American Journal of Nursing Science
2023; 12(1): 21-27
http://www.sciencepublishinggroup.com/j/ajns
doi: 10.11648/j.ajns.20231201.14
ISSN: 2328-5745 (Print); ISSN: 2328-5753 (Online)

Experiences of Healthcare Workers Working in COVID-19 Isolation Wards in Lesotho: A Qualitative Study

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To cite this article:

Bokang Mahlelehlele, Maselobe Lebona, Moses Murandu. Experiences of Healthcare Workers Working in COVID-19 Isolation Wards in Lesotho: A Qualitative Study. *American Journal of Nursing Science*. Vol. 12, No. 1, 2023, pp. 21-27. doi: 10.11648/j.ajns.20231201.14

Received: December 30, 2022; **Accepted**: January 20, 2023; **Published**: February 24, 2023

Abstract: Background: Health and wellbeing of Healthcare workers impacts the health of the nation. COVID-19 pandemic has brought to light a number of challenges faced by Healthcare workers all over the world, affecting their psychosocial, financial, spiritual and physical well-being. There has been an alarming number of healthcare workers being affected by COVID-19 across the globe, some even succumbed to death as a result of COVID-19. Some identified reasons for this tragedy have been lack of appropriate Personal Protective Equipment (PPE), insufficient knowledge about the disease, shortage of healthcare workers and the compromised welfare of the Healthcare workers. Few studies within Lesotho focused on the perceptions of healthcare workers on COVID-19 and there was none conducted on the experiences of healthcare workers working in the COVID-19 isolation wards therefore, the aim of this study is describe the experiences of Healthcare workers working in COVID-19 isolation wards in Lesotho. Material and Methods: A descriptive phenomenological research design was utilized and data was collected using unstructured interviews which were audio-recorded. The interviews were conducted amongst the nine Healthcare workers who were working in the COVID-19 isolation ward and they composed on one office assistant, two medical doctors and six registered nurses. Analysis: Colaizzi's seven-step method of qualitative data analysis was followed in this study. Results: Findings revealed increased workload, significant amount of negative emotions in the early stages of the pandemic, positive emotions at the later stage as well as stigma and discrimination. Conclusions: The COVID-19 pandemic placed a huge burden on the health care system. Health care workers, being in the front line, were significantly affected; they had to endure continued psychological distress because of the unique type of care required.

Keywords: COVID-19, COVID-19 Isolation Wards, Experiences, Healthcare Workers, Qualitative Study

1. Introduction

1.1. Background

The COVID-19 pandemic has affected human live and health systems resulting in alarming rates in morbidity and mortality globally [22].

When COVID-19 first began spreading globally, evidence suggested that the disease was going to disproportionally affect people from African population due to unpreparedness and lack of resources [6, 13]; with the risk of death among people diagnosed with COVID-19 being higher in those living in more deprived areas such as Lesotho. Surprisingly, this was not the case as the country had a very low number of deaths during the first height of the pandemic. However, the death rate brought by COVID-19 in the country was significant (706/2,184,026) based on the population of the country [21]. The pandemic placed an overwhelming demand on health care systems and healthcare workers globally, presenting various unpredictable health care challenges [2]. Challenges brought to light included among others increased workloads, unsafe and unsupported workplaces and limited resources [19, 13, 14]. It is important to note that the increased workload of HCWs continues with the added intervention of vaccine administration with no additional staff procured. The WHO report of 23 January 2022 indicated that the government of Lesotho has administered 698, 383 vaccine doses [22] and this is an added workload

which places more stress on the HCWs further impacting the family members. According to Torky and Hassanien [20], it is quite impossible for countries to estimate the infection rate or cessation of COVID-19 to unknown emerging variants associated with this deadly disease. As a measure to protect healthcare workers (HCWs), the government of Lesotho procured and received donations of Personal Protective Equipment (PPE) which was still inadequate [10, 17], this shortage increased HCWs exposure to COVID-19. As reported by Shah, Wood, Gribben et al. [16] there were significant (17.2%) hospital admissions of HCWs in Scotland, UK. Like most respiratory infectious diseases, the mode of transmission of COVID-19 makes it easy for HWs to transmit the virus to others [8].

