THE EXPERIENCES OF HEALTHCARE WORKERS ON THE DELIVERY OF HEALTHCARE SERVICE DURING COVID-19 PANDEMIC IN CLINICS SUB-DISTRICT A, CITY OF JOHANNESBURG MUNICIPALITY GAUTENG PROVINCE

by

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# DISSERTATION

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at the

# UNIVERSITY OF LIMPOPO

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## DECLARATION

I Joy Senzeni Ncube declare that the dissertation "The experiences of healthcare workers on the delivery of healthcare service during COVID-19 pandemic in clinics sub-district A, city of Johannesburg municipality Gauteng province" hereby submitted to the University of Limpopo for the degree Master of Nursing has not been previously been submitted by me for a degree at this or any other institution, is my own work in design and execution, and all material used has been duly acknowledged in both the text and in the list of references.

J.S. Ncube (Ms.)

Date

## DEDICATION

This dissertation is dedicated to my mother, Mashudu Florence Ndou, my grandmother Nyamunzhedzi Sarah Ndou and my sibling Mpho Ndou for their motivation, constant prayers, love and support. This dissertation is also dedicated to all professional nurses and medical doctors in Johannesburg municipality region A Clinics.

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# **DEFINITION OF CONCEPTS**

## COVID-19

Coronavirus disease (COVID-19) is an infectious disease caused by the transmission of Severe Acute Respiratory Syndrome Coronavirus 2(SARS-Cov-2); the virus that causes COVID-19 (WHO, 2021). In this study, COVID-19 refers to the outbreak of a disease that significantly impacts the healthcare system and exposes healthcare workers to the risk of transmission.

#### Experiences

Experiences refer to practical knowledge, skill, or practice that is gained through close observation of or involvement in events or a specific activity is referred to as having experiences(Cambridge Dictionary, 2018). In this study, experiences refer to the practice and knowledge healthcare workers came across during COVID-19.

#### **Healthcare Worker**

Healthcare Worker is one who delivers care and services to the sick and ailing directly as doctors, nurses, or indirectly as aides, helpers, laboratory technicians, or even medical waste handlers (Joseph & Joseph, 2016). For the purpose of this study, healthcare workers refer to all the doctors and nurses who provide care to COVID-19 patients in the selected clinics.

#### Healthcare Service

Healthcare service refers to a public service that provides the care of mental and physical health by preventing, treating, or managing illness by providing medical treatment (Cambridge Dictionary, 2018). In this study, healthcare service refers to services rendered in city of Johannesburg municipality clinics, such as COVID-19 screening and testing.

# Pandemic

A pandemic refers to a disease outbreak that spreads across countries or continents within a short period (Cambridge Dictionary, 2018). In this study, pandemic refers to the outbreak of COVID-19 globally with an emphasis on the city of Johannesburg municipality clinics, sub-district A.

#### ABSTRACT

**Background**: The novel coronavirus (COVID-19) epidemic has invaded health systems throughout the world. The study findings present many difficulties for healthcare practitioners. This study summarizes the studies that came out during the first year of the pandemic.

**Purpose:** To determine the experience of the healthcare workers on the delivery of healthcare service during the COVID-19 pandemic in clinics sub-district A, city of Johannesburg municipality Gauteng province.

**Study method**: A qualitative, phenomenological, descriptive, and contextual design was applied to explore and describe the experiences of healthcare workers on the delivery of healthcare services during the COVID-19 pandemic in clinics sub-district A, city of Johannesburg municipality Gauteng province. A purposive and convenient, the non-probability sampling method was used to select 24 healthcare workers, two doctors and 22 nurses. Data collection was completed with an unstructured interview that lasted between 25 and 40 minutes. Data were analyzed using Techs' open coding method of qualitative data analysis.

**Results:** The following themes emerged: Diverse experiences of the healthcare workers when delivering service during the COVID-19 pandemic, diverse experience regarding support systems when providing health services during the COVID-19 pandemic, challenges regarding the provision of care during the COVID-19 pandemic and suggestions on how to improve the service provision during COVID-19 pandemic.

**Conclusion**: The COVID-19 pandemic has put a significant strain on healthcare systems around the world, including South Africa. COVID-19 pandemic demanded healthcare workers to be resilience when providing service delivery, according to interviews with healthcare workers in Johannesburg. The study's results will be presented to the Gauteng health department and nurses. The study has examined the necessary intervention and support of healthcare workers to improve patient care. It will also provide policymakers with robust data to inform urgent decision-making regarding

workforce protection, support, and sustainability. Keywords: COVID-19, healthcare workers

# LIST OF ABBREVIATIONS

COVID-19	Coronavirus Disease
HCW	Healthcare Workers
PPE	Personal Protective Equipment
SARS-COV-2	Severe Acute Respiratory Syndrome Coronavirus 2
WHO	World Health Organization
ED	Emergency Department
NICD	National Institute for Communicable Diseases

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## **CHAPTER 1**

#### **OVERVIEW OF THE STUDY**

#### **1.1 INTRODUCTION AND BACKGROUND**

Coronavirus disease (COVID-19) is an infectious disease caused by the transmission of Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) the virus that causes COVID-19 (WHO, 2021). COVID-19 emerged from Wuhan, China in December 2019, and has infected millions of people worldwide (Reem, Majed, Hamdan, 2020). In January 2020, the World Health Organization declared COVID-19 a pandemic. According to WHO (2021), most people infected with COVID-19 present with symptoms such as cough, sore throat, loss of smell or taste, headache, fever, tiredness, chest pain, and shortness of breath. People with underlying medical conditions such as Cardiovascular Disease, Diabetes, Chronic Respiratory Disease, Cancer, and the elderly are more likely to develop serious illnesses. COVID-19 is spread through droplets of saliva from an infected person during coughing, sneezing, or talking (WHO, 2021).

Due to the advent of COVID-19, healthcare workers may be apprehensive when delivering services. According to Gupta and Sahoo (2020), factors influencing the behavior of healthcare workers during the epidemic include fear of contagion, exposure to their family members and associates, interpersonal isolation, quarantine, and support from their immediate organizations. Healthcare workers are subjected to anxiety, stress, and fear due to providing direct patient care, working irregular hours under pressure, and being exposed to the virus. It is, therefore, understandable why these healthcare workers may exhibit these behavioral factors as much of this pandemic is still being documented, thus leading to much apprehension.

Notably, reports from different countries around the world detailed experiences of increased emotional distress, symptoms of depression, insomnia, and overall psychological health disturbances amongst healthcare workers following engagements with infected patients (Vindrola-Pandros, Andrews, Dowrick, Djellouli, Fillmore, Bautista

Gonzalez, Javadi, Lewis-Jackson, Manby, Mitchinson, Mulcahy Symmons, Martin, Regenold, Robinson, Sumray, Singleton, Syversen, Vanderslott & Johnson, 2020). According to these researchers, healthcare workers who do not directly care for COVID-19 patients may also be susceptible to psychological consequences. They may thus experience vicarious trauma at levels comparable to the general public. This could be attributed to their concerns for patients with the condition, at-risk coworkers, as well as for themselves and their families (Li, Ge, Yang, Feng, Qiao, Jiang, Bi, Zhan, Xu, Wang, Zhou, Zhou, Pan, Liu, Zhang, Yang, Zhu, Hu, Hashimoto, Jia, Wang, Wang, Liu & Yang, 2020).

According to the study conducted by Vindrola-Padros et al. (2020), the COVID-19 pandemic in the UK shed light on existing fractures and deficiencies in the healthcare system related to underfunding, workforce deficiencies, and fragmentation. This study found similar concerns from healthcare workers regarding care delivery during COVID-19 as those reported by other countries. Shortage of personal protective equipment, changing of guidelines rapidly, and lack of routine testing created anxiety and distress while impacting the efforts to maintain a sustainable workforce. When PPE was provided, the challenge of incorrect sizes and overheating that complicated routine work.

