

Nurses' Lived Experiences of Caring for Patients with COVID-19 in Nigeria

SAGE Open Nursing
Volume 8: 1–10
© The Author(s) 2022
Article reuse guidelines:
sagepub.com/journals-permissions
DOI: 10.1177/23779608221117384
journals.sagepub.com/home/son



Tosin Popoola, RN, PhD¹ , Victor Popoola, MBBS²
and Katherine Nelson, RN, PhD¹

Abstract

Introduction: Since the beginning of the COVID-19 pandemic, nurses have been on the frontline providing care for patients with COVID-19. Caring for patients with COVID-19 can be a rewarding experience for nurses, but research also suggests that nurses experience numerous challenges on the frontline.

Objectives: This study aims to explore the experiences of frontline nurses caring for patients with COVID-19 in Nigeria

Methods: Ten nurse volunteers working in a COVID-19 isolation center were purposively recruited. Data were collected with a semi-structured interview guide, and a template analysis approach was used to analyze the transcribed interviews.

Results: The participants volunteered at the isolation center for safety reasons, professional gain, and concern for humanity. Working at the isolation center was accompanied by changes in working hours, work dynamics, care context and care tools. These changes resulted in personal, professional, and work-related challenges for nurses. However, team spirit, positive patient outcomes, gratitude and family support helped the nurses cope with the challenges.

Conclusions: This research highlighted that working on the frontline of COVID-19 is associated with multiple and complex challenges that can impact nurses' personal and professional life. Thus, a tailored approach to support is needed to address the challenges faced by frontline nurses.

Keywords

COVID-19, nurses, nurse experience, Nigeria, qualitative study

Received 20 January 2022; Revised 11 July 2022; accepted 16 July 2022

Introduction

Since the first case of COVID-19 was reported in Nigeria in 2020 (Tijjani & Ma, 2020), over 250,000 people have been infected, and around 3000 people have died (Nigeria Centre for Disease Control, 2022). The impact of COVID in Nigeria is comparable to other countries. This is partly due to the mitigation and containment measures pursued by the Nigerian government. Similar to other countries, there have been school closures, cancellation of public events, and border closure. These mitigation measures have restricted access to education (Azubuike et al., 2021), public transportation (Mogaji, 2020), essential medicines (Akande-Sholabi & Adebisi, 2020; Awucha et al., 2020), and social welfare programs (Ozili, 2021).

Before COVID-19 became a public health issue in Nigeria, there were endemic social and public health issues such as poor public health infrastructure and limited social welfare programs (Kalu, 2020; Ohia et al., 2020; Ozili,

2021). With such reality, enforcing COVID-19 guidelines was challenging and this not only contributed to increased COVID-19 infections but also increased pressure on the already fragile healthcare system (Ozili, 2021). Similarly, healthcare workers who were meant to look after patients with COVID-19 were also contracting the virus, further depleting the already thin healthcare workforce. For example, over 15% of patients with COVID-19 in Nigeria were healthcare workers (Alasia & Maduka, 2021).

¹School of Nursing, Midwifery and Health, Victoria University of Wellington's, Wellington, New Zealand

²AIDS Healthcare Foundation, Abuja, Nigeria

Corresponding Author:

Tosin Popoola, School of Nursing, Midwifery and Health, Victoria University of Wellington's, Room 714, Level 7, Clinical Services Building, Wellington Regional Hospital, Wellington, 6021, New Zealand.
Email: Tosin.Popoola@vuw.ac.nz / popooltos@gmail.com



As COVID-19 stretched the healthcare system, studies in Nigeria shifted to the healthcare workers who were bearing the brunt of COVID-19 on the frontline. These studies found that most healthcare workers in Nigeria have good knowledge about COVID-19 and adopt acceptable prevention practices (Odikpo et al., 2021; Tsiga-Ahmed et al., 2021). However, 88.5% of nurses were anxious about working on the frontline (Odikpo et al., 2021). Likewise, the rate of psychological distress among frontline healthcare workers was high, ranging from 23.4% (Olagunju et al., 2021) to 47.0% (Badru et al., 2021).

Despite the prevalence of anxiety and mental distress among frontline healthcare workers in Nigeria, there is a paucity of research on their experiences. Limited studies suggest that healthcare workers in Nigeria feel unsupported, experience stigma, and have concerns about their safety (Afemikhe et al., 2020; Iheanacho et al., 2021; Ogolodom et al., 2020; Okediran et al., 2020). More studies are needed to understand nurses' experiences of working on the frontlines of COVID-19 in Nigeria. This is because detailed information about the realities of nursing on the frontline, challenges faced, and motivations for working on the frontline remain hidden. Given the above, the current study aimed to explore the experiences of frontline nurses caring for patients diagnosed with COVID-19 in Nigeria.

Research Question

What are nurses' experiences of caring for patients with COVID-19 in Nigeria?

Methods

Design

Nurses' experiences of caring for patients diagnosed with COVID-19 in Nigeria were captured from a descriptive qualitative design perspective. A descriptive qualitative design is appropriate when the research goal is to understand and describe a phenomenon (Bradshaw et al., 2017).