1.2. Problem Statement

COVID-19 is a highly infectious disease and requires skilled personnel in managing infected individuals. Its emergence was sudden and did not allow enough time to equip front-liners with the necessary skills and to prepare them psychologically. COVID-19 isolation wards were established and this meant increased workloads for HCWs nationwide, they had to be re-scheduled to the isolation wards and this was beyond their call of duty.

Social restrictions were imposed in order to curb the spread of infection. These social restrictions caused psychological distress, uncertainties, and frustrations globally, suggesting that people inclusive of HCWs were generally emotionally unprepared for the negative effects of pandemics [15].

1.3. Objective

To explore the experiences of healthcare workers working in COVID-19 isolation wards.

2. Methodology

2.1. Study Design and Study Area

The study employed a descriptive phenomenological research design to explore experiences of health care workers working in COVID-19 isolation wards in Lesotho. A descriptive phenomenological design describes the experience of participants and the manner in which they experience it [13, 18]. The study was carried out at Motebang hospital; a district and a referral hospital located in the urban part of Leribe district, this hospital has an isolation facility for COVID-19 patients, with a 12 bed capacity equally distributed for both males and females [11].

2.2. Study Population

The population for the study consisted of healthcare workers working in COVID-19 isolation ward at Motebang hospital.

2.3. Sampling Method and Sample Size

The study employed purposive sampling technique to recruit participants. The sample size included all HCWs working in COVID-19 isolation ward.

2.4. Selection Criteria

Table 1 below outlines the inclusion and exclusion criteria.

Table 1. *Inclusion and Exclusion criteria.*

Inclusion	Exclusion
Healthcare workers working in COVID-19 isolation ward	Healthcare workers who are not working in COVID-19 isolation ward
Healthcare workers who willingly consent to participate in the study	Healthcare workers who decline to participate in the study

2.5. Pilot Study

A Pilot study was not conducted due to the limited number of healthcare workers who were purposely selected to participate in the study.

2.6. Data Collection Tools and Techniques

Ethical clearance and permission was obtained from the appropriate authorities, these included National University of Lesotho Faculty of Health Sciences Institutional Review Board (NUL FoHS IRB), Ministry of Health research committee (MoH RC), District Medical Officer and Motebang hospital among others. The researchers contacted the healthcare workers working in COVID-19 isolation wards to inform them about the study through the participation information sheet. A consent form was issued to those willing to participate in the study and to be audio recorded during the interviews. Details of the interview session (date, time and nature of questions) were arranged with participants upon receipt of participants' consent.

Interviews were conducted in August 2022. Individual interviews were conducted using in depth unstructured interview questions to allow participants to narrate their experiences of working in COVID-19 isolation wards. The grand tour question to all healthcare workers was "*What are your experiences working in the COVID-19 isolation ward?*" Each interview lasted for 30 – 60 minutes and participants had enough time for expression of self. Transcription of the recordings was done within 48 hours so that the researchers could identify saturation of data immediately or any need for re-interviewing. Based on the individual's preference, the interviews were conducted in both English and Sesotho. All the interviews recordings were placed under lock and key and later transcribed. All names of participants were kept confidential and were only identified by allocated study numbers.

