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UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG
SCHOOL OF HUMAN AND COMMUNITY DEVELOPMENT
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Narratives on the frontline: A qualitative investigation of the lived experiences of healthcare workers during the COVID-19 pandemic in South Africa

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A Research Report

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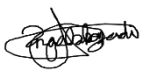
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Abstract

Background: During the Coronavirus pandemic, a mental health pandemic emerged, with frontline healthcare workers' arguably being the most affected. In South Africa, however, the sociohistorical background must be considered, as this virus poses a new threat to a country that has suffered a series of collective traumas.

Aim: This study explored the qualitative, lived experiences of frontline healthcare workers in South Africa during the COVID-19 pandemic.

Method: A lifeworld phenomenological framework was used in this study. Semi-structured interviews with 11 frontline healthcare workers were conducted as part of a broader study focused on the mental health of South African healthcare workers' during COVID-19. The information gathered was analysed using the principles of reflexive thematic analysis.

Results: This research showed that the lived experiences of frontline workers' during the COVID-19 outbreak in South Africa are diverse and peppered with paradoxes. The findings revealed that working during COVID-19 is an emotional rollercoaster, that it is emotionally and mentally tiring, that there are concerns with the Department of Health and that COVID-19 has had a substantial influence on daily living. In addition, the data also demonstrate that the concept of a 'front-line' healthcare worker altered throughout the pandemic as a result of task shifting as healthcare personnel took on different responsibilities, moving them to the 'frontline.'

Conclusion: This study adds to the body of knowledge about mental health and the working environment of health professionals during COVID-19. It also highlights the need to understand healthcare workers' lived experience using qualitative methodologies, which has

provided depth and new insights into the multiple realities of healthcare workers on the frontline.

Keywords*:* mental health, frontline healthcare workers', South Africa, lived experiences, COVID-19, pandemics, mental disorders, delivery of Health Care

Table of Contents

Acknowledgements **8**

Chapter 1: Context of the study **9**

1.1 Introduction 9

1.2 Study rationale and aims 11

1.3 Outline for the research report 12

Chapter 2: Literature review **14**

2.1 Background to the Coronavirus 14

2.2 The COVID-19 pandemic in South Africa 15

2.3 The mental health of healthcare workers' during COVID-19 18

2.4 Frontline Healthcare Workers and Burnout in the Workplace 20

2.5 Theoretical framework: phenomenology 22

Chapter 3: Methodology **25**

3.1 Research question and design 25

3.2 Participants 25

3.3 Instruments 27

3.4 Procedure 27

3.5 Data analysis 28

3.6 Trustworthiness 29

3.7 Ethical considerations 30

4.1. Participant demographics 33

4.2 Major themes identified in the dataset 34

4.2.1 Working during COVID-19 is an emotional rollercoaster 35

4.2.2. Working during COVID-19 is physically and mentally exhausting 48

4.2.3. Positive and negative attitudes towards the Department of Health 57

4.2.4. COVID-19's significant impact on daily life. 66

Chapter 5: Discussion and conclusion **70**

5.1 Implications of the study 77

5.2 Limitations of the study 78

5.3 Reflexivity 79

5.4 Conclusion 80

References **82**

APPENDICES **103**

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Chapter 1: Context of the study

1.1 Introduction

COVID-19 has had a worldwide impact. Some have argued that it has triggered mental health illnesses among those without a history or vulnerability to mental illness and aggravated the condition of those with a diagnosis or predisposition (Semo & Frissa, 2020). Thus, Miller (2020) suggests that a mental health pandemic emerged during the Coronavirus (COVID-19) pandemic, affecting all ages and minority groups in various ways. According to Newman et al. (2022), the COVID-19 pandemic has had a significant impact on psychological well-being, particularly among those working on the frontlines who are disproportionately exposed to the risk of transmission, mortality, and disease; as there has been constant reporting of new infection rates, hospital strains, and mortality rates. As a result, Cabarkapa and colleagues (2020), state that frontline healthcare workers' (HCWs) are arguably the most vulnerable group at risk of mental health illnesses.

Individuals with direct patient contact are referred to as front-line healthcare workers (Nguyen et al., 2020). Whereas, overall, a healthcare worker is defined as someone who provides services and care to the sick and injured, either directly as a doctor or nurse or indirectly as aides, medical waste handlers, laboratory technicians, or helpers (Joseph & Joseph, 2016). Therefore, front-line healthcare workers are medical personnel who provide critical care to infected individuals and work in unusual position (such as the COVID19 pandemic), sometimes beyond their capabilities and with the possibility of contracting the infection and putting themselves at risk for mental health illnesses (Gupta & Sahoo, 2020). Mental illnesses are described as sicknesses that cause mood changes, thoughts, or behaviour, with the most common symptoms being distress and difficulty coping in social, occupational, or family activities (Leighton & Dogra, 2009).

Robertson and colleagues (2020) express that workplace performance can be hampered by mental health disorders, which results in burnout, absenteeism, and resignations. Frontline HCWs have globally documented severe anxiety, psychiatric depression, suicidal ideation (planning or thinking about suicide), and post-traumatic stress disorder during the pandemic (Liu et al., 2020; Rossi et al., 2020). Strikingly, one study conducted in China during the first wave of the pandemic indicated that 36% of frontline HCWs experienced insomnia, 45% had anxiety, 51% had depression, and 74% had post-traumatic stress symptoms (Liu et al., 2020). Additionally, a study conducted in KwaZulu-Natal South Africa found that during COVID-19, public sector doctors and nurses employed in KZN had high rates of depression, anxiety, and post-traumatic stress as 44.3% to 86.2% participants reported mild to extremely severe symptoms of depression, anxiety, stress, and post-traumatic stress disorder (PTSD) (Dawood et al., 2022). Thus, Cabarkapa et al. (2020) express that the demand placed on all HCWs, as a result, is difficult to understand in its entirety, with the consequences for their mental health and well-being being much less well understood. However, even before the COVID-19 pandemic, the South African healthcare system was already overworked and under strain due to a lack of resources, personnel, and critical infrastructure, as well as a vast number of patients with tuberculosis, HIV, diabetes, and malnutrition (Cook et al., 2021). As a low-to-middle-income country, South Africa should have a doctor-to-patient ratio of 180 per 100,000 people. However, the doctor-to-patient ratio is estimated to be 62 per 100,000 people (Econex, 2015). As underlined by Rispel (2015), a scarcity of employees in hospitals has repercussions on the staff, with over 60% of nurses being too exhausted to operate efficiently while on duty due to continuous overtime labour.

Furthermore, the South African healthcare system's weak infrastructure places unrealistic caseloads on HCWs in general, resulting in unfavourable patient outcomes and safety issues due to infection control breaches (Robertson et al., 2020). As a result of systemic

problems and their influence on HCWs' mental health, they experience chronically elevated stress, worry, and weariness, which may degrade their work efficiency, raise their chance of errors, and put them at risk of illness and burnout (Gray et al., 2019). The pandemic has compounded these crises. As a result, frontline HCWs are more likely to experience psychological issues such as worry, depression, dread, distress, poor coping skills, and insomnia (Robertson et al., 2020; Shaukat, Ali, & Razzak, 2020). Thus, Cook et al. (2021) expressed that during the COVID-19 pandemic, preserving frontline HCWs' mental health and well-being is critical.

Therefore, this study aimed to obtain an in-depth understanding of the lived experiences of frontline HCWs actively working during the COVID-19 pandemic in South Africa. The additional pressures of a complex public health care system; limited resources; other factors such as poverty at an alarming rate of 55%; an unemployment rate of 29%, and extreme lockdown conditions (Kim et al., 2020) all make South Africa an essential context in which to research the lived experiences of frontline HCWs during COVID-19.

1.2 Study rationale and aims

The COVID-19 pandemic is currently a threat to people's physical and mental well-being, with frontline HCW arguably being the most vulnerable. Frontline HCWs are exposed to the virus and attempt to combat it, resulting in increased workload, physical and mental exhaustion, isolation from family, and the frustration of losing patients and colleagues during the pandemic. However, thus far, the majority of international (Karimi et al., 2020; Gunawan et al., 2021; Shaban et al., 2020) and local (Robertson, 2020) studies have investigated the impact of the pandemic on the mental health of frontline, and non-frontline HCWs have been based on survey questionnaires. Both frontline and non-frontline HCWs report high levels of mental health disruption during infectious disease outbreaks, according to Robertson's (2020)

quantitative study conducted in South Africa. Using this methodology, the subjective and qualitative experience of frontline HCWs is not captured. Only a handful of international studies have engaged in qualitative explorations of the lived experience of frontline HCWs during the pandemic (e.g., Iran, Indonesia, and Australia). However, to my knowledge, no study in South Africa has engaged in an in-depth, qualitative investigation of the lived experiences of frontline HCWs during the COVID-19 pandemic. As a result, it is critical to gain an in-depth understanding of the lived experiences of frontline HCWs in the South African context because prior to the COVID-19 pandemic, the South African healthcare system was burdened and under great strain (i.e., critical facilities, lack of resources, a large number of patients with HIV, malnutrition, diabetes, and tuberculosis) (Cook et al., 2021).

1.3 Outline for the research report

The study's context and its rationale and aims have been outlined in chapter one. Chapter two provides a detailed literature review and outlines the theoretical framework used for this study. The study's research questions, design, and methodological approach are specified in Chapter three. The fourth chapter examines the findings of the study. Lastly, Chapter five provides an in-depth discussion of the results, limitations, and future directions of research, as well as conclusion comments.

Chapter 2: Literature review

The study's literature review is covered in Chapter Two with reference to the context of the Coronavirus, the COVID-19 pandemic in South Africa, the mental health of healthcare workers' during the pandemic, and frontline HCWs'' burnout in the workplace. The study's theoretical frameworks, especially phenomenology, are also outlined.

2.1 Background to the Coronavirus

Over the last century, global epidemics have severely threatened public health. Severe Acute Respiratory Syndrome (SARS), for example, in 2002, caused 800 deaths, the H1N1 outbreak in 2009 caused 18 500 deaths, and the Ebola outbreak in 2014 caused 11 310 deaths (Anjorin, 2020). In comparison, over 14 112 864 million people worldwide have been infected by COVID-19, with more than 321.84 million fatalities, making COVID-19the fifth pandemic since the 1918 influenza pandemic arguably the most devastating (Liu, Kuo & Shih, 2020). Consequently, the unexpected appearance of COVID-19 poses a severe public health concern, and while the virus is a novel entity, it is not a new member of the family; instead, it is a new strain of the human SARS coronavirus (Das & Choudhuri, 2020). In December 2019, the first cases of COVID-19 occurred, and it was first recognized in Wuhan, China, in a province called Hubei (Hafeez et al., 2020).

Nyashanu and colleagues (2022) explain how the COVID-19 virus has had a significant impact on people all across the world, particularly frontline HCWs. They also explain how it has had a substantial impact on communities' social and economic structure, and it is thought that frontline HCWs are at risk of infection due to extended exposure to coronavirus patients (Nyashanu et al., 2022). In addition, there has been much uncertainty about how COVID-19 is spreading; now, the consensus is that it is unquestionably airborne, which adds to the fear and

uncertainty (and hysteria) of frontline HCWs and the general public (Greenhalgh et al., 2021; Elsharkawy & Abdelaziz, 2020). Coronaviruses are also known for their ability to mutate and recombine, according to Lu et al. (2020). Anjorin (2020) explains that the virus spreads from person to person via respiratory droplets produced by coughing and sneezing, with an asymptomatic individual serving as the primary source of transmission. Hafeez et al. (2020) show that transmission can occur even before symptoms appear in patients, with an incubation period of two to 14 days. The symptomology displayed by patients is diagnosed as viral pneumonia, which includes fever, malaise, dyspnoea, and dry cough (Liu, Kuo & Shih, 2020). Furthermore, COVID-19 has spread domestically and internationally since its inception (Lai et al., 2020). The death rate and the number of confirmed cases has gradually increased since the first case was identified, putting the entire world on high alert (AlTakarli, 2020).

2.2 The COVID-19 pandemic in South Africa

According to Nueangnong et al. (2020), a pandemic is declared when a virus harms an immense number of individuals. By March 2020, the World Health Organisation (WHO) declared an international pandemic as the virus was regarded as a public health emergency (Spoorthy, Pratapa & Mahant, 2020). Furthermore, on March 5th, 2020, South Africa's National Institute of Communicable Diseases (NICD) announced its first confirmed case (Staunton et al., 2020). However, Chersich et al. (2020) explain that there are significant gaps in response capacity where the pandemic is spreading in Africa, particularly in terms of human resources and protective equipment.

However, the COVID-19 pandemic in South Africa's population has posed a new danger to a nation that has experienced a series of collective traumas (Atwoli et al., 2013). South Africa has a history of constitutionally sanctioned racial exploitation and discrimination in the form of apartheid (Norman et al., 2007). According to Atwoli and colleagues (2013),

high levels of frequently criminal interpersonal violence persisted after apartheid, fuelled by rapid urbanization and persistent social inequalities, resulting in high trauma exposure. Therefore, it is impractical to think about South Africa's mental health without considering its sociohistorical context (Chew et al., 2020). With the constant threat of home invasions, violent hijackings, murder, kidnapping, theft, gangsterism, and so on, daily trauma is common in South Africa (Weingarten, 2004). Thus, the trauma of the COVID-19 pandemic could well exacerbate pre-existing mental health disorders and trigger economic deterioration, resulting in increased poverty and inequality (Montemurro, 2020; United Nations, 2021).

Most South Africans live in impoverished households and multigenerational families in an economically disparate society with a possible prevalence of depression, anxiety, gender-based violence, neglect, and child abuse (Naidu, 2020). It is often difficult for those living in poverty in South Africa, where basic infrastructure (water and food) is scarce, and overcrowding and high density are the norms, to adhere to social distancing and public measures during the pandemic (De Groot & Lemanski, 2020).

