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Unprepared

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Overview:

This report summarises the experiences of health and social care workers during the coronavirus pandemic in South Africa.

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Document Information

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Abbreviations

AMCOA	Association of Medical Councils of Africa
HCWs	Health care workers
NHI	National Health Insurance
PPE	Personal protective equipment
SCWs	Social Care workers

1. Executive Summary

> "Nursing staff are tired. Hospital staff are tired, cleaning staff are tired. Security staff are tired. Emergency Medical Services (EMS) crews are tired" (Theron et al., 2022, p. 415)

As a country that battles with poverty, unemployment, and an incapacitated health care system, South Africa was unprepared for crisis and suffered immensely from the COVID-19 pandemic. South Africa recorded the greatest number of COVID-19 cases and deaths in all of Africa. Much of the South African population live in overcrowded conditions, particularly in the informal settlements, shack dwellings and densely populated townships, making the concept of social distancing an unachievable aspiration. Many communities still lack access to running water, with families sharing communal bathrooms, toilets, water pumps and taps. In such conditions, the rapid spread of COVID-19 and the immense strain placed on an already struggling health and social care workforce was inevitable.

This report presents the results of a scoping review which explores the experiences of South African health and social care workers during the COVID-19 pandemic. A thematic analysis of fifteen publications on the topic identified the following themes which have been broadly divided into the domains of work-related experiences and personal experiences:

Table 1 Domains and themes identified

Domains	Work-related experiences	Personal experiences
Themes	Adapting to new ways of working	Emotional responses
	Impact on quality of care	Trying to keep safe
	Needing support from leaders and managers	Financial impact
	Resource constraints and challenges	Faith as a tool to cope in the chaos
	Poor communication and dissemination of information	

2. Introduction

The COVID-19 pandemic has had an overwhelming impact on health and social care organisations across the world, putting many national systems under severe pressure. Low and middle income settings were especially vulnerable to the challenges that came with the pandemic (1). South Africa declared a state of national disaster ten days after the first case in the country was reported in an attempt to mitigate the spread of the virus (2). The pandemic had a profound impact on the South African health and social care systems and exacerbated existing challenges as well as exposing missed opportunities for improvements to health care (3). The South African health system battled to withstand the pressure from the pandemic in a context of post-apartheid disparities between socio-economic status, geographic location and a two-tier health care system (4). Health care in South Africa is managed by the Department of Health (6), the two tiers in the system comprise of a private sector that is relatively well-resourced, and an underfunded public sector that is responsible for caring for the majority of the population (4, 5). The two tiers function parallel to one another. The public health system is subsidized by the government and serves at least 80% of the population, which exceeds its capacity (7). The system is underfunded and poorly managed thus contributing to the perpetuation of inequalities (8).

Even before the onset of COVID-19 there was a widespread shortage of health care workers (9) and this worsened during the pandemic as HCWs began suffering and dying from the virus (10). Estimates of deaths among HCWs in South Africa vary widely, with reports of between 80,000 to 180,000 said to have died from the virus between January 2020 and May 2021 (11).

The South African healthcare system was also affected by other challenges including a lack of personal protective equipment (PPE) for HCWs (12), increased mortality rates, heightened mental health problems and the resurgence of non-communicable diseases (8). The South African health and social care sectors were inadequately prepared for the COVID-19 pandemic and the impact on other services was significant.

This scoping review aims to provide insights from the available literature on the experiences of the health care and social care sectors in South Africa during the COVID-19 pandemic.

3. Methodology

Research question

What were the experiences of health and social care staff in South Africa during the COVID-19 pandemic?

Scoping review methodology

Scoping reviews enable researchers to synthesize diverse bodies of knowledge and describe their relevance, range and nature (13). Scoping reviews are valuable to map and describe data drawing from different fields and methodological approaches (13), including quantitative, qualitative, and review work (14). The approach taken in this review followed Arksey and O'Malley's five-step framework (15), as shown in figure 1 below.

Figure 1: Five step framework: Arksey and O'Malley, (2005)

Search strategy

Searches were conducted on the Google Scholar search engine and four databases, namely: Pubmed, Web of Science, Scopus, and Medline. Full texts of peer reviewed articles were located and screened. The search terms used were: "experiences of health care workers AND COVID-19 AND South Africa" "experiences of social care workers AND COVID-19 AND South Africa".

Table 2 Search results

Database	Source	Search terms/fields and hits
Google scholar	https://tinyurl.com/zbwzb528	Experiences of health care workers during COVID-19 in South Africa= 200
Pub-med	https://tinyurl.com/26j276ra	Experiences of health care workers during COVID-19 in South Africa=66
		Experiences of social care workers 'AND' COVID-19 'AND' South Africa=27
Medline	https://tinyurl.com/2p9hyh2d	Experiences of health care workers 'AND' COVID-19 'AND' South Africa=7
Scopus	https://tinyurl.com/4hj5ftwh	Experiences of health care workers 'AND COVID-19 'AND' South Africa=39
		Experiences of social care workers 'AND' COVID-19 'AND' South Africa=19
Web of Science	https://tinyurl.com/32wvmpn7	Experiences of health care workers 'AND COVID-19 'AND' South Africa= 63
		Experiences of social care workers 'AND' COVID-19 'AND' South Africa= 7

Considering the extremely large number (>300,000) of hits from the Google Scholar search, the first 20 pages of the results were reviewed, which were sorted by relevance based on the aims of the scoping review.