2.7. Data Analysis

The study utilized the Colaizzi's seven steps method of qualitative data analysis. This method helps to validate findings of the research problem as shared experiences or feelings are clustered together to set up a scientific standard [18]. The seven steps were applied as follows:

In the first step, transcriptions from the interview were read several times in order to make sense of the content. During this step, the researchers did not attribute personal feelings, beliefs or values on the transcriptions. In the second step significant statements were extracted from each participant's transcriptions. For instance, statements or phrases related to workload experienced by HCWs working in the COVID-19 isolation ward were extracted. In the third step, meanings of these extracted significant statements were formulated. During the fourth step, meanings formulated were condensed into a cluster of themes. These themes were then defined in step five, in a comprehensive description of the study phenomenon in order to give sense of the overall structure. At this point, the researchers sought expertise from an experienced qualitative researcher to confirm the comprehensive descriptions of themes and fullness and richness of the findings. In the sixth step, preceding the last, the researchers reviewed the comprehensive descriptions that contained key elements that described the phenomenon of the study (experiences of healthcare workers working in the COVID-19 isolation ward). The last step was validation of the findings which is a unique feature of Colaizzi's method [12]. In this seventh step, the researchers conducted a follow-up interview with participants where findings of the study were shared with each participant where they confirmed that indeed the results reflected their experiences.

2.8. Ethical Consideration

Ethical issues are crucial components of modern research related to the subject as well as the researcher [23]. The participants' main role in research is to serve as sources of data, it is therefore the researcher's responsibility to protect; participants' life, health, dignity, integrity, right to self-determination, privacy and confidentiality of personal information. It is also the responsibility of a research institution to protect the ethical rights of participants from the risks that might be imposed by the study [7].

To maintain confidentiality, the names of the participants were not disclosed and study numbers and date of birth were used to identify individual participants' interviews and their responses. Researchers sat in a quiet room to within the hospital premises to conduct the interviews and the recordings were saved in a computer where only the researchers had access through a password.

3. Result

The COVID-19 isolation ward was allocated nine (9) healthcare workers where the majority (67%) of participants was registered nurses followed by only two medical officers and an office assistant. The office assistant's duty was to clean and fumigate the isolation COVID-19 ward. Almost half of participants (n=4; 44%) had age range of 31 to 35 and eight (8) participants (89%) were female. Majority (5) of participants had more than four years as health care workers. Participants were given information sheet so that they can reach informed consent. The information sheets were collected the next day and all the HCWs who were caring for COVID-19 patients had already filled the consent forms. During collection of these forms, researchers also signed in the presences of participants. Since these HCWs were now placed in different hospital settings such as maternity ward, dates and time for interviews were set with individual participants.

COVID-19 restrictions had been lowered during data collection therefore the interviews were conducted individually with healthcare workers in a quiet room from July to August 2022 away from the COVID-19 ward, but still maintaining distance and using face masks. The interviews were audio recorded and transcribed later by the researchers in order to record all the lived experiences as shared by the HCWs. Each participant was asked a grand tour question: *What have been your experiences in caring for COVID-19 patients?* Probing questions followed which urged participants to elaborate more on what they have shared. Follow up questions asked included: 1. What were your feelings after you had been assigned to work with COVID-19 patients? 2. Tell us your experiences of this new role of caring for COVID-19 patients. 3. Tell us about your experiences of having to put on personal protective equipment (PPE) when caring for COVID-19 patients. 4. Tell us about your feelings when going home to meet your family members after you worked with COVID-19 patients? 5. How has caring for COVID-19 patients changed your life at home? Each interview lasted for 30 – 60 minutes and participants were able to express their experiences adequately. Transcription of the recordings was done within 48 hours so that the researchers could confirm the transcriptions.

The interviews with HCWs yielded the themes discussed below and the sub-themes and quotes for each theme are indicated in Table 2.

Table 2. *Demographic data.*

Data	n	Percentage (%)
Age in years	18 – 20: (n=0)	0
	21 – 25: (n= 2)	22
	26 – 30: (n=0)	0
	31 – 35: (n=4)	44
	36 – 40: (n= 3)	33
Gender	Male: (n= 1)	11
	Female: (n= 8)	89
Occupation	Qualified Nurses: (n=6)	67
	Medical doctors: (n=2)	22
	Office assistant: (1)	11
Years of service	< 1 year (n=2)	22
	1 – 2 years (n=2)	22
	3 – 4 years (n=0)	0
	> 4 years (n=5)	56
Healthcare professional	Yes: (n=9)	100
	No: (n=0)	0