Setting

The research setting was a COVID-19 isolation center located within a referral hospital in southwest Nigeria. The isolation center started operating in April 2020 during the first wave of COVID-19 in Nigeria. Nurses who work at this center took the job voluntarily. The isolation center is an eight-bedded open ward devoted mainly to managing patients diagnosed with COVID-19. Both male and female patients are admitted into the ward, but each bed has its own screen for privacy. The isolation center operates on a 12-h nursing shift (0800–2000), with two nurses per shift. Depending on the number of admitted patients, the nurse-patient ratio is usually one nurse to four patients when the

ward is at total capacity. The COVID-19 cases managed in this center are typically mild and would not require ventilators or intubation. Patients who deteriorate and need intubation are usually referred to a higher acuity center. However, the center has the capacity to administer oxygen which many of the patients require at some point during their stay.

The isolation center is divided into three separate rooms. The first room is the red zone, where patients with COVID-19 are admitted. The second room is the nurses' station, where nurses plan their care. The third room is where nurses can pass PRN medications to patients and have more private conversations with patients. There is a transparent glass barrier separating nurses and patients in the third room, and nurses wear their PPE. Except for emergencies, entry to the red zone is limited to twice per shift. To achieve the goal of minimal entry into the red zone, nurses rely on CCTV cameras and the CCTV monitor in the nurses' station. Depending on patients' health conditions, nurses might not need to enter a patient's room during a shift, but they cluster all their care together when they do. The nurses' station also has a public address/telecommunication system for nurse-patient communication. Nurses mostly enter the red zone to administer medications, including oxygen and insulin. To further minimize nurse's need to enter the red zone, patients are trained and provided with an automatic sphygmomanometer, infrared thermometers, and pulse-oximeter on admission to take their own vital signs.

The period between the opening of the isolation center (add year) and the data collection (add year) has seen many policy changes that directly impact work routines at the isolation center. In the first three months of the opening of the isolation center, nurses worked 14 days shift. They then proceeded on mandatory quarantine for another 14 days in a managed isolation facility. Nurses who test negative to COVID-19 after the mandatory isolation are released to go home to their families for seven days, after which the shift work is re-started.

Population, Sampling and Sample Size

The study population are the 15 registered nurses working at the isolation center. Each of the 15 nurses was eligible for the study by XX, of which 10 nurses joined the study. The non-participation of the remaining nurses was due to a lack of time or interest in the study. The nurses were recruited based on their experience of caring for patients diagnosed with COVID-19 in the isolation center, which means the recruitment strategy was purposive.

Recruitment Process

One of the nurses working at the isolation center served as the intermediary between the first author and the participants. This intermediary first discussed the study with the frontline

nurses, and they all initially signified their interest in learning more about the study. After that, the primary author contacted the nurses individually through WhatsApp text messages and sent them participant information sheets, ethical clearances, and informed consent forms. Within a week of exchanging information about the study, the primary author checked in with individual nurses to ascertain their interest in participation. Although all 15 nurses initially agreed to be part of the study, only 10 eventually participated. The nurses willingly agreed to participate in the study by providing written informed consent; verbal informed consent was also recorded before data collection commenced.

Data Collection Tool and Procedures

The data for the study were collected with a semi-structured interview guide between December 2020 and January 2021 over Zoom, a video conferencing tool. Permission to record the interviews was obtained from all the participants at the beginning of every interview. Because of the ethical issues of privacy and confidentiality, only audio recordings of the interviews were obtained. The researchers developed the interview guide (Figure 1) based on the study aim and the literature review. The interview guide was structured to explore participants' demographics, training before starting work at the isolation center, the day-to-day realities of working in the isolation ward, and the challenges/impact of working there. The interviews were in-depth, lasting between 50

and 116 min (averaged 75 min). All interviews were conducted in English by the first author, and most participants were at home when the interviews took place.

Data Analysis

The transcribed data were analyzed according to the convention of template analysis. Template analysis is a form of thematic analysis where a coding template is developed based on a subset of data (Brooks et al., 2015). The coding template is then applied to further data such as remaining transcripts and then refined by the emerging data. In the present study, all the transcripts were initially manually hand-coded independently by the first and third authors (TP and KN). After that, TP and KN met to discuss the inductively derived codes. During the coding meeting, the independently derived themes were defined, clustered into themes/sub-themes based on the hierarchical relationships between them and a coding template was derived. The coding template was then used by the first and second authors (TP and VP) to re-examine all the transcripts. The re-examination of the transcripts and the sorting of data into the initial template was completed with NVivo software. The transcripts were re-read to identify data that fit the template. Data that did not fit the template were incorporated into the template and this resulted into changes in the template. Template analysis facilitated reflexivity amongst the authors and all authors were satisfied with the results.

1. Tell me about yourself
 - a. When did you first register as a nurse?
 - b. What clinical area do you normally work in?
 - c. What is your family situation (e.g live alone, married with children etc)
 - d. How did you end up working at the Isolation center and why did you decide to work here?
2. What orientation/ training did you have for your new role in the isolation center?
 - a. How prepared were you for your new role?
 - b. What, if anything, would you have liked to know before commencing in your new role?
3. Working in the Isolation center
 - a. Describe what a typical day looks like at the isolation center
 - b. What tools do you use in caring for patients diagnosed with COVID-19 that are different from your previous working environment?
 - c. What challenges have you faced since taking up your new role?
 - d. If you are going to change anything about how you work at the isolation center, what would it be?
4. Personal impact
 - a. How do you manage your personal risk of exposure to Covid-19?
 - b. How has working in the isolation center affected you, your family and your relationships with others?
 - c. What support have you received since working at the isolation center?
5. Any other comments about nurses' work and Covid-19 in Isolation Units or Nigeria generally

Figure 1. Interview guide.

