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Lived experiences of nurses working in the clinical setting during Covid-19, in Ekurhuleni, Gauteng Province, South Africa

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ABSTRACT

Background: The Coronavirus 2019 (COVID-19) outbreak rose rapidly and had a strenuous impact on the healthcare systems. As the health system responded to the pandemic, there was a change in the care rendered. Additionally, as more people became infected with the virus, the number of nurses reduced resulting in prolonged working hours and increased burden of care for the remaining few nurses. This study aimed to gain an in-depth understanding of the lived experiences of nurses working in the clinical setting during the COVID-19 pandemic in Ekurhuleni, Gauteng Province.

Methods: The study followed a descriptive phenomenological approach. In-depth interviews were conducted face-to-face and telephonically with thirteen professional nurses who were purposively sampled as they had nursed COVID-19 positive patients in a hospital in Ekurhuleni District, Gauteng Province, South Africa. The audio-recorded interviews were transcribed and inductively analysed using descriptive phenomenological analysis with the aid of the ATLASti Version 9 program.

Findings: Four themes emerged: (1) Nurse's social life during COVID-19 pandemic. (2) Challenges in the clinical setting during COVID-19 pandemic. (3) COVID-19 pandemic impact on patient care. (4) Nurse's future recommendations for pandemic management.

Conclusion: The results of this study indicated that professional nurses who nursed COVID-19 patients suffered psychological distress and physical burnout. Having insufficient resources, which included Personal Protective Equipment (PPE) and other equipment exposed the nurses to the possibility of contracting COVID-19. Lack of managerial support worsened poor patient care. Therefore, further studies are needed to improve the procurement of resources and disaster preparedness. Therefore, it is recommended that managerial support which includes offering of professional counselling be done routinely, regular in-service training, and nurses should be involved in decisions affecting patient care.

Implications for nursing management: Managerial support to offer professional routine counselling for improvement of mental wellbeing of the nurses and acknowledge nurses' input.

1. Background

The thought of being infected by the severe acute respiratory syndrome Coronavirus 2 (SARS-CoV-2) and losing colleagues and families still haunts many nurses to date. Coronavirus disease (COVID-19) is a type of pneumonia that was discovered in Wuhan City, Hubei Province in China, in December 2019. This virus destroys the health systems in both developed and developing countries (Liu, Zheng et al., 2020). During the first wave, the disease was described as a virus that affected the respiratory system of the host and transmissible from person to person via touching and droplets when coughing or sneezing. The infected person presented with symptoms which varied from cough, sneezing, sore throat, fever, haemoptysis, vomiting blood, headache, diarrhoea, difficulty in breathing, acute respiratory distress, which was often fatal and resulted in death (Rothan & Byrareddy, 2020). Nurses were working at the front line to take care of patients who were infected with the virus.

The World Health Organization (WHO) declared COVID-19 a global pandemic on 11 March 2020. Measures and guidelines were implemented to manage and curb the spread of COVID-19, leading to lockdowns of countries and the ban on travelling to contain and manage the outbreak's spread (Khanna et al., 2020). The health-care sector needed

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to respond quickly as the infection rate rose. A study conducted to evaluate the outcomes of government closure and containment measures found that the infections successfully dropped (Hale et al., 2020). Furthermore, the findings emphasise the persistent significance of non-pharmaceutical responses to COVID-19. Unfortunately, the pandemic exposed the shortcomings related to disaster preparedness and responsiveness across all spheres of government in South Africa. Without a doubt, nurses, as the health system's backbone, experienced the pandemic's effects worse than all other health professionals. The sudden change in routine necessitated upskilling on the go among nurses and, like any emergency, raised the burden of care, resulting in prolonged working hours and a shortage of critical human and capital resources. The availability of primary solid health care in the South African setting would have facilitated the containment of the virus and prevented deaths (Rensburg, 2021).

According to Madarasz, one of the risk factors for this infection was the lack of Personal Protective Equipment (PPE), which the government had to provide to the nurses and other healthcare workers (HCWs) (Madarasz, 2020). The COVID-19 infection required the correct protective measures to be in place as the shortage of PPE directly affected nurses and other health-care providers' duties as they depended on PPEs to protect themselves from contracting the COVID-19 virus (Organization, 2020). Ferioli agrees with the study's findings in Wuhan City as highlighted that spending more time with the COVID-19 infected patient in the same room without enough space and negative pressure was a risk factor for being infected (Ferioli et al., 2020). Furthermore, inadequate hand hygiene and correct PPE were other risk factors.

In an empirical phenomenological study in Hubei, China, on the Health Care Workers' (HCWs) experience with COVID-19, nurses revealed that they sometimes did not get enough time to eat or use the bathroom to save time and PPEs. Nurses further reported that they avoided taking tea and toilet breaks as it required them to discard PPEs with each break and they did not have enough. Staff shortages contributed to overwork as there was no relief among the staff to offer quality care. The staff would be exhausted at the end of each shift (Liu, Luo, et al., 2020). Another study conducted in the First Affiliated Hospital of Henan University of Science and Technology in China revealed that nurses experienced fear, anxiety, and discomfort as they started to work in negative pressure wards and worked longer hours than usual. They were also expected to reuse their PPEs as they lacked stock. Nurses also reported that they lacked coping mechanisms and felt helpless as the pressure increased (Sun et al., 2020).

Recommendations about conversations which are supportive and have clear guidance for front-line caregivers may assist them to cope and decrease their anxiety. Promoting self-care was also deemed vital (Adams & Walls, 2020). Huang recommended that providing nurses with psychological counselling and workable shifts would improve their well-being (Huang et al., 2020). The authors also encouraged educating and training HCWs regarding the proper donning and doffing of the PPEs as an excellent strategy to help avoid contamination and reduce the risk of exposure to COVID-19.

Africa had 8 609 967 COVID-19 cases with 8 057 933 recoveries and 222 130 confirmed deaths as of 29 June 2021 (CDC, 2021). In South Africa, as of 23 November 2021, there were 2 948 760 confirmed cases, putting it on top of the list in Africa, with 2 838 24 recoveries and 89 635 confirmed deaths; these statistics do not isolate HCWs (NewZimbabwe, 2020). This is in relation to the poor health system, many people having weak immune systems and being overcrowded in their families, which could have impacted badly on the health-care service.

