oxygen, etc, but it has not been enough.

Because sometimes there are some shortages of resources, like masks, test kits for COVID. Yeah, it's not always there. So yeah, they've done half of it. (Rani)

Taji, while recognizing that her government has tried its best, had had to work in tandem with other hospitals to fill in the gaps. Her private hospital was able to access international funds and donations to be better prepared for COVID-19, as the government in Malawi only supplied the publicly funded hospitals. Given the burden that COVID-19 placed on every country, international aid was not as easily accessed, and so the private and public hospitals would work together to share medicine, oxygen, patients, masks, and other protective equipment.

> *It came to a point that at this hospital of ours, we lacked PPEs [Personal Protective Equipment], and after talking to [a public hospital], they provided it free of charge. They didn't charge us anything, but they provided us with the equipment. And when they or [another public hospital] told us they lack something, and we have them, we would also send it to them. There was coordination, working together. Once we have a problem, we'll just make a phone call. They'll help us if help is there.* (Taji)

This is built heavily on Malawi's communal culture where people and communities come together in times of hardship to provide help, support, and care to one another. There was a strong sense of solidarity built amongst healthcare workers that enabled them to better serve the communities that needed them.

Finally, there was the issue of compensation. As COVID-19 hit, the risks that healthcare workers faced in their employment were much higher. The disease also burdened the healthcare system where hospitals were seeing more patients than usual and thus, hospital staff had to work longer hours. In the first months of the pandemic, healthcare workers across the country collectively went on strike to get their wages increased and get better support/protections in their workplace.

> *We need a risk allowance. We didn't work for some time and asked [the government] to at least increase our risk allowance because [COVID-19] is coming at you with a higher risk and we're carrying that disease to our families. So the government responded yes. So because of that, we are able to say that we are being looked after.* (Taji)

As Malawi enters a new normal, there are important lessons that have been learned from COVID-19 in terms of the needs and supports necessary for healthcare workers. The Malawi government has responded with increased campaigns to raise awareness and has largely been praised for its vaccine rollout. The government has involved media, religious leaders, traditional healers, and village chiefs in spreading information about COVID-19 and the vaccine, and has provided missing resources such as oxygen tanks to all institutions, public, and private, to ensure that people are taken care of, no matter where they go. Phit, a Dental Therapist, summarizes it well:

> *Well, I would say Malawi has done a bit fair on the response to COVID-19. As I said earlier on, the rollout of the vaccine has been very great. We really appreciate that one. The communication has been there, though not much. But we'd also appreciate on that one, more PPEs, the personal protective equipment. They [the PPEs] have done a lot in terms of supporting health care workers and the like, just to contain the disease.* (Phit)

Traditional healers stood out in our participant pool because while those who worked in institutionalized healthcare spoke quite a bit about their needs from the government; traditional healers, who do not receive any formal support from the government in their healthcare work, largely praised the actions of the government in their fight against COVID-19.

> *As a government, you can't just let your people suffer and die, they [Government of Malawi] have done a good job with the vaccine. [...] this disease caused havoc and the government has done a lot to end it.* (Ip)

4 | DISCUSSION

The results of this study have allowed us to glimpse into what it was like to be a healthcare professional in Malawi during the first 2 years of the COVID-19 pandemic. Themes and subthemes that emerged from the data analysis process include the fear that COVID-19 invoked, the impacts it had on the relationship between healthcare workers and their communities, the importance of public health communication and the role of government in a pandemic response.

Through this study, we confirm the importance of worldview. As healthcare professionals, all of the participants interviewed for this study who worked in the hospital system held some form of tertiary education. We had thus assumed that they were likely to take a scientific approach to describing COVID-19 and its impacts; however, as was seen in a similar study conducted with doctors in the Sindh province of Pakistan [1], the healthcare workers in Malawi interpreted COVID-19 through both personal and sociocultural lenses. Rather than simply being seen as a virus or a disease, participants imbued COVID-19 with meaning. They spoke of the impact that the disease has had on their friends, families and communities; they shared their fears about catching the disease; and some even associated the disease with whiteness, believing the

disease to move along racial lines. These results show that educated medical professionals are not exempt from being swayed by public discourse, general bias and misinformation through the (social) media, thereby calling attention to the importance of prioritizing immediate and direct discourse with healthcare professionals to circumvent these beliefs from influencing their work and the treatment of their patients.