A study in Saudi Arabia indicated that healthcare workers are concerned about disaster events such as a fear for their safety, worries about their family's health, childcare issues, fear of contracting illness from victims, and so forth (Almaghrabi, Alfaraidi, Hebshi & Albaadani, 2020). These concerns have resulted in HCWs not reporting on duty when needed. Some studies show that healthcare a lack of staff preparedness, a shortage of PPE, vaccines, crisis counselling, and family preparedness with social support causes the absenteeism of healthcare workers during the COVID-19 pandemic. HCWs also want the department to give them incentives and financial support for their family members.

The study by Gupta and Sahoo (2020) in India shows that the HCWs faced many mental health problems while nursing COVID-19 patients such as burnout, anxiety, depression, and stress-related disorders. Some major contributory factors for developing mental

health problems among HCWs include lack of effective communication, higher authority support, misinformation, lack of PPEs, stigma, and job-related stress. Various biological, psychological, and socio-environmental factors cause these challenges.

In Africa, a study conducted in Lagos, Nigeria, reported that at the beginning of the COVID-19 outbreaks, crucial attention to restriction revolved around case investigation, contact tracing, and the isolation of patients with confirmed COVID-19 positive in a chosen area. Healthcare workers occupied the isolation area without adequate experience in nursing COVID-19 patients (James, 2021). In South Africa, a novel COVID-19 first case was reported on March 6, 2020, and cases increased rapidly daily (Nyasulu & Pandya, 2020). It is difficult for the healthcare system to maintain regular health routines in healthcare services and cope with the pandemic. The South African healthcare system offers various preventative and curative services at the healthcare level, including chronic care to address the quadruple disease burden. The healthcare workers continued to provide these services during the pandemic; they also needed to conduct COVID-19 screening and testing. Managing these additional workloads because of an increased number of people accessing the services and managing their own infection risk may be very stressful.

The study by Crowley et al. (2021) in Western Cape Province South Africa, indicated that the primary healthcare nurses were not optimally prepared for the COVID-19 pandemic. The challenges they faced included inadequate training, infrastructure, the availability of personal protective equipment, COVID-19 testing of healthcare workers, and management support. Primary care nurses need comprehensive support to manage stress and anxiety. Currently, there is an increased burden in the healthcare system resulting in a shortage of healthcare workers and others healthcare workers being overworked.

#### **1.2 PROBLEM STATEMENT**

The COVID-19 pandemic has set an unprecedented demand on the healthcare system

globally. Multiple types of research from around the world have well-documented effects brought by the COVID-19 pandemic on the healthcare systems. These include, among others, patient influx at healthcare facilities leading to personnel shortages, lack of PPE, and inadequate or rushed training in response to the pandemic, thus inadvertently exposing the healthcare workers to the virus. The SARS-COV-2 virus has significantly impacted healthcare systems worldwide since there is no viable cure for COVID-19, and access to vaccination is limited to selected priority groups.

COVID-19 is the largest pandemic in a century and completely overloaded the world's healthcare systems. Since everyone on the planet has been impacted, some people think that the epidemic may constitute a form of collective trauma. Due to the high infection rates among healthcare personnel, a sizable section of the staff was sick and under quarantine. Administrators had to make complex judgments about visitation restrictions and banning family members from visiting loved ones in their final days. Daily best practices were updated as new information about the infection was learned.

The pandemic-related stress, anxiety, and depression experienced by healthcare professionals may be a factor in the lack of nurses. Throughout this pandemic, there seems to have been an increase in public awareness of mental health issues. This appears to partially result from anxious and depressed people seeking therapy owing to increased stress and fear. Burnout can increase medical errors, decrease patient empathy, decrease productivity, and increase the likelihood that a healthcare worker will leave their position which during COVID-19, these issues worsen and become more expensive (Leo, Sabina, Tumolo, Bodini, Ponzini, Sabato & Mincarone, 2021). In line with the documented global challenges affecting healthcare systems worldwide, the researcher, a healthcare worker in a community clinic, had first-hand experiences with challenges related to the COVID-19 pandemic. During the provision of healthcare services, the researcher has observed that healthcare workers are experiencing challenges such as a shortage of PPE in clinics, which makes it difficult to accommodate safety COVID-19 rules. More importantly, healthcare workers risk being infected while at work. Based on these observations, the study will explore healthcare workers' experiences in rendering services during the COVID-19 pandemic in community clinics

around Johannesburg municipality sub-district A.

# **1.3 RESEARCH QUESTION**

The following research questions were used to guide the study:

• What are the experiences of the healthcare workers when delivering healthcare services during the COVID-19 pandemic in clinics sub-district A, city of Johannesburg municipality Gauteng province?

• What are the challenges experienced by the healthcare workers when delivering healthcare services during the COVID-19 pandemic in clinics sub-district A, city of Johannesburg municipality Gauteng province?

# 1.4 AIM OF THE STUDY

The study aimed to determine the experiences of the healthcare workers on the delivery of healthcare service during the COVID-19 pandemic in clinics sub-district A, city of Johannesburg municipality Gauteng province.

# **1.5 OBJECTIVES OF THE STUDY**

The objectives of the study were:

- To explore healthcare workers' experiences in delivering healthcare services during the COVID-19 pandemic in clinics sub-district A, city of Johannesburg municipality Gauteng province.
- To describe healthcare workers' challenges in delivering healthcare service during the COVID-19 pandemic in clinics sub-district A, city of Johannesburg municipality Gauteng province.

# 1.6 OVERVIEW OF RESEARCH METHODOLOGY

This study used a qualitative research method to explore and describe the experiences of healthcare workers when providing care during the COVID-19 pandemic. Data was

collected using unstructured face-to-face interviews and a voice recorder with the healthcare workers (HCWs). Interviews were conducted with doctors and nurses until data saturation was reached. Ethical clearance was obtained from the Turfloop Research Ethics committee at the University of Limpopo.

# **1.7 SIGNIFICANCE OF THE STUDY**

After determining the experiences of the healthcare workers on the delivery of healthcare service during the COVID-19 pandemic in clinics sub-district A, the result of the study will be presented to the Gauteng department of health and nurses. The benefits of the study will include:

# • Departmental benefits

The study's results will create awareness to the Department of Health about the factors that contribute to the experience of healthcare workers working with COVID-19. Such factors need to be addressed to develop appropriate strategies to improve psychological intervention and support for healthcare workers. It will assist the department to provide adequate PPE, enough staff, and flexible working hours. It will provide policymakers with robust data to inform urgent decision-making now and into the future regarding workforce protection, support, and sustainability.

# • Healthcare worker

Due to the availability of psychological support, the healthcare worker will be able to work with less stress and freedom and without worrying about COVID-19. To provide important information about the disease trends and risk factors, outcome of treatment or public health interventions, functional abilities, patterns of care, and healthcare costs and use.

## • Patients

The study will discuss the necessary intervention and support of healthcare workers to improve patient care. the study will also help the patient understand the COVID-19 pandemic and its risk. it will also assist the patient to take precautionary measures such as wearing musk, washing hands, using a disinfectant, and maintaining social distancing.

# **1.8 CONCLUSION**

Chapter one discussed the overview of the study, including the introduction and background, problem statement, theoretical framework, study aim, research questions, objectives of the study, overview of research methodology, and significance of the study. The next chapter has surveyed the literature pertaining to the research objectives and links to the research problem.

# **CHAPTER 2**

## LITERATURE REVIEW AND THEORETICAL FRAMEWORK

### 2.1 INTRODUCTION

Literature is written sources relevant to the focus of the study, including articles published in periodicals or journals, internet publications, conference papers, thesis, dissertations, clinical journals, textbooks and other books, google scholar, science direct, etc. (Burns & Grove, 2015).

## **2.2 THE CORONA VIRUS PANDEMIC**

In December 2019, a brand-new coronavirus was first identified in China, which set off a global pandemic in March 2020. Coronavirus (COVID-19) is an infectious disease which is caused by a newly discovered coronavirus, it was discovered in Wuhan China in 2019 December (WHO, 2020). COVID-19 symptoms can range from mild to moderate respiratory illness and they do not require special treatment. Still, there are those who have comorbidity or underlying conditions such as diabetes, chronic respiratory diseases (e.g. chronic asthma), cardiovascular diseases and cancer, they are more likely to develop serious illnesses even death (WHO, 2020). Direct, indirect, or close contact with those with the illness, also known as Corona Virus Disease (COVID), can transfer to others by mouth and nose secretions (Kabadayi et al., 2020). As a result, stringent policies like border closures, stay-at-home directives, travel restrictions, extensive quarantines, forced social withdrawal, contact tracing, and self-quarantines are implemented globally (Tian et al., 2020).

