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HEALTH PSYCHOLOGY | RESEARCH ARTICLE

Psycho-emotional challenges experienced by COVID-19 infected healthcare workers: A phenomenological study

Idah Moyo¹, Livhuwani Tshivhase^{2*} and Azwihangwisi Helen Mavhandu-Mudzusi³

Abstract: The emergence of the coronavirus disease 2019 (COVID-19) has had a negative impact on the psychological and mental wellbeing of healthcare workers. The purpose of this study was to explore and describe the psychological and emotional challenges that healthcare workers experienced when they contracted COVID-19.An interpretative phenomenological approach was undertaken. In-depth interviews were used to collect data virtually from ten purposefully sampled healthcare workers. The findings of the study revealed that participants experienced negative emotions, overwhelming stress as a result of poor communication of COVID-19 results, self-blame in contracting the infection, fear of dying from COVID-19, infecting others, and reinfection. Furthermore, psychological distress related to uncertainty regarding COVID-19 infection/recovery, uncertainty worsened by lack of institutional support resulting in stress, confusion, shock and frustration. Lastly, stigma and discrimination related to COVID-19 infection were common experiences and were evidenced by rejection by colleagues, stigmatisation of families, and fear of disclosure of the positive COVID-19 results. In conclusion, emphasis is placed on providing comprehensive, differentiated psychosocial support to the healthcare workers who have contracted COVID-19 to enhance their mental wellbeing during and after the pandemic.

Subjects: Nursing; Nursing Research; Community and Public Health Nursing; Mental Health Nursing; Public Health Policy and Practic; Information Technology

Keywords: COVID-19; healthcare workers; psycho-emotional challenges; phenomenological

1. Background

While the COVID-19 pandemic caused by the spread of the novel coronavirus (Sars-Cov-2) started as a localised outbreak in Wuhan, China, a global view of the disease shows the huge impact it has had (World Health Organization, 2020a) even among healthcare workers as the following statistics illustrate. By April 2020, approximately 10000 healthcare workers in Italy had been infected and 74 healthcare personnel had died, and by July 2020, about 10% of all COVID-19 cases globally were among healthcare workers (World Health Organization, 2020a). The same report indicated that in the 40 African countries that had reported on COVID-19 infections, more than 10000 health workers had contracted the COVID-19 virus. With reference to Southern Africa, as of August 2020, South Africa reported 27000 infections and 240 deaths among frontline healthcare workers (AS, 2020). This emphasises the importance of protecting healthcare providers and workers. At the time of writing this manuscript, Zimbabwe had recorded a figure of 5 745 confirmed







COVID-19 cases (374 being frontline healthcare workers) and 152 deaths, five of whom were frontline healthcare workers.

According to Shah et al. (2020), a global pandemic such as COVID-19 can be a source of fear and concern among healthcare workers. Studies elsewhere also found that the job-related stress affected the mental health and wellbeing of healthcare workers. Relatedly, during the severe acute respiratory syndrome (SARS) outbreak, quarantined healthcare workers were stressed and experienced fear, stigma, and some frustration (Chen et al., 2005; Maunder et al., 2003; Robertson et al., 2004). The feelings of insecurity and vulnerability during the pandemic were found to be predictors of poor mental health for healthcare workers (Chen et al., 2005; Parkash & Saini, 2021).

Healthcare workers facilitate the continuum of care and the containment of pandemics such as COVID-19 (Zhang et al., 2020). Given the fragile nature of the economy and the health systems in Zimbabwe, when healthcare providers become ill in the middle of the pandemic, further strain is placed on the healthcare delivery system. The experiences and challenges encountered by healthcare workers after contracting COVID-19 have been documented by several scholars (DiNg et al., 2020; Liu et al., 2020; Mostafa et al., 2020; Ng et al., 2020; Sun et al., 2020). To the researchers' knowledge, no study in Zimbabwe has qualitatively explored the psychological-related challenges that have been experienced by healthcare workers after contracting COVID-19. However, quantitative studies on this topic have been conducted in Zimbabwe by scholars such as Mackworth-YouNg et al. (2020) and Rusakaniko et al. (2021). Therefore, the current study aimed to expand upon the largely quantitative findings of other researchers by widening the scope to explore the psychological impact of COVID-19 on healthcare workers who suffered from the disease.