Study Selection

The inclusion/exclusion criteria outlined in Table 2 below were used to assign a value of 'include', 'exclude' or 'maybe' to the identified articles to ascertain whether the article should be included in the review or not. Further, Appendix 1 elaborates on the strategy that was used to include and exclude the articles in relation to Table 1. In a situation where it was not possible to decide based on the title and abstract alone, the full article was reviewed. When the reviewer was unsure of whether to include an article, this was resolved by the full article being retrieved and re-read in each case. After removal of duplicates and excluding articles that did not match the search criteria, a total of 15 articles were included in the analysis. A summary of the characteristics of the 15 articles selected for review can be found in Appendix 2.

Table 3 Exclusion and inclusion criteria

Exclusion criteria	Inclusion criteria
Not in English	English language publications
General focus on the African content/Sub-Saharan Africa/Southern Africa	Focus on South Africa only
Non-peer reviewed	Peer reviewed articles
General research or commentary on COVID-19 not related to the aims of the review	Described health or social care workers experiences during COVID-19 pandemic
Research letters, Editorials etc	

Data Analysis

All articles were read and re-read to explore and understand raw data comprising verbatim quotes from participants in the 15 articles and to identify key themes. While individually drawing from each article was important, it was also important to read these articles in comparison to synthesise the themes.

Twelve of the studies used a qualitative approach in their methodology while the other three used a mixed method approach.

4. Findings

Fifteen articles were analysed to better understand the experiences of the health and social care sector workers in South Africa. Themes constructed from the scoping review were broadly divided between two domains:

(1) work related experiences
(2) personal experiences

Each domain included several themes as shown in table 4 below:

Table 4 Summary of domains, themes, and main concepts in each theme

Domains	Themes	Main concepts in each theme
Work related experiences *This domain describes work-related experiences in the health or social care sector*	Adapting to new ways of working	Adapting rapidly to changes, challenges of keeping up with changing procedures, working under extreme pressure
	Impact on quality of care	Prioritisation of COVID-19 above other needs, increased waiting times, stigmatisation when queueing for care, HCWs going the extra mile for patients
	Needing support from leaders and managers	Universal need for support, feeling disconnected from managers, lack of debriefings, HCWs feeling their own safety and wellbeing was not considered
	Resource constraints and challenges	Widespread staff shortages, reductions in consultation times, mistakes from being overstretched, shortages of PPE and oxygen
	Poor communication and dissemination of information	Poor accuracy, frequency and clarity of information, having to dig for information, trying to keep up with changing information about protocols
Personal experiences *This domain explores and understands challenges*	Fear and anxiety: battling the realities of the pandemic	Fear of catching the virus, anxiety, loss of sleep, hopelessness, feeling conflicted
	Trying to keep safe	Trying to keep safe, resilience
	Financial impact	Drop in income, budgetary changes, new job opportunities
	Faith as a tool to cope with the chaos	Coping mechanisms of individuals, turning to faith

Work related experiences

This domain encompasses the experiences of HCWs and SCWs in both rural and urban work settings all-over South Africa during COVID-19. The settings included in all 15 articles were in Gauteng, Eastern Cape, Mpumalanga, Western Cape, KwaZulu Natal, and Limpopo provinces. In terms of the distribution and confirmed number of COVID-19 cases in the country during the first wave of the pandemic, Gauteng province had the highest number (206,892), followed by Kwa-Zulu Natal (110,521), Western Cape (104,781) and Eastern Cape (85,311) (16). Participants in the 15 studies included a range of personnel working in various settings in the health and social care system in South Africa such as pre-hospital and emergency centres medical personnel, nursing staff (enrolled,

professional and specialised nurses), medical staff (interns through specialist emergency physicians), radiographers, emergency services, rehabilitation clinicians, nutritionists, psychologists, community health workers, counsellors, speech-language pathologists, clinical associates, pharmacists, social workers and community caregivers.

Adapting to new ways of working

It was evident that some HCWs had not experienced anything like COVID-19 before. The pandemic changed the way in which they used to work with patients and within facilities. Articles reported how participants had to adapt rapidly to a new and frightening work situation and were challenged by trying to keep up with new information and changing procedures, as well as providing care in a limited resource environment (3,17,26). One physician described the sudden change:

> *"So, my work changed overnight to basically 100 percent COVID response..." (Senior Manager; EM Physician) (17, p. 413).*

Many HCWs described difficult working conditions which forced them to quickly adapt to new ways of carrying out their activities in the best way possible (18). This was against a background of working within a public health care system that had already been compromised by different challenges that impacted on healthcare quality before COVID-19 (19). The theme covers the sense of working under extreme pressure (19) from the large numbers of COVID related admissions (20). Working with these patients was a very intense experience as described by a professional nurse based in Gauteng:

> *"We only worked inside the COVID-19 ward for 6 h compared to a normal shift [12 h], but that 6 h would be under extreme pressure, we would not even have time to eat." (Professional nurse, Gauteng, hospital) (18, p. 4).*

Others reported how the impact of frequently changing guidelines affected their work:

> *"Every week we had to be ready to adapt and change things according to whatever was going on with the COVID numbers and how many beds we had available and how sick the patients were and what the new guidelines said or if there were any new guidelines. And we just kind of had to keep going and keep being ready for change" (Participant, EM Physician) (17, p. 413).*

HCWs reported challenges in adapting to new working environments, some were unable to cope with the pressure and felt crushed in the new work system. Some participants described the horrific nature of the working environment, where they had to witness many deaths of patients and colleagues. The following quotations express the anxiety, trauma and uncertainty faced by HCWs and also by their patients:

"That is the issue because even as health practitioners, you come to work, it is like you are drained by just being at work because you are scared for your life" (Participant 7, Male Professional Nurse) (22, p. 5)…

"There are a lot of uncertainties because we are seeing people getting tested and we are seeing people awaiting their results getting agitated. They are anxious. Some are depressed…" (Participant 2, Female, Social worker) (22, p. 5).