## 2.3 IMPACT OF CORONA ON THE HEALTHCARE SERVICE INDUSTRY

The healthcare service industry, which relies heavily on human interaction has been severely impacted by the pandemic and its preceding decisions such as changes in policies. Healthcare service industry businesses have accelerated the implementation of technology-driven strategies in response to COVID-19 difficulties, despite severe time restrictions (Carroll & Conboy, 2020). Additionally, after the epidemic, this digital

transition is anticipated to accelerate. Most people fear contact; therefore, contactless services may take over all elements of customer service. When adopting digital technology and making significant changes to service methods, several potential modifications could occur in the services' deep structure. In a way, much sooner than expected COVID-19 ushers in a new normal for digitalized services across industries. Services and the service sector are going through significant transformations. The ultimate deep structure of services is where these changes are taking place. The meanings and objectives of services are evolving and their routines. In some circumstances, services may benefit from several digital technology layers that combine routine and algorithmic elements (Lee & Moon, 2018). In other situations, technology might digitally automate operations to remove human involvement.

WHO(2020), recognizes the need to take steps to prevent and slow the spread of COVID -19, as well as the symptoms it causes and how it spreads. People must wash their hands using soap or using alcohol by rubbing frequently and by avoiding touching the face. Since, COVID-19 primarily spreads through saliva or discharge from the nose or when an infected person coughs or sneeze, the infected person must practice respiratory etiquette (covering into a flexed elbow) and wear a face mask. Studies all over the world show that HCW experienced some challenges which threaten their health or expose them to COVID-19, some of the challenges that were identified were:

#### 2.3.1 Overview of the impact of COVID-19 on healthcare workers

According to Santarone, McKenney, and Elkbuli (2020), Over the past two years, the COVID-19 virus and its devastating effects on healthcare facilities and resources have shocked the world. Lockdowns, quarantines, and isolation measures have been implemented worldwide to stop the virus from spreading. This was done to prevent overcrowding and enable medical staff and facilities to continue offering high-quality care without a treatment or cure and, for a considerable amount of time, a vaccination. The epidemic has, nonetheless, had a profound impact on medical settings, and these impacts will likely last for many years. Although what healthcare workers have gone through over the past two years has been the subject of innumerable news articles,

editorials, television shows, and special announcements, it is difficult for anyone outside the medical system to comprehend the catastrophic impact it has had. Santarone et al (2020) described how the pandemic had added stress to the ability of healthcare workers to leave work and seek support from friends and family, making it even harder to find adequate emotional support. They contrasted this with the pre-pandemic ability to do so and how that has changed with the ability now being more concerned about spreading COVID-19 to friends and family due to the pandemic. While this begins to provide some insight into the greater degree of stress that healthcare employees are experiencing, the following comment seems to capture the evolution of workplace stressors better:

#### 2.3.2 High mortality rate

The high rates of morbidity and mortality linked to this pandemic, the scarcity of personal protective equipment, the worry that they or their family members might contract the disease, the lack of immediate effective treatment or vaccine, and the new restrictive public health policies implemented in many countries have altered their usual situation (Braquehais et al., 2020). The additional safety measures implemented to reduce exposure in medical settings also meant less peer support accessible to workers, leaving them feeling even more isolated and alone, according to several other testimonies (Braquehais et al., 2020; Fiore, 2020; Morse & Dell, 2021).

## 2.3.3 Psychological impact of the COVID-19 pandemic on the population

Numerous research has attempted to quantify this alteration's effects (Kramer et al., 2021; Lu et al., 2020; Morse & Dell, 2021; Shreffler et al., 2020; Zhu et al., 2020). Research has generally discovered that despair, anxiety, fear, psychological stress, burnout, suicide, emotional exhaustion, psychological disorder, and fatigue have grown among healthcare workers. In contrast, work satisfaction and solid support have dropped. Since they frequently have the closest contact with infected patients, this is the worst among medical professionals working in COVID-19 positive wards (Kramer et al., 2021; Lu et al., 2020; Shreffler et al., 2020). Since it has been more challenging to offer patients and families support in person or virtually, resources have been stretched to their maximum. Beyond, hospital staff members appear to have felt an overwhelming sense of powerlessness and helplessness throughout the pandemic, adding to their

emotional strain, job dissatisfaction, and difficulty setting boundaries (Booth & Venville, 2020; Dragwidge, 2021; Lewis, 2021; Ross et al., 2021; Vo, 2021). According to Lewis (2021), one of the most difficult emotional burdens is "sitting with human misery, trying to mitigate it through human, distant contact, wondering if that sorrow might visit you soon". These experiences and trauma-related symptoms that have been recorded appear to change a little as COVID infection, and hospitalization rates in particular regions rise and decline, maybe offering brief respite and a return to a work environment more like life before COVID (Liu et al., 2020).

#### 2.3.4 Mental effect of the COVID-19 on the population

Studies do, however, seem to concur that more healthcare workers were exposed to unanticipated life-threatening situations or uncertainty, with more mental discomfort projections, and these detrimental consequences are anticipated to have a devastating influence on healthcare workers in the health sector (Braquehais et al., 2020; Swift, 2020). The fact that COVID-19, the exact source of the stress experienced by patients and families, is also causing trauma to healthcare personnel seems to put them at a high risk of experiencing shared trauma. Trauma research has grown to include more specific names for various types of stress brought on by engaging in helping professions and working with trauma victims. Researchers should concentrate on the study of burnout to comprehend the traumatizing work environment COVID has produced for healthcare staff.

Fewer studies have taken the time to specifically differentiate between the various healthcare professions and those that tend to concentrate on the experiences of doctors and nurses. A few studies also concentrate on the effect COVID-19 has had on hospital social workers (Booth & Venville, 2020; Dragwidge, 2021; Holmes et al., 2021; Lewis, 2021; Morse & Dell, 2021; Ross et al., 2021; Szczygiel & EmeryFertitta, 2021; Vo, 2021). While descriptive studies and editorial reports of social workers' experiences make up most of the literature to date, it is more difficult to establish how these changes have affected medical social workers. According to Morse and Dell's study (2021), about one-fifth of social workers self-reported having burnout. However, because people who are

burnt out are not primarily motivated to ask for help or reach out, it can be presumed that they may not have accurately self-reported. Approximately 64% of participants showed burnout symptoms in another study utilizing the Shared Trauma and Professional Posttraumatic Growth Inventory (STPPG), while 50% showed shared trauma symptoms (Holmes et al., 2021). Further research is required to determine the prevalence of burnout and shared trauma because generalizations cannot be inferred from these studies due to their discrepancies. In order to assist in preventing a significant increase in job turnover following COVID, further research should be conducted on therapies that can help address both problems.

#### 2.3.5 Healthcare worker's burnout

Three elements of burnout were initially identified by early theories: emotional weariness, depersonalization, and decreased personal accomplishment (Maslach & Jackson, 1981). Further research was done on these elements, and definitions emerged quickly: Depersonalization describes the increasing emotional distance and lack of empathy between a service provider and those they serve (Maslach & Jackson, 1981). In contrast, emotional tiredness and limited personal accomplishment reflect the frustration that results from feeling underqualified and unsuccessful in their line of work (Leiter & Maslach, 1988). These factors made it easier to understand the connection between doctors' work-life experiences and their risk of burnout. They also made it clearer why burnout can serve as a good indicator of job turnover. HWCs may become less committed to their work and more likely to withdraw from it and leave their job as a result of emotional tiredness, emotional detachment, and unhappiness with their employment (Leiter & Maslach, 1988). Finally, the connection between burnout and turnover was explained by using this to explain "lower productivity, more absenteeism, and worse retention rates leading to higher turnover (Penwell-Waines et al., 2018).