Furthermore, our study incorporates informal healthcare systems (traditional medicine) where the education and mentorship that they receive to do their work is largely spiritual. In these instances, a cultural interpretation of disease becomes even more prevalent in the actions taken to treat the illness. Early government intervention is key in educating traditional healers on new disease outbreaks and giving them the tools that they need to ensure the wellbeing of the people who seek out their services. Traditional medicine is sometimes the main, and often the only, source of affordable medical care for many people in Malawi. National policies across the continent of Africa creating a formal relationship between governments and traditional healers are few and far between, but case studies in Ghana, Ethiopia and South Africa show the potential of what could be commonplace, and could provide avenues for knowledge sharing between different forms of knowledge production, and lead to better health outcomes in public health crises like a pandemic [21–24]. As demonstrated by our results, when given the opportunity, traditional healers can be champions for public health policies like vaccination and support their patients in knowing when to transition to using "mainstream" forms of healthcare.

This study also affirms the negative impacts that the COVID-19 pandemic had on the mental health of healthcare practitioners in Malawi. A literature review by Manchia et al. (2022) [25] revealed that in studies conducted across the world, healthcare workers as a whole faced a greater psychological burden from the COVID-19 pandemic than any other sector of society. Similar to what was revealed in our study, Manchia et al. (2022) [25] noticed a pattern where this burden stemmed from a variety of factors including fear of being infected by the virus and of infecting their family and others, working overtime hours in demanding work conditions, and witnessing the limitations of their country's healthcare system as it is pushed to the brink. In Malawi, however, mental health is not a part of mainstream discourse and thus is not well understood. A study by Kauye et al. [26] revealed a 0% diagnosis rate for anxiety and depression by primary healthcare workers in Malawi without specialized training. Nevertheless, in our research, the resulting conversation around fear revealed the mental health impacts of the COVID-19 pandemic on healthcare workers, including decreased performance and discomfort in the workplace, as well as a loss of communal coping mechanisms. Even traditional healers spoke of rejecting patients out of fear of catching the disease. These stories exemplify the need to build culturally appropriate mechanisms and systems of psychosocial support for healthcare workers, especially in the advent of a new disease, as there are very real consequences to patient care without these measures. This is especially important for healthcare worker retention and recruitment. When looking into why there is such a scarcity in healthcare professionals in Malawi, a 2014 study by Chimwaza et al. [27] found that 69% of the 84 people they interviewed "had experienced a demotivating incident in the previous three months that had made them seriously consider leaving their job".

In addition to the mental health consequences stemming from a fear of COVID-19, our findings reveal the ways in which a new disease can harm community relationships in Malawi and the impact this can have on both the healthcare system and individual healthcare service providers. Following the politicization of COVID-19 was an uptick in violence against healthcare workers across the world. Cukier and Basky [28] write about escalating violence towards hospital staff in Canada during the pandemic, and Dyer [29] describes a *surge of violence* in the United States. In Malawi, our results show how a combination of government policy and misinformation put healthcare workers in danger, where they were either physically attacked for acting on COVID-19 measures or socially shunned because of their (perceived) proximity to the disease and death. Even more disappointing was the need for individual hospitals to initiate their own outreach with communities to assure the safety of their personnel, rather than a larger scale government/political endeavor. These attacks depict the need for reflection on the part of policymakers as to the ways their policies will be received, thereby recognizing the impact on those who carry out the policy, as well as the importance of empowering communities in the event of a pandemic to counter the sense of powerlessness that is all too often at the origin of violent acts.

We wanted to know what healthcare workers in Malawi felt that they needed to feel supported throughout the COVID-19 pandemic. The respondents spoke of the need for better resources and resource allocation, citing corruption and embezzlement being at the heart of the supply shortages they had. They talked about struggling to access adequate personal protective equipment, oxygen cylinders and furnished isolation wards, which not only made their jobs more difficult but more dangerous as well. There was the issue of risk pay which was resolved through a collective nation-wide strike at

the height of the first wave of COVID-19, and the need for earlier public health communication to educate the general public. These requests are not uncommon in other parts of the world. Cox [7], in her commentary piece, argues that in seeing healthcare workers as heroes, we deprive them of their humanity, and thus the very real things they need to navigate this pandemic, including personal protective equipment and a 'general public, who must play a role in supporting the healthcare system, "both during an epidemic and in times where there is no crisis"'. The onus now falls on decision-makers to hear these requests and build out reciprocal procedures that protect and celebrate healthcare workers, thereby strengthening the overall health of the community.