Impact on quality of care

Adapting to new ways of working also impacted on service delivery as there was prioritization of COVID-19 matters above other health care needs (20). This in turn increased waiting times for patients within facilities, impacted on the quality of care, and provoked discomfort and feelings of stigmatisation for those queuing outside health facilities (22). The high patient load and the fragmentation of services into COVID-19 and non-COVID-19, meant that holistic patient services were no longer available. HCWs reported on the strained relations between health workers and patients, which included shorter consultation times, social distancing and mask wearing (3). One HCW recalled:

"We are always overloaded with patients and some of the patients they even write about us on Facebook saying that we do not want to work we are very slow, but we are trying our best sometimes I don't even take my lunch time because I want to help them" (AGIN HCW) (3, p.7)

In some of the articles HCWs reported having the willingness and drive to meet the needs of their patients in the face of the COVID-19 related burden. Some reported the different ways in which they were going the extra mile for their patients, including how they had formed a response committee at the start of the pandemic thus demonstrating a sense of resilience and a commitment to their patients. Adams and colleagues document the extent of HCWs 'internal resilience and spirit of togetherness' during the pandemic (20, p.7). Lalla-Edward and colleagues also reported how COVID-19 exposed some good aspects of the healthcare system. They quote a HCW in Johannesburg who noted:

"…a lot of people have a bad perception of our public healthcare and they saw that we are managing with the patients, and we are doing quite well" (3, p.5).

Needing support from leaders and managers

While some articles discussed the resilience of HCWs and SCWs (3, 17, 20), it was evident that all needed some form of support in their work (17). As reported in all articles, COVID-19 created a difficult time for all HCWs and SCWs. Consequently, there was a universal need for support. Adams

and colleagues reported that participants needed support due to anxiety and fear that the pandemic had caused (20). They highlighted a lack of essential support for HCWs who may have come into contact with COVID-19 patients or patients under investigation (PUIs) for COVID-19. One of the participants noted that more guidelines in such situations from management would be helpful:

> *"I would like more guidelines from hospital management on how to manage isolation and quarantining if in contact with PUI's or Confirmed positives without adequate PPE" (P20, KwaZulu Natal, Private sector) (21, p. 4)*

It was clear that many of the participants who took part in the different studies needed support from their leaders and managers. However, the pressures from the pandemic began to drive a wedge between management and employees. Some participants felt that departmental management support was completely lacking with many of the managers working from home and being absent from the department (24). Participants in one study reported:

> *"I can't say our management have been very present or terribly supportive to be honest ….. Most of them have worked from home … it wasn't I'm working from home and here's my phone number, it was I'm working from home, and you email me " (DR12) (24, p. 190).*

> *"They always put on the end of emails our door is always open, feel free to contact us if you have any issues or any concerns. But there's been no formal debrief or mention of any kind of meetings or one on one support in that respect" (DR1) (24, p. 190).*

Some participants strongly felt that those in leadership positions lacked empathy with their situation, this feeling also extended to the government which was felt to be unsupportive *(26)*. Some commented on a lack of debriefing meetings to air their views and concerns, an unwillingness to accept and address complaints, and a lack of concern for ill staff. While safety was deemed an imperative requirement for continued service delivery, HCWs felt that their distress was not understood and hence their own safety and wellbeing was not being attended to *(3)*.

Resource constraints and challenges

It was inevitable that the increase in COVID-19 cases would bring challenges regarding human resources in the health care sector. For example, Moyo and colleagues' article reported the experiences of nurse managers who struggled to find a balance in allocating staff members as they were already overstretched (26). Asking for more staff from other wards at first seemed to be viable, however it emerged that the situation was the same for all hospital wards. Further, the situation was heightened by the freezing of recruitment to posts throughout the country:

"I could not make an alternative allocation because there was a huge shortage of staff everywhere. I could not even ask other wards to use their staff temporarily or have a substitute from other wards." (Vele) (26, p. 6).

"There are many positions for all nursing categories that are supposed to be advertised and filled and they have been there for a very long time. That's the main reason we are experiencing severe staff shortage because they just decided to freeze them." (Maemu) (26, p. 6).

The shortage of health personnel had a negative impact on the delivery of services by HCWs and their own personal health through needing to work more shifts to compensate for staff shortages. These negative effects can be glimpsed from the following extract:

"Personally, I felt there was a lot of stress because there was a huge shortage of staff [eeh] because we are short staffed, you find that there is only two in the ward instead of having six per shift. This affected patient care" (Ndanga) (26, p. 7).

Staffing levels at various facilities were impacted by contributing factors such as staff members becoming ill or dying and the protection of high-risk individuals by using a staff rotation policy, which allowed a complement of 50% of staff members per day to mitigate staff exposure to the virus. The pandemic protocols required that there was an instant quarantine of all exposed staff while waiting for test results, which often led to quarantined staff being away for a very long time while waiting for their test results (3). This then resulted in short-staffed wards or clinics and a need to reduce time spent with patients:

"not more than 3 min with patients, to manage the patient load and match the standard of service delivery prior to COVID- 19," (3, JHB HCW)

with some claiming,

"sometimes in the end there were a lot of mistakes that were happening," (AGIN HCW).(3, p. 6).