With the advent of the pandemic, many individuals were suddenly jobless, homeless, hungry, and trapped in informal settlements where appropriate social distancing was not feasible (Botes & Thaldar, 2020). Mukumbang et al. (2020) state that these circumstances have fuelled and continue to fuel feelings of self-doubt, anxiety, anger, distress, fear, and melancholy, all considered precursors and prodromes to mental health disorders like anxiety and depression. Therefore, this pandemic also requires a rise in the mobilization of resources to combat the pandemic and mitigate financial losses while ensuring social services to the poor (Nyasulu & Pandya, 2020). Subsequently, Chen et al. (2020) expresses that major pandemic outbreaks necessitate an increase in frontline HCWs, yet this is difficult to achieve in a country already experiencing shortages of HCWs.

South Africa is a profoundly unequal country in which only 16% of the population has access to medical assistance, with the rest relying on a public healthcare system that is underfunded and poorly managed (Staunton, Swanepoel & Labuschaigne, 2020). However, Clearly et al. (2021) explain that the pandemic has increased pressure on the healthcare system, resulting in critical deficiencies of resources (ICU beds, hospital beds, medical staff, and ventilators), especially in the South African public sector. Despite being understaffed, underfunded, and lacking in human resource capacity, the South African public health service has experience with viral pandemics (such as Ebola and Human Immunodeficiency Virus (HIV)) and tuberculosis (TB), along with experienced epidemiologists and sound public health policies (Naidu, 2020). Furthermore, in countries like South Africa, all HCWs are at high risk of occupational exposure to various pathogens, including Measles, Tuberculosis, Ebola, and HIV (Alele et al., 2019; Ngatu et al., 2017).

Dramowski et al. (2020) state that COVID-19 poses a more significant threat to all HCWs than any pathogen to date. In the report of Rees et al. (2021), in early August 2020, the Minister of Health in South Africa declared that over 27 000 HCWs had been diagnosed with COVID-19, with 240 deaths. Moreover, according to data taken from the national hospital surveillance database for COVID19 admissions from private and public hospitals in nine South African provinces, a total of 10,149 COVID-19 HCWs admissions were recorded from 5 March 2020 to 31 December 2021 (Ratshikhopha et al., 2022). The provinces of Gauteng and KwaZulu-Natal recorded the most deaths among HCWs admitted with COVID19, followed by the Eastern Cape (Heywood, 2021). Nevertheless, the suspension of the AstraZeneca/Oxford COVID-19 vaccine roll-out due to low efficacy against the new (i.e., 501Y.V2) variant of this coronavirus raises concerns about the vaccine's safety (Dzinamarira et al., 2021), all of which contributes to anxiety amongst the general South African public. The constant growth of infected patients, a rise in mortality, a deficiency of a specific treatment, widespread media

attention, massive workload, a lack of personal protective equipment, and feelings of insufficient support can be factors that lead to the mental burden of HCWs (Lai et al. 2020).

2.3 The mental health of healthcare workers' during COVID-19

Worldwide the spread of COVID-19 accompanying morbidity and mortality has posed several challenges to nations, such as the unaddressed and underrated mental health problems that frontline HCWs develop during the pandemic (Spoorthy et al., 2020). According to Robertson et al. (2020), HCWs are the most valuable source for maintaining essential services and COVID-19 responses. As explained in Chapter 1, an HCW can be defined as an individual who provides direct or indirect treatment and services for the sick and ailing, either as a nurse, doctor, assistant, laboratory technician, helper, and even a medical waste handler (Joseph & Joseph, 2016).

Aside from the biological sense, dealing with COVID-19 poses a psychological challenge due to the profound and long-term changes it can cause in daily life (Ornell et al., 2020). Individuals are comparing COVID-19 to "the end of the world," with hospitals overburdened amidst a variety of concerns about day-to-day life (Lima et al., 2020, p.5), which is further exasperated in the South African context, as detailed above. Moreover, Bielicki and colleagues (2020) elucidate that those various viral diseases are known to significantly impact HCWs, as is currently the case with COVID-19.

Individuals are advised to maintain social distance during the pandemic, as society experiences a shutdown or slowdown of everyday activities, reducing contact between people and, as a result, reducing the risk of new cases, yet HCWs, by necessity, must do the opposite (Wilder-Smith & Freedman, 2020; Ornell et al., 2020). Therefore, frontline HCWs' role in providing care for patients with COVID-19 puts them at risk of experiencing psychological and physical health issues (Shaukat, Ali & Razzak, 2020). Ornell et al. (2020) explains that

those in close contact with patients and their bodily fluids, such as nurses, nursing assistants, and medical doctors, are the most prone to infection. However, there is a significant knowledge gap among HCWs who conduct aerosol procedures, as disease risks are widely unknown (Harding et al., 2020).

HCWs are well aware of the substantial risk of infection associated with their job. They may also be concerned about infecting their children, families, and friends, particularly those who are elderly or have chronic medical conditions (Rose, 2020). Thus, frontline HCWs may isolate themselves and live in hotels or student residents where they can temporally rest (Hu et al., 2020). As a result, stigma and fear are heightened, with HCWs experiencing loneliness and loss (McMahon et al., 2016; Koh, 2020).

In early cases in Wuhan, China, 29% of COVID-19 patients were HCWs who were thought to have acquired the virus in a hospital (Bielicki et al., 2020), whereas, on May 6th, 2020, Minister Zweli Mkhize of South Africa stated that 511 HCWs (7% of the national total) tested positive for COVID-19, with nurses making up 53% of the total cases (Dramowski et al., 2020). According to a Human Sciences Research Council poll of South African HCWs, approximately 80% felt endangered by their work environment during the COVID-19 pandemic due to COVID19 viral exposures (Rees et al., 2020). Thus, Rees et al. (2020) argue that more needs to be done to protect the well-being of HCWs as there is inadequate research to prevent and control COVID-19 in South Africa.

Nevertheless, in addition to being at risk of obtaining the virus, frontline HCWs face fatigue, tough triage decisions, separation from families, stigma, and the pain of losing colleagues and patients (Chersich et al., 2020). Similarly, a quantitative study conducted in the United States of America displayed that staff shortages, competency issues when redeployed without sufficient training, insufficient and cumbersome personal protective equipment, and

constant exposure may all make it difficult for HCWs to respond to demanding and unexpected medical emergencies (i.e., emergencies during the COVID19 pandemic) (Young et al., 2021). In Qatar, however, Villar and colleagues (2021) state that health authorities increased nurse recruitment and transferred some nurses from state hospitals to COVID-19-authorized facilities. Frontline HCWs were forced to work in conditions that did not comply with infection control requirements because of how drastically the workplace environment had changed; as a result, orientation and training were accelerated to speed up the deployment of nurses to the various COVID-19 sites in Qatar (Villar et al., 2021).

In contrast, a qualitative interview study conducted in the United Kingdom demonstrated that frontline HCWs expressed that they felt frustrated with individuals who did not abide by social distancing rules as the virus could spread further, which results in an increase in workload and altering working conditions in the workplace (Aughterson et al., 2021). Similarly, an exploratory qualitative research methodology also used in the United Kingdom revealed that frontline HCWs who were on call during the COVID-19 pandemic might have been frustrated due to evolving standards and rising patient expectations (Nyashanu et al., 2022). As a result, Grailey and colleagues (2021) state that working in a pandemic adds exceptional stress to a known-to-be stressful workplace, making the need for strong cooperation and efficient communication even more crucial. This is especially difficult when PPE is being used, and staff is being redeployed (usually from non-specialist or outpatient areas to work in high-acuity COVID-19 areas) (Grailey et al., 2021).

2.4 Frontline Healthcare Workers and Burnout in the Workplace

The COVID-19 pandemic has led to extensive work hours, revealing inadequate resources, occupational risks, and interference in health care workers' working environment and sleep. This level of strain has arguably been more severe in frontline HCWs (Zhang et al.,

2020). This has resulted in a negative mental impact on frontline HCWs resulting in insomnia, anxiety, depression, and posttraumatic stress disorder (Chew et al., 2020., Kisely et al., 2020; Pappa et al., 2020). Furthermore, a one-month cross-sectional observational study involving 180 frontline HCWs in China who treated patients with the COVID-19 virus found that increased sleep disruption can lead to long-term insomnia, disrupting the circadian rhythm and, as a result, having long-term health consequences for these employees, including mental health disorders (Zhang et al., 2020; Xiao et al., 2020).

Frontline HCWs may also be at more risk for burnout in the workspace. Burnout is a psychological syndrome that develops as an adverse reaction to prolonged occupational stress, which consists of cynicism, reduced personal ability, and emotional fatigue (Bradley & Chahar, 2020; Leiter & Maslach, 2003; Maslach, Jackson & Leiter, 1996). Cynicism is a state of detachment from one's work due to fatigue and is associated with a lack of passion and interest. In contrast, reduced personal ability refers to a lack of professional efficacy and efficiency at work (Lasalvia et al., 2021). Moreover, Lasalvia et al. (2021) explain that emotional fatigue is associated with a person's stress level, linked to a reduction in emotional and physical energy.

According to West and colleagues (2018), burnout has ramifications beyond the well-being of the workers, affecting the standard of service given and the overall well-being of the organization. Moreover, Bansal et al. (2020) and Gold et al. (2020) state that burnout can result in malpractice and a potential increase in drinking and drug use, suicide, and divorce. Frontline HCWs have expressed that providing care during the pandemic is emotionally challenging, with stress, confusion, and stigmatization resounding themes (Ramaci et al., 2020).

However, before the pandemic worldwide, most general and frontline HCWs had been experiencing an increase in burnout (Bradley & Chahar, 2020). Thus, the COVID-19 pandemic could have aggravated an already-existing issue within overburdened healthcare systems,

aggravating burnout's pernicious impact (Lasalvia et al., 2021). For instance, even prior to the COVID-19 pandemic, Uganda's healthcare system, like that of other low- and middle-income nations, was plagued by issues like a high patient load in the face of inadequate infrastructure, human resources, and stock-outs of supplies and equipment (Kayiga et al., 2021). Therefore, work burnout before the pandemic is widespread among HCWs in general, according to Elshaer et al. (2018), with the highest job burnout found among frontline HCWs in emergency and intensive care units, which are subjected to a great deal of work-related stress.

As a result, it can be argued that pandemics can have a significant psychological impact on all HCWs, highlighting the importance of adequate psychological support, interventions, and staff support (Shaukat, Ali & Razzak, 2020). Social support has been found to enhance sleep quality indirectly by reducing anxiety and stress and increasing self-efficacy, according to Xio et al. (2020). On the other hand, stronger supervisor care seems to mitigate the effect of post-traumatic stress on nurses' intentions to leave (Jung et al., 2020). Researchers also indicate that HCWs feel a strong sense of unity amongst each other as they believe that they are "all in this together", fighting against a common adversary (Aughterson et al., 2021, p.5).

2.5 Theoretical framework: phenomenology

Phenomenology as science provides researchers with a theoretical framework for understanding phenomena at the subjective reality level (Qutoshi, 2018). According to Yüksel and Yıldırım (2015), the key goals of phenomenological research are to extract the truth from people's narratives of their thoughts and experiences, as well as to produce detailed explanations of the phenomenon. In its most basic form, phenomenology is a way of thinking – a procedure – that illuminates the embodied, contextual, and inter-subjective qualities of the life-world (Tomkins & Eatough, 2013). The notion of the lifeworld is a hybrid approach that investigates how individuals' daily experiences manifest in their lifeworlds by taking into

account selfhood, sociality, embodiment, temporality, and spatiality (Neubauer et al., 2019). Bengtsson (2013) explains that when it comes to perception and understanding, the lifeworld approach includes texts and tools, and behaviours as it seeks to decipher texts and act on the meanings they convey.

Nevertheless, in this study, the emphasis is on lifeworld experiences; thus, a qualitative research method was also employed. Qualitative research investigates and conceptualizes human experience as it is expressed in the text – it works with small groups of participants to obtain rich and open-ended dialogue to gain a deeper understanding of the meanings people attribute to their experiences (Salkind, 2010).

In this study, phenomenology is utilized to characterise the essence of a phenomenon by looking at it through the eyes of frontline HCWs who have experienced being at the forefront of the COVID-19 pandemic. The goal of putting phenomenology into practice is to express the relevance of this experience in terms of what was experienced and how it has been experienced. As a result, employing a lifeworld phenomenological framework and a qualitative research methodology is relevant to this study because it seeks to gain an in-depth narrative understanding of frontline HCWs' lived experiences during the COVID-19 pandemic.

The benefits of using phenomenology are that it is a good approach for researching human experience and attempts to discover hidden significance in the phenomena found in the narrative's words (Wimpenny & Gass 2000). Specifically, qualitative approaches allow the researcher to collect in-depth data and understand experiences; they also will enable participants to disclose themselves, reflect, and give a voice in the research process (Ntinda, 2019), which cannot be quickly done through other methods. However, Ntinda (2019) also explains that researchers must be aware of complicated power relationships between the participant and researcher and the difficulty in determining one’s position during the research

process. Taken together, using a lifeworld phenomenological framework and a qualitative methodology outlined below, this study, therefore, aimed to gain an in-depth understanding of the lived experience of frontline HCWs actively working during the COVID-19 pandemic in South Africa.

Chapter 3: Methodology

In Chapter Three, the research methodology is discussed. The reasoning or theory behind the tools (methods) chosen is known as a methodology (Gabriel, 2011). In this section, primarily, the research question and design of the study, the participants of the study, the instruments, and the procedure of the study are discussed, followed by the data analysis method, trustworthiness, and ethical considerations of the study.

3.1 Research question and design

The main research question guiding this study was: What are the qualitative, lived experiences of frontline healthcare workers' actively working during the COVID-19 pandemic in South Africa?

This study employed a qualitative, exploratory research design. Qualitative, semi-structured qualitative interviews were conducted with frontline HCWs. A lifeworld phenomenological approach guided the proposed research, as the interviews captured the participants' lived experiences (Creswell et al., 2007). The importance of personal perspective (i.e., reflexivity) and perception is emphasized in phenomenological approaches, which are based on a concept of personal knowledge and subjectivity (Lester, 1999). As a result, Lester (1999) states phenomenology is useful for deciphering subjective experiences and learning about people's motives and behaviours.