Trustworthiness/Rigor

This study followed the criteria for evaluating rigor in qualitative research (Cope, 2014). Prolonged engagement with the participants, use of verbatim quotations to support themes, member-checking, and peer-debriefing among the authors during analysis strengthened the case for the study's credibility. Because the first author conducted all interviews, there was consistency in the data collection procedure, which ensured dependability. The research process was adequately described, and this will facilitate others' decisions about transferability or replicability.

Institutional Review Board Approvals

Ethical approvals to conduct this study were received from Human Ethics Committee of Victoria University of Wellington (#28988) and Ethics and Research Committee of Obafemi Awolowo University Teaching Hospitals Complex (ERC/2020/12/04). Key ethical issues were participant confidentiality and management of the confidentiality of third-party people named.

Results

Sample Characteristics

The sample consisted of seven males and three females. Participants' ages ranged between 35 and 47 years, with the average age being 38.6 years. Consistent with the age of the participants, years of working experience as nurses ranged between 10 and 30 years, with most of the participants (80%) also being at the rank of senior nursing officer or higher. Apart from one single participant living alone, all the participants were married with children and lived with their families. All the participants had Bachelor of Nursing degrees, which is the minimum criterion for employment in the teaching hospital where the isolation center was located. Before volunteering at the isolation center, all the participants worked in various specialized units in the teaching hospital (Table 1), but they all received dedicated training on infection control before starting work at the isolation center. The isolation center mainly admitted patients with mild cases of COVID-19, which means most of the patients are independent and ambulant. The patients' ages in the isolation center ranged from 5 to 80 years and were mostly males.

Template analysis results. A total of 18 subthemes were identified from the interviews, and these were grouped into four overarching themes: i. reasons for volunteering; ii. nature of care; iii. challenges associated with caring for patients with COVID-19; and iv. strategies for surviving the job.

Table 1. Participants' Characteristics.

	N = 10
Age in years	
Mean (range)	38.6 (35–47)
Working experiences as nurses in years	
Mean (range)	16.5 (10–30)
Gender	
Male	7
Female	3
Marital status	
Married	9
Single	1
Clinical area before isolation center	
Accident and Emergency Department	4
Renal Department	2
Intensive Care Unit	1
Theatre Department	1
Labor Ward	1
Public Health Department	1
Educational Qualifications	
RN, BNSc	10
Nursing Rank	
Nursing Officer I	2
Senior Nursing Officer	3
Assistant Chief Nursing Officer	2
Chief Nursing Officer	3
Working experience in isolation center in months	
Seven months	9
Six months	1
Ethnicity	
Yoruba	10

Theme 1: Reasons for Volunteering

Safety reasons. Most participants (7) said they volunteered at the isolation center for safety reasons. Safety was discussed in two folds. First, the participants said they were worried that working in the general wards would expose them to COVID-19 due to low testing in Nigeria. As a result, they thought the isolation center was safer because it provides certainty around patients' COVID-19 status, which was thought necessary for adopting and adhering to safety instructions. Second, the participants thought that since the center was dedicated to managing COVID-19 positive patients, it would be better equipped to deal with infection control than other wards.

I thought working as a nurse at the isolation center was safer because you know you are managing people who have been diagnosed, and you are consciously taking precautions...nurses in other settings have no way of knowing if their patients have been exposed...I also believe that since the center is dedicated to COVID-19, they [management] will provide us with the tools to do the job. (P4)

Personal/professional gain. Many of the participants (5) said they anticipated that working at the isolation center would benefit their careers and increase their knowledge about COVID-19.

I am someone who wants to learn something new, and I know that I cannot learn about COVID-19 if I am not part of the team involved in the care of COVID-19 patients...but besides that, I am also working there [isolation center] because I need the experience to boost my CV. I am eyeing international positions outside the country. I know that outside the country, I will be rated based on my experience and what I have on my CV. (P7)

Humanitarian/call of duty. Many participants also said their decision to volunteer was due to professional obligations and concern for humanity.

I saw working at the isolation center as part of my humanitarian job...I felt it was still part of my job as a nurse. The patients cannot be neglected like that; they still need someone to take care of them. (P1)

I am called to serve, and that has been my philosophy. When the clarion call came, I signified my interest. (P9)

Theme 2: Nature of Care

Working at the isolation center was a new experience for the participants because of the changes accompanying infection control measures. Caring work was adjusted according to technological tools and care practicalities.

Use of technology. Technological tools such as CCTV and telephonic communication tools such as public address systems were introduced to limit direct and face-to-face interactions with patients. Most nursing interventions such as patient communication, observations and assessments occurred through these technological tools. Thus, nurses observed patients through CCTV monitors instead of direct patient observation. Likewise, instead of one-on-one communication with patients, a public address system was used to deliver group interventions such as educating patients on self-care and taking their own vital signs.

Monitoring of patients is not direct. We monitor them [patients] virtually through the CCTV camera...what we do is that we fix our eyes on the CCTV monitor, especially when a patient is clinically unstable. We also use a public address system to communicate with patients about their care and even educate them about how to take their own vital signs. (P7)

Care practicalities. Because of reduced access to patients, nurses utilized different strategies such as clustering of nursing interventions. For example, during a 12-h shift, the nurses on duty could only enter the red zone twice to provide direct patient care. Because of the reduced contact with patients, nurses had to bundle many nursing activities when entering the red zone. This approach required detailed planning and efficient execution of planned/unplanned activities within a relatively short period.