The Maslach Burnout Inventory (MBI), a tool designed to measure burnout, only measures emotional exhaustion, depersonalization, and personal accomplishment and states that each score should be interpreted individually, meaning there is no actual burnout score identified (Maslach & Jackson, 1981). Even though this initial research did much to spark interest in burnout and create awareness of the issue, it is also flawed

(Maslach & Jackson, 1981). According to a more recent study, the results can be used confidently to measure the three components of burnout. However, they cannot measure burnout as a whole or assess the severity of an individual's burnout, which makes it challenging to suggest choices for therapy and intervention (Schaufeli et al., 2020). The Burnout Assessment Tool (BAT), which was recently developed in response to the awareness of these limitations, distinguishes three between secondary elements-depressed mood, psychological distress, and psychosomatic complaints and four primary elements of burnout, including exhaustion, cognitive impairment, emotional impairment, and mental distance (Schaufeli et al., 2020).

#### 2.3.6 Healthcare workers care trauma

A shared trauma is when a helping healthcare worker and a service recipient have both gone through the same horrific event and are still processing it (Tosone et al., 2012). Their experiences may be similar or dissimilar, but their emotional and mental responses to those events can be readily misunderstood and difficult to digest in a therapy environment (Tosone et al., 2012). This could endanger clients and professionals, mainly if the professional is unaware of how the trauma has affected them. The longer the trauma goes untreated, the higher the risk of burnout, depression, anxiety, traumatic stress disorders, and other conditions. If they cannot accurately identify how they have been affected, this could result in more errors and less competent practice. In the 1940s, during the London Blitz in World War II, the idea of shared trauma was first raised because civilians had been living and working in a traumatic environment for years. However, this idea was soon abandoned in favour of research focusing on PTSD and the experiences of soldiers and those who had personally experienced trauma (Szczygiel & Emery-Fertitta, 2021). After 9/11, the idea was revived when local traumatic events like terrorism, school shootings, and natural disasters began to receive more attention and media coverage (Szczygiel & Emery-Fertitta, 2021).

Because clinicians are also exposed to the same collective trauma as their clients, Tosone, Nuttman-Schwartz, and Stephens (2012) define "shared *trauma*" as "the affective, behavioral, cognitive, spiritual, and multimodal responses that clinicians experience as a result." They also stress that this double exposure increases the

clinician's risk of developing PTSD and causes the line between personal and professional boundaries to become hazier. For the COVID-19 pandemic, Szczygiel and Emery-Fertitta (2021) note that this could be a significant problem, posing the question, "If both the client and therapist are experiencing trauma symptoms in response to the same event, how can the clinician accurately decipher between the threads of her own experience and that of the client? However, because shared trauma is so uncommon, there is not much information about it or potential treatments. However, these general guidelines do not offer many helpful tips for healthcare professionals facing shared trauma. Instead, they call for more research and lobbying within organizations for more significant assistance when workers encounter shared trauma (Tosone et al., 2012).

Organizational Support as a Protector against the Burnout Effects of Shared Trauma Burnout is "a cumulative reaction to continuing work pressures. it tends to remain relatively stable over time. According to Leiter and Maslach's (2003) -burnout is not a sudden occurrence but rather "a protracted, pathological process whereby signs of emotional tiredness might emerge due to the psychological pressure of working with many stresses (Tosone et al., 2012). There are no quick fixes or simple solutions to solve burnout and assist employees in protecting themselves because of its gradual nature. To better address the psychological and professional aspects that lead to burnout, it is generally advised that future studies concentrate more on exploring intervention options on both the individual and organizational levels (Morse et al., 2012). In other ways, burnout seems to feed on itself because it makes healthcare professionals less likely to ask for assistance to deal with their problems. Help-seeking and receiving can be highly negative experiences that lead to sentiments of inequity or inadequacy among employees if there is an inadequate organizational structure and processes in place to assist hospital personnel who are experiencing burnout, according to Barrera (1986) when a worker is already experiencing emotional weariness, guilt or shame is likely to make it harder for them to seek help (Barrera, 1986).

#### 2.3.7 Work-life balance of the healthcare workers

The Areas of Worklife Model, which Leiter and Maslach (2003) developed, later identified six key elements contributing to burnout. These are described as "workload (i.e., having too many demands placed on one's time), control (having the freedom and resources to meet demands), the presence of suitable rewards or recognition, a sense of community within the workplace, perceived fairness concerning decision-making, and values alignment between employee and organization (Penwell-Waines et al., 2018). These six characteristics describe how employees perceive each one, making it possible to forecast the degree of burnout employees suffer (Leiter & Maslach, 2003).

While these six components describe the general atmosphere of an organization in a normal situation, the traumatic conditions brought on by COVID-19 may have affected each factor's role. How firms try to adapt and provide their employees with additional support may require the addition of a further variable. According to specific research, people who felt appreciated and valued at work generally reported higher levels of job satisfaction, which may function as a buffer against burnout (Booth & Venville, 2020; Morse & Dell, 2021; Ross et al., 2021; Tosone et al., 2012).

Some academics have begun to consider this, referring to it as organizational capacity or support, and have begun creating and testing ways to quantify the level of support staff feel their organization gives (Holmes et al., 2021). Research may be able to help reduce the amount of burnout that clinicians experience in the field and help reduce turnover rates that can contribute to worse outcomes for the clients they serve by focusing on both helping individual clinicians address their burnout and helping organizations understand the role that work-life atmosphere and available resources can play in contributing to burnout.

# 2.4 EXPERIENCES OF HEALTHCARE WORKERS ON THE DELIVERY OF HEALTHCARE SERVICE DURING COVID-19 PANDEMIC

According to the literature review for this study, the coronavirus pandemic has resulted in numerous research on the increased stress and load on healthcare professionals. Even if

the prior study has been beneficial, there are still specific gaps that can aid in bringing about significant adjustments. Second, few studies have tried to gauge the perceptions of different professions working in the same institution. We cannot, therefore, presume that one profession's experience is indicative of that of other healthcare professionals. This might offer a fresh viewpoint on how the coronavirus has influenced specific jobs. It was evident that healthcare professionals need to address the crisis of burnout and mental health. Many describe their experience as trauma or burnout, but very few offer any evidence or thorough justification. We may start to develop strategies to lessen some of the additional stressors by better understanding the experiences of healthcare employees

### 2.4.1 Prolonged use of PPE (personal protective equipment)

Personal protective equipment is intended to be used for a short period, however, during the COVID-19 pandemic there was more demand for PPE and the government failed to supply it (Ardebili, Naserbakht, Bernstein, Alazmani-Noodeh, Hamideh & Ranjbar, 2021). Healthcare workers compromise by using PPE for longer than an intended period, exposing them to COVID-19. All HCWs mentioned the scarcity of protective equipment and its difficulties followed by the paucity of N95 masks, protective garments, gloves, shields, and gowns, with the majority mentioning the acute discomfort of wearing the protective gear. This implied that the health-care system was not in good shape (Ardebili, et al, 2021). According to the study conducted in Bangladesh by Razu, Yasmin, Arif, Islam, Islam, Gesesew and Ward (2021), the authorities provided PPEs that were composed of a plastic-like material. With time, the shortage of PPE also decreased to some extent. Nurses also complained about a severe shortage of PPEs because doctors were the primary emphasis here, and the requirement for an appropriate supply of PPEs for nurses was overlooked. The regular protective procedures and guidelines to meet the special conditions of a pandemic could not be adhered to properly or comfortably, and the usual protective procedures and guidelines to meet the special conditions of a pandemic could not be adhered to adequately or comfortably. Participants regularly stated that the personal protective equipment (PPE) provided by their hospitals was either insufficient or of poor quality. Despite the government's claims in the media that every hospital had received the required quantity of PPEs, the reality on the ground was quite different. Study participants in private medical institutions were required to purchase their own PPEs since they were unsure of their availability in the health facilities.