In addition to problems with staff numbers, the health and social care sector also suffered badly from shortages of other resources. There were widespread concerns relating to the availability of Personal Protective Equipment (PPE) to protect HCWs from contracting the virus. These were highlighted in the reviewed articles (18, 23, 26). Many HCWs were nervous and worried about contracting the virus and infecting family members as noted below (18).

"I can say during the first waves it was very difficult because it was the first time for us to hear about COVID-19 and we were scared I don't want to lie, and there were no PPEs at work by that time. So, we were supposed to go and nurse the patient without protection and as I am staying with my daughter at home, I was worried that I wonder what will happen to her. But we had to nurse the patients with COVID-19 anyway because there was nothing we can do." (Professional nurse, Eastern Cape, hospital) (18, p. 6).

HCWs reported inadequate supplies of PPE, in some cases there was none at all, this was a huge challenge to them:

> *"There are people who are expected to trace and test without PPE, [and] are receiving COVID patients without PPE. Now, PPE has been an issue since before COVID." (Participant 10, Male, Enrolled nurse) (22, p.7).*

> *"We did not have enough PPE to cover ourselves during this pandemic. So, that was the main challenge…. there was nothing at all'. (Participant 5, Male, Nutritionist) (22, p.7)*

Moyo and colleagues (26) reported participants struggling with a shortage of oxygen in their facilities, continuous positive airway pressure (CPAP) machines were also in short supply particularly in cases where a continuous supply of oxygen was needed such as for COVID-19 positive patients who had difficulty breathing. Some of their participants said:

> *"We did not have oxygen. There were no CPAP machines and high flow to provide oxygen to patients. Mind you, patients needed to be on continuous oxygen due to COVID-19 related difficulty in breathing. Honestly, how can you save a patient who needs oxygen if you don't have good supply of oxygen? It was very difficult." (Vule) (26, p. 7).*

> *"We experienced a shortage of oxygen in the entire hospital, and it was very difficult for patients who were supposed to be on continuous oxygen." (Ndidzu) (26, p. 7).*

Poor communication and dissemination of information

Mchunu and colleagues reported the challenges of how information was communicated, particularly its accuracy, frequency and clarity (22). Participants in their study reported that there were often delays in information sharing from higher levels within the health system, which negatively impacted on services especially during the pandemic. The shared information was sometimes unclear, and the contents could not be applied to other contexts or healthcare settings. Two participants reported:

> *"When it comes to disseminating the information to the healthcare workers, there was not much, even from the department. When information came, it was very late we had already been doing what we were thinking was right only to find that it's not. Also, the information provided came from national most of the time and was always changing especially in the beginning and that caused a lot of confusion on its own" (Participant 6, Female, Pharmacy manager) (22, p.7).*

"I believe that the institution or the institution's management does not disseminate information the way they should. We sometimes have to dig for information ourselves and ask them what to do in certain situations. They do not freely give certain information". (Participant 13, Male, Clinical associate) (22, p. 7).

Similarly, Lalla-Edward and colleagues reported that no meetings were being held during COVID-19 thus making communication difficult from management to HCWs, between HCWs themselves and community health workers and community members. Participants reported using other ways to address the communication gaps such as video calls, WhatsApp, and other social media platforms. However, it was clear that these were not sufficient as reported by one of their participants:

"So, I would say they did attempt to train us virtually, but it wasn't as smooth as it would have been had it been the normal way," (JHB HCW) (3, p.7).

Additionally, some HCWs reported that the communication on the correct COVID-19 treatment protocols continued to change frequently,

"You would be gathered for management to tell you that, 'we have changed protocol'. Changing it from which one to start with? And only then would you realize that there was a protocol. Then, the next thing is that they change it again," (AGIN HCW) (3, p. 7).

Personal experiences

HCWs and SCWs reported that COVID-19 had a personal impact on their lives. Being scared, confused and generally concerned for safety of their families, friends and people in general was commonly mentioned. Some HCWs were reported to have resigned due to anxiety and fear from COVID (25, 28, 29, 31).

Emotional responses

Some reported the fear and anxiety that came with the COVID-19 pandemic (28). Individuals feared for their lives as they would hear every day about someone who had died of COVID-19. It was evident from their stories that they knew someone who had died of the virus, whether a colleague, a friend or relative and it was a matter of waiting for their own time (27). Participants had witnessed the disruption caused by the pandemic. The disruption had a direct and enduring personal impact on participants, which included confusion and fear for their own safety, their friends and relatives. The fear of seeing the consequences of this disruption made them anxious.

"…Some staff seems to be so immobilised by fear and is unable to take the smallest of decisions.' (March 2020, RM4, OT)" (27, p.5)

For HCWs, the anxiety was often increased by the constant contact with patients.

"Anxiety and fear were the reigning emotions. Staff were convinced they had all had some contact with [a COVID-19] patient. The irrational thoughts and messages between staff caused such mayhem. Made us aware how fully unprepared we were to deal with the inevitable. It took calm and at some points an authoritarian response to have people actually listen through their fears and understand protocols and procedures. I myself had a sense of hopelessness come over me at some point and needed to take some time just to re-centre and face the onslaught of the fear mongering." (April 2020, RM2, PT) (27, p.4)

"Everybody was terrified. Everybody in the ward is crying and you don't feel like you can continue, you realize that you can't expect normal emotions in an abnormal situation and everybody feels the same." (Doctor, Gauteng, hospital) (18, p. 5)

It was also important for staff to acknowledge that they were afraid (30), or felt uneasy about the situation. When having such feelings, it was important to take their own action to address these feelings:

"I stopped sleeping, I wasn't concentrating. I felt like really low at home and distant and I didn't want to play with my children or talk to my family or anything …. I uninstalled the news Apps on my phone, I stopped reading the news. I downloaded an App and started listening to meditation music, I tried to start reading books ….I've been trying to go to bed earlier and starting eating better. " (DR8) (24, p. 191).