Timing is crucial in the isolation center. When we go into the red zone, we usually make sure that we take our tasks together so that we don't have reasons to go in more than twice during any 12-h shift. Besides pulling our procedures together at any particular entry into the red zone, we also perform all procedures within the shortest possible time to limit our exposure. (P2)

Theme 3: Challenges Associated with Caring for Patients with COVID-19

The participants experienced various challenges at the isolation center, and these challenges were related to the work setting, professional and personal aspects.

Work setting challenges

Shortage of Equipment. Shortage of equipment was a challenge that all the participants experienced. However, the equipment supply was not a problem when the center first opened.

When the isolation center was first opened, we had an adequate equipment supply, but as time went on, PPE supply started to dwindle. The government and the management started rationing equipment. For example, the total number of PPE released to the isolation center per day was reduced to five. This affected how we operate and limited what we could do for patients. (P4)

The shortage of equipment was experienced in terms of lack of personal sizes of PPE and absolute lack of PPE. The limited equipment supply means nurses start their shift with concerns about equipment.

The first thing that I do on the resumption of every shift is to check the materials that we have. Do we have the sizes that I need? There are occasions where I could not find an appropriate PPE size. Sometimes the gloves are too tight. (P10)

The limited equipment supplies created conditions for unsafe practices, such as choosing between two or more equally essential nursing interventions and handing over

nursing responsibilities that could have been completed to the next shift.

There was a time when a patient was on IV fluids. When the IV fluids got finished, and we had to change it, only one Tyvek suit remained for the shift, and I still had important procedures like medication rounds. I found myself weighing up my options between continuous rehydration and medication – which one should I use the Tyvek for? Sometimes, we have to delay tasks or pass them on to the next shift. (P7)

All the participants said inadequate resources made them seem unprofessional to the patients.

I have found myself in situations where I had to open up to patients that I could not attend to them because there were no materials. I did that because the patient was feeling ignored and neglected. I was also troubled that the inability to continue to perform my nursing responsibilities could lead to physiological harm and negatively impact the patient's chances of recovery. In such situations, I could no longer cover for the management because it is not the nurses' fault, but that of the system. (P7)

Fear of Infection. Although the participants had training for infection control before they joined the center, they said they were always in a state of apprehension because of the risk of infection and its impact on them and their families. The participants found themselves always linking every symptom they had to COVID-19. They also described how they compulsively followed all the precautions, including ritualistic handwashing and liberal use of hand sanitizers even when not needed.

Another challenge is the fear of contracting the disease. Whenever I feel a slight headache or fever or slight change in my health, I get apprehensive, thinking they are signs of COVID. I begin to wonder if I have been exposed. I become apprehensive as I wait for routine testing of COVID-19. Even after being routinely swabbed, you enter another period of apprehension because you don't know if the result will come out negative or positive. (P7)

I am always cautious. I wash my hands until they turn white, and I apply hand sanitizer. I was combining handwashing with hand sanitizer because I wanted to protect myself. Besides, I also have a family to go back to. (P8)

Physical Discomfort from Equipment. While the PPE is central to the nurses' assurance of protection and safety against infection with COVID-19, using the equipment was not straightforward because of physical discomfort.

The attire, the suit and the goggles are not comfortable to wear, including the donning and doffing. Being inside the Tyvek suit is uncomfortable because no part of the body is exposed. At times, the goggle gets fogged, and one may feel dizzy. (P6)

Boredom from Long Working Hours. The participants' working hours increased from 8-h to 12 h-hour shifts. The long working hours and the nature of care at the isolation center was described as dull, monotonous, and less stimulating.

When you have a stable COVID-19 patient, all you do is administer medications and monitor the CCTV. It is not as energizing and challenging as the operating theatre I used to work [in]. (P4)

A typical day at the isolation center is boring and tiring, though it depends on the cases of the patients. When patients are ambulant, you just monitor them through the CCTV, which can be very boring. But when patients are so dependent, and you have to support them for bed baths or when they are on IV medications, it can be so busy and apprehensive...but all in all, working at the isolation ward is boring and monotonous. (P6)

Feeling Under-Appreciated. The participants felt under-appreciated, under-valued and said the government reneged on their promises of support.

The support was not there, and there was also the issue of remuneration. Although everything is not about money, sometimes when people are well remunerated, they are motivated. When we first started, the government promised heaven and earth, but they did not fulfill most promises. The hazard and call allowances that we were promised was not just low, but we were only paid for just three months, and that was it...it made us feel under-valued. (P4)

Professional challenges

Potential Abuse and Violence from Patients. The participants said working at the isolation center exposed them to threats of violence and verbal abuse from patients. There was even a case where a patient abducted one of the health-care workers.

A patient once talked to me in an abusive manner on the intercom. The way he spoke to me was not good. He was transferring aggression to me, but I understand that it is not easy to be in isolation. (P1)

One of the hygienists was abducted by a patient in the red zone while decontaminating the ward. The senior management team had to negotiate his release because the patient would not release him until there was assurance that he would be discharged immediately. It was a traumatic experience for us...we witnessed a patient holding one of us hostage while threatening to rip his PPE open and expose him to the virus. (P8)

While participants admitted that patients admitted at the isolation center were generally more difficult to deal with compared to their previous wards, there was a sense that healthcare workers with COVID-19 were even more challenging to care for. The participants said healthcare workers with COVID-19 “created problems and scenes” (P6) and “*expected preferential treatment because of their health worker status*” (P2).