In contrast, safety measures and incentives to protect and encourage nurses have been a priority in some countries. In the Zimbabwean government and Ghana, incentives were offered to encourage and support nurses. In Zimbabwe, there was a call for the government to award all HCWs risk allowances and have a tax exemption as a way of appreciation. Meanwhile, in Ghana, the country's President announced three months' free water supply to the Ghanaians and three months of tax relief to health care providers (Favour, 2020; NewZimbabwe, 2020). Nurses in South Africa expressed dissatisfaction regarding the lack of incentives such as risk allowance, salary adjustment and tax breaks (Denosa, 2020). Nurses in South Africa are at the front line and responsible for managing COVID-19 patients. They are, therefore, at risk of being infected. However, the national government in South Africa has made means to lessen the burden by employing extra health-care workers; yet staff shortages remain uncorrected (Dayimani, 2021). Corruption has proven to prohibit improvement as the funds allocated for the procurement of PPE for the front lines were misused, and the health sector continues to face the struggle (Services, 2021). Quality patient care depends on the clinical environment and availability of resources such as PPE resuscitation equipment. Despite the literature published regarding the lived experiences of nurses working in the clinical setting during the COVID-19 pandemic, this study's setting is different. This study aimed to explore and describe the lived experiences of nurses working in the clinical setting during the COVID-19 pandemic in Ekurhuleni, Gauteng Province.

2. Significance of the study

This study conveyed insight into the daily experiences that the nurses faced as they fought the pandemic through the revelation of their experiences. Nurses' experiences in the workplace may assist in improving their clinical setting for optimal patient care. Furthermore, this study explored the meaning and the value nurses have attached to their nursing duties in relation to the experience they had in their clinical environment during the height of the COVID-19 pandemic. This study also attempted to reveal how this experience has contributed to how nurses view their profession. Their experience may also be used as a baseline for identifying challenges and appraisal of improving the clinical setting. The findings of this study highlight areas needing improvement for disaster preparedness.

3. Materials and methods

3.1. Design

This study followed a descriptive phenomenological research design grounded in the Husserlian philosophy. This method was utilised on the basis that it describes a specific phenomenon or thing as it appears (Polit & Beck, 2021). A qualitative descriptive phenomenological study was conducted to explore and describe the lived experiences of nurses working in the clinical setting during the COVID-19 pandemic in Ekurhuleni, Gauteng Province (Polit & Beck, 2021). A descriptive phenomenological study includes the following four steps: bracketing, intuition, analysing and describing. Under bracketing is that the researcher works as a professional nurse at a government hospital. However, not working in the studied hospital, she had put aside preexisting information she had about the studied phenomenon to prevent polluting the data collected. Using reflexive journaling helped maintain bracketing. The researcher wrote down all her opinions, ideas, and beliefs about the studied phenomenon before conducting the interviews and interpreting the data (Polit & Beck, 2021). Intuition was applied when the researcher remained open to listen to the participants and explored their lived experiences (Polit & Beck, 2021). During data analysis, the researcher repeatedly read the participants' responses to note vital statements and create categories of similar statements that assigned meaning to them (Polit & Beck, 2021). Lastly, in describing the lived experiences of nurses, the researcher formed an understanding of the participants' responses and explained their experiences of working in the clinical setting during the COVID-19 pandemic. Additionally, direct quotes from the participants' responses were used to provide clarity of their meaning (Polit & Beck, 2021).

3.2. Study setting

This study that was conducted in the City of Ekurhuleni Metropolitan Municipality of Gauteng Province. The hospital is in Germiston, with an estimated population of 273 167 people and a land size of 133.8 square kilometers (city-facts, 2023). The hospital had five wards that accommodated COVID-19 patients. Casualty is where all patients were assessed and triaged before being admitted. Medical wards accommodated patients with medical conditions from casualties. Step Down A accommodated female long-term patients for stabilisation in the medical ward. Step Down B accommodated male patients who were long-stay and stabilised in the medical ward. The surgical ward accommodated patients needing surgical intervention.

3.3. Population and sampling

The population of this study consisted of professional nurses who had nursed a patient who tested positive, via polymerase chain reaction (PCR) and nasal swabs, for COVID-19 in any of the units that accommodated patients with COVID-19 in the hospital. The professional nurses who were interviewed in the study work in casualty, high care, and step down wards. They met the inclusion criteria as they had nursed COVID-19-positive patients in their day and night duties. A purposive criterion sampling method was used to recruit participants with rich, unique lived experiences. Rich and unique lived experiences were expressed by individuals who had witnessed and lived the situation. The researcher approached 22 participants who met the inclusion criteria. However, due to the working hours, off-duties, and at times isolation of staff members and sick leave for the staff members, that was experienced during the data collection period, eleven participants who met the inclusion criteria were then interviewed for the study. It was not easy to get access to some of the staff members. The researcher added two interviews after data saturation was reached. The sample size was thirteen participants in total.

3.4. Data collection

Pilot interviews were conducted with two participants to ensure the interview questions answered the research question, which describes the lived experiences of the nurses. The researcher approached the nursing area manager to ask for an introduction to the potential participants, and she introduced her study. The researcher obtained contact details of the potential participants and made interview arrangements. In-depth, one-on-one, unstructured phenomenological interviews were conducted in the hospital. The interview guide (Table 1) was used to guide the interview sessions. All COVID-19 precautionary measures were followed during the face-to-face interviews for the participants who preferred to be interviewed in the hospital. Some interviews were telephonically conducted in the comfort of the participants' homes. Both types of interviews lasted 30–60 min and were audio-recorded with the participants' consent. Data collection was stopped when data saturation was reached, wherein no new information was emerging. All interviews were conducted between February 2021 and June 2021. Interviews were conducted in English.

Table 1
Interview guide.

Main question:	Follow up questions:
What is it like to work in the COVID-19 wards during this pandemic?	•What impact is this experience having in carrying out your duties as a nurse?•How are you coping with the current situation? •How is the support you are getting going to help you to get through the situation? •What are the measures in place to ensure you are safe and protected in the wards? •What are the challenges you are facing in your clinical setting? •How are you dealing with things you cannot change and are affecting your duties as a nurse? •What lessons have you learnt from the experience?