4.1 | Policy impact and recommendations

Part of the goal of this research is to provide recommendations and policies that would render Malawi more resilient in the advent of new disease outbreaks and allow healthcare workers to feel better supported by their government. Based off the results of this study, we recommend the following:

(a) Immediate and open discourse/dialogue with healthcare professionals on information concerning the disease as it comes out to give them the tools they need to best respond to the treatment of their patients, and limit the influence of public discourse and misinformation on their understanding of the disease in question.
(b) Building formal relationships with traditional healers through policy so that patients who seek out traditional forms of medicine are able to receive the necessary advice and care.
(c) Creating culturally appropriate mechanisms and systems of psychosocial support for healthcare workers and traditional healers, and amplifying these mechanisms and systems in the advent of a new disease where increased pressure is placed in the healthcare systems.
(d) Consulting with community leaders and health practitioners before putting in place new policies to better understand the social implications and potential repercussions of such policies. In essence, better community engagement in the development and implementation of public health policies is necessary.
(e) Establishing an independent body, distinct from government, to develop and administer policies and practices surrounding necessary (public) health resource acquisition and allocation, as a means of reducing the impacts of government corruption and embezzlement on public health.
(f) Automatically implementing risk pay, or some sort of financial risk bonus, for healthcare workers in the event of a new disease outbreak (epidemic or pandemic).

4.2 | Study limitations

There are limitations to this study. In working with a single partner organization, we were limited in the range of healthcare workers that we had access to, and so it may be worthwhile to conduct more interviews with a different network of healthcare personnel to compare or combine the findings. Although data collection was led by a Malawian team on the ground, the results were interpreted by a Canadian researcher (the lead author), and so there are cultural elements to the understanding of disease and health that may have been missed that should be explored. Efforts were made to mitigate this blindspot through having discussions and sharing initial findings with our community partners in Malawi to confirm the accuracy of our interpretations. The research took place between September 2021 and June 2022. Since then, COVID-19 conditions in Malawi may have changed, and perspectives and practices may have evolved.

5 | CONCLUSION

In conducting interviews with healthcare workers from across Malawi, we have been able to compile a preliminary overview of some of the difficulties that they faced as they sought to uphold the health of their communities. The results of this study offer some constructive criticism and pathways of action for decision-makers at all levels of government in Malawi, both regional and national, to build a more resilient healthcare system through investing in and protecting their frontline personnel. In the words of Flora, a traditional healer:

> *You have already gathered courage, continue with that courage.* (Flora)

AUTHOR CONTRIBUTIONS

The authors confirm contribution to the paper as follows: *Study conception*: Chúk Odenigbo. *Study design*: Chúk

Odenigbo and Eric Crighton. *Data collection*: Chúk Odenigbo. *Analysis and interpretation of results*: Chúk Odenigbo. *Draft manuscript preparation*: Chúk Odenigbo. *Review of drafts*: Eric Crighton. All authors reviewed the results and approved the final version of the manuscript.

ACKNOWLEDGMENTS

We would like to acknowledge the hard work of Esther Lupafya and the rest of the team at SFHC for helping coordinate the research work on the ground in Malawi; Dr. Paul Mkandawire for supporting my larger PhD thesis work; Dr. Sonia Wesche for stepping in and reviewing my manuscript; and, each of the respondents for being so open in sharing their thoughts, opinions, and concerns that helped shape this paper. A massive thank you to Abhayjeet Singh Sachal who played an important role in data collection and transcription. The authors disclose receipt of the following financial support for the research, authorship, and publication of this article: This work was supported by Mitacs through the Mitacs Accelerate Programme [grant number IT19260].

CONFLICT OF INTEREST STATEMENT

The authors declare no conflicts of interest.

DATA AVAILABILITY STATEMENT

Due to ethical reasons and the promise of anonymity to the participants, we cannot share the data set; however, we can share tools used in the data collection such as the question guide. Please reach out to the lead author.