The emergence of coronavirus disease 2019 (COVID-19) affected healthcare workers' psychological and mental health and resulted in anxiety, depression, and sleep disturbances (Chirico & Magnavita, 2020). With the significant negative impacts on the psychological health of healthcare workers, Chirico and Magnavita (2020) advocate implementing occupational health surveillance programmes and addressing the associated psychological-related distress.

The lack of preparedness and support, the stigma, and the discrimination that healthcare providers have been subjected to translate to psychological effects on these providers (Brooks et al., 2018; Cullen et al., 2020; Raven et al., 2018). A study in Ghana by Ofori et al. (2021) found that the COVID-19 pandemic had psychological impacts on healthcare providers. Moreover, fear and anxiety were found to be prevalent in China among healthcare workers during the pandemic (Maben & Bridges, 2020; Rubin & Wessely, 2020).

Instances of stigma and discrimination by neighbours against healthcare workers during the COVID-19 pandemic are also evident (Juan et al., 2020; Mostafa et al., 2020; Park et al., 2020). The provision of psychological support in order to enhance the mental wellbeing of healthcare providers is a critical component of the COVID-19 response (Williams et al., 2020; World Health Organization, 2020). As part of the psychological support interventions and to enhance the psychological skills of medical staff, Li et al. (2020) call for strengthening the training of healthcare workers, for example, through taking online courses and conducting group or debriefing activities. In addition, studies have established that feelings of inadequate support in healthcare workers during the COVID-19 are contributors to the mental burden of healthcare staff (Lai et al., 2020). According to the National Centre for PTSD (U.S. Department of Veterans Affairs, 2020), monitoring, assessment, and support for healthcare workers after contracting COVID-19 is critical in addition to efforts to ensure their successful reintegration following the period of illness.



Much of the evidence on the lived experiences of frontline healthcare workers caring for patients with COVID-19 has largely been in Europe, Asia, and America (Liu et al., 2020; Sadang et al., 2021). In addition, studies have been conducted that explored the lived experiences of patients who have been admitted due to COVID 19 (McDonald & Clark, 2020; Sahoo et al., 2020). However, very few studies have been conducted that address the psychological impact of COVID-19 on healthcare workers, and to the best of the researchers' knowledge, none have been done in Zimbabwe. The mental health impact of the COVID-19 pandemic is often neglected, yet the adverse effects are costly (Naser et al., 2020).

The prevalence of anxiety, obsessive behaviours, depression, stress, post-traumatic stress syndrome, insomnia, psychological distress and burnout were evident among healthcare providers during the COVID-19 pandemic (Batra et al., 2020; Dubey et al., 2020) Females, nurses and frontline workers were among those who suffered anxiety and depression than males, doctors and second line healthcare workers (Batra et al., 2020; Cabarkapa et al., 2020; Danet, 2021). This suggests that female nurses are faced with doubled burden of psychological and emotional challenges as alluded upon by Danet (2021) and Lentoor and Maepa (2021). Females were reported to be highly hopeless, expressing loneliness and depression during the COVID-19 pandemic lockdown. Challenges that worsen the females' psychological and emotional well-being are that they are: overburdened by home chores/domestic responsibilities, engage more in childcare and home schooling of children while performing full time jobs during lockdown (Lentoor & Maepa, 2021). This study explored the psychological- and emotional-related challenges experienced by healthcare workers after contracting and suffering from COVID-19 in a resource-limited setting. The findings are critical for policy makers, programme planners, and hospital management in developing innovative supportive interventions that specifically enhance the mental wellbeing of healthcare workers during this and other pandemics.

2. Methodology

2.1. Design

To gain insight into the lived experiences of healthcare workers who contracted COVID-19, an interpretative phenomenological analysis (IPA) design was employed. According to Smith and Osborn (2015) and Alase (2017), this design facilitates an in-depth exploration of the lived experiences of the study participants. This approach enables the study participants to narrate their stories based on their lived experiences (Creswell & Creswell, 2017; Smith & Osborn, 2015) and facilitates the adoption of an insider perspective. Thus, the researchers are able to explore, probe, and ask critical questions to gain an in-depth understanding of their experiences (Smith & Osborn, 2015).