Theme 1: Increased workload

Two nurses were assigned at the COVID-19 isolation ward as their first employment and they did not have an experience in the care before and the rest of the nurses had an experience in the care of patients. All the nurses (n=6) indicated that they were short-staffed since majority of their colleagues

declined the assignment of COVID-19 isolation ward and the two experienced nurses asked to volunteer to work with COVID-19 patients. On average days, there were two nurses and one medical doctor per shift while the office assistant worked from Monday to Friday alone. Sometimes a nurse would be on duty alone when her colleague had some emergencies to run out of work and this would place too much workload on the duty nurse.

One experienced nurse explained: *"…sometimes I was left alone in one shift and I was caring for thirty (30) critical patients alone while my colleague had an emergency at home, her child was sick*." All participants indicated that dues to the protocols which were to be observed when caring for COVID-9 patients led to extra workload. These included thorough screening of patients when they come into the ward which was repetition of the initial screening performed at the entrance of the hospital premises and the moving around of the heavy oxygen cylinders especially onto the female participants. All the nurses (n=6) expressed that majority of the caring for these COVID-19 patients was carried by them as compared to the doctors and they experienced fatigue on daily basis. A young inexperienced nurse expressed: "*A lot of work was done by us as nurses as usual; Doctors only come to confirm diagnoses and prescribe then leave the ward*."

Theme 2: Significant amount of negative emotions in the early stages

The two newly employed nurses were staying with their parents who are in above 50 years and both expressed that they were scare that they would transmit the infection at home and lose the parents through death. The other experienced nurse and a doctor were staying with children less than 3 years and they were also scared that they would them infected. Majority of the nurses (n=5) indicated that they did not attend any training on how to care for COVID-19 patients therefore they had anxiety due to lack of knowledge, in the early phases of this pandemic. One experienced nurse explained: "*I did not receive any training on how to care for COVID-19 patients since I had volunteered and sometimes I felt incompetent.*" The four experienced nurses were traumatized by the instant deaths of COVID-19 patients; some died while speaking, some died while turning in bed and some would die a few minute after indicating that they are feeling much better. One of them said: "*I was drained by the end of every shift due to the high death that I had never witnessed in my entire career: I saw one collapsing while talking to his relative over a phone*." One doctor explained that removing the PPE was very scary because they had learned from the PPE don and doff workshop that one would infect himself or herself during removal of PPE therefore it was the most stressful activity. Due to the inadequate PPE, all participants indicated that they were working with fear of being infected because they had to conserve the PPE. Some quotations below explain further:

Inexperienced nurse: "*Before donors come to our rescue, we used to use N-95 mask for a week because we were told that PPE is limited*."

An office assistant: "*I was not given any COVID-19 PPE for over a month. I used to work with my normal cloth gown on a daily basis because I also thought PPE was only for nurses and doctors. I was advocated by one person from a private organization which donated some PPE and since then, I was comfortable working in the COVID-19 isolation ward*."

Theme 3: Positive emotions at the later stage

The two doctors found COVID-19 pandemic interesting and exciting to be assigned to the isolation ward. One of them expressed himself: "*It was an interesting experience and I was able to exercise several skills that I never had an opportunity to execute since I was a student*." They indicated that it gave them an opportunity to learn and improve their medical skills since it was their first time executing such skills with this pandemic. Both of the doctors also indicated that their workload was better as compared to working in the general wards; they were allocated more off days. They were only allocated on day duty. One of them explained: "*We worked only on day duty and we exchanged days with my colleague: when I am on duty on Monday, Tuesday I rest then resume on Wednesday which is a different case in the general wards where there are night duties.*" The excitement also came with being able to help patients recover from the lowest oxygen saturation (less than 5%). The two nurses who were newly hired were initially excited being assigned at the COVID-19 isolation ward since this was their first employment. All participants expressed that they eventually relaxed as the COVID-19 cases were dropping and the ward began to be calm. One nurse said: "*Cases of COVID-19 dropped from December 2021 and workload was lowered*." An office assistant added: "*In June 2021, there an addition of a temporary office assistant from a private-owned organization who significantly relieved me even though there were fewer patients*." They later tolerated the sufficient PPE which was donated in numbers from other countries and were competent in caring for COVID-19 patients.