### 2.4.2 Use of disinfectants during the COVID-19

To reduce the virus burden caused by the COVID-19 pandemic, disinfectants must now be used more often worldwide. Chemicals like guaternary ammonium compounds (QACs), hydrogen peroxide, bleach, and alcohol are examples of common disinfectants. Asthma and a higher risk of chronic obstructive pulmonary disease have both been linked to QACs and occupational disorders. The WHO proclaimed COVID-19 to be a pandemic on March 11, 2020. The global total increased to 28 million by September 2020. (Khan, Siddique, Shereen, Ali, Liu, Bai, Bashir & Xeu, 2020). Acute respiratory illness, pneumonia, a dry cough, a fever, and body aches are the classifications for this illness. The key ingredients in the alcohol-based hand sanitiser that the WHO recommends are ethanol, isopropanol, and several kinds of hydrogen peroxide. These preparations could harm the environment and people's health if they are misused. It is advised to periodically wash your hands with antibacterial soap to eliminate any potential illnesses. There is an increased use of disinfectants in healthcare facilities which may cause toxic effects among HCW, some experience nasal and eye irritation, chest tightness, wheezing, etc. Some HCW were forced to work immediately after fumigating because work has to continue, and the shortage of stuff was increasing.

## 2.4.3 Workload and work time

Healthcare professionals informed us that due to added responsibilities and stressors, the growing complexity of patient admissions, and the rising number of coworkers taking sick leave, their already heavy workloads grew considerably during the pandemic. The additional obligations have put a significant burden on our workplace. Daily patient observations, COVID screenings, staff and resident families being screened, and more documentation. In this line of employment. Masks and eye protection are very draining to wear all day. Patients with dementia cannot understand what you are saying. The changes to this job are undoubtedly not for the better. With the additional workload on

top of what was already a significant workload working in aged care, myself and my coworkers are under a lot of stress.

During the COVID-19 pandemic, many HCWs were working long hours with heavier workloads and insufficient time to rest. Some HCWs were experiencing a shortage because their colleagues tested positive for COVID-19. Work-related factors, including lack of staff, working long-hour shifts, increased workload, and inadequate rest time, were other main factors that led to physical tiredness and psychological burden. Eighty-seven percent of the participants thought the workload in the early days of the pandemic was too much for them. This massive burden manifested in many patients, problems employing protective equipment, a growing number of severe cases, and significant fatality rates (Ardebili et al., 2021).

Participants reported that there is a shortage of workers in the healthcare system. Additionally, many qualified doctors do not actually practice medicine, which adds increasing burden on practicing doctors. both public and private facilities with health workers. In In private facilities, doctors frequently received one-day contracts. Take a break once a week. In Doctors were frequently given a one-day contract in private facilities. Every week, take a break. Doctors worked long shifts in their offices. During working days and vacations, via telecommunication. Excessive workload not only puts you under a lot of physical strain but also a lot of mental strain. Medical facilities also suffered a shortage of nurses, who were required to work 16–17 hour shifts daily. Additionally, workers could not join their workplace due to fear of infection (Razu, Yasmin, Arif, Islam, Islam, Gesesew & Ward, 2021).

Healthcare professionals expressed dissatisfaction with the inadequate staffing levels for the pandemic's needs. Age-related care, emergency medicine, intensive care, mental health, and palliative care were just a few areas where the burden was felt. Some healthcare professionals felt pressured to perform unpaid overtime or take on more responsibilities to avoid disappointing patients or coworkers due to staffing shortages and rising demand. Healthcare professionals were concerned about patient safety due to

staffing shortages, particularly in COVID and aged care wards.

# 2.4.4 Violence, harassment, discrimination, and stigma toward HCW

Razu et al (2021) reported that there was an increase in incidents of violence and harassment against HCWs during the COVID-19 pandemic. The most widespread risk factors for workplace violence in health sectors include fatigue, stress, crowding, long patient waiting period, the burden of transmitting negative prognosis, COVID-19-specific prevention and control measures (such as quarantine or isolation), and not allowing families access to the bodies of the deceased loved ones, all these leads to violence and tension against the HCW by the public (Razu et al.,2021).

HCWs expressed frustration at being rejected by peers, coworkers, family members, neighbours, and society and with others being treated like a COVID-19 positive patients because of working in the COVID-19 unit (Razu et al., 2021). Another HCW stated that they were rejected not only by the general public but also by healthcare professionals. Furthermore, many individuals claimed that their neighbours, shops, and taxi drivers had rejected them and their families. According to the majority, during the COVID-19 pandemic, healthcare workers also had to deal with social shame. They were regarded as a nuisance by their neighbours, who avoided communicating with them for fear of infection. If medical professionals were found to be COVID-positive, landlords in some circumstances upped their monthly housing rents or removed them from their homes. Their maintaining social distance might be brutal at times, which bothered the healthcare personnel (Razu et al., 2021).

## 2.4.5 Mental health and psychosocial support

A study conducted in Poland discovered that healthcare workers (HCW) exposed to COVID-19 are more likely to be at greater risk of depression, sleep disorder and anxiety, (Wankowlcz, Szylinska & Rotter, 2020). Similarly, a study conducted in Iran and China discovered that HCW experiences greater stress, fatigue, insomnia and anxiety during their work at public hospitals and clinics during the pandemic (Diomidous, 2020).

Witnessing the abrupt death of coworkers instilled a sense of powerlessness among healthcare workers, leading to several suicide attempts. Insomnia is a common occurrence among them. The lack of acknowledgement from other colleagues added to the psychological strain of doctors not giving nurses enough credit. The study by LoGiudice and Bartos (2021) outlined that HCW expressed heavy feelings when it comes regarding efforts to save patients dying without their family members in the hospital. Some of the emotional situations were when HCW try to protect their own families from COVID-19, some were afraid of them being sick and infecting their children, partners, or parents.

A study conducted by Ardebili, Naserbakht, Bernstein, Alazmani-Noodeh, Hakimi, and Ranjbar (2021) indicates a prior study on nurses in China revealed changes in psychological features over time. A study of healthcare workers in China found that hard work depleted health-care providers physically and emotionally, but that these providers showed resilience and a spirit of professional dedication to overcome challenges. Excessive work demands were found to be associated with a lack of work resources and a loss of control over the work situation, according to our findings. Failure to successfully cure patients and the perception of delivering useless care were both mentioned as potential sources of moral distress among personnel.

#### 2.4.6 Risk of exposure to infection

The HCWs working in a high-risk areas such as screening and testing patients for COVID-19 are at a higher risk of exposure to infection. A study from Wuhan (China) reports that 87.5% of HCWs got infected by COVID-19 (Feroz, Pradhan, Ahmed, Shah, Asad, Saleem & Siddiqi, 2021). This results in fear, anxiety and stress among the HCWs, which often get worsened by the fear of being a contagion for their family members and loved ones, resulting in significant mental health problems. Some HCWs had to resuscitate COVID-19 patients including their colleagues which led to post-traumatic stress disorder. Because of the extremely contagious nature of the coronavirus (SARS-CoV-2) and the perceived risk of contracting the disease, physicians and nurses

expressed concern about contracting the virus when treating patients in interviews. Front-line employees have a particular mental health problem, and several respondents expressed remorse at the possibility of passing the infection on to their families (Feroz et al., 2021).

COVID-19 was deemed a terrifying sickness by the participants. They stated that they were at a higher risk of contracting the infection; this risk was inescapable, causing them to be more fearful of infection. One nurse stated that she had heard of multiple deaths among health workers worldwide due to COVID-19, which added to her fear. When they heard the first diagnosed patient was arriving at the ward, some participants expressed terror and showed significant dread when admitting the first patient. After receiving care, one person described having a hallucination-like experience (Rathnayake, Dasanayake, Maithreepala, Ekanayake & Basnayak, 2021).

## 2.4.7 Social distancing and Isolation/quarantine

In the continuing COVID-19 outbreak, social separation is seen as a crucial measure to combat the infectious outbreak. As a result, HCWs are required to keep a safe distance from their coworkers, both within and outside the job, depriving them of much-needed social and collegial support. Also, maintaining a social distance from family members leads to a lack of emotional support from significant others, which contributes to emotional stress and mental health issues(Ardebili et al., 2021). During a pandemic, isolation/quarantine is vital for reducing infection. HCWs are frequently assigned to isolated wards, responsible for caring for isolated patients. Without much-needed interpersonal interaction and social support, HCWs suffer from burnout and a lack of self-control. HCWs are routinely placed in quarantine (if exposed to infection) or isolation (if sick), robbing them of much-needed social support from their hospital colleagues and causing various psychological problems.