2.2. Study setting and participants

The study setting was a central hospital in Bulawayo, Zimbabwe that was designated as a centre for the management of COVID-19 patients. The participants were Bulawayo-based healthcare workers (nurses and doctors) who had contracted COVID-19. To gain access to study participants, the first author approached the hospital manager, explained the purpose of the study, and requested permission to access the potential study participants. The first two participants were recruited purposefully with the assistance of the facility manager. The facility manager directed the researcher to contact two of those who suffered from COVID-19. After the telephonic recruitment of the first two participants, the 3rd participant to the 10th participant were recruited through snowballing where the participants were able to share contacts of the health workers who they knew had also contracted COVID-19 (De Vos et al., 2016). The researcher stopped at participant number 10 when she realised that there were no new themes emerging during interviews. A sample size of 10 is justifiable by Polit and Beck (2021), who explained that in phenomenology, saturation could be reached at 10 or less participants. Additionally, Ellis (2019) also suggested six to twenty participants as sufficient for a phenomenological study.



Table 1. Demographic data of the study participants					
Participant Code	Age Range	Gender	Profession	Years of Experience	
Sizi	31-35	Female	Nurse	10	
Vusi	36-40	Male	Nurse	10	
Lizi	21-25	Female	Nurse	1	
Dumo	36-40	Male	Nurse	7	
Noma	31-35	Female	Nurse	7	
Siboe	36-40	Female	Nurse	13	
Muzi	31-35	Male	Medical doctor	8	
Noe	25-30	Female	Nurse	1	
Lihle	36-40	Female	Nurse	10	
Thina	30-35	Female	Nurse	4	

Nine of the participants were nurses and one participant was a medical doctor working in one of the central hospitals in Bulawayo, Zimbabwe. The inclusion criteria for the study were: healthcare workers who contracted COVID-19 working at the study setting and were willing to participate. The study excluded healthcare workers who had contracted COVID-19 but were not willing to participate in the study or were sick during the data collection process. The demographic data of the participants are displayed in Table 1.

Pseudonyms used

2.3. Data collection

An interview guide was developed from the literature review to guide data collection. The questions in the guide were informed by the aim of the study. The interview guide consisted of semi-structured, open-ended questions and follow-up questions for further clarification. A pilot study was conducted involving three nurses who were not part of the study. This assisted the researchers to refine the interview guide and to make minor adjustments. The interviews were audio recorded and conducted virtually due to the potential risk associated with the spread of COVID-19. All the individual interviews were conducted by the first author from the 10th January to the 31 March 2021, and each interview lasted 60 minutes or more.

2.4. Data analysis

The audio-recorded interview data were transcribed verbatim into written text. Interpretative phenomenological analysis was used to analyse the transcripts (Smith & Osborn, 2015). Noon (2018) states that IPA focuses on examining the lived experiences of individuals by drawing from the concepts of phenomenology: hermeneutics and ideography. In related studies, this approach has been demonstrated to be useful in exploring experiences in healthcare settings (Volpato et al., 2018). Using an IPA framework (Smith & Osborn, 2015), the researchers analysed the transcripts independently. A third person acted as an independent co-coder and conducted the open coding of each transcript. Listening to the audio recordings repeatedly, each researcher read each transcript several times. The steps outlined by Smith and Osborn (2015) were followed: (1) reading and re-reading the transcript; (2) note taking and developing emergent themes; (3) clustering the emergent themes; (4) crafting a master table of themes composed of superordinate themes, sub-themes, and extracts from the interviews; (5) examining and comparing the similarities between the master tables of the themes; and (6) compiling a single master list composed of a superordinate theme, themes, and sub-themes. Thereafter, the