Moral and Ethical Tensions. The participants said they frequently questioned whether they were doing enough for patients. They shared they often get disturbed because the nursing care was less than ideal and un-holistic.

It is quite tricky to nurse patients in the isolation ward because everything that makes you a nurse is what you are trying to avoid. Being in a PPE while attending to patients and performing tasks in a jiffy reduces connection with patients and makes it difficult to establish interpersonal relationships with the patients... constantly ask myself: ‘am I doing enough? Is my patient not feeling neglected? Is my patient feeling okay and not depressed?’ (P10)

The nursing that we practice at the center doesn’t look like the nursing I am used to. When I go inside the red zone, the patients have many questions that they want you to answer, but there is no time to answer those questions. Sometimes patients are anxious, but you can’t do much to allay their worries or reassure them because you can’t afford to stay longer with them. All of this impacted me because I am not able to give the patient the best care that is required of a nurse. (P2)

Personal challenges

Stigma and Shaming. The participants were treated as carriers of COVID-19, with people branding them ‘coronurses’ and stigmatizing and alienating them.

Let me start with what it feels like to work at the isolation center. It is like everybody stigmatize. They don’t want anything to do with you and treat you as if you are a reservoir of the virus...Even my colleagues started avoiding me. (P1)

The participants were also disparaged for volunteering at the isolation center. People told the participants they were risking their lives and their family’s welfare for monetary gains.

After I volunteered at the isolation center, people started insinuating that I did it because of my love of money or because I don’t love myself and my family. Many people did not believe it was not for the money. (P10)

Family Separation. The participants experienced family separation because of policies initially adopted at the isolation center to minimize the spread of infection. Family separation impacted negatively on participants’ psychological wellbeing.

The other challenge was that we do not run the type of shift that you go home to your family at the end of the day. When the isolation center first opened, the routine was 14 days of work and another 14 days of quarantine in a managed isolation center...you are separated from your family for a month. For someone who hasn’t been away from his family for such a long time, that caused was psychological disturbances. (P7)

Theme 4: Strategies for Surviving the job

Teamwork. Team spirit and inter-professional collaboration at the isolation center were high points for the participants. The participants said the blurring of professional boundaries and the absence of workplace politics/ego led to good team spirit.

The team spirit was excellent at the isolation ward...it didn’t matter who did what. Sometimes, it could be a doctor going inside the red zone, and s/he may have to do some nursing procedures that he knows how to do. If it’s the nurse that goes in, s/he may have to do some medical procedure that he knows how to do. (P10)

Nurses and doctors do fight a lot on the ward. But in the isolation center, doctors worked with nurses amicably. That’s why I said I loved my experience here. We worked together as a team. We are one big family that care for each other because we know that if one person gets infected, others would also be affected. (P8)

Family support. All the participants said their families initially tried to dissuade them from taking the job at the isolation center because of the risk of infection. However, they were all supported by their families. The participants’ families stayed connected with them through regular phone and video calls.

Thankfully, I have a very caring and up-to-the-task wife who held the fort for me in my absence...We communicate through video calls every day, they see my face and I see theirs. We spoke on the phone regularly. That mitigated our fears to a large extent. (P7)

My wife was skeptical, but I explained everything to her. I told her that procedures are in place to keep me safe and

that I have received adequate training to keep myself safe... she grudgingly agreed to my volunteering, but she has been my pillar of support. (P4)

Celebrating patients' positive outcomes. Up to the time of data collection, the isolation center had not reported any fatality. This positive outcome contributed positively to the participants' job satisfaction and work meaningfulness because they felt their nursing practice and efforts contributed positively to patients' outcomes.

Since...we have not recorded any mortality. It gives us joy. We are happy that we put smiles on people's faces. Patients' come into the center panicking, thinking they have a death diagnosis, but they leave happily. (P5)

Embracing gratitude. The participants received and embraced gratitude from patients, family, and friends. Some said they felt like heroes because of the extent people went to highlight their contribution to the pandemic.

When people hear that you work at the isolation center, they appreciate you as a hero. On Facebook and WhatsApp, I see people using my pictures as their display pictures. They appreciated my work at the isolation center. This makes you feel special, and I think it also boosts the image of nursing. (P1)

The patients were very appreciative because they knew there was so much stigma out there. They were grateful that we were putting our lives on the line to look after them. (P4)

Discussion

This study provides insights into nurses' experience of caring for patients with COVID-19 in Nigeria. Evidence from this study confirmed findings from earlier studies that have suggested that nurses who work on the frontline make their decision based on a duty of care, knowledge acquisition, and concern for humanity (Khanjarian & Sadat-Hoseini, 2021; Moghaddam-Tabrizi & Sodeify, 2021; Rathnayake et al., 2021; White, 2021). The present study adds that in contexts such as Nigeria where there is low testing among the public, nurses may perceive the frontlines as a safer place to work because of certainty about patients' COVID-19 status. Similarly, nurses may also choose to work on the frontline if they perceive that they will be better equipped to perform their nursing responsibilities safely. However, despite that the participants volunteered for safety reasons, caring for patients with COVID-19 also generated intense fear.

While the participants volunteered based on the impression that they would have adequate resources to do their jobs safely, the reality of the job was far from their expectations. As an illustration, they faced shortages of equipment, experienced abuse from patients, and endured long working hours.