3.2 Participants

This study formed part of a larger study entitled *Mental Health of South African Healthcare Workers During the COVID-19 Pandemic*. A total of 650 participants completed an online survey in 2020 as part of the larger study. This study aimed to recruit 10 to 15 frontline HCWs from this sample. A total of 11 frontline HCWs were recruited using the

following inclusion criteria: Frontline HCWs' who work in private or public hospitals, such as doctors and nurses, and frontline HCWs' who reported to work directly with COVID-19 patients. The exclusion criteria were: work experience- minimum of 1 year of work experience before the pandemic; and participants unable to interview in English. The inclusion of frontline HCWs did not fit the traditional definition of frontline HCWs. Frontline workers are typically defined as nurses and doctors in the literature. However, in the context of the pandemic, frontline was taken to mean any healthcare worker working directly with COVID-19-positive patients in a hospital setting for the purposes of this study. The researcher recruited four people outside of the broader research and seven participants from the larger study who completed the online survey and expressed a desire to be contacted for an interview. The additional participants outside the larger research were recruited using convenience sampling since there were insufficient participants to interview from the larger study. Additional participants were recruited through referrals from a frontline HCW, as frontline HCWs interested in participating in the broader research were especially difficult to contact during the pandemic due to the increased demand for healthcare workers' during the COVID-19 outbreak. Additional participants' contact information was provided with their agreement, and a thorough explanation of the study was sent to them along with consent and demographic forms.

It has previously been suggested that a sample size of at least 10-20 is adequate for a small-size study (Clarke & Braun, 2013). As a result, the sample size of 11 people is considered sufficient for the size of this study. Furthermore, in this study, data saturation was reached to some degree via common themes identified across some of the participants, as presented in the results chapter. When no new information is found through data analysis, this is referred to as data saturation, and it informs researchers that they may need to cease collecting data (Faulkner & Trotter, 2017). During the participant interviews, the interviewer noticed some patterns resurfaced in some themes. Finding innovative concepts, viewpoints, or patterns came to an

end as the researcher spoke with more and more participants. However, it should be noted that there was also significant variability in individual participants' experiences.

3.3 Instruments

Demographic Questionnaire: Information about the gender, age, educational qualification, job position, previous work experience, family, and other support systems, as well as relevant health-related information, had already been collected using a demographic questionnaire (see Appendix A) attached to the survey for the participants recruited from the larger study. However, the same demographic questionnaire was distributed to some people who did not engage in the larger survey study but were recruited separately. Some demographic data may be used for descriptive purposes only, although other data can be used in analyses to gain a more detailed understanding of the frontline HCWs.

Qualitative interview: A semi-structured interview schedule was adapted from studies by Rubin et al. (2016) and McCormack and Bamforth (2019). The interview schedule consisted of 16 questions developed from the previous studies and the open-ended questions used in the questionnaire (see Appendix B). However, before conducting the interviews, a pre-test study was conducted to properly test the questions and determine the approximate duration of an interview. Each interview lasted a minimum of 37 minutes on average. However, several of the participants' comments prompted the interviewer to continue beyond the allotted 16 questions.

3.4 Procedure

At the end of the larger study's survey, participants were asked if they would like to engage in a further extension of the research, specifically a qualitative interview. Individuals

who agreed to participate were contacted and emailed a participant information sheet about this research study. However, due to the high demand for frontline HCWs during the pandemic, volunteers who participated in the broader study and indicated an interest in a follow-up interview were later unable to commit to an interview. As a result, the researcher had to recruit all participants using both recruitment strategies; after participants had read and signed the consent form, the semi-structured interview was arranged at a suitable time and date. The researcher then conducted the interview in English from August to November 2021, and since the recruited frontline HCWs in South Africa generally spoke English, it was the preferred language for conducting interviews.

The researcher understood the importance of preventing COVID-19 transmission between the researcher and participants. Thus, depending on the resources and personal preferences of the frontline HCWs the qualitative narrative interview was conducted and recorded on a digital device using a comfortable platform for the participant – specifically WhatsApp, Zoom, or Microsoft Teams - at a suitable location and time that was convenient for the participant. Online interviews allow the researcher to conduct interviews across the country. No reimbursement was given to participants in line with ethics guidelines.

One participant requested a follow-up interview because they felt they had not fully responded to the interview questions. Each interview was audio recorded on Teams and Zoom and then transcribed using the Otter application, which transcribed the interview clearly and with minimal errors. After each interview, the researcher wrote about their thoughts and feelings in a reflective notebook.

3.5 Data analysis

As a first step, the audio-recorded narrative interview was orthographically transcribed. Second, the transcriptions of the interviews were analysed using reflexive thematic analysis

principles (Braun et al., 2019). Thus, to describe the data, preliminary codes were generated and assigned to the data using reflexive thematic analysis. Reflexive thematic analysis is a simple and conceptually flexible interpretive technique for qualitative data analysis that makes it easier to find and analyse themes or patterns in a set of data (Braun & Clarke, 2012). During this phase, the data is organized meaningfully and methodically. The researcher independently analysed the data to identify underlying themes; basically, the researcher became acquainted with the material by comprehending the breadth and depth of the content and seeking patterns and meanings. Following that, the researcher labelled and organized data items into meaningful categories. Although multiple themes were identified, the researcher amended and integrated the themes depending on the data, resulting in a total of four main themes. After this phase, the codes were grouped into overarching themes that appeared to have something to say specifically about this study subject. The researcher then identified and matched the key quotes from the participants to the themes, focusing on those that best addressed the research topic. The topics and quotes were then presented to address the research question. As a result, the data acquired provided an in-depth insight into frontline HCWs' lived experiences during COVID-19.

3.6 Trustworthiness

Lincoln and Guba established four stringent dimensions in qualitative research to establish trustworthiness: credibility, dependability, confirmability, and transferability (Forero et al., 2018). The credibility of this study was ensured by accurately assessing and documenting the participant interviews, which was done by reporting each participant's truth. Furthermore, credibility in this study was created by demonstrating that data analysis was performed accurately, consistently, and exhaustively by recording, systematizing, and presenting the

methodology of analysis in sufficient detail to allow the reader to assess its credibility. Furthermore, all the research methods described in this study can be used, ensuring dependability, and allowing those outside the study to inspect, monitor, and analyse the research process. This study additionally achieves dependability by offering a full description of the research procedures. Conducting a step-by-step replication of the study to detect similarities in outcomes while simultaneously keeping a reflexive notebook to keep a chronicle of one's thoughts, reflections, and decision making as one makes meaning from data.

On the other hand, confirmability was ensured through a rigorous review process in which the audit trail is designed so that the information gathered supports the study's results and interpretations. The audit trail was detailed by the researcher throughout the data collecting, data analysis, and data interpretation processes. The study used a qualitative research design to provide an in-depth knowledge of the lived experiences of frontline HCWs during COVID19. The methods used to gather, analyse, and interpret the data are covered in length in separate sections. Auditing this trail will show how the information acquired supports the study's findings and interpretation. Transferability was ensured because this study can be applied to a similar study, and the results obtained would be similar to those obtained in the current study. Furthermore, in this study, rigour was assured by using respondent validation and reflective diaries following each interview with a participant. Nevertheless, ensuring the trustworthiness of the data is an important consideration in qualitative research.

3.7 Ethical considerations

Ethics are standards that enable researchers to differentiate between inappropriate and permissible behaviours (Resnik, 2011). Therefore, ethical principles and standards were sustained throughout the research study. Ethical clearance for the main project had already been received from the Human Research Ethics Committee (Medical) of the University of the

Witwatersrand (M200461), and the researcher has received confirmation that she is listed as a co-researcher on this project (see Appendix C). The following ethical considerations in this study were examined, namely, informed consent and ensuring confidentiality.

According to Denzin and Lincoln (2011), informed consent is the foundation of ethical study. The theory of informed consent emphasizes the researcher's obligation to thoroughly educate participants about all aspects of the study in a language they can understand (Sanjari et al., 2014). Participants must be sufficiently aware of what will be asked of them, how the data will be used, and the potential risks or harms (Koonin, 2014). It is to be expected that participants may experience some vulnerability when responding to questions in the interview; therefore, information on free counselling services was made available (The South African Depression, The Healthcare Workers' Care Network and Anxiety Group (SADAG) -0800 567 567 (toll-free) that provides 24-hour telephonic counselling).

Participants provided clear, active, signed consent to participate in the study, including knowing their rights to access their data and the ability to withdraw at any time (Fleming & Zegwaard, 2018). Since the interview was performed remotely, participants were provided with a participant information sheet and consent form electronically. Before the interview, participants read, signed, and emailed the PIS and consent form to the researcher (See Appendix D).

Participant confidentiality occurs when the researcher is aware of the participant's identity, but the data has been de-identified, and the identity is kept private (for example, in interviews where the researcher is aware of the participant's identity, only confidentiality, not anonymity, may be offered) (Fleming & Zegwaard, 2018). As a result, confidentiality in this study was maintained by keeping any identifying information anonymous when reporting and

publicizing. Besides, participants were also informed about how their identities and personal information will be protected.

Chapter 4: Results

This chapter presents the demographic characteristics of the participants and the thematic results.

4.1. Participant demographics

Eleven front-line healthcare workers consented to participate in this study. The demographics were obtained from the broader survey study, and individuals who were recruited outside of that sample (convenience sampling) were asked the same demographic question through email. Table 1 represents the participants' demographics as captured by the demographic questionnaire, including their age, gender, employment, years of work experience, and whether they worked in the public or private sectors. The participants' mean age was 39 (SD = 10.6), ranging from 26 to 54 years. Of the 11 participants, nine were females, with an average of 13 years (SD = 9.8) of work experience (range: 2 – 28 years). The majority of the participants (64%) reported to work in the private sector, with one HCW working in both the private and public sectors. The vocations of the HCWs were varied and did not fit the traditional definition of frontline HCW. As explained in Chapter 2, the definition of frontline HCW was adjusted in this study to include those who worked directly with COVID-19-positive patients. Therefore, of the group, an equal number (n = 2) of psychiatrists, physiotherapists, and general medical practitioners participated, with one participant from the following healthcare fields: dentistry, midwifery, speech therapy, occupational therapy, and audiology.

Table 1: Participant Demographics

Code	Age	Gender	Occupation	Years of work experience	Type of sector
P1	49	Male	Psychiatrist	20	Private
P2	40	Female	Speech Therapist	8	Private
P3	54	Male	Psychiatrist	25	Private and Public
P4	28	Female	Community service Medical Doctor	3	Public
P5	51	Female	Occupational Therapist	28	Private
P6	49	Female	Physiotherapist	25	Private
P7	32	Female	Dentist	7	Private
P8	26	Female	Medical Doctor	2	Public
P9	41	Female	Physiotherapist	19	Private
P10	31	Female	Audiologist	5	Private
P11	27	Female	Midwife	2	Public

4.2 Major themes identified in the dataset

Using the reflexive thematic method of qualitative analysis, four primary themes were identified that characterised frontline HCW' lived experiences during the COVID-19 pandemic in South Africa. Specifically, as illustrated in Table 2, the overarching themes identified were: (1) Working during COVID-19 is an emotional rollercoaster; (2) Working during COVID-19 is physically and mentally exhausting; (3) Negative and positive attitudes towards the Department of Health; and (4) COVID-19's significant impact on daily life. Each theme is explored below through illustrative excerpts from participant interviews that best addressed or characterised their lived experiences and how the COVID-19 pandemic influenced these

experiences. To clarify each remark's intended meaning, each statement's context was mentioned where necessary.

Nonetheless, this section looked at how frontline HCW described their lived experiences throughout the pandemic. After presenting a broad summary of how participants reported their lived experiences, this section will unpack the emerging themes.

Table 2: Summary of themes and sub-themes

Themes	**Categories**
Working during COVID -19 is an emotional rollercoaster	• Attitudes towards their work • Experience within the workplace • Work became time-consuming
Working during COVID-19 is physically and mentally exhausting	• Physical, psychological and emotional fatigue • Coping mechanisms; religion and support systems within their surroundings
Positive and negative attitudes towards the Department of Health	• Resources • Vaccines • Department of Health
COVID-19's significant impact on daily life.	• Gratitude • Being more patient and understanding • Learning new tasks

4.2.1 Working during COVID-19 is an emotional rollercoaster

This topic highlights how frontline HCWs expressed their thoughts and feelings about their work experience and surroundings during the COVID-19 pandemic versus before the COVID-19 outbreak. Participants generally described their feelings about their work during the pandemic as satisfying or upsetting. Additionally, participants noted the difference in their

job from before the pandemic to now. The change revealed a broad spectrum of feelings and obstacles.

4.2.1.1 Attitudes towards their work

This sub-theme captures the attitudes participants have towards their jobs during the pandemic. Several participants expressed that they still felt rewarded despite the difficulties and challenges associated with their work. Rewarding because several participants said that their work was perceived as important during the pandemic, mainly because they were at the forefront. They were deemed essential for fighting the pandemic, which brought them a sense of honour.

> ***P2:*** *"So, I really felt a sense of duty like a sense of, this is, my time, because I cannot refuse to see COVID patients. For example, I have to step up, and even though it was risky working at a hospital at all, never mind going to the COVID ICUs, I felt like we on the frontline for a reason, and we had to help these people, so I really felt I had a significant role to play […]"* (Speech therapist)

Furthermore, one participant stated that their employment became even more fulfilling during the third wave, as they were used to the new standards and norms from the first and second waves.

> ***P2:*** *"[…] it is rewarding. It is not as stressful anymore; currently, I am enjoying it busy. I am learning to... I am not learning; I still enjoy the kind of COVID patients I work with, like work is good, I feel like I have a handle on everything, like all the protocols are under my belt […]"* (Speech therapist)

The sense of honour also stemmed from people looking at healthcare for information and guidance on battling this disease. It also highlighted other healthcare professionals' work deemed unimportant before the pandemic, such as those working within mental health

facilities. Instead, mental healthcare providers such as psychiatrists and psychologists are now vital.