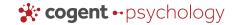


Table 2. Themes derived from the study findings						
Superordinate theme	Theme	Sub-theme				
(1) Negative emotions experi- enced by the participant	1.1 Overwhelming stress	1.1.1 Poor communication mechanism of results 1.1.2 Self-blame in contracting the disease				
	1.2 Fear and anxiety	1.2.1 Fear of dying				
		1.2.2 Fear of infecting family and others				
(2) Psychological distress	2.1 Uncertainty due to the disease and recovery process	2.1.1 Feeling stressed and frustrated				
		2.1.2 Feeling scared, shocked, and confused				
	2.2 Uncertainty due to lack of institutional support	2.2.1 Lack of support leading to frustration				
(3) Psychological impact of stigma	3.1 Negative feelings as a result of	3.1.1 Rejection by colleagues				
and discrimination against positive COVID-19 healthcare workers	stigma and discrimination	3.1.2 Family stigmatised and discriminated against by community				
		3.1.3 Fear of disclosure of positive COVID-19 results				

research team met to compare and discuss the preliminary list of superordinate and subordinate themes and to develop a detailed description of their meanings. The team reached a consensus regarding the final master table that was composed of superordinate themes, sub-themes, and associated excerpts from the transcripts (Table 2; Creswell & Creswell, 2017; Smith & Osborn, 2015).

2.5. Ethical considerations

A significant ethical issue is protection of the rights of the participants (Gray et al., 2017). Before the commencement of the study, clearance and approval from the following were obtained: the University of South Africa College of Human Sciences, the National Health Research Ethics Council (NHREC Registration #: Rec-240,816-052), and the Medical Research Council of Zimbabwe (MRCZ/A/268). As part of the study protocol, permission to conduct the study was also obtained from the Ministry of Health and Child Care and the centre manager. Before taking part in the study, all participants gave both verbal and written consent. They were informed that they were free to decline or to discontinue participation at any time if they so wished and that the interview would be audio recorded. Participants were also assured in writing and verbally that data would be handled confidentially, and the findings would be presented in such a way that identification of informants would be impossible. Data were secured in a password-protected computer. From the transcripts, all identifiers were removed, and pseudonyms were used to enhance anonymity. The study participants were provided with an information sheet that explained the details of the study, and their informed consent was only given after assimilation of this essential information.

2.6. Credibility and trustworthiness

To ensure the trustworthiness and credibility of all analysis results detailed in the current study, several steps were taken. It is important to note that the experiences of participants in phenomenological studies are understood through the subjective interpretation of the researcher (O'Mullan et al., 2019). To explore personal feelings, experiences, and biases, the researcher conducted much introspection and internal examination. These personal opinions were bracketed in order to enhance



objectivity. This approach allows one to become less assuming about another's experiences, to be open, compassionate, and non-judgmental and to present data from the perspective of the study participant and not the researcher (Chan et al., 2013). After each interview, peer debriefing was conducted and identified irregularities were addressed. Thus, the interviewer was able to engage in self-reflection throughout the entire process. By coding and recoding many times and comparing the themes and categories with a co-coder, the researchers ensured dependability. To enhance authenticity, verbatim extracts from the interviews were used. Additionally, the research team met to discuss and compare the initial findings and agreed on the super/subordinate themes (Liu et al., 2020).

3. Findings of the study

The results describe the participants' psychological- and emotional-related experiences after contracting COVID-19. The results are described under the following superordinate themes: negative emotions experienced by the participant; psychological distress; and psychological impact of stigma and discrimination against positive COVID-19 healthcare workers. Related themes and subthemes are shown in Table 2.

Infections of COVID-19 among healthcare workers affected their psychological space in an overwhelming manner. In addition to the physical strain that the health workers suffered through the COVID-19 infections, they were significantly affected psychologically and emotionally. The psychological impact of the COVID-19 infection displayed by participants included negative emotions, psychological distress, stigma, and discrimination.

3.1. Superordinate Theme 1: Negative emotions

The superordinate theme emerged as negative emotions that resulted in overwhelming stress and the extreme fear and anxiety that the participants experienced as COVID-19 patients.

3.1.1. Overwhelming stress

Participants of the study reported experiencing overwhelming stress as a result of the poor communication process used for disclosing COVID results to patients in addition to feelings of self-blame for possible negligence that may have resulted in contracting COVID-19.