Some articles also discussed how the pandemic had served as a catalyst for South Africa's growing mental health care crisis (18, 22), which in turn impacted on their own emotions having to deal with patients struggling with their own mental health. A psychologist commented:

"We were receiving a lot of new referrals *since the lockdown." (Participant 4) (28, p. 317).*

"It was so stressful *and emotional because you will see people dying . . . Yes, you see people dying like maybe four people a day and it was emotional, and it is not something that you are used to like sometimes even in the unit that I was working in, maybe in three months there is only one death . . . Everyday people are dying! Some are still young and some are old." (Professional nurse, Gauteng, hospital) (18, p. 7).*

Trying to keep safe

Authors reported of participants who were struggling with the oath they took as HCWs and the fact that they needed to take care of themselves, in the midst of dealing with the fear for their own well-being (22, 24, 27). One nurse said:

> *"You cannot be compromising your life at the expense of a patient. You cannot be wanting or focusing or wanting to achieve the optimum health of your client if you are sick. So, there is a dichotomy there between you being exposed to COVID-19 and wanting to prevent your patient from contracting COVID-19." (Male, Clinical nurse practitioner) (22, p. 6).*

At the beginning of the pandemic, there was a lot of conflicting information regarding PPE, and many in the health sector made autonomous decisions contrary to national guidance around their own use of PPE which in turn meant trying to keep safe. This was a way to protect themselves:

> *"We became masters of our own defence against COVID ….So many different avenues of information, which one do you believe … basically the one that provided you with the most protection was the one we decided to follow ourselves" (DR3) (24, p.190).*

Resilience in the healthcare work force was apparent in some of the articles (3, 17), Theron and colleagues in particular reported that amongst their participants, there were high levels of uncertainty, restriction, fear, anxiety, and exhaustion. However, despite these difficulties, participants demonstrated resilience and commitment to caring for patients (17).

Financial impact

Some HCWs spoke about the financial impact that COVID-19 had. Some of the changes in income were mainly because of the lack of annual salary increase as well as salary cuts that came with COVID-19 (3). This was as a result of changes in working hours as well as overtime without pay. Another spoke about how some people had been retrenched because of the pandemic, which even made them feel guilty:

> *"So many people have lost their jobs because of COVID-19 and I started feeling really guilty that I am only working 2 days a week and still getting my full salary." (Field notes, BA1, STA) (27, p.4)*

Further, due to the inactive system to track qualification upgrades, others suffered a loss of increments. In some instances other temporary HCWs became permanent staff members, which

was a positive development as this led to a secure income (3). The change in budgets was significant; COVID-19 disrupted all finances within the health sector and impacted on health care workers.

In relation to finances, some participants in a study also felt that after the difficult work that they had done during COVID-19 there was a need for a monetary reward to be given to frontline workers. One participant in the study reported:

> "After having committed yourself and risked death during COVID-19, government should have provided monetary incentives for HCWs who were on the frontline. That to us would have demonstrated support." (Professional nurse, Eastern Cape, hospital) (18, p. 9)

Faith as a tool to cope with the chaos

Some articles provided reflections on coping in a time of chaos as many HCWs felt hopeless, powerless, helpless, depressed, guilty, fearful, anxious and experiencing a sense of loss (18, 23, 26). In this situation, some turned to their faith as a way to keep their sanity (30). Participants shared how their faith supported them in their everyday work on the COVID-19 ward. Faith was reported as a form of acceptance and surrender to what they explained to be a supernatural power in a difficult situation, one of the participants reported:

> *"Nothing brings more contentment and peace to my mind than turning to a higher power. In that moment, I'm relieved from all worldly stress; it brings mindfulness .... You become more aware of what you've been gifted and blessed with by the Creator, and all worldly troubles seem resolvable because I become more aware that life itself is a gift, and my blessings are countless."(30, p. 6).*

Another participant reported drawing her strength from God as everything had become too overwhelming:

> *"I just drew my strength from God, every day I would ask God to help me, I would tell God that I can't do this alone and he has put me out here for a reason, so that's how I deal with it, I don't know about others." (Professional nurse, Gauteng, hospital) (18, p.8)*

5. Conclusion

Scoping reviews are highly useful in gathering information and mapping out the literature on certain topics as well as identifying gaps (13). Comprehensively identifying and analysing the relevant

literature relating to the research question makes it an essential technique in understanding the topic being researched (33). The purpose of this review was to provide insights from the available literature on the experiences of the health care and social care sectors in South Africa during the COVID-19 pandemic. We hoped to glean from different studies across South Africa how to better understand these experiences. As a result, this scoping review was able to highlight the opportunities that could have been used to improve support mechanisms for health care workers and social care workers to enable them to cope better during the pandemic both personally as well as in their work.