> ***P1:*** *"Positively, it is a blessing, and an honour to be a health worker and have people looking to me for hope, information, and guidance. Not so much the ability to travel during other people's lockdowns but the need for people to be heard. Psychiatrists are always in short supply, but this pandemic shone the spotlight on our profession once again […] People value firefighters when there is an earthquake or terrorist attack. We as psychiatrists are being valued more and more now that people are aware and educated about their mental health […]"* (Psychiatrist 1)

Participants also stated that they considered their professions satisfying because of the attention and respect they received from others, which helped them realise that they were making a difference.

> ***P6:*** *"It is incredibly rewarding, it is a small town I stay in, and I am always ready to practice […] and obviously having breakfast at one of the beaches, restaurants, and someone, call saying hey, look, thank you if it were not for you. Like it is small things when realised, you are making a difference […]* (Physiotherapist 1)

However, some found their jobs unrewarding; this mainly stemmed from the changes experienced within the workplace and guidelines and programs. As described by an Occupational therapist:

> ***P5****: "Work, it is upsetting because we have to get rid of the program, I am passionate about. So now, the waiting list for that program is very long, and the*

need for that program is high. So, I feel very upset about the people in the service they need, as they are seen as not a priority." (Occupational therapist)

On the other hand, others reported mixed emotions about their employment, stating that it was satisfying when patients recovered and were treated well. Yet unrewarding, when the public, mainly younger individuals, does not take the COVID-19 virus seriously, despite all the information given to them, which would cause a strain on the healthcare centre, putting more stress and work on the healthcare workers.

P3: *"I am not so sure; it ranges. Rewarding when working with patients who have been personally affected by covid and its death, and you know they truly appreciate what you do for them. It is unrewarding because there are still people in the younger generation who think it is a joke, no matter how you try to explain the opposite to them. Upsetting, because my kids are part of the younger generation. According to some, I am emotionally manipulative and should not warn them about the dangers of covid; I just went quiet. Rewarding, I know with God's grace we made a difference in many patient outcomes."* (Psychiatrist 2)

Furthermore, one physiotherapist indicated that they found their employment frustrating because many of the facts and truths of COVID-19 were modified or erased from the media, causing others to be ignorant of what genuinely exists.

P9: *"Upsetting that the people will not listen to reason and are forcing others to do something they believe in because they have not been given all the facts, since most of the facts about COVID have been left out or deleted from the media."* (Physiotherapist 2)

However, some feel that their work has always been rewarding despite the pandemic; they will always enjoy it*;* as explained by a medical doctor, "*working in the hospital is rewarding regardless of the pandemic"* (Medical doctor, P8).

Nonetheless, taken as a whole, the majority of participants provided an in-depth description of their work experiences, such as being extra conscious and cautious of their surroundings, being frustrated and worried, treating patients differently, and acknowledging the importance of physical touch, while also expressing challenges or positives that came with the experience, such as receiving a sense of recognition and respect.

4.2.1.2 Experience within the workplace

This sub-theme reflects the healthcare workers' work experiences throughout the pandemic and the problems or accomplishments they may have met. When participants discussed their work experiences during the pandemic, it was evident that the work environment had changed. This shift is apparent as healthcare professionals expressed the need to adapt to a new norm, such as avoiding physical contact, being cautious of what they touch, what they wear while working, what they bring into the hospital, and constantly remaining aware of their surroundings. With the excerpts below, nonverbal communication, such as physical touch, plays a vital role in developing patient relationships. Physical contact is required for connections, intimacy, and reassurance, and refraining from nonverbal communication such as this and wearing personal protective equipment (PPE) creates a barrier between the patient and healthcare.

P2: *"[…] I work in a private hospital as a speech therapist, and suddenly it was the first real thing; we were not allowed to really take much into the hospital. We had to think very carefully about the items and belonging. When in and out of hospitals, we had to think about what shoes we were wearing…about*

how to sanitise and clean before you enter your house again […] it was just a whole set of protocols sanitising things and then of course when it came to treating your patients differently. In terms of even just the PPE, you wear or blow on their soup when you are about to feed them. Little things like that that we do not take note of […] I am more aware and cautious of what I do, and touch and how I interact with my patients, and sometimes even my confused patients want to reach out and touch me […]" (Speech therapist)

P1: *"It was tough and is still tough to not have a cure or solution when patients look to us. The essence of caring has been highlighted. Being there [present] for patients, sitting with them, holding their hands, and listening to them. Sitting silently with them has highlighted the need for people to connect. We are supposed to disconnect and distance, but COVID patients yearn for connections, for intimacy. Even the PPE that we wear seems to create a barrier between us and them […]"* (Psychiatrist 1)

Furthermore, participants stated that it was more difficult to develop therapeutic ties with their patients due to the fear that the patient would soon die, which affected the quality of the job and relationship while also causing emotional and psychological weariness.

P1: *"[…] The worry that they would die soon also made it difficult to build a therapeutic relationship […] It is hard to form attachments with such patients and then lose it all to start all over again with the next patient who replaces them within minutes […]. Existentially, this was hard to stomach when I was alone with my thoughts in bed. I wanted patients to get help. But indirectly and unintentionally, I also wished some patients to die […]"* (Psychiatrist 1)

P6: *"[…] from an outpatient perspective, it was very traumatic, especially in the second wave when they were no hospital beds. We were just trying to treat people and make it as comfortable as possible knowing these people, knowing that they are actually going to die at home, but you are just trying to get as much as comfortable as possible, knowing that they probably will not be seen and later get a call to say they are no longer there."* (Physiotherapist 1)

On the other hand, a participant noted that their specialisation in the healthcare sector allowed them to spend more time with patients while building a link and communication line for the patients and their families and friends over video and phone conversations.

P6: *"[…] From the physio side, I think we were the ones that got the time with the patient and got into contact with family members, video calls, phone calls, and we are like the link between the outside and the inside […]"* (Physiotherapist 1)

Additionally, a physiotherapist explained that every profession inside the hospital was valued and viewed as just as necessary as the other; doctors, physicians, nurses, specialists, and cleaners were all essential and equally significant, generating a new level of respect for each profession.

P6*: […] I think it brought a lot of us closer to respecting the different disciplines and what each one does as medical professionals. Even from the cleaners, I mean, you can't walk straight past them and not realise what they do, they come in and helped when we needed help with patients and things like that, everyone just did it. So, they would not just stand and look at you but do something, and yeah, the respect improved"* (Physiotherapist 1)

According to another participant, work settings changed as separation between patients and their families was instituted. It was also devastating since patients were afraid to come in for treatment because they were fearful of COVID-19, no matter how much pain they were in.

> ***P6:*** *"[…] as a practice owner, it is quite devastating because our numbers fall drastically, as people were scared to come in, regardless of the amount of pain that they were in […] inpatient is very emotional. They have no support whatsoever, so you would have husband and wife lie next to each other, and family members cannot come in; the wife has no one for support. And you had to put your phone in a plastic bag so she could try to phone family members, so they could just speak to them. Especially the elderly that were not sure where they were."* (Physiotherapist 1)

A participant also mentioned feeling helpless at work, especially when the primary goal is to aid others.

> ***P11****: "So, I work as a midwife, I work with pregnant women and babies. I see COVID news and how bad it is in the country. Yeah, and to find pregnant women with COVID is terrifying because I am used to only healthy patients and women, usually. So, last week I had a patient with COVID, and she was in the very sick part of COVID, and it is even scarier because they have two lives, and you never know at which point you can lose one of them. It is a terrifying thing, and it is something that people do not have answers to, so it also makes you feel helpless, and as a healthcare worker, when you feel helpless, it is not that often, only in some cases. Especially for me in my field, we know and can control many things for the helpless part. It changes everything that your job is about; it changes what you thought you are signing up for when you sign up for this job […]"* (Midwife)

Furthermore, this participant added that during the pandemic, healthcare workers would risk their lives for the good of people. Still, work was even more difficult because those outside, such as the public, were not abiding by the COVID-19 safety rules, making their work experience even more challenging and frustrating.

> ***P11:*** *"[…] I guess it is that thing where we decided to be healthcare workers', we have to take it, both kinds of means giving up everything. I had to nurse COVID patients, and it was completely fine. I signed up for this to risk my life for the primary good of other people, and that was fine. I think the worst part for me was when I was sacrificing everything, but seeing the rest of the country not caring at all, just not abiding by the rules, making it worse, I was just outraged all the time. Everyone around me could see I would post it on social media all the time. I was just; no one was taking it seriously. I do not mind nursing the COVID; I just mind that people were not taking it seriously."* (Midwife)

Participants also compared their work experience during the pandemic to what they would see in a movie because this was the first pandemic they had ever lived through. At the same time, one participant attempted to make sense of their job experience by linking the severity of conditions to the Human Immunodeficiency Virus (HIV) and Tuberculosis (TB).

> ***P7:*** *[…] initially, it felt like, the phrase that comes to mind is; working in uncharted territory because there was no understanding of the virus and how life would be with all the lockdown regulations. So, there was a lot of fear, along with the unknown that was going on in the nation. A bit scary. It was initially quite frightening. I never lived through a pandemic before, so yeah. I mean, I have not even heard about it. You see it in the movies. You know, it is what you watch on screen, and Hollywood stuff. Now it is you watching Cyril saying, the soldiers are*

being deployed going into lockdown, and it is like Wait, what? Yeah. Which is scary." (Dentist)

P1: *"[…] This is the first pandemic I have lived in. HIV and TB are the closest in terms of severity of conditions. But they lived longer and died after we had built therapeutic relationships with them"* (Psychiatrist 1)

On the other hand, healthcare workers stated that the work experience for healthcare staff in terms of treatment had become a lengthy procedure owing to the constant need to change PPE and do COVID-19 tests on inpatients before operations or treatments. However, a patient who cannot do a COVID-19 test will be designated as a person under investigation in an emergency.

P4: *" Then again, moving on to anaesthetic. Not all patients will be able to have a negative COVID test, and foundations need emergency surgery, and you know we would have to do what we call a PUI, which is a person under investigation. So, if you are unable to have your COVID test result or a positive COVID test and you need the operation. So that was a whole different protocol for those kinds of patients; the setup, like COVID, stands for PPE, it was a very long set-up for a COVID case, and it is something that we would all dreaded when we were in anaesthetics. We dreaded it even on the surgical side because it is too much. It is so much work setting it up and preparing for the PPE that you have done. I have passed out in the theatre from getting too hot under the theatre lights and all the PPE you are wearing when doing a COVID case. So, it is not a nice occasion, but also in orthopaedics and just this whole year in my community service work in the surgical departments. There are just more and more people, but there are not as many COVID-positive patients on the surgical side of things;*

I mean, if you are in the hospital, you are likely to pick up things as long as they are pure COVID surgical wards. We have COVID-positive patients that we have to manage, and sometimes our patients will come in COVID-19 negative and get COVID in the ward, which needs to be managed. You know you cannot hand them over to a surgical team like this." (Community service medical officer)

Nonetheless, many protocols changed inside the hospital; participants indicated that they would occasionally find themselves working in a different field due to a scarcity of employees or needing to conform to a new set of rules and regulations.

P5: *"Okay, so, I work as an occupational therapist, in a ward setting, a specific ward with a specific program. So, we had to accommodate. We had to scale down our usual program and accommodate many elderly people who came into our program, which was a different field for me. It was not the field that I was working in at all. So, my initial experience was like, let's just do what needs to be done, whatever comes my way, let's do it, and so there was a lot of adaptation that needed to happen. I had to invent a new program for a new set of clients, a different client population. So, my first sense was just getting things that needed to be done, but also a lot of anxiety about getting infected, taking infections home, family, and a lot of hyper-alertness. Seeing danger everywhere and in everything, yeah, I think that is the main thing I can think of for now for the initial parts. […] The challenge at work, besides adapting to the program, would be dealing with when I disagreed with decisions from management, the way they thought we were supposed to manage things that did not make sense to me. So that was a challenge to deal with. So, there was often a lot of frustration and anger."* (Occupational therapist)

> ***P10:*** *"[…] I have had a busy time, like my entire job description changed with the pandemic because I went from seeing kids and being patient-facing to suddenly managing logistics and stuff […]* (Audiologist)

Additionally, one participant's job experience was based on their concerns about working with asymptomatic patients. This is because asymptomatic patients are more prone to unwittingly transfer the virus, which might disrupt and delay the participants' jobs if they get the illness. Thus, although at the forefront of the pandemic, participants stated that their job was not viewed as vital, especially when patients lost their funds for medical aid. As a result, patients had to reorganise their priorities to combat the COVID-19 virus rather than concentrate on dental health.

> ***P7:*** *"[…] there is always that worry that you know, even though the patient did not present with symptoms when they were coming in, they could still be COVID positive, you know, and it has happened to me a few times, I had to go into isolation because I was treating someone who later informed me, they are COVID positive, and then you start to worry about the people you have been into contact with. If I am not working, I am not generating money and cannot pay my staff. So, it was a lot of space—a lot of worries. A bit of paranoia […] work had been the toughest being in the private sector. Many of my patients pay through the medical aid that the jobs subsidise. So, when people lose their jobs, they lose those benefits. So, you can see the decrease in numbers with, like, okay, dentistry is not a priority right now. I cannot be worried about cleaning my teeth when I have a blocked nose and do not have a taste; to an extent, I am saving money for COVID tests and medication."* (Dentist)

However, one participant could not describe his work experience in-depth because of fear of judgement from the public. The psychiatrist explained that: *"Initially I could talk about it, it was overwhelming not anymore, now people (public) say you talk nonsense, and you are emotionally manipulative"* (Psychiatrist 2). Overall, the work experience of each participant depicted the change that COVID-19 brought about. In addition to the shift in protocols and guidelines, participants also felt that these new protocols and procedures were time-consuming.

4.2.1.3 Work became time-consuming

One of the other repetitive comments that the majority of the participant spoke that kept coming up was the essence of time within the workplace. This sub-theme captures how time was a relatively significant issue within the workplace. For example, participants described that treating and caring for patients took relatively longer because of their PPE and additional paperwork, resulting in a loss of funds and an inability to see all patients effectively.