ETHICS STATEMENT

This project received approval from the Research Ethics Board at the University of Ottawa in Canada (application number: S-03-21-6554) and the National Committee on Research in the Social Sciences and Humanities at the National Commission for Science and Technology in Malawi (reference number: NCST/RTT/2/6).

INFORMED CONSENT

All participants were presented with a consent form in their preferred language. Interviewers read the form outloud to participants and provided them with the opportunity to ask questions. Participants were aware that their participation was voluntary and that they were free to withdraw at any given time, without giving a reason and without cost. They were each given a signed copy to keep for their records with the contact information of both authors as well as the ethics board at the University of Ottawa.

ORCID

Chúk Odenigbo https://orcid.org/0000-0002-0145-902X

REFERENCES

1. Ali I, Sadique S, Ali S. Doctors dealing with COVID-19 in Pakistan: experiences, perceptions, fear, and responsibility. Front Public Health. 2021 Dec 2;9:647543. https://doi.org/10.3389/fpubh.2021.647543
2. Spoorthy MS, Pratapa SK, Mahant S. Mental health problems faced by healthcare workers due to the COVID-19 pandemic—a review. Asian J Psychiatry. 2020;51:102119. https://doi.org/10.1016/j.ajp.2020.102119
3. Ehrlich H, McKenney M, Elkbuli A. Protecting our healthcare workers during the COVID-19 pandemic. Am J Emerg Med. 2020 Jul;38(7):1527–8. https://doi.org/10.1016/j.ajem.2020.04.024
4. Webber-Ritchey KJ, Simonovich SD, Spurlark RS. COVID-19: qualitative research with vulnerable populations. Nurs Sci Q. 2021;34(1):13–9. https://doi.org/10.1177/0894318420965225
5. Belfroid E, van Steenbergen J, Timen A, Ellerbroek P, Huis A, Hulscher M. Preparedness and the importance of meeting the needs of healthcare workers: a qualitative study on Ebola. J Hosp Infect. 2018 Feb;98(2):212–8. https://doi.org/10.1016/j.jhin.2017.07.001
6. Woolf SH, Stange KC. A sense of priorities for the healthcare commons. Am J Prev Med. 2006;31(1):99–102. https://doi.org/10.1016/j.amepre.2006.03.010
7. Cox CL. 'Healthcare Heroes': problems with media focus on heroism from healthcare workers during the COVID-19 pandemic. J Med Ethics. 2020 Aug;46(8):510–3. https://doi.org/10.1136/medethics-2020-106398
8. Koontalay A, Suksatan W, Prabsangob K, Sadang JM. Healthcare workers' burdens during the COVID-19 pandemic: a qualitative systematic review. J Multidiscip Healthc. 2021 Oct 27;14:3015–25. https://doi.org/10.2147/JMDH.S330041
9. Malawi Malaria Impact Evaluation Group. Evaluation of the impact of malaria control interventions on all-cause mortality in children under five years of age in Malawi [Internet]. USAID. 2016 Mar [cited 2020 Aug 22]. Available from: https://www.pmi.gov/docs/default-source/default-document-library/pmi-reports/malawi-malaria-impact-evaluation-group-evaluation-of-the-impact-of-malaria-control-interventions-on-all-cause-mortality-in-children-under-five-years-of-age-in-malawi-full-report.pdf?sfvrsn=10#:~:text=In%20Malawi%2C%20malaria%20is%20highly,under%20five%20years%20of%20age
10. Khonje A, Metcalf CA, Diggle E, Mlozowa D, Jere C, Akesson A, et al. Cholera outbreak in districts around Lake Chilwa, Malawi: lessons learned. Malawi Med J. 2012 Jun;24(2):29–33. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3588220/
11. Muula AS, Mfutso-Bengo JM. Important but neglected ethical and cultural considerations in the fight against HIV/AIDS in Malawi. Nurs Ethics. 2004 Sep;11(5):479–88. https://doi.org/10.1191/0969733004ne726oa
12. Makwero MT. Delivery of primary health care in Malawi. Afr J Prim Health Care Fam Med. 2018 Jun 21;10(1):e1–3. https://doi.org/10.4102/phcfm.v10i1.1799
13. Msyamboza KP, Phiri T, Sichali W, Kwenda W, Kachale F. Cervical cancer screening uptake and challenges in Malawi from