It is evident from the articles reviewed that the health and social care sectors in South Africa were ill prepared for the pandemic. The negative effects of COVID-19 can be attributed to the fact that South Africa is a society which has the highest level of inequality in the world, with severe poverty, hunger, inadequate housing security and unemployment (34,31).The current state of health services needs to be improved in a bid to effectively manage future public health emergencies or crises such as the COVID-19 pandemic (32).

In South Africa, the pandemic placed an additional burden on already resource constrained health and social care services (32); from shortages of staff, shortages of basic resources in health facilities, quick consumption of COVID-19 related resources and delayed replenishment of the same resources (23). It is apparent that there is a need to improve infrastructure, human resources, and communication systems from the top (Department of Health, Department of Social Development) right to the bottom (primary health facilities and others) as way to ensure South Africa can manage public health emergencies.

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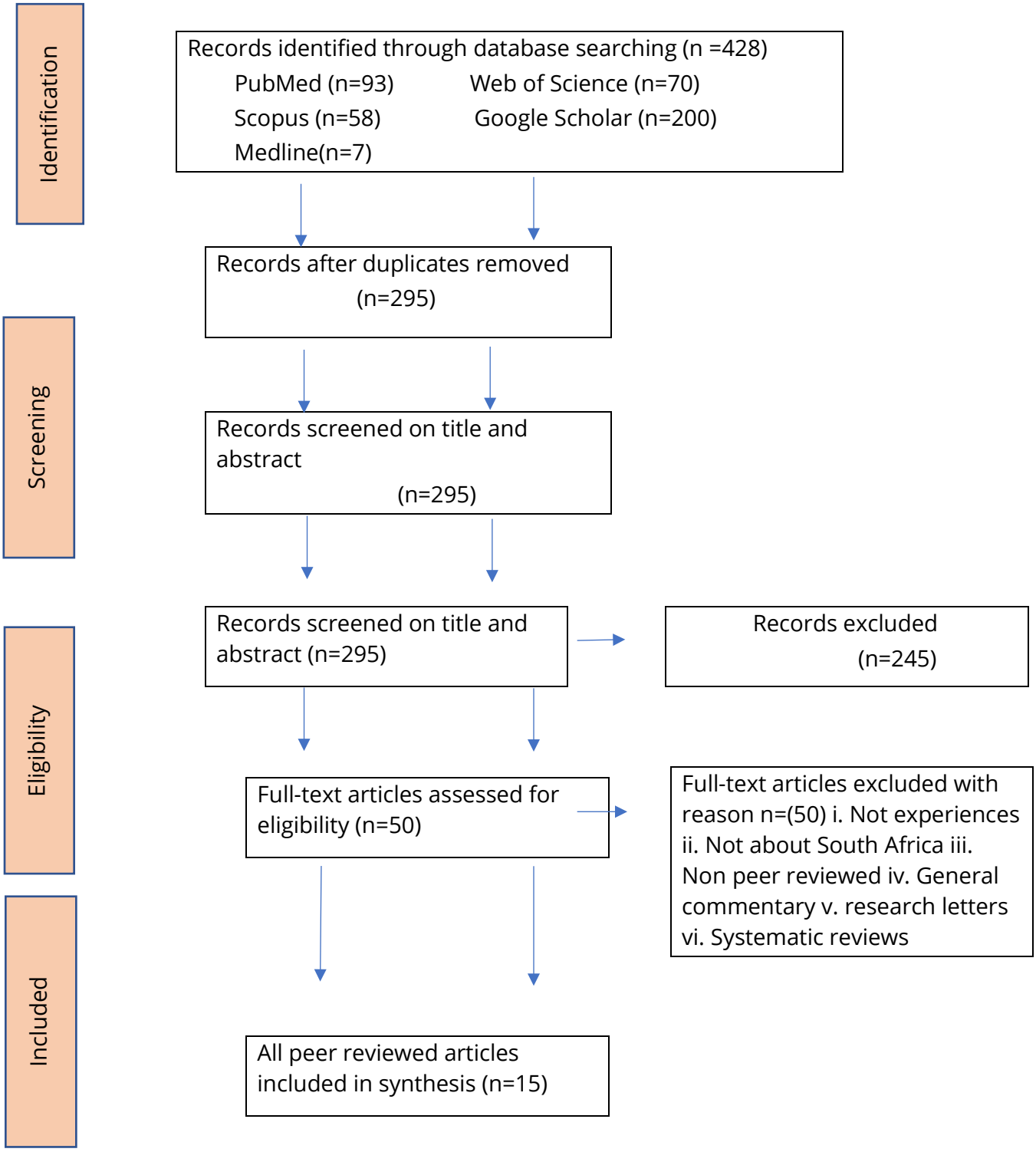
7. Appendix 1

Figure 2: Flow diagram of study selection process



8. Appendix 2 – Characteristics of reviewed articles

The table below provides a list of 15 reviewed articles including authors, research aim, sample, methods used and findings.