> ***P1:*** *"[…] Patients who had chronic respiratory conditions would be swabbed every time they sneezed, and this became an administrative nightmare in terms of the paperwork that needed to be filled in […]"* (Psychiatrist 1)

> ***P2:*** *"[…] some challenges were time management, everything took longer, and that is a loss of money like to see one COVID patient, I would have to change my clothes and PPE, wrap my cell phone in aplastic bag, and then I would have to shower like a full-on shower before the hospitals. So, to see one patient easily took an hour and a half, and it is not billable, and you still have so many other patients to see, so time management just takes longer, like sanitising, washing visors, just yeah, everything takes longer, and it is a big challenge, and it is exhausting […]* (Speech therapist)

Overall, time management was impacted during the COVID-19 pandemic, which made attending to patients relatively longer, resulting in healthcare professionals seeing fewer patients per day than before the pandemic. Nonetheless, while participants discussed their experiences, there were also physical and mental consequences for frontline HCWs during the COVID-19 pandemic.

4.2.2. Working during COVID-19 is physically and mentally exhausting

This theme examines how healthcare personnel articulated how the pandemic affected their psychological and physical well-being while working in an already challenging environment. Participants frequently reported experiencing tremendous weariness, discomfort from their PPE, and phantom COVID-19 symptoms. The notion of having phantom COVID-19 symptoms results from mental exhaustion and fear while not necessarily being sick; feeling sick results from a psychological issue. Having phantom COVID-19 affects work performance and results in a loss in hours performed at work which may cause a strain on other professions and may result in insufficient staff. Thus, as illustrated by the narratives of a midwife and speech therapist below, inadequate staffing led to increased physical weariness.

> ***P11:*** *"You see, like the fact that we always get in contact with COVID, it is very difficult for us to get diagnosed with COVID because I am sure all of us, we have had COVID a hundred times by now, but there are times we, we can just get so sick. And then you end up testing for COVID now and then, when it is just going to come back negative, but you have all the symptoms, are vaccinated, but you are just constantly feeling symptoms for COVID. Especially between the third wave in June, Yeah, I felt like that for an entire month. I even lost so much weight, which takes a huge toll on your body, you are just constantly tired, and you must*

show up to work because if you do not show up, no one is going to show up, and you must. So, all your colleagues are testing positive, and nobody is left. So, yeah, definitely my physical health" (Midwife)

P2: *"[…] it was challenging when one of us was sick with COVID. We became short-staffed…and of course, even if you started symptoms, but you do not feel sick, then you have not to attend work until you tested and when you test negative that time away from work, was for no reason then you feel bad […]"* (Speech therapist)

One participant described and likened their degree of exhaustion at the workplace to that of a 'sponge.' The idea of the ‘sponge' refers to how one's physical and emotional well-being is negatively absorbed by their surroundings, causing tiredness. This level of fatigue also indicates that the quality of work may have been compromised since the workplace was demanding for this participant. The thought of preferring other patients to die over others exemplifies a sense of fatigue and hopelessness.

P1: *"[…] When I worked in private for a month or so, I was fatigued. They all soaked up my time and enthusiasm to sit down with them like a sponge… It was meaningful for me to be present with the patients, but I was fatigued every night after hearing so many stories and realising that they wanted more of my time […]"* (Psychiatrist 1)

The concept of a sponge is very similar to that of other participants who emphasised emotional fatigue. The physiotherapist expressed that the emotional exhaustion mainly stems from the notion of patients dying at a rapid rate, be it suddenly or over a period, while also having to provide support and hope to family and friends, sometimes even false hope to create a sense of positivity amongst them. However, as described by the physiotherapist, it was often

difficult to control a patient's outcome even though they were better. The participant expressed this as a sudden loss.

> ***P6:*** *"Physically, I think it is complete exhaustion. I mean, you just drained at the end of the day, your energy; it is non-existent. Usually, you do not lose that number of patients in such a short time; unfortunately, the hospital I worked at had a very high patient loss. So, being the physio, I still get it now. When the wife, son, or daughter comes up crying or bursting into tears, you will be like a crutch to them, whether it is up close and personal or not. Last week I treated a gentleman at home and got the phone call that he had suddenly passed away. Whereas the family standing up there just one, just wants to be sure that everything is going to be okay […] you try to remain positive, loving, and caring. Yeah, you just get drained of it very quickly."* (Physiotherapist 1)

On the other hand, healthcare personnel are frequently characterized as optimistic persons. However, one participant firmly said that the difficulties of working during the pandemic were that psychological and physical exhaustion drained their sense of optimism in properly treating patients.

> ***P11: "****Yeah, it kind of kills something in you that had hope. Because I think we are very hopeful people if we can work in this field. We hope that something big will come; we hope we can do better. We have hope that we can fix it; we can help. But I think COVID has taken a lot of my hope. We are in tough times, and it last during the tough times and lasts very long; tough times do not last, but that is a lie. Yeah. For me, it has taken away my hope."* (Midwife)

Furthermore, psychologically, individuals reported sensations of despair, worry, and tiredness. One participant stated that being among patients and the quick mortality rate made

them depressed. Viewing material from the media worsened this emotion while also impacting their daily eating and socialising with others.

> ***P3:*** *"Covid patients are depressing. The fact that so many passed away and you cannot do anything about it made us depressed. Now in the third wave, where you see the statistics [National] -and you cannot link the stats with what you see? That is worse. Is it a lie? That is why the public still thinks it is a joke and we are made out to be manipulative […] when depression comes worse personal habits; eating habits change with consequences your self-isolation is a norm now, not something strange anymore."* (Psychiatrist 2)

In contrast, another participant expressed that being restricted from socialising with others and being put into isolation affected their mental health because the restrictions did not aid in releasing the stress of working during the pandemic. Instead, the limitations exacerbated psychological strains.

> ***P4:*** *" I think, for me, most of the psychological impact comes from just the restriction that I experienced in being able to do and not just myself, but most of us have the experience of not being able to do the things that we need to do to rejuvenate ourselves […]"* (Community service medical officer)

Furthermore, another healthcare professional explained that, while they did not encounter any direct impacts of COVID-19 in their family or themselves, they nevertheless felt its pressures. This participant said they bore the stresses and fears of others who lost their employment and those who received assistance from social security grants, non-governmental organisations, and leadership programs as these systems collapsed during the pandemic. This participant's major worries were centred on the problems of the less fortunate. As a result, the

participant became more conscious of the extreme hardships that resulted in physical and emotional fatigue.

> ***P5:*** *"I became tired. That initial 'let's get things done ran out of steam. So, I became tired emotionally and physically because I think part of what happened in our time was that I became much more aware of the intense struggles it has caused for many people, so, although personally, my family was okay, we all had work, and we were not seriously ill. So, I became, like I said, completely aware of everything, even my neighbours and even my patients that I work with. Now, all this was extra. It added difficulties to the difficulties that already had pre-COVID. So, the systems that were in place like the SASSA [social] grants, for instance, and the NGOs, leadership, those kinds of systems that were in place that I could refer people to for help, they also collapsed. And we are letting people down and making things more on a social level, day-to-day survival labour much more difficult. So, I became very emotionally tired."* (Occupational therapist)

On the other hand, one participant stated that as more knowledge on COVID-19 became available, their physical and mental health improved, allowing them to take the required precautions to avoid a detrimental impact on their health.

> ***P7:*** *"No, actually, I think my physical health has improved because more research was coming out about the virus and the people who are passing away from the virus because of comorbidities. I think it forced me to become healthier. I was very conscious about how much time I am going to the gym and when and what I am eating because I am like, you know what, I do not want to hit positive and worry about high blood pressure or your sugar level, you know. It is like, okay, cool, if I am going to contact this virus, let my body be strong and healthy*

enough to fight, so that I do not have to be hospitalised, you know, my immune system is good and strong." (Dentist)

On the other hand, participants who did experience a detrimental influence of the pandemic on their health said that despite being physically and psychologically exhausted, they participated in a range of coping mechanisms to help them manage these stressors. Therefore, the HCWs' experiences are highly individual.

4.2.2.1 Coping mechanisms

This sub-theme depicts how healthcare professionals dealt with psychological and physical tiredness while working as frontline HCWs' during the COVID-19 pandemic. Religion and relying on support systems in their environments were the coping mechanisms utilized by the participants, which were reoccurring themes in their responses.

4.2.2.1.1 Religion

This topic focuses on how healthcare professionals use religion as a coping method. Participants mainly emphasised the concept of prayer, expressing that praying and keeping their faith was a significant help for the physical and emotional strain they were experiencing at work.

P1: *"[...] Prayer and talking with colleagues. We are in this boat together [...]"* (Psychiatrist 1)

P3: *"To pray together, to talk to co-workers, and to cry together. Support from management (They can also only do so much) Support from external companies (motivational messages)"* (Psychiatrist 2)

P7: *"Prayer, prayer, prayer, prayer, and lots of prayer. You know, it is God, especially because now we do not have a church, just reconnecting in that*

relationship, you know, because not meeting in the house (church) anymore does not mean the relationship is no longer there. But yeah, friends, and family as well. My dad was, was quite encouraging. When I got the call of the first patients I encountered, who had COVID. My dad was like, hey, man, you know, this is this, what we are going through. Now, these are the things, these are the side effects of the career we have chosen. We have chosen to be front liners; we have chosen to be healthcare workers. So, we put the needs of our patients before our own, and you will be fine. And it is like, Oh, okay. I am ready to do this. I am going to be fine." (Dentist)

P5: *"[…] my faith is also of great support for me. So, using my prayer life was helpful. I would allow myself not to do much, just slow down a bit. I would help where I could help with food parcels and that kind of thing."* (Occupational therapist)

Overall, religion enabled participants to find a sense of serenity or a coping approach that helped them overcome the difficulties of working during the pandemic. The idea of having people 'pray' or motivate one spiritually was a coping mechanism that some participants depended on. Furthermore, participants also took advantage of their community's support networks.

4.2.2.1.2 Support systems within their surroundings

This theme examines how healthcare professionals use their environment to cope with physical and psychological stress. For example, many participants stated that having supportive family and friends helped them cope with the psychological demands of work. Participants also noted that talking and expressing emotions to their family and friends significantly influenced their health.

P9: *"My family is very close; we all support each other. We are a big happy family. We see each other regularly. I also have a WhatsApp group of close friends I have gathered over the years, and we get together once a month to do and learn something new. We had Easter egg hunt, German biscuit making, crotchet morning, sokkie learning, sari & curry lunch, belly dance evening, high tea with piano playing, and next is Chinese braai."* (Physiotherapist 2)

P5: *"I have a very supportive family, friends and colleagues. So, I would just share my experience. I wouldn't talk about it; I would share [on] WhatsApp and perform a little bit like send funny memes […]"* (Occupational therapist)

P8: *"[…] My friends and family are my support."* (Medical doctor)

Several respondents also emphasised the value of having a friendly work environment where colleagues check in on one another regularly and share thoughts, feelings, and experiences. While also having access to and availability of mental health treatments for them

P2: *"[…] My boss. He sets up a group chat with a psychologist from these three rooms for matters… we have a group counselling session where we discuss all the stuff together, which is good. It is nice and supportive… I also have my partner to talk to, and sometimes I just take a week of leave to get away or incorporate Pilates into my schedule […]"* (Speech therapist)

P6: *"So luckily, we have a lot of support at work. We have got a lot of responses between us; in practice you know we have good laughs. We bounce ideas off each other; we are always there talking […] the hospitals are being very good with regards to webinars and things like that. Then I got a good family support system. I have a good rant and rave when I go home and burst into tears*

for 10 minutes. That does help, but also quite lucky because the group of us who work together have a positive attitude." (Physiotherapist 1)

P1: *"[…] I recounted how I broke down in tears when a matron from a high care unit in a private hospital passed away. I was immediately taken on the shoulder by a busy physician and sat down with and given water. No, "It will be okay." They just sat down together and gave me the space to cry. I dried my tears, put on a smile under my mask, and went on with the job. I did look out for others whom I covered when they were awaiting test results or running to care for sick relatives […]"* (Psychiatrist 1)

However, several participants stated they needed to find mental health treatments, such as seeing a psychologist, while simultaneously engaging in self-therapy activities such as journaling and puzzling.

P4: *"I have had to work with maintaining my mental health, I started going to therapy. So I go to therapy, see a psychologist once a month, and then I do my kind of self-therapy in the form of journaling; ideally, I am supposed to journal once a week, but it happens once every three weeks or whatever. So those are some of the things that I would do. I started puzzling; everyone started kind of taking on different things, so I started puzzling. It helps me just like be present and not think about everything else around me. Yeah, that is pretty much it."* (Community service medical officer)

Another participant stated that they received help from a psychologist and psychiatrist while taking medicine and participating in outdoor activities such as hiking.

P10*: "So, I am now on medication; I have seen a psychologist and psychiatrist. I tried going the natural route, but it was not going to work well, so*

I have scheduled medication. Like sleeping tablets, that is continuous. As well as then, I mean, I lean heavily on my girlfriend. I go out a lot; I go out for a lot of hikes because it helps a lot." (Audiologist)

Nevertheless, another stated that rather than seeking help from relatives or friends, sharing information on social media sites aided in managing the physical and emotional stresses of being at the forefront of the COVID-19 outbreak.

P11: *"I do not think I have any coping mechanisms; I just stayed away from friends and family to isolate. The only thing I did that helped a little, is that every time I got angry from COVID and what people were doing, I would post on my social media about getting vaccinated and staying at home and doing all the right things and then I would breathe a little bit of fresh air and try to help educate other people which helped a little because a lot of people would pay attention, and ask me questions and try to do the right thing. Then I felt like, okay, maybe there is hope."* (Midwife)

In addition to participants' mental and physical exhaustion, the Department of Health and resources made accessible to healthcare workers' either exacerbated or improved their mental and physical exhaustion. Participants expressed frustration and satisfaction with the Department of Health and the resources available to healthcare staff. PPE staff shortages, complaints to the Minister of Health, immunisations, and a lack of assistance or facilities within hospitals to assist healthcare professionals suffering from mental strains, particularly in the public sector, were all recurring themes.

4.2.3. Positive and negative attitudes towards the Department of Health

This theme covers healthcare personnel's grievances and satisfactions with the Department of Health and the resources made accessible to them.

4.2.3.1 Resources

This sub-theme highlights their disappointments and satisfaction with the resources made accessible to them. Participants expressed anger, perplexity, and dissatisfaction about the minimal resources provided, such as PPE equipment and insufficient support services.