The challenges that the participants faced mirror earlier studies. As an illustration, fear of infection, shortage of equipment, physical discomfort from PPE, long working hours, feelings of under-appreciation, and isolation from family have been reported in places such as Canada (Mohammed & Lelievre, 2022), Jordan (Khatatbeh et al., 2021), Iran (Karimi et al., 2020), Sri Lanka (Rathnayake et al., 2021) and the UK (Roberts et al., 2021). This similarity indicates that the challenges that frontline nurses are facing in Nigeria are similar to other places.

The findings of the present show that volunteering out of concern for humanity did not insulate nurses from COVID-19-related stigma. COVID-19-related stigma is a common experience among frontline nurses and has been reported in Canada (Mohammed & Lelievre, 2022), Jordan (Khatatbeh et al., 2021), Turkey (Muz & Erdogan, 2021) and the US (Robinson & Stinson, 2021). The impact of stigma is consistent in that it alienates nurses from their social circle, increases their feelings of social isolation and discrimination, and changes their social/personal lives (Khatatbeh et al., 2021; Muz & Erdogan, 2021; Robinson & Stinson, 2021). While people's fear of infection influenced stigma, nurses in the present study were also shamed for working on the frontline. People argued that nurses who took the job prioritized money over the wellbeing of themselves and their families. This suggests that shame and stigma can make the work of frontline nurses even more challenging and needs to be taken into consideration when planning support for frontline healthcare workers.

The findings of this study illustrate that working on the frontlines of COVID-19 is associated with marked changes in working hours, work dynamics, care context and care tools. However, while these changes are instituted to minimize the spread of infection and manage equipment scarcity, they generated multiple challenges for nurses. For example, the clustering strategy utilized to deliver nursing care in this study and other studies (Mohammed & Lelievre, 2021; Rathnayake et al., 2021) resulted in limited care time with patients. Limited care time with patients and perceptions of un-holistic care contributed to moral tensions and can lead to poor professional outcomes. As an illustration, it has been reported that ethical tensions and loss of control over nursing practice on the frontlines of COVID-19 are associated with mental/physical exhaustion, guilt, moral distress, feelings of powerlessness and work dissatisfaction (Conz et al., 2021; Lulgjuraj et al., 2021; Moghaddam-Tabrizi & Sodeify, 2021; Rathnayake et al., 2021; Roberts et al., 2021; White, 2021). Similarly, long working hours and changes in work routines resulted in negative thoughts, physical tiredness, psychological harm, poor concentration, and increased consumption of coffee/cigarettes among frontline nurses in Jordan (Khatatbeh et al., 2021) and Sri-Lanka (Rathnayake et al., 2021). This highlights that frontline nurses need to be supported with conducive working environments so that they can focus on patient care and be better equipped to deal with ethical issues in their practice.

The present study reveals that working on the frontline of COVID-19 can negatively impact nurses' personal, professional, and work-related aspects of life. However, good team spirit, positive patient outcomes, patient appreciation, and family support can ameliorate the challenges nurses encounter on the frontlines. This indicates that incorporating gratitude into healthcare feedback, boosting team spirit, and supporting nurses to achieve positive patient outcomes and stay connected with their families can increase resilience and help them cope better with their job. Other studies have also identified spirituality, music, exercise, and family support (Kackin et al., 2021; Lulgjuraj et al., 2021; Rathnayake et al., 2021; Robinson & Stinson, 2021) as critical coping mechanisms among frontline nurses.

Strengths and Limitations

This study provided in-depth information on the experiences, challenges and coping strategies of nurses working on the frontlines of COVID-19 in Nigeria. The findings from the present study can be used to design and provide tailored support for nurses working on the COVID-19 frontline. The limitations of this study are related to the use of Zoom for interviews and the small number of participants drawn from a single isolation center. While the interviews were in-depth, there were occasions where probes could not be used effectively because of poor internet connectivity or participant(s) wanting to attend to something else. Since the participants were still working at the isolation center when the data were collected, they might not have had the time to reflect on their experience. Taken together, it is still possible that the findings did not capture all the experiences associated with caring for patients with COVID-19 in Nigeria.

Conclusion

The findings of this study demonstrate that nurses can be relied upon to work during pandemics because of their commitment to duty of care. However, nurses working on the frontlines also have valid concerns about the nature of care, adequacy of equipment, welfare packages and safety on the job. These concerns can be addressed by encouraging teamwork, providing generous welfare packages, incorporating gratitude in patient-nurse interactions, and ensuring safe working environments. Such strategies can eliminate many of the challenges that nurses face regarding ethical tensions, feelings of under-appreciation, helplessness, and burnout.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.


Ethical Approvals

Ethical approval from Human Ethics Committee of the Victoria University of Wellington (28988) and Ethics and Research Committee of Obafemi Awolowo University Hospitals Complex (ERC/2020/12/04)

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work was financially supported by a Victoria University of Wellington Residual Grant to author TP. Award monies went to publishing this article open access.