Table 2 Characteristics of reviewed articles

	Author name(s)	Title	Research aim	Methodology	Findings
1.	Mahlangu et al., 2023	I Carry the Trauma and Can Vividly Remember": Mental Health Impacts of the COVID-19 Pandemic on Frontline Health Care Workers in South Africa	To contribute to the literature from the global South on how FHCWs were impacted by COVID-19 while on the frontline during the first wave of the COVID-19 outbreak in South Africa.	Qualitative research among 44 frontline health care workers (FHCWs) practicing in seven South African hospitals and clinics. FHCWs were interviewed on their experiences of working during the first-wave of the COVID-19 pandemic and its perceived impact on their wellness	Most of the FHCWs reported stressful and traumatic experiences relating to being exposed to a deadly virus and working in an emotionally taxing environment. They reported depression, anxiety, traumatic stress symptoms, demoralization, difficulties in sleeping, poor functioning, increased irritability and fear of being infected or dying from COVID-19.
2.	Lalla Edward et al., 2022	Essential health services delivery in South Africa during COVID-19: Community and healthcare worker perspectives	To contribute information on COVID-19, with the intention of providing guidance on preparing for future infectious disease outbreaks.	Cross sectional exploratory qualitative methodology was employed using semi-structured interviews and focus group discussions with community members (CM) and healthcare workers (HCW) from two South African study sites: (a) rural Bushbuckridge (run by Agincourt Health and Socio-Demographic Surveillance Site) and (b), Regions D and F in Johannesburg Metropole.	After interviewing 42 CMs and 43 HCWs, it emerged that mandated process changes while minimizing COVID-19 exposure, necessitated healthcare personnel focusing on critical care treatment at the expense of less acute ones. COVID-19 isolation protocols, extensive absenteeism and HCWs with advanced skills being perceived as more adept to treat COVID-19 patients contributed to HCWs experiencing higher workloads. Fears regarding contracting and transmitting COVID-19, suffering financial losses, and not being able to provide adequate advice to patients were recurrent themes.

3.	Theron et al., 2022	The lived experiences of emergency care personnel in the Western Cape, South Africa during the COVID-19 pandemic: A longitudinal hermeneutic phenomenological study	To explore emergency care personnel's lived experiences and their perceptions thereof within the context of the COVID-19 pandemic in the Western Cape province.	This study followed a longitudinal hermeneutic phenomenological approach. The convenience sample included prehospital and emergency centre medical personnel. Data were collected over a 4-month period using both one-on-one interviews and participant recorded voice recordings.	Four themes were generated during the data analysis: 1) In the beginning, waiting for the unknown; 2) Next, change and adaptation in the workplace; 3) My COVID-19 feelings; 4) Support and connection. Participants discussed the uncertainty associated with responding to an unknown threat and a need to keep up with constant change in an overburdened work environment. Results showed high levels of uncertainty, restriction, fear, anxiety, and exhaustion.
4.	Mchunu et al., 2022	Exploring primary healthcare practitioners' experiences regarding the coronavirus disease 2019 (COVID-19) pandemic in KwaZulu-Natal, South Africa	To explore primary healthcare practitioners' experiences regarding the COVID-19 pandemic at two selected primary healthcare facilities within a low-income rural context in KwaZulu-Natal, South Africa	Data were collected from a purposive sample of 15 participants, which consisted of nurses, physiotherapists, pharmacists, community caregivers, social workers and clinical associates. The participants were both men and women who were all above the age of 20. Data were collected through individual, in-depth face-to-face interviews using a semi-structured interview guide	Personal experiences of COVID-19 yielded superordinate themes of psychological distress, self-stigma, disruption of the social norm, Epiphany and conflict of interest. Occupational experiences yielded superordinate themes of staff infections, COVID-19-related courtesy stigma, resource constraints and poor dissemination of information. Community-related experiences were related to struggles with societal issues, clinician-patient relations and COVID-19 mismanagement of patients.
5.	Osman and Singaram 2022	Using PhotoVoice to understand mindfulness in health care practitioners	To gain insight into the use of mindfulness through the lens of PhotoVoice on how HCPs reflected on their stressors and sense of self whilst working as	A four-week MBI intervention was implemented using Zoom. An exploratory qualitative analysis was conducted using a PhotoVoice methodology. Interpretative	The major themes identified were operating on autopilot, feeling a sense of overwhelm because of COVID-19, using faith to cope and being able to attain a sense of self-compassion by the end of the intervention.

			frontline workers during the COVID-19 pandemic	phenomenological analysis was used to generate themes.	
6.	Oosthuizen et al., 2022	Maternity healthcare providers' self-perceptions of well-being during COVID-19: A survey in Tshwane Health District, South Africa	To identify maternity healthcare providers' self-perceptions of changes in their feelings of mental well-being.	We conducted an anonymous, cross-sectional survey amongst a convenience sample of 114 maternity healthcare workers to gauge the changes in healthcare workers' experience and perceptions of well-being during the COVID-19 pandemic. Four items measured the perceived changes on a scale of 0–10 for the periods before and during COVID-19, respectively, namely feelings of fear or anxiety, stress, depression and anger.	The biggest 'before-during' difference was in perceptions of fear or anxiety and the smallest difference was in perceptions of anger. A framework was constructed from the open-ended responses to explain healthcare workers' understanding and perceptions of increased negative feelings regarding their mental well-being.
7.	Lewis and Muller 2021	Diagnostic radiographers' experience of COVID-19, Gauteng South Africa	To explore diagnostic radiographers' experiences of COVID-19.	A qualitative approach using an asynchronous opened-ended online questionnaire was used to explore diagnostic radiographers' experiences of COVID-19. Responses from purposively sampled diagnostic radiographers in Gauteng SA, underwent thematic analysis.	Sixty diagnostic radiographers representing both the private and public health sector responded to the questionnaire. Thematic analysis revealed three themes: new work flow and operations, effect on radiographer well-being and radiographer resilience.
8.	Nathoo, Gurayah and Naidoo 2022	Life during COVID-19: An Explorative Qualitative Study of Occupational Therapists in South Africa	To explore the experiences of fifteen occupational therapists during the COVID-19 pandemic	Semi-structured interviews and personal narratives were used to collect data on occupational engagement during the pandemic. Inductive thematic analysis was used.	The impact of COVID-19 on occupational engagement, occupational adaptations, factors that negatively influenced occupational engagement and enablers to occupational engagement emerged as themes.