3.5. Data analysis

Data analysis was done at the same time as data collection. The researcher worked with an independent coder to ensure that all captured information was analysed accordingly. The data was inductively analysed using ATLASti Version 9. The steps (Forte et al., 2017) followed were: Step 1: A folder that contained all documents, quotations, and codes was created; Step 2: The transcribed interviews were prepared for import; Step 3: The transcribed interviews were imported; Step 4: To create a textual quotation, appropriate text segments that reflected the meaning of participants' experiences were selected in the transcript; Step 5: Open coding was used to create a new code associated with selected quotations or text segments. A new code was added to the code list, and if needed, a new quotation was added to the quotation list. All transcripts were analysed by selecting quotations and assigning descriptive codes to the quotations. Step 6: Code groups were created. Codes were assigned to code groups, representing the themes, codes, and sub-themes in the table with findings; Step 7: The researchers discussed and reached a consensus on the final themes and sub-themes.

3.6. Measures to ensure trustworthiness

The researcher ensured credibility through lengthy, in-depth interviews with the participants, lasting 30–60 min. The researcher had built trust and rapport with the participants to gain their trust. The researcher ensured the participants felt safe and comfortable sharing their perceptions and the meaning attached to their lived experiences. Confirmability was ensured by noting the researcher's reflections on how she could have influenced the findings. The researcher bracketed her thoughts and journaled all her ideas through data collection and analysis to prevent study contamination (Polit & Beck, 2021). Transferability was ensured by giving full descriptions of the findings on the lived experiences of the nurses working in the COVID-19 wards during this pandemic. Authenticity was achieved through the same interview guide (Table 1) with all participants to ensure they all had the same opportunity to describe their experiences (Amin et al., 2020).

Probing questions were used as the need arose for further clarity and paraphrasing and summarising were also used to reflect on the participants. The interviews were audio-recorded with the participants' permission. Field notes were taken on the non-verbal responses of the participants.

3.7. Ethical considerations

This study received ethics approval to collect data. The researcher obtained informed consent from the participants. The following ethical principles were upheld; autonomy as the participants were not forced to participate; all participants were treated with respect and equality; for beneficence, the researcher ensured that the research was not harmful to the participants, preventing discrimination and injustice. COVID-19 protocols were followed, including social distancing, always wearing face masks, and the checking of body temperature. This study was completed in accordance with the guidelines of the Declaration of Helsinki. The researcher anticipated that some participants may experience trauma related to their experiences during the interview. Therefore, a trained psychologist was on standby to offer individualised psychological support and counselling when needed.

4. Findings

Of the thirteen professional nurses interviewed, one (8 %) was male, and twelve (92 %) were female. All participants met the inclusion criteria. Their ages varied from 24 to 55 years. They all worked with COVID-19-positive patients. The mean duration of exposure is 12.62 months (range: 12–16 months). Of the thirteen professional nurses, eight (61.5 %) tested negative, and five (38.5 %) tested positive for COVID-19. The participants were assigned pseudonyms to maintain confidentiality. The females were assigned 'sister' and a random alphabet next to the word Sister, for example, Sister K. The males were assigned Mr. and a random alphabet next to the word; for example, Mr. T. Table 2 highlights the participants' demographic data.

Four themes emerged from the phenomenological interviews: 1) Nurse's social life during the COVID-19 pandemic. 2) Challenges in the clinical setting during the COVID-19 pandemic. 3) COVID-19 pandemic impact on patient care. 4) Nurses' future recommendations for pandemic management. Table 3 summarises the themes and sub-themes that emerged from this study.

Table 3
Themes and sub-themes.

THEMES	SUB-THEMES
1. Nurse's social life during COVID-19 pandemic	Social isolation Stigmatisation Effects on nurses' family members
2. Challenges in the clinical setting during COVID-19 pandemic	Health-care system-related challenges Support related challenges Ethical dilemmas
3. COVID-19 pandemic impact on patient care	Humane patient care Ineffective patient care
4. Nurses future recommendations for pandemic management	Psychological support Managerial and organisational support

4.1. Theme 1: Nurse's social life during COVID-19 pandemic

4.1.1. Social isolation

Nurses who were interviewed felt isolated from their circle of socialising because they feared infecting their own families; if infected and tested positive for COVID-19, they were stigmatised and excluded from family gatherings and matters. Some research participants were left depressed. This was shared by one of the participants, as presented verbatim and in italics:

> *"Obviously, they were uneasy for some time, very uneasy because now you have to go and visit, but now you can't even go because you are worried that you might go and infect the kids and just go and infect your grandmother. So now you must stay in one place because you are very scared of infecting anyone at home, you know. So now you can only talk to them over the phone because am scared what if I go home and am already infected and it becomes a problem"* (Sister T, 25 years).

This was supported by another participant who shared: "*And as for me, another thing that makes me bitter is that I failed to bury my mom because my family was saying no, you are not coming home because of this COVID*" (Sister C, 39 years).

> *Another participant added: "Remember during the isolation period because you in that room and you can't go out. It's like you are in a prison being locked in a cage. That wasn't nice that was hard. That was a period it became depressing*" (Sister P, 30 years).

4.1.2. Stigmatisation

The nurses who were interviewed reported being victims of stigma not only in their workplace but among their families. The following comment was shared by one of the participants:

> "*Stigmatisation makes people afraid and anxious. When COVID arrived, my family were afraid to come near me and associate with me. They thought I have COVID and that I am going to die. People did not want to sit next to us in public transport as they were afraid of being infected*" (Sister A, 37 years).

Another participant commented: "*You know, it was hectic even at work; colleagues from different wards would actually stigmatise the COVID ward"* (Sister P, 30 years).

Another participant echoed the same experience: "*When you approach the passage, you will see all people moving away from you and ask yourself what is happening. I wore the name tag for only one month and never again until today*" (Sister F, 40 years).