ORCID iD

Tosin Popoola  <https://orcid.org/0000-0003-2761-7783>

References

- Afemikhe, J. A., Esewe, R. E., Eneku, C. A., & Ehwarieme, T. A. (2020). Transmission based precaution practices among nurses in Edo State, Nigeria during COVID-19 pandemic. *African Journal of Reproductive Health, 24*(2), 98–107. <https://www.ajol.info/index.php/ajrh/article/view/199072>
- Akande-Sholabi, W., & Adebisi, Y. A. (2020). The impact of COVID-19 pandemic on medicine security in Africa: Nigeria as a case study. *The Pan African Medical Journal, 35*(Suppl 2), 73. <https://doi.org/10.11604/pamj.suppl.2020.35.2.23671>
- Alasia, D. D., & Maduka, O. (2021). Prevalence and pattern of COVID-19 among healthcare workers in Rivers State Nigeria. *Occupational Diseases and Environmental Medicine, 09*(01), 20–32. <https://doi.org/10.4236/odem.2021.91003>
- Awucha, N. E., Janefrances, O. C., Meshach, A. C., Henrietta, J. C., Daniel, A. I., & Chidiebere, N. E. (2020). Impact of the COVID-19 pandemic on consumers' access to essential medicines in Nigeria. *The American Journal of Tropical Medicine and Hygiene, 103*(4), 1630. <https://doi.org/10.4269/ajtmh.20-0838>
- Azubuikwe, O. B., Adegboye, O., & Quadri, H. (2021). Who gets to learn in a pandemic? Exploring the digital divide in remote learning during the COVID-19 pandemic in Nigeria. *International Journal of Educational Research Open, 2*(2021), 1–10. <https://doi.org/10.1016/j.ijedro.2020.100022>
- Badru, O. A., Oloko, K. O., Hassan, A. O., Yusuf, O. B., Abdur-Razaq, U. A., & Yakub, S. (2021). Prevalence and correlates of psychological distress amongst healthcare workers during the COVID-19 pandemic: An online survey. *South African Journal of Psychiatry, 27*(1), 1–7. <http://dx.doi.org/10.4102/sajpsy.2021.01617>
- Bradshaw, C., Atkinson, S., & Doody, O. (2017). Employing a Qualitative Description Approach in Health Care Research. *Global Qualitative Nursing Research, 4*, 1–8. <https://doi.org/10.1177/2333393617742282>
- Brooks, J., McCluskey, S., Turley, E., & King, N. (2015). The utility of template analysis in qualitative psychology research. *Qualitative Research in Psychology, 12*(2), 202–222. <https://doi.org/10.1080/14780887.2014.955224>
- Conz, C. A., Braga, V. A. S., Vasconcelos, R., Machado, F. H. R. D. S., De Jesus, M. C. P., & Merighi, M. A. B. (2021). Experiences of intensive care unit nurses with COVID-19 patients. *Revista Da Escola De Enfermagem Da USP, 55*, 1–9. <https://doi.org/10.1590/1980-220x-reeusp-2021-0194>