3.1.1.1. Poor communication mechanism of disclosing positive COVID-19 result. Participants of this study indicated that they suffered from an overwhelming stress that emanated from poor communication of the COVID-19 results. Participants' positive COVID-19 results were communicated via telephone. This method of divulging their positive COVID-19 results was perceived by most participants as unacceptable and stressful:

I was not told the results physically; I was told through a phone call. Imagine if you are to receive a phone call from the Infection Control department telling you that your results were positive and that you needed to go on isolation. The road was terrible. I was very stressed with no one to talk to. (Vusi)

After a week of being on quarantine, I had an experience of receiving my results through a phone call. I felt it was unprofessional. The person who called never asked me whether I was in a convenient or private place to receive the results. She just proceed [ed] to give me the results. The whole thing didn't sit well with me. The fact that my results were positive, I expected the news to be delivered in different way. I felt more frustrated and unsupported. (Noe)

3.1.1.2. Self-blame. Overwhelming stress was also caused through self-blame. Participants felt that they could possibly have been negligent when rendering care to positive COVID-19 patients. The excerpt in support of the theme are as follows:



When you receive a positive result, it is very stressful. I started thinking where I would have got the disease or was it my negligence? Is it that I was not careful when I was providing care? (Sizi)

I think it was my fault that I was infected with COVID-19. Knowing that I was nursing such patients, I should have been using two surgical mask[s] to protect myself. Maybe I should have done better to protect myself from this COVID-19 virus. (Lizie)

3.1.2. Fear and anxiety

This theme demonstrates the intense fear and anxiety experienced by the study participants. The fear and anxiety were associated with either dying or transmitting the COVID-19 virus to family members and others.

3.1.2.1. Fear of dying. The study participants indicated the extreme fear and anxiety experienced as a result of having contracted COVID-19. The participants were fearful of death because they had seen COVID-19 patients die in their care. The fear of dying from COVID-19 was very common among the participants, as confirmed by the following excerpts:

I was anxious and had this fear that I would die because some of the patients that had suffered from COVID-19 turned out to be bad, with some dying. I had this fear of dying. (Lihle)

I was scared, and I used to think that I would die from COVID-19. Before, I would do anything for my parents or anything for myself. I used to think I would die young during my early carrier days as it is my fourth year working as a registered nurse. (Lizie)

3.1.2.2. Fear of infecting others and reinfection. Other reasons for the participants' fear and anxiety were related to fear of infecting family members and others. Excerpts confirming this are presented below:

I was scared that if I was positive then other family members would be affected. I used to think that these people spent a lot of time at home and hence, they didn't deserve to be infected with COVID-19. (Duma)

I stay with six people so I was afraid I would infect those six people, and those six people would in turn infect others where they work since they work with a lot of people. One works at a grocery store and the other works in a clothing boutique. (Noma)

Each and every day when attending to a patient, I would feel scared and anxious that I might contract COVID-19 infection again. (Sizi)

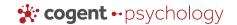
I have got a young child who is about three years old so I was worried I had infected my child or my husband or the relatives who are staying with us, in particular, my mother-in-law who has diabetes and hypertension and so was more vulnerable to COVID-19. (Lizie)

3.2. Superordinate Theme 2: Psychological distress

This superordinate theme relates to the psychological distress that was suffered by study participants due to uncertainties associated with the new disease. The two themes that emerged were: (1) uncertainty associated with the disease and recovery process, and (2) uncertainty due to the lack of institutional support.

3.2.1. Uncertainty about the disease and the recovery process

Another psychological struggle that positive COVID-19 healthcare workers experienced during their sickness was associated with their uncertainty about the disease and the recovery process and/or the effectiveness of the treatment they were taking.



3.2.1.1. Stress and frustration. Participants were stressed and frustrated as a result of these uncertainties:

Each time I heard about the effect of the disease on the lungs, I was further scared and stressed because a lot is still unknown about COVID-19 and my worst fear was that I was going to die. (Lihle)

At one time, when a patient had died, the relatives of a patient that had died brought the patient's results that were COVID-19 positive. This further stressed me as I had classic COVID-19 symptoms, flue-like, shortness of breath, chest tightness, fever. My sense of insecurity increased when the patient's results came. (Siboe)

Some participants reported that they were scared and anxious to be diagnosed COVID-19 positive because they associated the illness with death, especially when they suffered symptoms related to COVID-19.

3.2.1.2. Confusion and stress. One of the participants indicated that she was sick, confused, and forgot that she was supposed to breastfeed a child as a nursing mother. The following excerpt is in support of this sub-theme:

As a nursing mother, I would even forget to breastfeed my child. I had some form of confusion, hallucinations. I even forgot that I had a child and that I was supposed to breastfeed. When I noticed that I had not breastfed the child, I began to realise that I was so sick and got even further stressed. (Sizi)

3.2.2. Uncertainty induced by lack of institutional support

This theme explored the psychological effects that emerged as a result of the lack of support for the healthcare workers who had contracted COVID-19. The lack of support left them feeling frustrated and stressed.