4.1.3. Effects on nurses' family members

The nurses who took part in this study shared how their family members had to bear similar burdens. The nurses also experienced stigma from their own families and other people as they were afraid and anxious. However, some of them demonstrated an understanding of their emotional struggles related to their clinical experiences. One of the participants shared: "*So when she gets to the hospital, yo-yo! The stigma that she gets there, the stigma at the entrance with those ones that are screening the patients, they said "you are seven days tested positive, no, no don't touch us, take your envelop and put your things don't come close to me please, please go and sit outside*" (Sister J, 55 years).

One of the interviewed participants shared that: "*Am still much stigmatised, ok as for stigma it's not only at home. Stigma wise also happens with our very same colleagues. You know it was hectic even at work; colleagues from different wards would stigmatise the COVID ward. It's like when you in a lift with them it's a problem so you must use your own lift, you must use isolate the ward was just isolated it was much stigmatised, much stigmatised*" (Sister P, 30 years).

The same view was echoed by another participant who shared that: "*Since I tested positive, I became too emotional, and I did not have any compassion and empathy left in me. My negative attitude affected my family. I just thank God that my husband was understanding and offered support"* (Sister C, 39 years).

Another participant argued that: *"I'm the one who is suffering with my kids because the people who are suffering it's us and our families. I had to change my uniform before touching my kids. Kids will jump to you as they don't understand your situation. I sometimes I came home being depressed. I would cry sometimes and not even eat because now am tearful; I just want to go to my room and cry and then sleep the following day, am going to work*

Table 2
Characteristics of the participants.

Gender	Type of COVID19 ward	Years of working experience as a nurse (Years)
Female	Step down B	6
Female	Step down A	12
Female	Surgical A	20
Female	Medical Female	5
Female	Casualty	16
Female	Step down A	16
Female	Labour ward	6
Female	Step down B	12
Female	Medical Female	5
Female	Casualty	17
Female	Casualty	23
Female	Step down A	18
Male	Step down B	11

again" (Sister Z, 47 years).

4.2. Theme 2: Challenges in the clinical setting during COVID-19 pandemic

4.2.1. Health-care system related challenges

Inadequate infrastructure posed another challenge for the nurses as the donning and doffing procedures were not done correctly, there was not enough space to properly isolate patients, and there was limited space to maintain social distancing among themselves. Patient quality care was affected by the lack of medical and human resources. The concern for most of the nurses were challenges by the shortage of PPE as they had to reuse them, which posed a risk of infection. As articulated by one of the participants:

> "*Yes, we had the challenge because we had to use the same cubicle for donning and doffing which is totally wrong regarding the infection control precautions. You don't don clean PPE and doff out dirty PPE in the same room, you understand, but there is nothing we can do*." (Sister H, 29 years).

Another participant attributed that: "*I can say we had a challenge with the patients sharing the same bathroom that was a challenge. Males and females, our ward was mixed, they were in the same ward sharing the same toilet. All patients under investigation, as well as the ones who were confirmed they, were sharing the same toilet and bathroom. It was a challenge because, according to what we were taught or what we were told, even on the surfaces, the virus could remain in there, so if the patients were sharing the same toilet, the one who are negative would also contract the virus. I think that was the challenge because there was no control on how to prevent the spread at that time. The hospital was just accommodating every patient who was coming through.*" (Mr. T, 27 years).

> *Another participant indicated that: "As I am telling you that, I nursed 22 patients for three days, being the only nurse on duty. It was hectic, I wished for a hole to open so I can enter, but what can I say the staff was knocked by COVID, and they were sick"* (Sister F, 40 years).
> *Another participant reported that: "you enter the cubicle and nurse the patient when coming out you can't discard the PPE. And when you go for lunch or tea, you have to remove your PPE, hang it outside, then you are done come back and wear it again and some of your colleagues may get infected"* (Sister T, 25 years).

4.2.2. Support-related challenges

Nurses felt disappointed by the lack of managerial support at times when they really needed it. Nurses felt a lack of effective communication from their managers, which contributed to their unpleasant experiences in their workplace. Nurses also felt that they were not sufficiently orientated and trained to manage the pandemic. However, some acknowledged the situation as unexpected and unfamiliar. One of the participants commented that:

> "*We didn't receive any support or additional support from any other unit or other wards. Like everyone was just scared, including the management themselves, they were nowhere to be seen*" (Mr T, 27 years).

The lack of preparedness exposed the nurses to not having sufficient stock at hand. Some of the nurses did not receive vital training on how they were supposed to don and take off the PPE and how to use it effectively to yield the needed protection from infection. Another participant argued that:

> "*Nothing, nothing, sister, nothing. Nothing I can tell you it was like, you see donning and doffing nobody came to tell us about the PPE how to wear them, how to doff, how long must we use that PPE*" (Sister K, 40 years).

Another participant reported that: "*And having me with an allergy the latex glove, it was something else. Cause at some point I had to go there without gloves"* (Sister G, 38 years).

4.2.3. Ethical dilemmas

Nurses experienced ethical dilemmas related to the distribution of resources and the unusual situation with which the health-care system was confronted. COVID-19 patients were not resuscitated as it was believed that the risk of spreading the virus was higher during this procedure, and patients were left to die. One participant reported that:

> *"…Yes, and people were left to die, and others they were going to make them survive, you know, my sister. But what if it was your mother was lying there? Then they don't resuscitate, and you know it that if I can give oxygen or more. Bag this patient or do maybe CPAP" (*Sister Z, 47 years).
> *Another participant stated that: "Well, we had two ventilators at a time, you know. At any one time, someone has to be ventilated, and it's occupied. Someone else comes in, it will now be a dilemma as to much more time can you give to one person compared to the next person. Because you would be caught up in a situation where you give some people oxygen but at the end of the day it would not give or yield the positive that you would want to see happen"* (Sister L, 50 years).

4.3. Theme 3: COVID-19 pandemic impact on patient care

4.3.1. Humane patient care

Nurses strive to maintain the quality of patient care. Some nurses were encouraging their patients to fight to live, and they were deeply emotionally affected if the patient died. Research participants reported that patients got the strength to live through the positive words of encouragement that the nurses preached. One participant expressed that:

> "*You find that a person lives because of the words we have spoken. We tell them no, you will be all right, think positively, think about your family, your children when you die*" (Sister F, 40 years).