The study conducted by Ardebili et al (2021) states that because of the unknown nature of the disease, its high transmission rate, and the fear of becoming an asymptomatic

carrier and thereby passing the sickness to others. Subsequently about 96.42 percent of healthcare workers had entirely cut ties with their families to protect them from the spread of the virus. In every case, the individual's and family's level of contact and engagement changed abruptly and unexpectedly, which is a hidden challenge to HCWs. For example, about 76.19 percent of participants indicated they feared becoming ill and dying alone apart from their relatives. Furthermore, there was apprehension about being buried without customary religious rites. These anxieties amplified for healthcare workers who had tested positive, with their primary concern being the transmission of COVID-19 to their families, followed by concerns about dying in seclusion and being buried without religious rites and ceremonies (Ardebili et al., 2021).

#### 2.4.8 Lack of coordination and direction

In the study conducted by Razu et al (2021) on challenges faced by healthcare workers during the COVID-19 pandemic: a qualitative inquiry from Bangladesh indicates that given the disease's newness and lack of prior understanding, WHO and government rules were constantly changing. Medical professionals were put under additional mental strain as a result of these uncertainties, as a result, doctors remained undecided regarding the best course of action. COVID-19-positive people frequently visit medical institutions for routine medical care, putting COVID-negative patients and medical personnel at risk, especially since patients were not informed of any safety protocols, according to the participants. Patients who did not declare that they were infected with COVID-19 affected doctors and nurses in several cases. In the healthcare administrations, there was a high-level coordination failure. Furthermore, healthcare personnel were upset with the authority's discriminatory initiatives. They lacked any knowledge of how to respond appropriately during a viral breakout. The authority's response to the pandemic was also perceived to include more administrators and fewer professionals. HCW shared some positive experiences, showing how proud the front lines were during the pandemic, providing nursing care with great teamwork and the fact that they were recognized and appreciated by the world for doing their good job (LoGiudice & Bartos 2021).

Robinson and Stinson (2021) used quantitative methods to understand the experience of HCW working during the COVID-19 pandemic using semi-structured interviews via telephone with participants for data collection, and Colaizzi's method of data analysis. Many HCW had one common experience: a major concern about patients dying with strangers and not having family members close to them as a family was not allowed to visit parents. Another worse experience was HCW seeing their co-workers sick and dying from COVID-19; some had to nurse them. Face-to-face interaction is prohibited; telemedicine has quickly become the primary healthcare method. Many new legislative and financial arrangements, including increased government funding, have been made possible to supply health services. Healthcare professionals are aware of the advantages of telehealth.

Social media gave certain healthcare professionals access to up-to-date information, the first-hand accounts of worldwide coworkers, and vital social and professional support. Many healthcare professionals informed us that the material they found on Facebook and Twitter groups was more up-to-date and beneficial than anything they got through official channels. They preferred closed social media and messenger groups of healthcare professionals with a common interest more than Twitter and other open platforms.

# 2.4.9 Lack of organizational justice

Many healthcare employees observed no rise in recognition or compensation along with increased workload during the COVID-19 pandemic. The COVID-19 pandemic expanded already-existing inequities in society and the healthcare system. Healthcare workers contended that the pandemic did not cause these issues; instead, they were made worse. Changes in environments, procedures, laws, and regulations at work contribute to front-line healthcare workers' emotional and practical labour. For instance, the COVID-19 pandemic significantly altered how patient care was provided touching and facial expressions that show compassion were restricted, which made the healthcare workers to witness or participate in incidents against their stoic care philosophy (Razu et al., 2021).

## 2.5 THEORETICAL FRAMEWORK

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The theoretical framework for the study is expressed as the theory from which the study is grounded (Grove & Grey, 2018). A theoretical framework is a brief explanation of a theory or those portions of a theory to be tested in a study. Roy's adaptation theory which consists of input, control processes, effectors, and output, as shown in figure 1 below guided the study. Roy's adaptation theory is a conceptual model focused on the adaptation of human beings to the environment and the factors that influence the adaptation of human beings. The derivation of the theory included citations from Harry Helson's work in psychophysics that extended to social and behavioral sciences (Alligood, 2014). For this study, the theory will outline healthcare workers' experience delivering healthcare services during COVID-19.

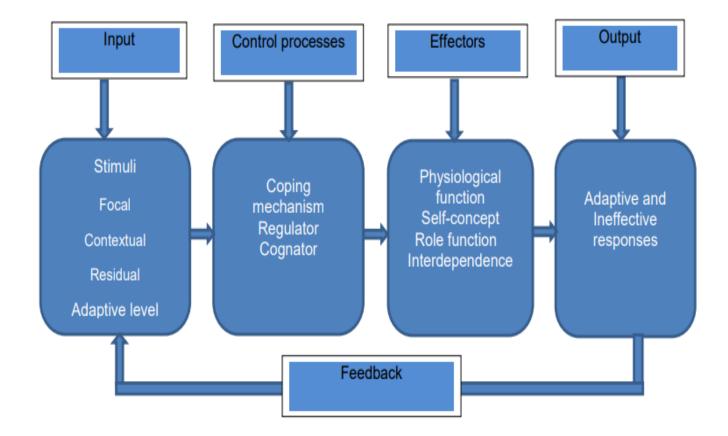
#### 2.5.1 The origin of the theory

Sister Callista Roy developed the Sr. Callista Roy Adaptation Model of Nursing in 1976 to define or explain nursing science's application (Wayne, 2021). The popular nursing theory seeks to describe or explain the practice of nursing. Roy's theory views the individual as a collection of interconnected systems that maintain a balance between diverse inputs. When Dorothy Johnson, a nursing theorist, challenged her students to develop conceptual models of nursing during a lecture, Roy's model was developed. The Roy Adaptation Model was initially introduced to the literature in an article titled "Adaptation: A Conceptual Framework for Nursing" which appeared in Nursing Outlook in 1970. In the same year, Mount St. Mary's School in Los Angeles, California, modified Roy's adaptation model of nursing. Roy's Adaptation Model was developed as a result of Johnson's Nursing Model (Wayne, 2021).

#### 2.5.2 The importance of Roy's adaptation theory

The creation of a theory is essential to the research process because it serves as a framework that gives the research investigation context and direction (Wayne, 2021). In the current global pandemic climate, the well-being of nurses continues to become compromised as evidenced by increasing moral distress, compassion fatigue, and burnout (Browning Callis, 2020). Thus indicating a need for interventional studies to

ameliorate moral distress and enhance job satisfaction. Theory-based supportive programs are vital to nurses' overall wellbeing, morale, and retention. The health facilities in the country, in line with the theory, have provided nurses with a brief mechanism for rest, refreshment, and self-care within their work facility in an attempt to provide quality healthcare. An example of self-care includes the use of counsellors to help healthcare workers reflect on why they went into professional practice and how their self-concept can be played out as a team (Browning Callis, 2020). Roy's adaptation theory is used to direct the research process and to assess the responses of healthcare workers to the working environment. The relationship between theory, practice, and research must be ongoing, reciprocal, and cyclical if the nursing profession is to fulfil its obligations to society better. This will support theory-guided practice and bridge the perceived "gap" between theory and practice (Wayne, 2021).



#### Figure 2.1: Roy's adaptation behavioral (Adopted from Alligood, 2014)

#### 2.5.2.1 Input

According to Alligood (2014), the person, as an open living system, receives input from stimuli from the self and the environment. The type of stimuli determines the adaptation level of the person with the combined effect of the focal, contextual and residual stimuli. A focal stimulus is an internal or external stimulus that immediately affects the human system. In this study, the focal stimuli are the experiences of HCWs in response to COVID-19.