2011 to 2015: retrospective cohort study. BMC Public Health. 2016 Aug 17;16(1):806. https://doi.org/10.1186/s12889-016-3530-y
14. Neubauer BE, Witkop CT, Varpio L. How phenomenology can help us learn from the experiences of others. Perspect Med Educ. 2019 Apr;8(2):90–7. https://doi.org/10.1007/S40037-019-0509-2
15. Bynum 4th WE, Artino Jr. AR, Uijtdehaage S, Webb AMB, Varpio L. Sentinel emotional events: the nature, triggers, and effects of shame experiences in medical residents. Acad Med. 2019 Jan;94(1):85–93. https://doi.org/10.1097/ACM.0000000000002479
16. Gale NK, Heath G, Cameron E, Rashid S, Redwood S. Using the framework method for the analysis of qualitative data in multi-disciplinary health research. BMC Med Res Methodol. 2013 Sep 18;13:117. https://doi.org/10.1186/1471-2288-13-117
17. Organisation mondiale de la Santé. Nouveau coronavirus (2019-nCoV): conseils au grand public [Internet]. Nouveau coronavirus (2019-nCoV). 2021 [cited 2022 May, 20]. Available from: https://www.who.int/fr/emergencies/diseases/novel-coronavirus-2019/advice-for-public
18. Agence de la santé publique du Canada. COVID-19: documents d'orientation [Internet]. Maladie à coronavirus (COVID-19). 2020 [cited 2022 May 20]. Available from: https://www.canada.ca/fr/sante-publique/services/maladies/2019-nouveau-coronavirus/document-orientation.html
19. Ministry of Labour, Skills and Innovation. COVID-19 workplace guidelines [Internet]. Malawi Government; 2020 Apr: 1–10. Available from: https://malawi.un.org/en/46716-covid-19-workplace-guidelines-malawi
20. Last S. Technical writing essentials: introduction to professional communications in the technical fields. 2019. 274p. https://pressbooks.bccampus.ca/technicalwriting/
21. Kassaye KD, Amberbir A, Getachew B, Mussema Y. A historical overview of traditional medicine practices and policy in Ethiopia. Ethiop J Health Dev. 2007;20(2):127. Available from: https://doi.org/10.4314/ejhd.v20i2.10023
22. Romero-Daza N. Traditional medicine in Africa. Ann Am Acad Pol Soc Sci. 2002;583(1):173–6. https://doi.org/10.1177/000271620258300111
23. McFarlane C. South Africa: the rise of traditional medicine. Insight on Africa. 2015;7(1):60–70. https://doi.org/10.1177/0975087814554070
24. Le Roux-Kemp A. A legal perspective on African traditional medicine in South Africa. Comp Int Law J South Afr. 2010 Nov 1;43(3):273–91. https://doi.org/10.2307/23253084
25. Manchia M, Gathier AW, Yapici-Eser H, Schmidt MV, de Quervain D, van Amelsvoort T, et al. The impact of the prolonged COVID-19 pandemic on stress resilience and mental health: a critical review across waves. Eur Neuropsychopharmacol. 2022 Feb;55:22–83. https://doi.org/10.1016/j.euroneuro.2021.10.864
26. Kauye F, Jenkins R, Rahman A. Training primary health care workers in mental health and its impact on diagnoses of common mental disorders in primary care of a developing country, Malawi: a cluster-randomized controlled trial. Psychol Med. 2014 Feb;44(3):657–66. https://doi.org/10.1017/S0033291713001141
27. Chimwaza W, Chipeta E, Ngwira A, Kamwendo F, Taulo F, Bradley S, et al. What makes staff consider leaving the health service in Malawi? Hum Resour Health. 2014 Mar 19;12:17. https://doi.org/10.1186/1478-4491-12-17
28. Cukier A, Basky G. Escalating violence against health workers prompts calls for action. CMAJ News [Internet]. 2021 Nov 26 [cited 2022 Jul 13]. Available from: https://cmajnews.com/2021/11/26/covid-violence-1095980/
29. Dyer O. US hospitals tighten security as violence against staff surges during pandemic. BMJ. 2021 Oct 5;375:n2442. https://doi.org/10.1136/bmj.n2442

How to cite this article: Odenigbo C, Crighton E. Exploring COVID-19 from the perspectives of healthcare personnel in Malawi. Health Care Sci. 2023;2:242–254.
https://doi.org/10.1002/hcs2.58