Another participant felt that: "*It was painful, you are crying, you run to the…. You cry, you cry with the patient, but at the end of the day, you don't tell the patient if the patient is dying, you understand. You just talk to the patient, "Baba fight." You talk to the patient, fight, please, don't give up now, you understand even though you see that it's difficult"* (Sister A, 37 years).

4.3.2. Ineffective care

Patient care was compromised due to nurses being scared to contact the patients. Most felt that the COVID-19 limit protocol disadvantaged the patient as the nurse had to spend less than 15 min per patient. Some nurses believed that the negative attitude of their colleagues resulted in the patient receiving poor quality care. Another participant articulated this:

> "*They were saying that they are not going to nurse the patients as COVID is for the RNs, the sisters. Unfortunately, I was the one who was nursing the patient*" (Sister C, 39 years).

Moreover, another participant echoed*: "Like you just actually you were limiting the movements and working with the patient part, it was hard. Because you, therefore, work like you, basically there for the patients, you try your level best to help the patient, and at the same time you must self, you must protect yourself. So, the nursing care, I wouldn't say the nursing care was as good as nursing a patient that is not COVID positive*." (Sister P, 30 years)

Another participant added: *"So, specifically for me, it was tough because I knew that every morning when I wake up am going to nurse that patient. Because no one wanted to help me, you see"* (Sister C, 39 years)

4.4. Theme 4: Nurses future recommendations for pandemic management

4.4.1. Psychological support

Nurses recommended that counselling would be more effective if done at the early stages of the pandemic to prepare them for what was

coming. One of the participants suggested as follows:

> "*I then asked the manager to speak on our behalf that every three months, we get counselling because we really need counselling as nurses during this pandemic. Especially the front-line wards because we are the frontlines, everything happens here*" (Sister F, 40 years).

Another participant indicated that: "*Proper preparation, especially mentally. Mental health is more important, I think as staff members we need to be mentally prepared*" (Sister P, 30 years).

> *Another participant argued that: "If they had allayed anxiety at the first go, but people are going to get infected, that's the truth, this is what is going to happen, we have ways that we can prevent it. Like I feel like that would have helped, you know. At some point, you get to understand the situation*" (Sister T, 25 years).

4.4.2. Managerial and organisational support

Some nurses pointed to a need for supplementary moral support and encouragement to boost staff motivation and morale. Furthermore, they saw an appreciation gap that should be filled by giving staff, who exposed themselves to COVID-19 through increasing the nurses' danger, allowance. One participant recommended:

> "*We saw that it is working, so I think if they could involve us more than coming when they have already decided that they think this will work, they don't even suggest they just come and tell us. If they can involve us in decisions regarding nurses, I think it will be the best way for me it will work best*" (Sister C, 39 years).

One participant suggested:

> "*I think people lack motivation to work because right now, everyone is calm. Motivation is the only thing that they need, so a thing like COVID-19 allowance because people are being exposed danger. So, people should be given at least allowances; clearly, everyone needs money, so if there is money involved, people would be encouraged to go and work"* (Mr T, 27 years).

From the data collected in this study, it is evident that the nurses who participated in this study had risked their lives for the lives of their patients. Additionally, issues of infrastructure and resources need serious intervention for better outcomes.

5. Discussions

The lived experiences of nurses working in the clinical setting in Ekurhuleni District during the COVID-19 pandemic were researched following the descriptive phenomenological design. It was found that nurses' experiences in the clinical setting were negatively influenced by the feeling of being excluded in decisions affecting patient care, lack of managerial support, poor supply of resources, especially PPE, and an unconducive working environment. Additionally, patient care was compromised. However, nurses remained committed to serving their communities as they were bound by the oath they took.

5.1. Nurse's social life during COVID-19 pandemic

Having a balanced social and work relationship is essential for nurses' well-being as it influences their interaction with patients. This study found that nurses' social experience of working during the COVID-19 pandemic was negatively affected and associated with social isolation, stigmatisation, and effects on family members.

Nurses spent most of their time with the patients, which caused them pain when the patient suffered, felt lonely, and eventually died. The fear of infecting their loved ones led nurses to isolate themselves from their friends and families as an act to protect others. Nurses in this study were scared, felt depressed, and incomplete without their loved ones, which affected their well-being. This was also shared by the nurses who were quarantined following contracting COVID-19. Nurses in this study revealed that being in quarantine added more pressure on them. They felt isolated and lonely. This study finding was supported by a descriptive phenomenon research study conducted in Turkey, which revealed that nurses stayed away from the social environment as they feared stigmatisation and infecting their loved ones; they also felt lonely and isolated (Kackin et al., 2021).

Nurses who nursed COVID-19 patients suffered stigma from other nurses as they reported to have been discriminated against and isolated by their colleagues. Hence, they started doubting themselves and their abilities, having less confidence, and not being proud of their work as they felt unappreciated. Lack of confidence and knowledge is known to have a more negative effect on the quality of work (Deghani et al., 2021). Furthermore, this study found that nurses in other wards refused to assist the COVID-19 unit when they were short-staffed, which highlights that there were nurses to fill the shortage. However, fear prevented them from performing their duties. It is essential to offer psychological support to nurses to improve patient and staff satisfaction. Similar experiences were reported in the findings of a study conducted in a government-designated COVID-19 hospital in Busan, South Korea, as they reported that stigmatising led to hiding the fact that they were nursing COVID-19 patients (Lee & Lee, 2020).

5.2. Challenges in the clinical setting during COVID-19 pandemic

This study found that nurses' challenging work experience during the COVID-19 pandemic was characterised by health system-related challenges, support-related challenges, and ethical dilemmas. Inadequate infrastructure to facilitate patient isolation was the primary concern for the nurses as they felt it facilitated the spread of the infection among the patients as they shared space and toilets. This study finding is consistent with the study conducted by Raza among the nurses working in government hospitals in Pakistan, as they reported poor conditions of the isolation wards, which they felt were contaminated and unsafe, which made it impossible to follow the standard operating procedure of COVID-19 (Raza et al., 2020). There is a need for the government to invest in building or renovating hospitals to accommodate the need of the patient's condition, as this situation damaged the patients' dignity because their rights were not respected and exposing patients and health-care workers to hospital-acquired infections, as nurses in this study reported nurses and patients on the floor and in wheelchairs.