					Participants experienced role changes at work and home, as well as feelings of isolation.
9.	Cook et al.,	Mental health experiences of healthcare professionals during COVID-19	To explore healthcare workers' (ophthalmologists, nurses and support staff) experiences of anxiety, depression, burnout, resilience and coping strategies during lockdown Levels 2 and 3 in an Ophthalmic consulting practice and hospital in South Africa.	A survey was sent out at two separate times to a convenience sample of 31 and 15 healthcare workers respectively. The survey consisted of a demographics section, Hospital Anxiety and Depression Scale, Burnout Measure short-version, Brief Cope Inventory, Connor Davidson Resilience Inventory and six open-ended questions investigating personal health and support experiences during COVID-19. Descriptive analyses and thematic analysis were used for data analysis.	The sample of healthcare workers experienced some degree of psychological distress, including anxiety, burnout and a lack of social support on both surveys. However, these symptoms were alleviated by personal factors, including positive coping mechanisms, high resilience and organisational support.
10.	Moyo et al., 2021	Experiences of Nurse Managers during the COVID-19 Outbreak in a Selected District Hospital in Limpopo Province, South Africa	To explore and describe the nurse managers' experiences during COVID-19 in order to identify gaps and lessons learnt.	A descriptive phenomenological research approach was used to explore the experiences of ten nurse managers who were purposively selected from different units of a selected district hospital	The study revealed that nurse managers experienced human resource related challenges during COVID-19, worsened by the fact that vacant posts were frozen. It also emerged that there was a shortage of material resources that affected patient care. Nurse managers also indicated that COVID-19 brought a lot of administrative duties plus an additional duty of patient care. Also, nurse managers who had previously contracted COVID-19 experienced stigma and discrimination.
11.	Adams et al., 2021	'We are in this together' voices of	to better understand how the workspace of	An exploratory cross-sectional study design was used to meet	SLPs' roles, responsibilities and service delivery were impacted by

		speech-language pathologists working in South African healthcare contexts during level 4 and level 5 lockdown of COVID-19	SLPs in hospitals was impacted by COVID-19, how they experienced this process and the implications for them as healthcare professionals in both the private and public sector throughout South Africa	the aims of the study. Thirty-nine SLPs from different provinces in South Africa, working in government and private hospitals during COVID-19, responded to the online survey. Results were analysed using descriptive statistics and thematic content analysis.	COVID-19. It was necessary for typical outpatient therapy services to be modified; there were changes to the role of the SLP in the hospital and inpatient services were curtailed.
12.	Goldschmidt et al., 2021	Telepsychology and the COVID-19 pandemic: the experiences of psychologists in South Africa	The experiences of psychologists in response to the implications of the COVID-19 pandemic pertaining to the provision, application, and accessibility of telepsychology services in the South African context.	Methodology?	The findings highlight the direct and indirect implications of the pandemic and its impact on both practitioners and clients. The core themes comprise an increase in mental health care needs, challenges pertaining to therapeutic modalities in response to crises, as well as contextual considerations.
13.	Naylor et al., 2022	Experiences of diagnostic radiographers through the Covid-19 pandemic	to explore the experience of diagnostic radiographers working clinically during the Covid-19 pandemic.	This study explored the experiences of diagnostic radiographers using virtual focus group interviews as a method of data collection.	Data were analysed independently by four researchers and five themes emerged from the data. Adapting to new ways of working, feelings and emotions, support mechanisms, self-protection and resilience, and professional recognition.
14.	Van Biljon and van Niekerk 2022	Working in the time of COVID-19: Rehabilitation clinicians' reflections of working in Gauteng's public healthcare during the pandemic	This study aimed to explore the nature and consequences of disruption caused by the pandemic, based on the experience of rehabilitation clinicians who were working in	This was a phenomenology study that used critical reflection method. Trained and experienced in reflecting on barriers and enablers that affect their practices, a multidisciplinary group of rehabilitation clinicians	The main themes captured the disorder and confusion with its resultant impact on rehabilitation services and those offering these services that came about at the beginning of the pandemic. The importance of teamwork and leadership in rehabilitation also

			public healthcare facilities in Gauteng.	captured their experience of working during the time of COVID-19. Data construction extended over 6 months during 2020. An inductive thematic analysis was performed using Taguette: an open-source qualitative data analysis tool.	emerged as themes. Other themes related to having to approach work differently, working beyond professional scopes of practice and pandemic fatigue.
15	Mogammad Shaheed Soeker, 2022	Healthcare professionals' perceptions and experiences of the influence of the COVID-19 pandemic on their personal and work performance	The aim of the article is to explore healthcare professionals' perceptions and experiences of the influence of the COVID-19 pandemic on their personal and work performance.	Twelve individuals working in the health sector participated in this study. The researchers used a qualitative exploratory and descriptive research design. Semi-structured interviews were used to collect data.	Theme one "A feeling of ambivalence", describes the positive and negative influence that the COVID-19 pandemic has had on HCWs. Theme two "Unfortunately, the support from the government is not as much as it's said to be in the news", describes the support required from government services during the pandemic. Theme three "Changes experienced by the individual related to his or her personal and work routine", describes the changes experienced by healthcare professionals in their daily tasks during the pandemic.