3.2.2.1. Frustration due to lack of support. The lack of support further frustrated and stressed the participants:

With all the effort that I put in my work, I got the impression that the hospital did not care even if I die. Therefore, I felt the hospital would look for a replacement—someone to cover my shifts without checking how I was coping during the time of isolation, whether I am recovering or not. I was so stressed and frustrated when I could not even get just a call from my hospital manager. I even thought that one could resign after recovery. (Muzi)

At that moment, it was so stressful and frustrating, I don't want to lie, especially looking for finances when I was also too sick. I had to have a chest x-ray at a private clinic using my own finances. I also had to purchase drugs at my own expense. (Thina)

3.3 Superordinate Theme 3: The psychological impact of stigma and discrimination on positive COVID-19 healthcare workers

The final superordinate theme focused on how healthcare workers felt when they were perceived negatively by their colleagues and members of the public.

3.2.3. Negative feelings as a result of stigma and discrimination

This theme encompasses the negative feelings of being stigmatised in both the workplace and the community.



3.2.3.1. Rejection from colleagues. The study findings revealed the psychological blow experienced by participants as a result of the stigma and discrimination that is attached to a positive COVID-19 test. The attached stigma worsened the mental health of the healthcare workers because they were rejected by the colleagues when they needed care the most. Participants remarked:

I was stigmatised by my colleagues; they were afraid to touch me. It was a very painful experience considering the sacrifice I do caring for other patients. I had this deep pain, physical and emotional as a result of feeling rejected by my colleagues. (Duma)

I was put on isolation by my colleagues. They were afraid to touch me, inclusive of the doctor. The doctor came after an hour. All these delays and rejections from my day-to-day colleagues stressed me. (Siboe)

Even now, some still pass comments that I still have COVID-19. People from other support departments, they run away and say we heard you were COVID-19 positive. Clearly, I can tell that some people seem uncomfortable by my presence. (Vusi)

3.2.3.2. Family stigmatised and discriminated against by the community. Participants were emotionally hurt because the communities were discriminating against their families due to their positive COVID-19 results. The quotations that follow support the theme:

I stay in a township. After a visit by the Rapid Response Team that was conducting contact tracing with all the neighbours watching and all that drama, there was a lot of stigma that was faced by my family. My kids were no longer allowed to play with other kids because of fear of COVID in the community. I wish the whole thing was done in a professional manner. The whole talking with RR Team was done outside the gate. (Noe)

As a result, I was forced to move away from my apartment because the landlord was not comfortable with me staying on. I was emotionally hurt by this kind of stigmatisation. (Noma)

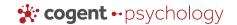
3.2.3.3. Fear of having COVID-19 test results disclosed. The study participants were fearful of having their positive COVID-19 status divulged to their families and others. The fear was associated with the stigma that people attach to positive COVID-19 results. The process of reporting the positive cases to the City Council was also frustrating to the participants since this could stigmatise them further. The excerpts that support the theme are presented below:

I felt frustrated and traumatised. There was no counselling as such. She just told me that my name and details were forwarded to the Bulawayo City Council [RR Team] and that there were the ones that were going to do contact tracing and provide guidance. I was also afraid that people may know my COVID-19 status and I could be discriminated. (Noe)

4. Discussion and conclusions

The findings of this study revealed that healthcare workers who suffered from COVID-19 experienced severe psychological and emotional stress related to the COVID-19 infection. The super-ordinate themes emerged as negative emotions experienced by the participants, psychological distress, and psychological impact of stigma and discrimination.

Participants indicated the overwhelming stress that they suffered because of the way that the results were communicated to them and the self-blame that they may have been negligent when caring for COVID-19 patients. Participants expressed the stress as overwhelming or unbearable when they were contacted via a telephone call and informed about their positive COVID-19 status without prior preparation or arrangement of a supportive environment in which to give the stressful results. According to the Protection of Personal Information Act (POPIA), No. 4 of 2013 as applied in Southern Africa, individuals are supposed to have their right to privacy respected and as such, violation of the human right to privacy was demonstrated by this study when the COVID-



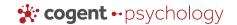
19 results were revealed to the patients. Proper counselling and arrangements should have been in place to reduce the stress when the COVID-19 results were announced.