Furthermore, the unavailability of resources, such as ventilators, oxygen supply, and intensive care unit (ICU) beds, led to the nurses feeling helpless in rendering total patient care. Additionally, the fact that there was a lack of PPEs and in-service training regarding donning and doffing did not stop the nurses from caring for COVID-19-infected patients. Nyashanu supports this argument that despite the fact that there were severe shortages and inappropriate PPEs, this did not stop the nurses from treating their patients (Nyashanu et al., 2020). The researcher's concern lies in the lack of purpose served by the government hospitals as they did not have life-saving equipment, and they are the first places people turn to for help.

This study reveals that nurses kept assisting COVID-19 patients even when they were not fully protected, as they had to reuse PPEs at some point, which put them at risk of contracting the virus and spreading it to other patients. Hoernke et al. support this finding as they reported that health-care workers in their study feared that not having enough PPE increased their risk of exposure to the virus (Hoernke et al., 2021). The current study findings suggest that employers ought to have monitored and analyse the climb in infection rates within the hospital to be able to prioritise areas of patient and staff safety if left unattended, which could have cost the institution a fortune.

Nurses worked in strenuous situations faced with staff shortages since other nurses were absent due to sick leave or quarantine. In this current study, nurses also reported that staff shortages were exacerbated by absenteeism and fear of providing care to patients with COVID-19, as

well as a lack of training. Furthermore, their absence contributed to those on the floor being overwhelmed, overworked, and depressed, worsening the already compromised patient care. Nursing managers should monitor the well-being of their staff to note patterns of absenteeism and the need for emotional support and intervene earlier for the benefit of the patient. Sheng's study findings confirm the same response as nurses reported that prolonged contact with COVID-19 patients due to staff shortages increased their risk of being infected, in addition to having to deal with their already heavy workload (Sheng et al., 2020).

Nurses in the current study reported that they lacked preparedness in a hospital and designated wards, which raised concerns of responsibility, lack of accountability, and guidance, resulting in mismanagement of patients, as managers did not provide adequate empowerment through in-service training and workshops. Not only did this educational gap create confusion, but it also raised questions of trust from the patients. A cross-sectional study also supports this finding as the authors indicated that lack of preparedness decreased nurses' confidence to respond effectively to the COVID-19 pandemic, and they encourage nurse educators and nurse administrators to prepare nurses for such a disaster (Sharour et al., 2022). A study conducted by Labraque identified the educational gap and lack of preparedness for the pandemic; therefore realising is a need for continuous in-service training to facilitate effective nurses (Labrague et al., 2018). The present study found that nurses experienced ethical dilemmas related to the distribution of resources and prioritising patient care. Furthermore, the COVID-19 protocol prohibited nurses from performing resuscitation, which could have saved the patients.

5.3. COVID-19 pandemic impact on patient care

Nurses confronted their fears, which encouraged them to continue fulfilling their responsibility to the patients despite inadequate protection and struggles with limited resources. Patients benefited from the nurses' dedication as they were vulnerable and depended on the nurses. This study found that nurses devoted themselves and encouraged the patients to live. The flexibility of the nurses allowed them to adapt to other non-nursing roles to ensure patients' needs were catered to, as opposed to other disciplines that distanced themselves from COVID-19. The same courage was reported by a study conducted in the United Kingdom among front-line HCWs, such as nurses who cared for COVID-19 patients. Front lines continued to care for patients regardless of the challenges they faced, including inappropriate PPE supply and inadequate training and guidance (Hoernke et al., 2021). Nurses who were interviewed reported that they managed to stay hopeful and found the strength to continue caring for the patients, regardless of the situation, by using spiritual coping. In a study conducted by Egunjobi, humans were encouraged to seek help from Jesus Christ as he had encouraged them from a Bible verse quoted in Matthew 6:25–34, that states: "Therefore I tell you, do not worry about your life, what you will eat or drink; or about your body, what you will wear. Is it life more than food, and the body more than clothes?… Therefore, do not worry about tomorrow, for tomorrow will worry about itself (Egunjobi, 2020). Each day has enough trouble of its own." Support and encouragement received by the nurses from their families, despite the distance, and team members gave them the strength to overcome their challenges (Egunjobi, 2020).

Fear of contracting the virus compromised patient care as nurses distanced themselves from the infected patients. Nurses felt the COVID-19 time limit protocol compromised the patient as the nurse had to spend less than 15 min per patient. There was no time to create rapport with the patients and attend to their holistic needs. The findings of this study are in line with those of a study conducted by Hoernke, as the nurses felt wearing masks prevented them from building a rapport with the patients as the PPE limited facial expression, physical touch and time spent with the patient (Hoernke et al., 2021). These findings are consistent with the study conducted by Kok, as the quality of patient care was compromised by nurses not taking responsibility for many COVID-19 patients (Kok et al., 2020). Being short-staffed with high patient demands contributed to the neglect of patient needs.

Furthermore, this study reports on the negative attitude displayed by the nurses due to the frustration of being overworked and feeling exhausted, which compromised patient care. This is consistent with the findings of a study conducted by Liu as nurses who provided care for a dying patient found the situation to be emotionally and physically draining, resulting in their negative attitude (Liu et al., 2021). Additionally, nurses were heartbroken as they nursed patients on the floor and in wheelchairs as there was a shortage of beds. This lowered the nurse's pride and confidence in creating a conducive and comfortable environment for the patient. The current study identified an urgent need for extra nursing staff to lessen the physical and psychological suffering of the nurses during a pandemic.

5.4. Nurse's future recommendations for pandemic management

Nurses in this current study recommended that counselling done in the early stages of the pandemic might have been effective in alleviating stress, while some nurses saw the need for counselling and debriefing as witnessing dying people affected them mentally. The study findings are consistent with the recommendations made by Markey as the study urges the Nurse Manager to consider ways of empowering, supporting, and enabling nurses to implement ethical standards daily (Markey et al., 2021). Furthermore, Galehdar saw the need to boost nurses' mental well-being with support from decision-makers, policymakers and the government during and after the crisis (Galehdar et al., 2020). In addition, nurses in this study strongly believe that nurses should be involved in the decision-making process. This study's findings are well supported by Barello's recommendations for voicing nurses' needs to the world in preparation for the next major health challenge (Barello et al., 2020). Nurses in this study remain concerned that their voices are suppressed, yet they are the primary caregivers of the patients and understand the patient's needs better than the management team.