Contextual stimuli are all the environmental factors that present to the person from inside or outside but are not the center of the person's attention (Alligood, 2014; Kaur, 2013). In this study, the contextual stimuli are the lack of support from the department, considerating that the workplace is prone to the transmission of workload and shortstaffed. Residual stimuli are environmental factors within or without the human system with unclear effects on the current situation. The environment stimulates the experience of healthcare workers, hence it is regarded as the input into healthcare their experience with internal and external factors. healthcare. According to Roy's adaptation theory, the environment is all the conditions, circumstances and influences surrounding and affecting the development and behavior of a person or a group" (Alligood, 2014).

#### 2.5.2.2 Control processes

Control processes are "innate or acquired ways of interacting with the changing environment (Alligood, 2014). Control processes are the primary functional subsystems in Roy's adaptation model. There are two types of coping mechanisms; innate coping mechanisms, which are genetically determined and automatic processes, and acquired coping mechanisms, which are developed through strategies such as learning. The primary subsystem also consists of the regulator and cognition, which are coping methods. The regulator coping process enables healthcare workers to respond automatically to stimuli using physiological adaptive modes using neural, chemical, and endocrine coping processes (Alligood, 2014; Kaur, 2013). Healthcare workers frequently exposed to stressful conditions may develop chronically increased cortisol levels and fatigue, placing them at risk of exhaustion. The cognator coping process enables healthcare workers to respond through four cognitive-emotive channels: perceptual information processing, learning, judgment, and emotions.

## 2.5.2.3 Effectors

- The effectors are adaptive modes that cognate manifestations of the regulator and cognate. Responses to stimuli are carried out through four adaptive modes namely:
- The physiological adaptive mode concerns how healthcare workers interact with the environment through physiological processes to meet basic needs such as nutrition, oxygen, elimination, activity and rest, and protection (Alligood, 2014). Long-term absence of support in the workplace can have devastating outcomes, the healthcare workers can face a variety of stressors including long shifts, staff shortages, frequent content with mortality, the potential of violence, and the risk of contracting COVID-19.
- The self-concept adaptive mode deals with the person's beliefs and feelings regarding themselves or others at a certain time (Alligood, 2014). The self-concept adaptive mode consists of the physical self and personal identity. Physical self refers to body image and sense. In this content, the self-concept mode refers to how healthcare workers feel and their individual beliefs about being diagnosed with COVID-19.
- The role function adaptive mode refers to the social integrity of how healthcare workers should behave towards other co-workers dealing directly with COVID-19 (Alligood, 2014). In this case, the role function adaptive mode refers to coping with a changing world using innate and acquired coping mechanisms. In order to respond positively to environmental changes a person's adaptation function of the

stimulus is exposed to and their adaptation level. The concept will be applied to address how healthcare workers as individuals and working in teams deal with the challenges that emerged during the COVID-19 pandemic.

 The interdependence mode is associated with one's relationship, interactions with others, and reciprocation of love, respect and value (Alligood, 2014). Support systems are crucial to the interdependence mode of healthcare because healthcare workers require compassion for the trauma they experience associated with their work environment. This entails emotional support and therapeutic communication that supports healthcare workers experiencing secondary traumatic stress, fatigue and moral distress. A practical example will be receiving benefits and recognition from their employer in a form of promotion, special leave, monetary value etc.

#### 2.5.2.4 Output

The output is the response of the healthcare worker which determines how adaptive or ineffective respond to stimuli. Adaptive response helps healthcare workers to maintain their integrity and promotes them to achieve their adaptive goals and objectives (Kaur, 2013).

## **2.6 CONCLUSION**

This literature study aimed to explore healthcare workers' experiences delivering healthcare services during the COVID-19 pandemic in clinics. Challenges can be caused by workload, insufficient training and education, and organizational problems in the medical field under normal conditions. Still, it appears that this epidemic has produced a shared trauma environment. Chapter 2 discussed the literature review which involves the introduction, of the coronavirus pandemic, the impact of corona on the service industry and the experiences of healthcare workers on the delivery of healthcare service during COVID-19 pandemic.

## **CHAPTER 3**

## **RESEARCH METHODOLOGY**

## 3.1 INTRODUCTION

Research methodology refers to the entire strategy of the study, from identifying the problem to the final defined structures for data collection. Research methodology is all about the scientific method which includes steps, procedures and strategies for obtaining and analyzing data. -

## 3.2 RESEARCH METHOD

This study used a qualitative research method to explore the healthcare workers' experience in delivering healthcare services. Qualitative research is a research approach that focuses on the qualitative aspects of meaning, knowledge, and understanding, and they are used to study human experience from the viewpoint of the research participants in the context in which the action took place (Brink, Van der Walt, & Van Rensburg, 2018). This method is appropriate as the researcher has asked the participant to determine the healthcare workers' experience delivering healthcare services during the COVID-19 pandemic in clinics sub-district A, city of Johannesburg municipality, Gauteng province.

## **3.3 STUDY SITE**

City of Johannesburg municipality Region A is the northern smallholdings area with the growing residential area of Midrand, which is a link to the capital city of Tshwane, with warehousing and telecoms companies; it is also a packing and logistics hub for the city's distribution network. The region also houses the relatively newly established poor townships of Diepslot and Ivory Park. The figure below shows the City of Joburg municipality region maps.:

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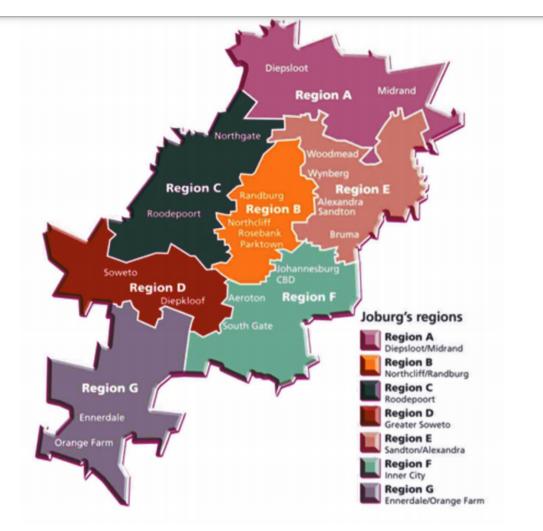


Figure 3.1. City of Johannesburg municipality regional map.

## **3.4 RESEARCH DESIGNS**

The depth of meaning and people's subjective experiences and meaning-making processes are valued in qualitative research methods (Leavy, 2017). By dissecting the meanings humans attribute to actions, situations, circumstances, people, and objects, these approaches help us develop a thorough grasp of a subject. These methods are based on inductive designs intended to produce meaningful, rich, descriptive data. Although they can be employed in research with various objectives, exploratory or descriptive research is where qualitative approaches are most frequently applied (Leavy, 2017). The phenomenological, descriptive, and contextual designs were used in this research to explore the experiences and challenges of healthcare workers in

providing care during the COVID-19 pandemic.

# 3.4.1 Phenomenological design

A qualitative research method known as phenomenology concentrates on the shared aspects of a group's life experiences (Creswell, 2013). In this study, the researcher investigated the experiences of the HCWs when providing healthcare services during COVID-19. This was accomplished by outlining medical personnel's experiences serving patients during the COVID-19 pandemic.

# 3.4.2 Descriptive design

Descriptive research accurately represents a group's characteristics and the frequency with which a particular phenomenon occurs to summarize and describe the data and answer questions such as what, why, or who (Pilot & Hungler, 2013). The descriptive design assisted the researcher in gaining a full view of the phenomenon by allowing the participants to describe their experience with delivering healthcare services during the COVID-19 pandemic during the unstructured interview sessions.

## 3.4.3 Contextual design

Contextual design is a structured, well-defined user-centred design process that provides methods to collect data about users in the field, interpret and consolidate that data in a structured way, use the data to create and prototype product and service concepts, and iteratively test and refine those concepts with users (Christensen, Johnson& Turner, 2014). For the participants' support and comfort, this study took place in a natural, uncontrolled, and real-life environment. The study was conducted at the clinics sub-district A, city of Johannesburg municipality Gauteng province in South Africa because in this area HCW are screening and testing a patient for COVID-19 and are more exposed to COVID-19.