Theme 4: Stigma and discrimination

All the participants expressed that they were discriminated by the colleagues. Colleagues did not want to meet with them and they could not even assist with carrying the heavy oxygen cylinders into the ward. An office assistant expressed herself: "*One a patient vomited over my shoulders while cleaning under his bed. I went to the laundry to clean up myself and when I got in, none of my colleagues wanted to help*." A nurse added: "*In some wards, we were not welcomed by our colleagues even if it is the start of my duty before I even meet COVID-19 patients.*" Some experienced discrimination from the community, from the public transport to community activities. The child of one nurse was discriminated at school and the teachers called the nurse to confirm if she was caring for COVID-19 patients and the nurse had to lie for the sake of the child's comfort at school. She explained: "*One day I got a phone call from my son's teacher. She told me that she had called to confirm that I am working in the COVID-19 isolation ward so that they can treat my son with care… I lied and told her that I was only in that ward for a day*." Relationships at home of some of the

participants were affected to an extend that some would undress outside and bath before meeting the rest of the family members. One newly recruited nurse said: "*I undressed at the door because I used to knock off while it was already dark and go straight to the shower then sleep…I would hardly meet my family especially my sister, she was very uncomfortable to sit around the table with me*."

4. Discussion

The findings of this study indicated that health care workers experienced various challenges while caring for patients during COVID-19 pandemic and those experiences were categorized during data analysis into 4 themes including; increased workload, significant amount of negative emotions in the early stages, positive emotions at the later stage and stigma and discrimination. Themes are further elaborated below.

The study revealed that COVID-19 pandemic has increased nurse-patient ratio as some of the health care workers declined the duty of being allocated in isolation wards and this lead to one person on duty hence increased workload, these findings are similar to those of Moyo, Mgolozeli, Risenga, et al. [9]; Akkus, Karacan, Güney, et al. [1]; Halcomb, McInnes, Williams, et al. [4]; Sun, Wei, Shi, et al. [18]. Similar to the findings in some areas, healthcare workers were faced with challenge of insufficient personal protective equipment during COVID-19 pandemic, Halcomb, McInnes, Williams, et al. [4]; Moyo, Mgolozeli, Risenga, et al. [9]; Sun, Wei, Shi, et al. [18], the respondents of this study indicated that there was inadequate PPE and were required to conserve PPE for instance, re-use of N95 masks for a week while, others were not given any PPE.

Like participants in our study who expressed being scared that they would transmit the infection to their family members and end up losing them through death, Akkus, Karacan, Güney, et al. [1]; Galehdar, Kamran, Toulabi, et al. [3]; Halcomb, McInnes, Williams, et al. [4]; Sun, Wei, Shi, et al. [18], described that due to the contagious nature of disease, healthcare workers lived apart from their family members because they were anxious that they will get infected and infecting others.

The study also revealed that some respondents experienced anxiety due to lack of knowledge in the early phases of the pandemic as some of them did not attend any training on how to care for COVID-19 patients since they volunteered, while some were assigned at the COVID-19 isolation ward as their first employment and they did not have an experience in the care before and similar findings were reported by Sun et al, (2020) in their study that explored psychological experiences of caregivers of COVID-19 patients. Akkus, Karacan, Güney, et al. [1], added that healthcare workers felt incompetent at first due to the scarcity of scientific information regarding provision of care to COVID-19 patients.