6. Conclusion

This study aimed to gain an in-depth understanding of the lived experiences of nurses working in the clinical setting during the COVID-19 pandemic in Ekurhuleni, Gauteng Province. A descriptive qualitative design was utilised to describe the lived experiences of nurses working in the clinical setting during the COVID-19 pandemic. The results of this study indicated that professional nurses who cared for COVID-19 patients suffered psychological distress and physical burnout. The families of the nurses who participated in this study were also affected by the clinical experiences of these nurses during this pandemic. Moreover, having insufficient resources, which included Personal Protective Equipment (PPE) and other equipment, exposed the nurses to the possibility of contracting COVID-19. This study found that the lack of managerial support for nurses' input in decisions affecting the patient, negatively affected the patient. In addition, insufficient resources worsened poor patient care. It is of note that the insights gained from this study may be of assistance to the government for prioritising infrastructural needs and adequate supply of resources to public hospitals to avoid issues of disrespecting the patient's suitable access to health care services and with the aim of protecting their dignity.

7. Implications for nursing management

The findings of this study suggest that nursing managers should continuously monitor staff well-being to improve patient and staff safety and satisfaction. Therefore, it is recommended that managerial support, which includes the offering of professional counselling, be done routinely, regular in-service training, and nurses should be involved and acknowledged in decisions affecting patient care. There is a call for

institutions to monitor their internal infections to be able to implement effective strategies to curb the spread and protect patients, together with health-care workers. Showing appreciation to nurses and involving them in decisions that affect the patients would improve their morale and motivate them. Further studies need to be carried out to determine how government hospitals can establish disaster preparedness to prevent physical and psychological trauma to the health-care workers and community.

8. Strengths and limitations

This study was conducted during the COVID-19 pandemic in the designated hospitals, thus presenting a complete picture of the participants' actual lived experience in the clinical setting. Unfortunately, the study was conducted during the pandemic when some nurses were in quarantine, and their experiences could not be explored. However, the researchers presumed the interviewed participants shared similar experiences as they were exposed to the same clinical setting. Since the study was conducted in an urban setting, we could not generalise the findings with those in the rural setting.

9. Availability of data and materials

The datasets used and analysed during the current study are available from the corresponding authors upon reasonable request.

10. Ethics statement

The authors got ethical approval to collect data. The researchers obtained informed consent from all participants before participating in the study. The participants were informed that their participation in the study was voluntary and that they could withdraw at least any time they felt uncomfortable. This study was completed in accordance with the guidelines of the Declaration of Helsinki.

The authors got ethical approval from the research ethics committee, faculty of health sciences, University of Pretoria, ethics reference: 583/2020. From the National Health Research Database to conduct the study in a hospital, in Ekurhuleni District hospital (GP_202011_041).

11. Consent for publication

Not applicable.

12. Consent to participate

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CRediT authorship contribution statement

Sinethemba Nyandeni: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Writing – original draft. **Fhumulani Mavis Mulaudzi:** Supervision, Writing – review & editing. **Rafiat Ajoke Anokwuru:** Supervision, Writing – review & editing.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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References

Adams, J. G., & Walls, R. M. (2020). Supporting the health care workforce during the COVID-19 global epidemic. *JAMA*.

Amin, M. E. K., Nørgaard, L. S., Cavaco, A. M., Witry, M. J., Hillman, L., Cernasev, A., & Desselle, S. P. (2020). Establishing trustworthiness and authenticity in qualitative pharmacy research. *Research in Social and Administrative Pharmacy*.

Barello, S., Palamenghi, L., & Graffigna, G. (2020). Empathic communication as a "Risky Strength" for health during the COVID-19 pandemic: The case of frontline Italian healthcare workers. *Patient Education and Counseling, 103*(10), 2200.

CDC, A. (2021, 23 November 2021). *Coronavirus Disease 2019*. African Union. https://africacdc.org/covid-19/.

city-facts. (2023). Germiston - Population Trends and Demographics - CityFacts. Retrieved 9/8/2023 from https://www.city-facts.com/germiston/population Wikipedia.

Dayimani, M. (2021). Eastern Cape govt finds R400m to extend contracts of 8 000 temporary health workers. Retrieved 28/09/2022 from https://www.news24.com/news24/southafrica/news/eastern-cape-govt-finds-r400m-to-extend-contracts-of-8-000-temporary-health-workers-20210330#google_vignette news24.

Deghani, R., Wnuk, K., Mendez, D., Gorschek, T., & Ramsin, R. (2021). *On understanding the relation of knowledge and confidence to requirements quality*. REFSQ.

Denosa. (2020, 22 April 2020). *President completely disregard nurses in his announcement of the relief support packages for COVID-19*. Denosa. Retrieved 11 June from https://www.denosa.org.za/media_View.php?id=36230.

Egunjobi, J. P. (2020). *The perception of Covid-19 as a fear factor in the preparation for the pandemic aftermath* (p. 10). Nairobi: Researchgate.

Favour, N. (2020, 6 April 2020). *Ghana government announce free water, 3 month tax holiday give health workers den 50% basic salary give frontline COVID-19 workers*. BBC News Pidgin. Retrieved 11/05/2022 from https://www.bbc.com/pidgin/tori-52179929.

Ferioli, M., Cisternino, C., Leo, V., Pisani, L., Palange, P., & Nava, S. (2020). Protecting healthcare workers from SARS-CoV-2 infection: Practical indications. *European Respiratory Review, 29*(155).

Forte, E. C. N., Pires, D. E. P. d., Trigo, S. V. V. P., & Martins, M. M. F. P. d. S. (2017). The hermeneutic and the Atlas. ti software: a promising union. *Texto & Contexto-Enfermagem, 26*.