- Cope, D. G. (2014). Methods and meanings: Credibility and trustworthiness of qualitative research. *Oncology Nursing Forum*, *41*(1), 89–91.
- Iheanacho, T., Stefanovics, E., Okoro, U. G., Anyaehie, U. E., Njoku, P. O., Adimekwe, A. I., Ibediro, K., Stefanovics, G. A., Haeny, A., Jackson, A., Unamba, N. N., Isiguzo, G., Chukwu, C. C., Anyaehie, U. B., Mbam, T. T., Osy-Eneze, C., & Ibezim, E. O. (2021). Assessing knowledge, attitude, practice and training related to COVID-19: A cross-sectional survey of frontline healthcare workers in Nigeria. *BMJ Open*, *11*(9), e050138. <https://doi.org/10.1136/bmjopen-2021-050138>
- Kackin, O., Ciydem, E., Aci, O. S., & Kutlu, F. Y. (2021). Experiences and psychosocial problems of nurses caring for patients diagnosed with COVID-19 in Turkey: A qualitative study. *International Journal of Social Psychiatry*, *67*(2), 158–167. <https://doi.org/10.1177/0020764020942788>
- Kalu, B. (2020). COVID-19 in Nigeria: A disease of hunger. *The Lancet. Respiratory Medicine*, *8*(6), 556–557. [https://doi.org/10.1016/S2213-2600\(20\)30220-4](https://doi.org/10.1016/S2213-2600(20)30220-4)
- Karimi, Z., Fereidouni, Z., Behnamoghdam, M., Alimohammadi, N., Mousavizadeh, A., Salehi, T., Mirzaee, M. S., & Mirzaee, S. (2020). The lived experience of nurses caring for patients with COVID-19 in Iran: A phenomenological study. *Risk Management and Healthcare Policy*, *13*, 1271–1278. <https://doi.org/10.2147/rmhp.s258785>
- Khanjarian, F., & Sadat-Hoseini, A. S. (2021). Lived experiences of nurses providing altruistic care to patients with COVID-19. *Nursing Outlook*, *69*(5), 767–779. <https://doi.org/10.1016/j.outlook.2021.03.021>
- Khatatbeh, M., Alhalaiqa, F., Khasawneh, A., Al-Tammemi, A. B., Khatatbeh, H., Alhassoun, S., & Al Omari, O. (2021). The experiences of nurses and physicians caring for COVID-19 patients: findings from an exploratory phenomenological study in a high case-load country. *International Journal of Environmental Research and Public Health*, *18*(17), 9002. <https://doi.org/10.3390/ijerph18179002>
- Luljuraj, D., Hubner, T., Radzinski, N., & Hopkins, U. (2021). Everyone is someone's child: The experiences of pediatric nurses caring for adult COVID-19 patients. *Journal of Pediatric Nursing*, *60*(2021), 198–206. <https://doi.org/10.1016/j.pedn.2021.06.015>
- Mogaji, E. (2020). Impact of COVID-19 on transportation in Lagos, Nigeria. *Transportation Research Interdisciplinary Perspectives*, *6*(2020), 1–7. <https://doi.org/10.1016/j.trip.2020.100154>
- Moghaddam-Tabrizi, F., & Sodeify, R. (2021). Lived experiences of nurses in the care of patients with COVID-19: A study of hermeneutic phenomenology. *Iranian Journal of Nursing and Midwifery Research*, *26*(6), 537–543. https://doi.org/10.4103/ijnmr.IJNMR_319_20
- Mohammed, N., & Lelièvre, H. (2022). Lived experience of medicine nurses caring for COVID-19 patients: A quality improvement perspective. *Journal of Nursing Care Quality*, *37*(1), 35–41. <https://doi.org/10.1097/NCQ.0000000000000590>
- Muz, G., & Erdoğan Yüce, G. (2021). Experiences of nurses caring for patients with COVID-19 in Turkey: A phenomenological enquiry. *Journal of Nursing Management*, *29*(5), 1026–1035. <https://doi.org/10.1111/jonm.13240>
- Nigeria Centre for Disease Control (2022, January 16). COVID-19 Nigeria. <https://covid19.ncdc.gov.ng/>
- Odikpo, L. C., Abazie, H. O., Emon, D., Mobolaji-Olajide, M. O., Gbahabo, D. D., & Musa-Malikki, A. (2021). Knowledge and reasons for anxiety among nurses towards COVID –19 in Nigeria. *African Journal of Infectious Diseases*, *15*(2), 16–23. <https://doi.org/10.21010/ajid.v15i2.4>
- Ogolodom, M. P., Mbaba, A. N., Alazigha, N., Erondu, O. F., Egbe, N. O., Golden, I., Ugwuanyi, D. C., Achi, G. I., & Eke, C. M. (2020). Knowledge, attitudes and fears of healthcare workers towards the Corona virus disease (COVID-19) pandemic in South-South, Nigeria. *Health Science Journal*, *1*(2), 1–10. <https://doi.org/10.36648/1791-809X.S1.002>
- Ohia, C., Bakarey, A. S., & Ahmad, T. (2020). COVID-19 and Nigeria: putting the realities in context. *International Journal of Infectious Diseases*, *95*(2020), 279–281. <https://doi.org/10.1016/j.ijid.2020.04.062>
- Okediran, J. O., Ilesanmi, O. S., Fetuga, A. A., Onoh, I., Afolabi, A. A., Ogunbode, O., Olajide, L., Kwaghe, A. V., & Balogun, M. S. (2020). The experiences of healthcare workers during the COVID-19 crisis in lagos, Nigeria: A qualitative study. *GERMS*, *10*(4), 356–366. <https://doi.org/10.18683/germs.2020.1228>
- Olagunju, A. T., Bioku, A. A., Olagunju, T. O., Sarimiye, F. O., Onwuameze, O. E., & Halbreich, U. (2021). Psychological distress and sleep problems in healthcare workers in a developing context during COVID-19 pandemic: Implications for workplace wellbeing. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, *110*(2021), 1–5. <https://doi.org/10.1016/j.pnpbp.2021.110292>
- Ozili, P. K. (2021). COVID-19 pandemic and economic crisis: The Nigerian experience and structural causes. *Journal of Economic and Administrative Sciences*, *37*(4), 401–418. <https://doi.org/10.1108/jeas-05-2020-0074>
- Rathnayake, S., Dasanayake, D., Maithreepala, S. D., Ekanayake, R., & Basnayake, P. L. (2021). Nurses' perspectives of taking care of patients with coronavirus disease 2019: A phenomenological study. *PLOS ONE*, *16*(9), e0257064. <https://doi.org/10.1371/journal.pone.0257064>
- Roberts, N. J., Kelly, C. A., Lippiett, K. A., Ray, E., & Welch, L. (2021). Experiences of nurses caring for respiratory patients during the first wave of the COVID-19 pandemic: an online survey study. *BMJ Open Respiratory Research*, *8*(1), e000987. <https://doi.org/10.1136/bmjresp-2021-000987>
- Robinson, R., & Stinson, C. K. (2021). The lived experiences of nurses working during the COVID-19 pandemic. *Dimensions of Critical Care Nursing*, *40*(3), 156–163. <https://doi.org/10.1097/DCC.0000000000000481>
- Tijjani, S. J., & Ma, L. (2020). Is Nigeria prepared and ready to respond to the COVID-19 pandemic in its conflict-affected northeastern states? *International Journal for Equity in Health*, *19*(77), 1–4. <https://doi.org/10.1186/s12939-020-01192-6>
- Tsiga-Ahmed, F. I., Amole, T. G., Musa, B. M., Nalado, A. M., Agoyi, O. B., Galadanci, H. S., & Salihu, H. M. (2021). COVID 19: Evaluating the knowledge, attitude and preventive practices of healthcare workers in northern Nigeria. *International Journal of MCH and AIDS*, *10*(1), 88–97. <https://doi.org/10.21106/ijma.418>
- White, J. H. (2021). “It was never enough”: The meaning of nurses' experiences caring for patients during the COVID-19 pandemic. *Issues in Mental Health Nursing*, *42*(12), 1084–1094. <https://doi.org/10.1080/01612840.2021.1931586>