Hospital facilities did not distribute PPE equipment in accordance; according to one participant, healthcare professionals in wards and hospitals who required the most PPE were not provided with sufficient PPE equipment.

> ***P1:*** *"[…] Different guidelines were followed, which is confusing. Hospital management would talk about using PPE sparingly. Still, they would dish it out to cleaners fumigating wards where a positive case had been found or drivers driving positive patients between wards or hospitals. The number of masks given to each doctor and the size of PPE became contentious issues. The consultants had the most stock; but they had minor exposure to covid positive patients […]* (Psychiatrist 1)

One participant also explained that a shortage of PPE created a delay in treating patients since one would be unable to assist and treat patients without placing themselves in danger of contracting the COVID-19 virus.

> ***P7:*** *"In the beginning, it was difficult because we started running out of masks and gloves because of the demand, it was crazy, everyone was ordering masks, gloves, and all the PPE equipment. So initially, we had to postpone some appointments just because we did not have gloves and masks to use, and you cannot give a patient a date for them to come back. Because you do not know when your supplier will pull through with whatever you ordered, that was a bit of a challenge."* (Dentist)

On the other hand, there was a considerable difference in PPE supply between private and public hospitals. Private hospitals had adequate PPE resources, but public hospitals were recycling one-use-only PPEs such as masks.

> ***P1:*** *"Working in a tertiary academic hospital, we had a lot of resources. There were many guidelines, psychologists on-site, and even psychology interns that we could sit with for debriefing personally and ask for guidance on how to help our colleagues in general hospitals who were physically and emotionally fatigued. Difficult was the limited PPE supply. Even though we did not have any covid + patients, we donned PPE for Patients Under Investigation. Those awaiting results or those who were fortunate enough to be admitted from home."* (Psychiatrist 1)

> ***P4****: "[…] there was not enough PPE in the public hospitals like, you know, two masks for like a week you have to wear those masks and they would try every now and again to like give us a few more masks and stuff. Which affects things as it should only be single-use, but you are using it for an entire week; obviously, it is like grungy and nasty, and you are putting this on your face"* (Community service medical officer)

One participant also described that, in addition to a shortage of PPE at rural hospitals (especially public ones), a key concern was a lack of training and information.

> ***P11:*** *"So last year when I was working in a rural hospital, it was the lack of resources. There were many times when we did not have resources even this year; I had that problem. And then I think also the lack of education, especially in the maternity ward of how to handle COVID patients because I think a lot of the patients when they are just in COVID wards, those people are very much trained*

to handle those things but now pregnant woman, and COVID, they need a midwife, they need maternity doctors they need to be in maternity. So, I would look after them, but I did not necessarily get the proper training. So, I think, it is the lack of training and the lack of PPE. Definitely, a big struggle that I had." (Midwife)

Furthermore, even though healthcare workers are exhausted and overworked, supporting services such as counselling were not provided to persons within public hospitals.

P4: "*Nobody is asking how you are doing, how are you coping or anything like that, which is preposterous, honestly. It is terrible. There should be facilities and services for everyone to be able to use to get some sort of containment, you know, and that is, whether we are in a pandemic or not in a pandemic because working here in the health care system is divisible, you know, regardless of whether you are in or not, there really was not any of that. And yeah, it was actually really bad because on top of the pandemic. As I mentioned, there was a fire at Joburg Gen [hospital], so the workload of Helen Joseph [hospital] was even more. It is like some of the doctors at Joburg Gen came over to Helen Joseph to help out but also, most of them did not come as they went to Bara [hospital], but most of the patients were coming to Helen Joseph, which just did not make sense. Everyone, the seniors, they kind of expect you guys to continue and to move and to do things like you not doing a whole load of another hospital, you know, a community hospital that has burned down, literally, like, it is terrible like we do not, we do not take care of each other, we do not check in with each other enough or I mean, obviously I checked in with my, colleagues who are like my friends. But, in the workplace itself. There really is not that culture, and it is sad; it is terrible. I am also so sick and tired of all the frustration that you have to deal with because of how things are understaffed and, you know, people are under-*

supported. Like, it is just extremely just like baseline, very difficult, very frustrating" (Community service medical officer)

In addition to insufficient PPE and inadequate training, key obstacles were staffing, bed shortages, and inadequate space to separate COVID-positive patients from COVID-negative patients.

P3: *"Staff shortages in the peak times, [ICU] bed shortages with available staff to hand them over to, not to be able to assist the paramedics with beds knowing they all feel drained and stressed with bed's situation. Yet what was more difficult – is that the unit is not built for massive amounts of isolation patients - there is not enough space for the "clean" patients that still need our help -the plan they made did help a bit, but when the season change and rain start again -more difficulties will arise. So, no, I do not believe the infrastructure is adequate. To cope in peak times with covid."* (Psychiatrist 2)

Besides the resources, notably the vaccine, many participants supported or opposed the COVID-19 vaccinations.

4.2.3.2 Vaccines

This sub-theme highlights healthcare personnel's reactions to the vaccines. The sample of frontline HCWs had varied attitudes towards vaccinations. Anti-vaccine individuals claimed that pro-vaccine individuals foster division in a split South Africa. Others who were pro-vaccine expressed feelings of frustration towards those who were anti-vaccine.

Anti-vaccine participants said that pro-vaccine supporters were dismissive of those who refused vaccination, whereas anti-vaccine activists thought there was a lot of misinformation about the vaccine.

> ***P1:*** *"[…] misinformation and fear-mongering. Even now, the vaccine supporters seem to be looking down on us anti-vaxxers as foolish or selfish for not contributing towards herd immunity. The fact that there are camps with names is also worrying. We have enough divisions in SA; we do not need more sub-divisions […]"* (Psychiatrist 1)

Pro-vaccine advocates voice their displeasure with people who refuse to receive the vaccination, saying, *"I hate them literally holding us. Sorry if you are an anti-vax, they are delaying progress"* (Midwife). One pro-vaccination audiologist described that they *"think vaccines are the only way forward."* She further explained her frustration by saying that *"people who are anti-vax are not looking at the bigger pictures but are taking convenient portions… they are not willing to consider someone else who is used to going in with blinders on and PPE and in the presence of patients."* Conversely, several healthcare workers, contended that it was a matter of personal preference – "*do what you want to do"*- and that no one should be punished or applauded for their choices. In addition, an occupational therapist expressed that even the vaccine is beneficial: *"the vaccine is also not a hundred percent the answer to everything,"* and that she can *"understand the difficulties they struggle with [in] making the decision"* because *"there is a lot of conflicting information out there.* Therefore she *"understands [s] that it is hard to make up your mind one way or another."* As a result, she expressed that she *"understands the anti-vaxxers and feels everybody must do what they want to do, and life must take its course.* She further explains that she became pro-vaccine *"because I think I kind of trust the medical expertise of the people I work with. So, I picked up on their vibe and thought that I would not be able to live with myself if I decided against it, and then I would get home and infect others. I would rather want to take the risk of having side effects from a vaccine than taking the risk of maybe failing somebody."*

> ***P2:*** *"[…] I lost interest in learning about COVID, COVID overload, and I have not read up a lot about vaccines and the differences between the pros and cons or whatever… but I am pro vaccines; I do believe that if everyone just did it, we will be fine. I do not understand why people do not want to. You get people with conspiracy theories, anti-vaxxers and some people who do not understand the benefits of it […] but it frustrates me when people do not want to […]"* (Speech therapist)

One participant was first conflicted but gravitated more toward being pro-vaccine but was concerned about the potential adverse effects of the vaccination in the future

> ***P7:*** *"[…] tough one. I was initially Anti-vaccine, but because I have been vaccinated, meaning that I was being pro-vaccine, again, it is a tricky one; you know, right now I am pro-vaccine because we are trying to get back to the normal life to the normal routine of how things were, we want to be able to travel without the restrictions you know, you want to be able to go into malls and church, and that is perfectly normal so yeah so I am; unfortunately, I am leaning towards pro-vaccine, but we hope that the unknown side effects will not hurt us, in Jesus name we are going to be all right."* (Dentist)

In addition to the resources stated above, another critical recurring issue was how the Minister of Health and the Department of Health handled the pandemic. This is described in more detail below.

4.2.3.3 Attitudes towards the Department of Health

This sub-theme addresses participants' concerns and satisfaction with South Africa's Department of Health. Participants voiced their displeasure and concerns about the failure of effective communication between the Department of Health and front-line healthcare workers,

the corruption of the Department of Health and its finances, and the long-term repercussions. Participants indicated a range of issues rather than satisfaction with the government.

Communication is essential for healthcare professionals because they believe that a lack of communication from the Department of Health contributed to the spread of misinformation throughout the country.

> ***P1:*** *"Communication. We need to get one set of information and work with that. It is also okay to say I do not know and change one's mind. Minister Mkhize initially said no masks, then changed. I respected that. He spoke based on what he knew. Silence creates a vacuum for conspiracies and fake news to spread like wildfire."* (Psychiatrist 1)

In addition to communication, people questioned the Department of Health's trustworthiness due to corruption and money. One speech therapist directly stated that *"[…] The minister of health should stop being corrupt […]",* while another participant questioned the use of funds.

> ***P6:*** *"Our five-week-long was to prepare field hospitals and things like that. It was a second wave hit that was much worse than the first; there were no beds in hospitals like we had not got enough to open up to the public. What happened with the funds?"* (Physiotherapist 1)

The long-term consequences of the Department of Health and Minister of Health's actions were also called into question because participants considered that wearing masks in children may create illnesses worse than COVID. As a result, participants felt and believed there is an urgent need to consider the long-term consequences of actions taken today while also allowing healthcare professionals to participate in decision-making not as a secondary source but as a primary one.

> ***P10:*** *"I think what we are doing right now is not sustainable. I think that we need to be cautious, and we also need to be thinking long-term. Acknowledging the pressure that's put-on healthcare workers' because everyone is sitting there, sitting in Parliament, creating all these things, but they have no concept of what is happening on the ground and be involved in the decision-making process, not as secondary but as a primary […]"* (Audiologist)

> ***P9:*** *"We need to go back to normal. Kids should not be wearing masks; it is hazardous and can cause a plethora of other conditions much worse than covid"* (Physiotherapist 2)

One participant expressed dissatisfaction with the Department of Health regarding the need to recruit more personnel, the upkeep facilities, and the provision of resources. In addition, this participant stated that the Department of Health's efforts in the health sector were insufficient since the government spent money on bringing in physicians from other countries rather than growing staff by recruiting more South Africans.

> ***P4:*** *"[…] I probably want to express disappointment, disappointment, and not to the Department of Health, but just to the government in general. One for that. Just complete abuse and misuse of funds because, as I mentioned, we were out here reusing masks for days, weeks on end, and we did not have PPE. They brought doctors from Cuba. When there are interns that are comm serve qualified, they are trained in South Africa and are sitting at home and cannot get good jobs because the government is not opening up posts, but they are spending billions to bring doctors from Cuba. We worked like dogs throughout the pandemic, and they did not even give us a salary increase.*

> *Moreover, this year they have given us a one percent salary increase, and still taxed 40% of it. It is honestly just so disappointing, really, like, keep your lights and candles, for the healthcare worker applauds for the healthcare, I do not need your candle I need you to hire people, I need you to provide us with PPE, I need you to do maintenance on hospitals so things do not get burnt down and we are not overburdened; I need you to give me my annual salary increase and a bloody bonus. That is what I need from you; you can keep your applause. Just do better."* (Community service medical officer)

Another stated a tremendous demand for mental health services for healthcare employees within hospitals since healthcare personnel is overloaded due to the present pandemic. This medical doctor (P8) pleaded with the Minister of Health to *"Provide health care workers' with support services for mental health; they are overburdened with patients both covid negative and positive."*

Overall, the pandemic has had some adverse or beneficial effects on frontline HCWs life. However, most participants spoke of more positive changes, ranging from being more grateful and appreciative to understanding the value of time.

4.2.4. COVID-19's significant impact on daily life.

This theme highlights the negative and positive implications of COVID-19 on the lives of frontline HCWs. Participants in this section indicated throughout the interview the positive and negative long-term ramifications and learning curves that occurred during the pandemic. The HCWs who stated that they had a positive influence spoke of feelings of gratitude and growth, expanding and reframing their perspectives and being more empathic and

compassionate towards others. Conversely, participants who spoke of the adverse effects of COVID-19 on them acknowledged feelings of isolation in their personal life.

The pandemic and the losses it brought, such as the loss of a career, a loved one, or any opportunity, clearly prompted most participants to find gratitude in the simplest of things and appreciate those in their surroundings.

> ***P1:*** *"I am grateful for each day. Tomorrow is not promised, and each moment is precious. These are now new truths, but the pandemic has highlighted them. People matter. The moments we are able to spend with one another are valuable and could be our last; so, I try and be present in each moment instead of worrying or focusing on some future event."* (Psychiatrist 1)

> ***P2:*** *"Workwise, I changed too; I am more open to seeing different ways, different people do different things. So, I feel like I am less likely to jump to conclusions because I realised that when people are stressed, like during the lockdown COVID times when people cannot deal or function as well or as professionally as usual, I think we are more open to kind of cutting people some slack and understand that we all go through a tough time and it is true, each one of us individually is going to have more patience and empathise a lot more with families that come into hospitals and all […]"* (Speech therapist)

> ***P4:*** *"So, I mean, when I think about some of the things that I have lost and things that have changed and have not been taken out of my life or added to my life. Not all of those things are bad things, you know; previously, I may have had things in my life that I thought were good, but the pandemic kind of stripped them away and showed me that I did not need all of that in my life. Then other things were good that the pandemic has taken away, like whether it is people, opportunities, and*

> *things like that, that has been, it has been difficult, but I guess it has been helpful in reframing my perspective on many things in hand. Yeah, and I think the pandemic is, you know, when you look at things from a different perspective, and you are just looking at everything that's going on, it is kind of good for me; it has helped me to grow and learn how to live more empathetic a bit more grateful, more appreciative of the things and the people that you have in terms of being a healthcare practitioner […]"* (Community service medical officer)

Thus, participants who expressed a favourable implication of the outbreak became intentional about focusing on the positive, such as the people around them, being present in the moment, and shifting their focus to what matters.