Galehdar, N., Kamran, A., Toulabi, T., & Heydari, H. (2020). Exploring nurses' experiences of psychological distress during care of patients with COVID-19: A qualitative study. *BMC Psychiatry, 20*(1), 1–9.

Hale, T., Hale, A. J., Kira, B., Petherick, A., Phillips, T., Sridhar, D., … Angrist, N. (2020). Global assessment of the relationship between government response measures and COVID-19 deaths. *MedRxiv*.

Hoernke, K., Djellouli, N., Andrews, L., Lewis-Jackson, S., Manby, L., Martin, S., … Vindrola-Padros, C. (2021). Frontline healthcare workers' experiences with personal protective equipment during the COVID-19 pandemic in the UK: A rapid qualitative appraisal. *BMJ Open, 11*(1), e046199.

Huang, L., Lin, G., Tang, L., Yu, L., & Zhou, Z. (2020). Special attention to nurses' protection during the COVID-19 epidemic. In: BioMed Central.

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.

Khanna, R. C., Cicinelli, M. V., Gilbert, S. S., Honavar, S. G., & Murthy, G. S. (2020). COVID-19 pandemic: Lessons learned and future directions. *Indian Journal of Ophthalmology, 68*(5), 703.

Kok, N., Hoedemaekers, A., van der Hoeven, H., Zegers, M., & van Gurp, J. (2020). Recognizing and supporting morally injured ICU professionals during the COVID-19 pandemic. *Intensive Care Medicine, 46*, 1653–1654.

Labrague, L., Hammad, K., Gloe, D., McEnroe-Petitte, D., Fronda, D., Obeidat, A., … Mirafuentes, E. (2018). Disaster preparedness among nurses: A systematic review of literature. *International Nursing Review, 65*(1), 41–53.

Lee, N., & Lee, H.-J. (2020). South Korean nurses' experiences with patient care at a COVID-19-designated hospital: Growth after the frontline battle against an infectious disease pandemic. *International Journal of Environmental Research and Public Health, 17*(23), 9015.

Liu, Q., Luo, D., Haase, J. E., Guo, Q., Wang, X. Q., Liu, S., … Yang, B. X. (2020). The experiences of health-care providers during the COVID-19 crisis in China: A qualitative study. *The Lancet Global Health*.

Liu, Q., Tao, J., Gao, L., He, X., Wang, Y., Xia, W., & Huang, L. (2021). Attitudes of front-line nurses toward hospice care during the COVID-19 pandemic. *American Journal of Hospice and Palliative Medicine®, 38*(2), 204–210.

Liu, Q., Zheng, Z., Zheng, J., Chen, Q., Liu, G., Chen, S., … Huang, J. (2020). Health communication through news media during the early stage of the COVID-19 outbreak in China: Digital topic modeling approach. *Journal of Medical Internet Research, 22*(4), e19118.

Madarasz, G. (2020, 20 April 2020). *ICN says worldwide death toll from CCOVID-19 among nurses estimated at 100 may be far higher*. ICN. Retrieved 13 May from https://www.icn.ch/news/icn-says-worldwide-death-toll-covid-19-among-nurses-estimated-100-may-be-far-higher.

Markey, K., Ventura, C. A. A., Donnell, C. O., & Doody, O. (2021). Cultivating ethical leadership in the recovery of COVID-19. *Journal of Nursing Management, 29*(2), 351–355.

NewZimbabwe. (2020, 8 May 2021). *COVID-19 Chamisa urges risk allowance payment to health care workers.* All Africa. Retrieved 8 May from https://www.allafrica.com/stories/202004170223.hml.

Nyashanu, M., Pfende, F., & Ekpenyong, M. (2020). Exploring the challenges faced by frontline workers in health and social care amid the COVID-19 pandemic: Experiences of frontline workers in the English Midlands region, UK. *Journal of Interprofessional Care, 34*(5), 655–661.

Organization, W. H. (2020, 19 March 2020). Coronavirus disease (COVID-19) outbreak: Rights, roles and responsibilities of health workers, including key occupational safety and health. WHO. Retrieved 25 April from https://apps.who.int/iris/bitstream/handle/10665/331510/WHO-2019-nCov-HCWadvice-2020.2-eng.pdf.

Polit, D. F., & Beck, C. T. (2021). Nursing research: Generating and assessing evidence for nursing practice. *Wolters Kluwer*. https://books.google.co.za/books?id=HyNGxQEACAAJ.

Raza, A., Matloob, S., Rahim, N. F. A., Halim, H. A., Khattak, A., & Ahmed, N. H. (2020). Factors impeding health-care professionals to effectively treat coronavirus disease 2019 patients in Pakistan: A qualitative investigation. *Frontiers in Psychology, 11*.

Rensburg, R. (2021, 7 July 2021). *Healthcare in South Africa: How inequity is contributing to inefficiency*. Retrieved 23 November from https://www.wits.ac.za/covid19-news/latest/healthcare-in-south-africa-how-inequality-is-contributing-to-inefficiency.html.

Rothan, H. A., & Byrareddy, S. N. (2020). The epidemiology and pathogenesis of coronavirus disease (COVID-19) outbreak. *Journal of Autoimmunity, 102433*.

Services, S. A. R. (2021, 8 October 2021). *Media Release- SARS tackles non-compliant PPE companies*. SARS. Retrieved 24 November from https://www.sars.gov.za/latest-news/media-release-sars-tackles-non-compliant-ppe-companies/.

Sharour, L. A., Salameh, A. B., Suleiman, K., Subih, M., Mahmoud, A.-H., Al Dameery, K., & Al Omari, O. (2022). Nurses' self-efficacy, confidence and interaction with patients with COVID-19: A cross-sectional study. *Disaster Medicine and Public Health Preparedness, 16*(4), 1393–1397.

Sheng, Q., Zhang, X., Wang, X., & Cai, C. (2020). The influence of experiences of involvement in the COVID-19 rescue task on the professional identity among Chinese nurses: A qualitative study. *Journal of Nursing Management, 28*(7), 1662–1669.

Sun, N., Shi, S., Jiao, D., Song, R., Ma, L., Wang, H., … Liu, S. (2020). A qualitative study on the psychological experience of caregivers of COVID-19 patients. *American Journal of Infection Control*.