The pandemic resulted in fatigue, exhaustion as well as emotional trauma that resulted from instant deaths of many patients. Congruent findings were obtained by Akkus, Karacan, Güney, et al. [1]; Galehdar, Kamran, Toulabi, et al. [3]; Sun, Wei, Shi, et al. [18], who further elaborated that healthcare workers were exhausted, helpless and worried due to the high-intensity of work as well as deaths of patients under their care. Consistent with the reports by Galehdar, Kamran, Toulabi, et al. [3]; Halcomb, McInnes, Williams, et al. [4], WHO revealed that clinical role of respondents put their health at risk and they fear that they would infect themselves, this study respondents explained that they got scared when they don off PPE as they have learnt that one would infect him/herself while removing PPE.

Most health care workers who were working in COVID-19 isolation ward have experienced varying forms of stigma and discrimination from their colleagues who did not want to meet with them nor to assist in carrying heavy oxygen cylinders into the isolation ward, from public transport, from community activities even from family members. These were in line with findings of Galehdar, Kamran, Toulabi, et al. [3]; Kackin, Ciydem, Aci, et al [5]; Moyo, Mgolozeli, Risenga, et al. [9]; Akkus et al. [1], who indicated that health care workers working with COVID-19 patients experienced feelings of social exclusion, loneliness, stigma and discrimination among other stressors. Akkus, Karacan, Güney, et al. [1] added that, the discrimination and stigma experienced by healthcare professionals were exacerbated by ignorance and information propagated by media. In contrast to this finding, Sun et al., (2022) study revealed that, healthcare workers were supported and encouraged by their colleagues.

Apart from negative stressors that healthcare workers have experienced, participants also mentioned that working in COVID-19 isolation wards became an interesting and exciting experience in the later phases of the pandemic as they were able to exercise several skills and they considered themselves heroes who worked where everyone else was not willing to. These findings were coherent with those of the study Akkus, Karacan, Güney, et al. [1] which revealed that participants had positive feelings of pride for working as front liners who saves lives also reported that, the pandemic has helped them recognize how crucial their professions are.

Furthermore, dropping cases of COVID-19 brought peace of mind as well as relaxation in those working in isolation wards as the ward was no longer busy and the even PPE became sufficient as several donations were made by different countries. The findings corresponds with those of Sun et al., (2020) who mentioned that, healthcare workers after receiving their pre-job training there was gradual adaptation and acceptance and they became calm and more relaxed.

5. Conclusion

Based on the results of this study, it can be concluded that COVID-19 Front-liners working in isolation wards are faced with greater challenges as opposed to the well-known challenges among Healthcare workers within Healthcare facilities. The challenges within COVID-19 isolation wards

include shortage of staff, discrimination from community and colleagues, lack of motivation and training for staff. The results necessitate need for the recommendations in the next section.

6. Recommendation

Trainings/refresher courses for HCWs on management of infectious diseases. There is also need for psychological counseling for HCWs. Recruiting more HCWs is recommended together with procurement of supplies for management of infectious diseases.

7. Limitation of the Study

This study was conducted in one district hospital where only a few HCWs were allocated in the COVID-19 isolation ward therefore the results cannot be generalized to the entire country. This study was also the first to be conducted in the country, therefore there was dearth in the local literature to identify knowledge gaps.

Abbreviations

WHO: World Health Organization; HCWs: Healthcare workers.

Funding

This study was funded by the National University of Lesotho.

Competing Interests

The authors declare that they have no competing interests.

Authors' Contributions

All authors participated in all phases of the study including topic selection, design, data collection, data analysis, American Journal of Nursing and Health Sciences 2022; 3 (2): 29-38 37.

Interpretation and presentation. Mahlelehlele & Lebona contribute to write this manuscript. All authors have read and approved the final manuscript.

Availability of Data and Materials

The complete data set supporting the conclusions of this article is available from the corresponding author and can be accessed up on reasonable request.

Consent for Publication

This manuscript has not been published elsewhere and is not under consideration by another journal. All authors have approved the final manuscript and agreed for its publication.

Acknowledgements

We would love to convey our deep gratitude and appreciation for COVID-19 Front-liners at Motebang for their agreement to give us details of their family members, the family members of front-liners for the consent to participate in this study, their cooperation and sacrificing their precious time to participate at this study.

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