Health workers who suffered from COVID-19 blamed themselves for having contracted the virus through not being careful when caring for COVID-19 patients. They, therefore, suffered stress, believing that they had not adhered to the COVID-19 guidelines such as wearing the personal protective clothing properly, adhering to proper hand hygiene, and keeping a social distance of one and half metres from another person (World Health Organization, 2020). Self-blame was found to be common, especially among health workers who had a family member ill with COVID-19 since they usually thought that they were the ones who had brought the illness home from the patients they were nursing.

In this study, fear was found to be a common feature underlying the mental health of the participants even before they were tested for COVID. Heath workers were worried that they could be infected since they provided care for COVID-19 patients or that they could infect family members and others because they were tending to infected patients daily. Similar findings were found in Wuhan, China among healthcare workers (Wu et al., 2020). Fear of infecting others with any infectious disease including COVID-19 was common (Jeong et al., 2016). Fear and anxiety relating to COVID-19 has been reported in several studies since the disease generates fear in everyone. Anxiety and fear were common among the participants of this study since they had witnessed the disease process in their work environment and were now themselves COVID-19 patients. The participants had witnessed patients with respiratory complications who had subsequently died in their care and these experiences inflicted additional fear once they were patients. Similar findings were also noted in the studies of BuselLi et al. (2020) and Chersich et al. (2020) in which participants expressed fear and anxiety as they executed their duties during the COVID-19 pandemic. They were better placed as eyewitnesses to what the COVID-19 pandemic was doing to communities. In the current study, their exposure to COVID-19 further worsened their fear because they were undergoing the stages of the disease process themselves. As a result of the shortages of equipment, medicines and sundries, including personal protective equipment as reported by Murewanhema and Makurumidze (2020), it is unsurprising for the healthcare workers to be fearful and anxious in the setting of the current study.

Although most studies report on the fear of healthcare workers in providing care to COVID-19 patients, this study found fear of dying when the participants themselves were COVID-19 patients experiencing physical symptoms and psychological fears. The findings are similar to those in the study of Shaukat et al. (2020) who posit that high levels of stress, fear, and anxiety exist among healthcare workers, especially among nurses who spend many hours with patients. Similar to this study's findings, Ide et al. (2021) indicated that nurses are among the healthcare workers who are reported to suffer the highest mental distress, and this is influenced by the number of hours they spend with the patients. Barta et al. (2020) in the meta analysis report conducted in over 24 countries, indicated the psychological and emotional distress impacting negatively on HCW and recommended that there be action taken to improve resilience and foster post-traumatic growth among HCW, Additionally, Alnazly et al. (2021) and Xiao et al. (2020) indicate higher levels of fear, depression, anxiety, and stress among health workers who provide care for patients who have tested positive for COVID-19 than those who do not provide care for COVID-19 patients.

Psychological distress was experienced because the participants were continually wondering how the disease was going to progress and whether they would die or whether they would experience complications since patients under their care had undergone such stages. In a related study, Xiong and Peng (2020) found that increased COVID-19 cases and mortality resulted in increased pressure among healthcare workers. Additionally, Jin et al. (2020) reported psychological stress and emotional changes during isolation period in 88% of study participants

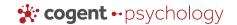


and recommended psychological intervention to be commenced for health care workers to overcome such. The participants in the current study were also concerned if they would be able to recover from the disease. The most difficult aspect was the lack of support from the institutional management and their colleagues. Some participants even voiced their wish to resign after recovery since they felt reluctant to work with people who did not value their hard work. The participants also wished they would have been greeted telephonically and asked how they were feeling, but it did not happen. This non-communication was viewed by participants as worsening the psychological stress caused by their infection with COVID-19.