> ***P7:*** *"It changed; it has forced me to focus on the positive because we can easily get caught up in, you know, the numbers of how many people are getting infected, how many big companies, how many deaths? How many people have lost their jobs? So, I really stopped watching the news... in the middle of it, I said, no, I cannot do this. Because every time you put on the news, it is just it is, you know, especially after the looting we went through I was like No, I am going to be intentional... I am going to be intentional about focusing on the positive; I am going to have a grateful list and try to write it down every other day when I get the chance to count my blessings and appreciate them."* (Dentist)

In addition, one participant even emphasised the importance of mental health and engaging in self-care, which was highlighted by the pandemic outbreak. The community service doctor (P4) explained that the pandemic encouraged her to *"really take that time off just to rest."* She further explained that she is not *"huge on self-care and self-care and my mental health" and that she has "grown and learned a lot about mental health during this time.*

However, fewer participants expressed the negative implications of the pandemic. Instead, participants expressed feelings of alienation and not wanting to socialise anymore with friends and family even though lockdown regulations have been lessened. A speech therapist explained that she was *"... changed as a person"* and that she *"changed a little bit socially,"* now preferring *"to stay indoors and not see anyone [...]".*

This could be because they have gotten used to a system that formed a habit of isolation for them; in other words, because the pandemic got them into a habit of being isolated, it eventually became a habit. Moreover, one participant highlighted that they witnessed so many deaths. As a result, making them more introverted while also emphasising that no one will truly understand these implications unless they experience this personally.

> ***P3:*** *"Personal life – many people passed away; it stays sad. Those who did not go through this personally will never understand its impact on me. It did change me. At home, I am more an introvert than ever before."* (Psychiatrist 2)

Despite the difficulties associated with the COVID-19 pandemic, most participants expressed a positive change in their lives with fewer negative consequences.

Chapter 5: Discussion and conclusion

The study aimed to explore the lived experiences of frontline HCWs in South Africa during the COVID-19 pandemic. As depicted in the literature review, Frontline HCWs' perspectives are typically described as an unpleasant collective experience that includes significant anxiety, despair, suicidal ideation, and psychological and physical health problems (Liu et al., 2020; Rossi et al., 2020). However, this study revealed that the experiences of being a frontline HCW during the COVID-19 pandemic in South Africa are highly individualised and punctuated by paradoxes. Although some common themes were identified in the data set, it was also clear that each participant had their own unique experience, some of which were similar to others' experiences but also wholly different. As a result, several implications can be drawn from the findings in this study because each participant described a unique experience, also demonstrating that frontline HCWs experienced the pandemic not only in a negative but also in a positive light, despite their position at the forefront. These results are discussed in detail below.

COVID-19 pathogen changes could be made in the future. According to Palacios-Cea et al. (2021), understanding what frontline HCW went through throughout the pandemic could be critical in identifying circumstances when new COVID19 variant waves or other pandemics occur in the future. In this study, the in-depth interviews demonstrated that working as a frontline HCW during the COVID-19 pandemic has substantially influenced frontline HCWs mental and physical health. According to Giusti and colleagues (2020), the COVID-19 pandemic has increased the risk of psychological distress among healthcare workers. According to previous studies, Frontline HCW who treat COVID-19 patients had a higher risk of depression, anxiety, and sleeplessness (Barello et al., 2020; Liu et al., 2020). Other research has found that the emotional pressures placed on healthcare workers' during the COVID-19 outbreak were linked to exhaustion, anxiety, depression, and distress (Fauzi et al., 2020).

However, participants in this study described a range of feelings in the findings, demonstrating that working during the COVID-19 pandemic was an emotional rollercoaster and not as overtly negative as the literature suggests. Despite the study's initial predictions, participants, as previously stated, expressed both pleasant and negative emotions. These feelings ranged from sentiments of honour to being devastated, disheartened, overwhelmed, guilty, hopeless, angry, powerless, depressed, and nervous and described their work experience as traumatic. Despite the emotional challenges of working during the pandemic, all participants expressed that their work was rewarding, mainly because people respected and recognized the importance of healthcare workers more, while certain deemed unimportant professions were highlighted, such as psychiatry. To the best of my knowledge, this finding has not yet been reported in previous international or local studies.

The second significant finding of this study is that the definition of a frontline HCW varied significantly from 'traditional' or literature-based definitions. Frontline healthcare workers are defined in the literature as those who have direct patient contact, such as doctors and nurses specifically (Nguyen et al., 2020). However, this research has revealed that the concept of a frontline HCW and an allied worker has evolved due to task shifting during the pandemic, as HCWs have been required to take on diverse roles. In this study, audiologists, speech therapists, psychiatrists, occupational therapists, physiotherapists, and dentists – not traditionally considered frontline workers' – became frontline healthcare practitioners at the forefront of the pandemic working directly with COVID-19-positive patients.

The literature shows that a lack of resources, poor infrastructure, insufficient staff, and long hours of work cause psychological and physical health problems in HCWs (Cook et al., 2021; Rispel, 2015) and that caring for COVID-19 patients may also induce psychological and physical health problems in frontline HCWs (Cook et al. 2021; Rispel 2015; Shaukat et al. 2020).

Participants' experiences with COVID-19 patients and the pandemic as a whole resulted in a shift in workplace norms. In addition, this study also revealed that some participants were impacted by rapid changes in procedures and management, which was a significant upheaval that influenced workplace norms because they had to adapt to the changes swiftly. Willis and colleagues (2021) note that healthcare organizations have concentrated on enhancing performance and efficiency in many countries under the influence of new public management techniques. However, researchers such as Scambler (2020) point out that the consequences have been severe regarding crisis preparedness, such as that required for a pandemic. The focus on efficiency, accountability, privatization, and austerity all lead to a work environment with little "organizational slack" (Trinchero et al., 2020), and work that is "intensified" potentially negatively affects healthcare workers' job satisfaction and patient care (Grima, Georgescu & Prud'Homme, 2020). Therefore, patient care was impacted in this study because of the many practical adjustments made. Medical hierarchies also played a vital role during the pandemic, such as PPE distribution, as one participant noted that doctors have more PPE supply than other frontline HCWs.

In addition, the data depicted that some frontline HCWs expressed that everything took longer than usual due to PPE, which resulted in a restriction on the number of patients visited each day, causing financial volatility. In contrast, certain facilities, such as those in the public sector, revealed an opposing setting in which frontline HCWs expressed that they had to see more patients due to an excessive number of patients, putting an increased burden on frontline HCWs. On the other hand, PPE also hampered the formation of genuine ties with patients, which was particularly difficult in the workplace because patients valued physical touch. According to Pierce (2020), when contact is restricted or abolished, people might develop touch starving or touch hunger (Mortenson Burnside, 1973), which has been related to increased stress, anxiety, and despair in all aspects of human health. Touch is also associated

with expressing care, compassion, and comfort and creating connections and bonds between healthcare providers and patients in the field of health care (Connor, 2015). Goetz, Keltner, and Simon-Thomas (2010) also express that touch is an excellent tool for relieving and reducing others' pain. Even though there has undoubtedly been a great deal of suffering throughout this pandemic, many types of touching have been prohibited due to social distance limitations imposed to reduce COVID-19 transmission (Durkin, Jackson & Usher, 2021).

On the other hand, PPE also created physical tiredness because participants had to regularly change PPE clothes between patients, which they reported as tiresome, uncomfortable, and caused excessive heat. Chand and colleagues (2021) state that healthcare professionals are not used to wearing this form of protective gear. According to the literature, the last time PPE was required was during the SARS outbreak in Guangdong, China, in 2003-2004. Whereas Le Roux and Dramowski (2020) state that PPE is already used and practised by frontline HCWs in South Africa who are exposed to tuberculosis, Ebola, and HIV. PPE is, however, worn for extended periods, up to hours during the pandemic, causing stress and poor health impacts (Chand, Sharma & Kumar, 2021). Lim and colleagues (2006) study looked at the headaches associated with mask use, while a study by Foo et al. (2006) looked at the adverse skin reactions associated with continuous mask use, such as acne, itching, and rash. As a result, according to Johnson (2016), wearing PPE has negatively influenced healthcare workers' physical and mental well-being (Johnson, 2016).

Moreover, Chand, Sharma, and Kumar (2021) show that when PPE is worn, the amount of time an activity may be sustained is lowered.

Studies have shown that the patient death rate affects the quality of work of healthcare staff. Furthermore, the data also revealed that physical exhaustion and psychological symptoms such as despair and anxiety were common amongst healthcare professionals due to working

long hours and patients dying at an alarming rate, which is not typical in hospitals. These findings correspond with the results of Haung et al. (2020) and Kang et al. (2020) on mental health amongst Chinese healthcare workers' during the pandemic. Huang and colleagues' (2020) suggest that treating COVID-19 patients creates a lot of psychological stress, leading to anxiety and post-traumatic stress disorder. Thus, psychological stress and the circumstances of COVID-19 may significantly influence healthcare personnel and potentially jeopardize their capacity to make decisions and the quality of their interactions with patients (Kang et al., 2020).

Although the findings revealed that working during the pandemic is physically and mentally tiring, participants demonstrated several coping techniques to deal with these mental and physical challenges. The results suggested that exercise, such as pilates and gym, were beneficial coping techniques, with family and staff support being a common thread among participants. Furthermore, some individuals heavily depended on their faith and religion to assist them in coping with the pressures of the pandemic, while others appeared to seek support from therapists. However, other individuals lacked a coping method. These findings are congruent with the results of Shaukat and colleagues' (2020) literature review, which emphasizes the importance of interventions, sufficient psychological support, and staff assistance for HCWs' emotional and physical well-being. Moreover, Xio et al. (2020) stressed that social support decreases stress and anxiety while enhancing self-efficacy. Additionally, researchers indicate that frontline HCWs have a strong sense of togetherness amongst themselves since they believe they are "all in this together" battling a common adversary (Aughterson et al., 2021, p.5).

Vaccination rollout experiences, on the other hand, varied significantly among participants. There were varied feelings even among frontline HCW. Although the vaccination roll-out may be considered an obligation for healthcare personnel, one would expect healthcare staff to be pro-vaccine. However, participants in this study expressed a range of feelings, with

some anti-vaccine and others pro-vaccine. These varying beliefs were present, despite the frontline HCWs being actively encouraged to get the vaccine. To the best of my knowledge, there is little to no in-depth descriptive knowledge about vaccine roll-out among healthcare professionals in the current literature. As such, this finding suggests that additional research on this finding is needed and highlights the importance of using qualitative methodology to gain more detailed and in-depth results on complex attitudes towards vaccination roll-out among HCWs and in the general population.

The data also indicated frustrations and dissatisfaction with the Department of Health and the available resources to healthcare workers. The recurring themes were that the Minister of Health lacked proper communication and that the government failed to provide adequate resources such as PPE, sufficient staff, and support mechanisms for healthcare employees, mainly in the public sector. As a result, the data revealed a significant difference between the private and public sectors in terms of resources and infrastructure. Participants also expressed that the reason why they faced several challenges within the hospitals was because of corruption. These findings correspond with findings in the literature. According to other studies (Mbunge, 2020; Malakoane et al., 2020; Maphumulo & Bhengu, 2019), the frustrations associated with the health systems of South Africa are common and have been exacerbated by the COVID-19 pandemic.

In a study looking at the Effects of COVID-19 on the South African health system and society, Mbunge (2020) found that in addition to the existing issues in healthcare service delivery, the South African health system is overwhelmed by the COVID-19 pandemic. Malakoane and colleagues (2020) further explain this by demonstrating that despite the progress made in the South African health system since 1994, the country is still experiencing challenges in healthcare service delivery, including inadequate funding, insufficient budget, and unequal distribution of resources (including healthcare facilities, health professionals,

insufficient production, and improper recruitment, particularly in rural areas) in both the private and public sectors (Maphumulo & Bhengu, 2019). Therefore, due to the current health facility discrepancies between urban and distant locations, ensuring universal access to competent, motivated, and supported health workers', particularly in remote and rural communities, is a problem (Versteeg, Du Toit & Couper, 2013; McLaren, Ardington & Leibbrandt, 2014). In addition to these issues, at various points during the pandemic, the South African health system has experienced a severe shortage of PPE for frontline HCWs', such as face shields or protective glasses, heavy-duty aprons and gloves, and N95 respirators, due to disruptions in the supply chain of medical equipment (Mbunge, 2020).

Limited research on frontline HCWs has demonstrated the favourable impact COVID-19 has had on their lives. This concept, however, is compatible with available research that supports the findings of this study. Although healthcare personnel faced several challenges in adapting to changes in their workplace and physical and mental challenges during the COVID-19 pandemic, for many participants, these challenges had a beneficial rather than a negative impact on their daily lives. According to Al Dhaheri and colleagues (2021), people (not HCWs specifically) reported paying more attention to their mental health and spending more time relaxing and resting during the pandemic, demonstrating some of the good outcomes of the pandemic. In addition, people explained that they cared more about their family members' feelings during the pandemic. Such favourable mental health effects may have aided individuals in coping with the COVID-19 pandemic's other harmful effects (Al Dhaheri et al., 2021). In comparison, participants in this current study expressed gratitude while emphasizing the value of being present in the moment and the importance of spending time with family and friends. Participants also stated that the pandemic allowed them to learn new skills and made them more patient and empathetic.

5.1 Implications of the study

The results of this study suggest several practical applications. This study adds to our understanding of mental health and the working environment of health practitioners. It also aids in understanding the lived experience and challenges experienced by frontline HCWs, which can provide insight into how we (the public) can effectively support them.

The individualized experiences described in this study show that future research should focus on the support provided to HCWs and that a group of HCWs working in the same environment can have distinct emotions and behaviours. As a result, future researchers should investigate a wide range of interventions because no intervention can be one-size-fits-all and meet each individual HCW where they are. As a result, all HCWs require help because it is not only nurses and doctors that work at the forefront. Future research should consider the differences in the mental and physical health of healthcare workers in public hospitals versus those in private hospitals. Due to the under-resourced and understaffed hospitals in South Africa, it might be argued that more sampling distribution among public sectors should be considered for future proposals.

Furthermore, researchers should investigate why female healthcare employees tend to be more prone than male healthcare workers to report their mental and physical health issues during the COVID-19 pandemic. As a result, it is suggested that additional data be collected from male participants and studies specifically recruit male participants in the future. In order to engage with their subjects, researchers might consider conducting interviews in person.

Furthermore, future researchers should consider including more qualitative research with frontline HCWs because at present most studies have provided a generalist experience using more descriptive and survey-based methodologies. The stories and experiences of HCWs are incredibly rich, detailed, and individualized, requiring methods that can fully appreciate

these nuances. However, in comparison, this study demonstrates that there are in-depth, individualized experiences that vary and provide insight into a particular group's genuine and diverse experiences.

5.2 Limitations of the study

Despite the impactful findings of this study, several study limitations should be acknowledged. Firstly, the sample size is arguably small; nonetheless, rich data and essential findings emerged. The male-to-female ratio of study participants may restrict the generalizability of the results because the majority of participants were female, with only two males. Nonetheless, the study's findings are adequate because there are sufficient participants. The study aimed to get a descriptive and in-depth understanding of the lived experience of frontline HCWs rather than ascertain the participants' gender. In addition, although suitable, the sample obtained required a greater distribution between private and public sectors, particularly public, because the majority of participants worked in private sectors. Even though the data was not widely distributed amongst the private and public sectors, it provided an in-depth descriptive examination of frontline HCWs' lived experiences during the pandemic. Another limitation was that gathering participants and interviewing them was challenging because there was a great demand for frontline HCW during the pandemic. Participants expressed a desire to participate but could not do so due to a lack of time to conduct the interview. There was also a lack of responsiveness among participants due to exhaustion, which hindered the study by making it difficult to recruit individuals.

Furthermore, conducting research online was difficult because connection building was limited when compared to conducting interviews in person, as well as connectivity issues, as sometimes participants' internet connections were not stable, potentially limiting the ability to

have more in-depth conversations. However, the online nature of the interviews was also advantageous. It allowed for sampling across the country and limited the additional costs of transporting the researcher or participants to the interview session. Furthermore, the interview questions (Appendix B) could have specifically asked participants about their mental health and experiences with signs of mental health illness rather than the psychological impact. Even though the questions did not expressly ask about mental health and mental health illness, the narratives gathered did cover a wide range of topics related to mental health and the questions were still very relevant and applicable in discussing the mental health of frontline HCWs during the pandemic.

5.3 Reflexivity

As researchers, one must remember that meaning is created in the context of the interviewee/interviewer (Holstein & Gubrium, 2011). As a result, it is critical to consider one's level of involvement in the research process.

As the daughter of a frontline HCW who had first-hand observed a frontline HCWs lived experiences, this study made it easier for me to appreciate the stories participants shared. Throughout the research process, I expected every frontline HCW to describe similar challenges and strengths to my father's, but the results revealed a wide range of views. My subjectivity to the production, interpretation and lived experiences were explored throughout the research process. These diverse comments piqued my interest even more since they helped me better appreciate what frontline HCWs are going through, mainly how they felt about how others, such as family and friends, perceived them. Furthermore, having a father whose health (both physical and mental) was negatively impacted by COVID-19, I found myself more sensitive and emotional to the participants' lived experiences, particularly those who spoke of their struggles. As a Christian, however, not every participant voiced their faith; I felt more

connected to those who did. As a result, there is a potential that I might have missed crucial information due to this bias. It did, however, allow me to establish rapport and gain a better understanding of the participants' specific challenges.

5.4 Conclusion

In conclusion, the purpose of the study was to gain an in-depth understanding of the lived experiences of frontline HCWs in South Africa during the COVID-19 pandemic. In the time of writing, only a handful of studies have examined the lived experiences of frontline HCWs during the COVID-19 pandemic internationally. To the best of my knowledge, no study in South Africa has looked at the lived experience of South African frontline HCWs, with only one survey-based study conducted locally (Robertson et al., 2020) using a purely descriptive quantitative methodology. As a result, the study's findings also highlight the importance of using qualitative methodologies because they highlight the richness of the experiences and add more significant meaning to arguably more generalised quantitative findings.

The data revealed that frontline HCWs experiences during the COVID-19 pandemic in South Africa are highly individualized and punctuated by contradictions and that literature tends to generalize experiences. The encounters were diverse; there was some commonality and many differences across experiences. There were mixed sentiments shared regarding vaccinations, including participants who held pro-vaccine sentiments and those with anti-vaccine sentiments. Furthermore, frontline HCWs' lived experiences throughout the pandemic had varying effects on each participant's mental and physical health. These effects resulted from participants' job experiences, which were emotional roller coasters due to the rigours of working long hours during the pandemic and dealing with COVID-19 patients, as well as the inconveniences of PPE. Likewise, the disappointments of insufficient resources and breaches that the Department of Health failed to supply. Although individuals described their

experiences as comprising multiple hurdles, most participants reported positive developments despite their difficulties. Most participants considered their work enjoyable, and they used coping mechanisms to overcome their mental and physical fatigue. Furthermore, participants described how living during a pandemic inspired them to learn new skills, be more patient and understanding with others, and express thankfulness.

Taken together, this research contributes to the body of literature on mental well-being and the working climate of health professionals during the COVID-19 pandemic. It also assists in understanding the lived experience and issues faced by frontline HCWs which can provide insight into how large government structures and clinically oriented professions, like clinical and counselling psychology, can support them. This study also provides insight into the perspectives of a unique time in history – while pandemics have occurred in the past century, none on this scale has happened since 1918. Also, given the uncertainty surrounding the pandemic, this study could provide insight into how frontline HCWs handle uncertainty.

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APPENDICES

Appendix A

Demographic Questionnaire

Participants must be practising healthcare professionals during the COVID-19 pandemic. Please answer questions as truthfully as possible. Please fill boxes in with a tick where these are provided.

1. Please provide the first 5 digits of your cellular phone number (N.B. this will only be used for the purposes of tracing questionnaires if you choose to continue participation in this research): _____
2. Date of birth: Year_____ Month _____ Day_____
3. Sex: _____
4. What is your home language? (please choose one)

   ☐ Afrikaans ☐ English ☐ IsiNdebele ☐ IsiXhosa ☐ IsiZulu ☐ Sepedi ☐ Sesotho ☐ Setswana ☐ SiSwati ☐ Tshivenda ☐ Xitsonga ☐ Other (please specify): _____

5. Please indicate the number of years of education you have received (starting from Grade 0): _____
6. Where did you receive your professional training? _____
7. What is your current occupation? _____
8. Where are you currently working? _____
9. How many years have you been working at this site/practice? _____
10. How many years of work experience do you have since graduating? _____
11. Please specify any previous work experience you have had (if none, please indicate so):

_____

_____

12. What is your religious affiliation?

    ☐ No religion ☐ Christianity ☐ Hinduism ☐ Islam ☐Judaism ☐ Traditional African Religion ☐Other (please specify): _____

13.1 Are you married?

☐ Yes ☐ No

13.2 Are you in a relationship?

☐ Yes ☐ No

13.3 Do you live:

☐ Alone ☐ With a partner only ☐ With a partner and children ☐ With children only

☐ With immediate family (parents/siblings) ☐ With other relatives

13.4 How many children do you have? _____

14.1 Are you currently on any medication?

☐ Yes ☐ No

Have you been diagnosed with any chronic medical condition, including any mental health conditions?

☐ Yes ☐ No

If yes, please specify: _____

Appendix B

Qualitative Questions for narrative interviews: Lived Experiences of Working during the COVID-19 Pandemic in South Africa

1. Could you talk about your experience of working during the COVID pandemic in South Africa?
2. Could you talk about your experience of caring for COVID patients?
3. Was there anything in your work experience that prepared you for working during the COVID outbreak?
4. Could you talk about how you have made sense of your experience of working as a health care worker during the COVID pandemic - both positive and negative?
5. Could you reflect on the psychological impact of witnessing patients with COVID?
6. Have you noticed that your health has been affected at all?
7. What were some of the challenges you experienced while working during this pandemic?
8. In terms of the resources or planning or infrastructure that you had available, do you think there was anything that made life especially difficult or easier for you?
9. What coping mechanisms and support systems did you find helpful?
10. What was not helpful?
11. Did you feel that your co-workers were looking out for you/checking how you were coping? Did you do similarly for them?
12. Having reached the end of this pandemic, if you could tell the Minister of Health one thing, what would it be?
13. Could you talk about whether you feel this experience has changed you as a person?
14. What kind of long-term impact has your COVID experience had on your work and personal life?
15. How do you feel now about your work after the COVID pandemic? Rewarding? Unrewarding? Upsetting? Rewarding?
16. Is there anything else you would like to share—positive or negative?

Appendix C

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

R14/49 Dr Shona Fraser

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)

CLEARANCE CERTIFICATE NO. M200461

NAME: (Principal Investigator)	Dr Shona Fraser, Prof Sumaya Laher *et al*
DEPARTMENT:	Psychiatry University of the Witwatersrand Medical School
PROJECT TITLE:	Mental Health of South African Health care Workers during the COVID-19 pandemic.
DATE CONSIDERED:	16/04/2020
DECISION:	Approved
CONDITIONS:	Site specific clearance for Tara H. Moross Hospital, Chris Hani Baragwanath Academic Hospital, The Eye Centre, East London, Klerksdorp-Tshepong Hospital; and permission provided by Northwest Department of Health.
SUPERVISOR:	
APPROVED BY:	CB Penny Dr CB Penny, Chairperson, HREC (Medical)
DATE OF APPROVAL:	15/05/2020

This clearance certificate is valid for 5 years from date of approval. Extension may be applied for.

DECLARATION OF INVESTIGATORS

To be completed in duplicate and **ONE COPY** returned to the Research Office Secretary on the Third Floor, Faculty of Health Sciences, Phillip Tobias Building, 29 Princess of Wales Terrace, Parktown, 2193, University of the Witwatersrand. I/we fully understand the conditions under which I am/we are authorized to carry out the above-mentioned research and I/we undertake to ensure compliance with these conditions.Should any departure be contemplated, from the research protocol as approved, I/we undertake to resubmit the application to the Committee. I **agree to submit a yearly progress report.** The date for annual re-certification will be one year after the date of convened meeting where the study was initially reviewed. In this case, the study was initially reviewed in **May** and will therefore be due in the month of **May** each year. Unreported changes to the application may invalidate the clearance given by the HREC (Medical).

Principal Investigator Signature

06/06/2020
Date

PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES

Appendix D

Participation information sheet

PSYCHOLOGY
THE SCHOOL OF HUMAN AND COMMUNITY DEVELOPMENT (SHCD)

Private Bag 3, Wits, 2050 • Tel: 011 717 4541 • Fax: 011 717 4559 • E-mail: psych.SHCD@wits.ac.za

Study title: Mental Health of South African Healthcare Workers During the COVID-19 Pandemic

Dear healthcare worker

We are a team of researchers from the University of the Witwatersrand conducting a survey on healthcare professionals' mental health experiences during the time of the COVID-19 pandemic. You completed some questionnaires for this research which were used to inform interventions at your hospital. Thank you for your participation. We would like to invite you to continue participating in this study by consenting to an interview based on your personal experience of being at the frontline during the COVID-19 pandemic.

Participation in this study is voluntary, and you have the right to decline participation in this study. The interview will be conducted at a time and place of your convenience and may be conducted via Skype or Whatsapp or face-to-face. The interview will be audio recorded and should take approximately 1 hour of your time. You will not receive any direct benefits from participating in this study, and there are no disadvantages or penalties for not participating. You may choose not to answer any question if you do not want to. All responses will remain confidential, and you will be referred to using a pseudonym (false name) in transcripts and publications.

The audio recordings and resulting interview transcripts will be stored in an encrypted, password-protected data cloud. A summary of the study and its results can be requested using the contact details below. The research may be presented at local/international conferences and published in a journal and/or book chapter.

If you experience any distress or discomfort following the interview, please contact the South African Depression and Anxiety Group (SADAG) at -0800 567 567 (toll-free) (SADAG provides 24-hour telephonic counselling).

If you have any questions afterwards about this research, feel free to contact me at the details listed below. If you have any concerns over the way the study is being conducted, please contact the Chairperson of this Committee who is Professor Clement Penny, who may be contacted by telephone number 011 717 2301 or by e-mail at Clement.Penny@wits.ac.za. The telephone numbers for the Committee secretariat are 011 717 2700/1234, and the e-mail addresses are Zanele.Ndlovu@wits.ac.za and Rhulani.Mukansi@wits.ac.za

Please detach and keep this sheet.

Yours sincerely,

Shona Fraser, shona.fraser@gmail.com, 082 746 8865 / 011 535 3212

Appendix E:

Informed Consent

PSYCHOLOGY
THE SCHOOL OF HUMAN AND COMMUNITY DEVELOPMENT (SHCD)

Private Bag 3, Wits, 2050 • Tel: 011 717 4541 • Fax: 011 717 4559 • E-mail: psych.SHCD@wits.ac.za

Study title: Mental Health of South African Healthcare Workers During the COVID-19 Pandemic

I, _____ (participants name) consent to being interviewed by _____ , for a research project on mental health of South African healthcare workers during the COVID-19 pandemic. I understand that;

- Participation in this study is voluntary
- I may withdraw from the study at any time before publication, and my withdrawal will not affect me negatively in any way.
- I may choose not to answer questions.
- There are no perceived benefits associated with this study.
- All information provided will remain confidential
- My name or any other personal information of mine will not be used in the interview, transcripts, notes as well as the research report.
- I am aware that some direct quotes from my interview may be used, but my name will not be used.
- When direct quotes from my interview are used, my name will be substituted with the named Participant A or Participant B etc.
- The recordings and transcripts will be stored for the duration of the project.
- I am aware that the results of the study will be reported in the form of a research report, which may be published in a journal or book.

Consent for Interview:

Signed: _____ Date: _____

Consent for Recording:

Signed: _____ Date: _____