Several emotions were shared as to how the participants felt when they were COVID-19 positive. The emotions included shock after being diagnosed COVID-19 positive. One participant revealed that she felt so confused that she even forgot she was a nursing mother and neglected to breastfeed her new born baby. To be diagnosed as COVID-19 positive was described as being frightening, especially when associating the COVID-19 results with death. A study in Nigeria documents similar reactions and feelings and reports that the healthcare workers who had tested positive for COVID-19 felt traumatised (Kang et al. (2020). Ng et al. (2020) call for more attention to the psychological and mental wellbeing of the frontline healthcare workers during the pandemic. They advocate, as do the researchers of the current study, that social support can relieve the psychological pressure of health workers and promote their mental health. The lack of support in the painful processes of being diagnosed COVID-19 positive without proper counselling and thereafter having to persevere throughout the disease process while being isolated from other people was viewed as stressful and frustrating by participants. Participants voiced their frustration at having to pay for services relating to COVID-19 tests and investigations whereas these services are free of charge for the general public. According to Ide et al. (2021), social support is associated with reducing occupational stress and preventing psychological stress and psychiatric symptoms. Additionally, the support of colleagues is necessary for self-efficacy and professional efficacy (Ide et al., 2021). The lack of support is associated with stress and anxiety (Xiao et al., 2020). According to Ide et al. (2021), a suggested solution for the psychological distress among health workers is for the worker to take a vacation during the pandemic to help them relax. Direct support from managers could help healthcare workers in their work and assist them in managing stress as they conduct their daily duties. Such support should continue when health workers report ill. It is recommended that healthcare workers with high levels of psychological distress receive more psychological support (Que et al., 2020; Di Tella et al., 2020) Since the healthcare workers in the current study suffered psychological distress, psychological support should have been provided for them.

Other psychological trauma suffered by the participants of this study involved the stigma and discrimination related to the positive COVID-19 test. Stigma and discrimination were perceived by participants as very common when one is infected with COVID-19. Participants were fearful to have their COVID-19 results disclosed to the City Council, family members, and colleagues. Participants were able to verbalise the rejection they felt as a result of the stigma and discrimination against them when they had tested positive for COVID-19. Rejection actions displayed by colleagues included the failure to offer treatment and delayed consultation in casualty when seeking treatment. Some of the colleagues were reported to hide and to put on masks even when the participants were back on duty after being cleared of COVID-19.

The stigma was perceived to worsen the psychological stress felt by the participants. Furthermore, the stigma cascaded down to the participants' families wherein the children were discriminated against and prevented playing with other children because they were regarded as infectious. The families of the participants were further stigmatised by the community, and this added to the psychological stress of the participants. Similar findings were reported by Chew et al. (2021) in their study on the stigmatisation of COVID-19 patients and their families who suffered emotional, mental, and physical ill-being. Disclosure of the COVID-19 status was reported as



unacceptable by some patients due to the stigma while other patients only disclosed their status with the aim of preventing infections (Barrett & Brown, 2008; Chew et al., 2021).

The stress from the stigma and the discrimination that are attached to COVID-19 was the root cause of the participants' fear of having their status disclosed to the City Council for contact tracing. According to Baldassarre et al. (2020), stigma devalues persons and conveys high levels of stress, and thus could worsen the mental wellbeing of individuals. Similar findings were noted in the studies of Buselli et al. (2020) and Chersich et al. (2020) in which participants expressed fear and anxiety as they executed their duties during the COVID-19 era. Related to this, Singh and Subedi (2020) call for accurate information dissemination to dispel myths and to create an enabling environment to combat COVID-19.

The study provides unique insights on the psychological and emotional challenges experienced by healthcare workers after contracting COVID-19. The findings of this study are critical for health institution managers, policy makers and programme planners, to facilitate planning during COVID-19 and other public health emergencies in order to provide mental support for healthcare workers in the frontline. In addition, the study triggers other forms of research on factors related to pandemics that affect the psychological and emotional needs of healthcare workers during a crisis.

Limitation of the study

The study was conducted during the first year of COVID-19 pandemic. Therefore, the study was conducted virtually, and some of the non-verbal cues such as emotions could have been missed during the interviews. The study was conducted in only one province of the country. However, the study findings still shared valuable insights necessary for supporting the psychological and emotional aspects of healthcare workers in Zimbabwe and in Sub Saharan Africa.

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Data availability statement

Data will be made available on reasonable request from the corresponding author.

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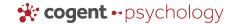
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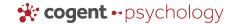
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