# **3.5 POPULATION AND SAMPLING**

# 3.5.1 Population

According to Grove, Gray (2018), the term population refers to a particular group of individuals or elements who are the focus of the research. The population of this study

included two doctors and 22 nurses working at the clinics sub-district A, city of Johannesburg municipality Gauteng province in South Africa.

## 3.5.2 Sampling

Sampling involves selecting a group of people, events, behaviors, or other elements to study (Grove & Gray, 2018). This study used non-probability, purposive, and convenience sampling methods to select the participants. Purposive sampling is a selective sampling that the researcher uses to consciously select certain participants, elements, events, or incidents to include in the study (Grove & Gray, 2018). In convenience sampling, also called accidental sampling, subjects are included in the study merely because they happen to be in the right place at the right time (Grove & Gray, 2018).

The researcher selected 24 healthcare workers who were working during the COVID-19 pandemic because they were the ones who dealt directly with COVID-19 patients. The selected participants consisted of two medical doctors and 22 professional nurses. The HCW were purposively selected from the following clinics: Midrand West, Halfway House, Mayibuye, Rabie Ridge, Hikhensile, Bophelong, Mpumelelo, and Thuthukani, where three participants from each clinic were included to reach data saturation. Purposive sampling was used to select all eight clinics based on provincial statistics of the clinics with more COVID-19 cases around Johannesburg municipality, Gauteng province.

## • Inclusion criteria

The healthcare workers included in the study refers to the doctors and nurses who were dealing directly with COVID-19 patients, diagnosing and testing for the virus with exposure to the virus and risks posed by the virus with limited knowledge given the sudden and unexpected emergence of the virus.

## Exclusion criteria

Healthcare workers excluded in this study refer to the admin assistant and general workers because they were not dealing directly with COVID-19 patients, therefore they

were not relevant to this study.

# **3.6 DATA COLLECTION**

Data collection describes how the researcher answers the research questions (Maree, 2016). An interview guide was used to ask questions, followed by probing questions to get more information on the experiences of doctors and nurses during care provision. One central question was asked, "Can you describe your experiences when providing care to patients during the COVID-19 pandemic?" The researcher captured data using a voice recorder as proof that data was collected from participants and for record-keeping. Interviews were conducted with doctors and nurses until data saturation was reached.

# 3.7 DATA ANALYSIS

Data were analyzed using Techs' open coding method of qualitative data analysis. Data analysis is the process of collecting, modelling, and analyzing data to extract insights that support decision-making (De Vos, Strydom, Fouché & Delport, 2011). Open coding is the part of the analysis that pertains specifically to naming and categorizing the themes of a phenomenon by closely examining the collected data (Creswell, 2014). During open coding, the data are condensed into discrete parts; closely examined, and compared for similarities and differences, and questions are asked about the phenomenon as reflected in the data. The following 8 steps of data analysis were used:

# • Picking up interview document

The researcher picked one the most intriguing, the shortest, and the most summarized document on top of the pile. In doing that, the researcher tried to understand what the document is all about and consider the underlying meaning of the information rather than the information contents.

# • Getting a sense of the whole

The researcher transcribed the audio recoded interviews verbatim. The researcher read and one by one transcript to understand all the meaning towards the research topic.

## • Make a list of all topics

This refers to making a list of all completed tasks for multiple individuals. Similar topics will be grouped and generate a column out of the topics, perhaps with major distinctive, and leftover topics.

## • Abbreviates topic as codes

The researcher abbreviated the formulated topics as codes and write them next to each appropriate segment and review to see if new codes emerged that could be classified as themes and sub-themes.

# • Find the most descriptive wording

The researcher made a list of the most descriptive words for each of the topics, organized them into groups, and looked for ways to reduce the list of categories by grouping related topics together to demonstrate interrelationships and draw lines between them.

## • Make decision

The researcher decided on an abbreviation for each category and alphabetize the codes.

## • Assemble the data material

The researcher assembled all the data material for each category in one location and conducted a preliminary analysis.

# • Record existing data

The researcher recoded the existing data using tape recorder.

# **3.8 MEASURES TO ENSURE TRUSTWORTHINESS**

Trustworthiness refers to the degree of confidence in data, interpretation, and methods used to ensure the quality of a study (Polit & Beck, 2014). To demonstrate trustworthiness, ongoing self-reflection and self-scrutiny were done to ensure that interpretations are valid and grounded in the data. The following measures to ensure trustworthiness were adhered to throughout the study:

# 3.8.1 Credibility

Credibility refers to confidence in the truth of collected data and interpretation (Polit & Beck, 2014). Credibility was ensured by prolonged engagement in the study, using audio recordings to record the data, and taking field notes during unstructured interviews.

# 3.8.2 Transferability

Transferability refers to the extent to which qualitative findings can be transferred to other settings or groups (Polit & Beck, 2014). The researcher ensured that the study can be transferred to another context through a thick description of the research methodology, ensuring data quality, and accurate interpretation of results.

# 3.8.3 Dependability

Dependability refers to the provision of evidence such that if it were to be repeated with the same participants in the same context, its findings would be similar (Brink, van de Walt & Van Rensburg, 2018). Dependability was ensured by the use of an inquiry audit since the researcher kept the field notes after data collection for auditing purposes. The researcher coded and recoded the collected data according to the stepwise replication of Tech's approach to ensuring dependability.

# 3.8.4 Confirmability

According to Creswell (2014), confirmability guarantees that the findings, conclusions, and recommendations are supported by data and there is actual evidence. To ensure confirmability, the researcher kept the records of raw data, a voice recorder and written field notes. To assist with retrieving data for future reference.

# **3.10 ETHICAL CONSIDERATIONS**

According to De Vos et al (2011) research ethics aims to ensure that research activities do not negatively impact or offend anyone. All participants may be somewhat aware of this and choose whether to participate in the study.

# 3.10.1 Ethical clearance

Ethical clearance was obtained from Turfloop Research Ethics committee at the University of Limpopo with a registration number of TREC/51/2022: PG (see Appendix B).

# 3.10.2 Permission

Permission to conduct the study was obtained from the Gauteng Department of Health, and clinics management with a registration number of NHRD REF. NO.: GP\_202204\_009 (see Appendix C).

# 3.10.3 Informed consent

Before a study starts, a person willingly consents to participate (Brink, Van der walt & Van Rensburg, 2013). The process for gathering information from healthcare workers and the study's goal were described to the healthcare workers. They were told what was expected of the HCW, how their names and information would be kept private, and how the study would help the patients. Without the permission of the researchers, participants may stop participating or withdraw. The HCWs gave their informed consent to be recorded during interview, and verbal informed consent was also given.

# 3.10.4 Privacy and Confidentiality

The participants have the right to determine the extent to which and the general circumstances under which their private information will be shared with or withheld from others. Privacy was ensured by questioning the respondents in their institutions, a room where there was the researcher, and respondents only will be found to ensure privacy. Confidentiality refers to how the researcher manages personal information to ensure that only the researcher directly involved in the study can access the information (Brink, Van der walt & Van Rensburg, 2013). It was ensured by keeping the information gathered in a safe place where only the researcher will be able to access it.

# 3.10.5 Anonymity

The identity of the research participants is unknown, even to the study investigator (Brink, Van der walt & Van Rensburg, 2013). Anonymity was ensured by not mentioning the names of the participants during an interview.

## 3.10.6 Respect for human dignity

Participants were informed that they have a right to decide whether to participate or not. They will also be informed that they can withdraw from the study without the risk of a penalty (Christensen, Johnson & Turner, 2014).

## 3.10.7 Protection from harm

Harm refers to any physical, psychological, social, or emotional discomfort of the research respondents inflicted by the researcher during the research process (Polit & Beck, 2014). The researcher made sure that participants wouldn't suffer any harm by gaining their informed consent, guaranteeing and maintaining the respondents' privacy and confidentiality, and giving them the option to leave the study at any moment.

## 3.10.8 Data management

Research data management (RDM) is all about how you take care of, use, store, and share your research data. Throughout a research endeavor, RDM entails the routine management of research data. Decisions must be made regarding data sharing and preservation once the project is finished. Your research capital is data. They help you find the answers to your research questions and support the findings you make public. By carefully managing your research data, you can reduce the chances of things going wrong that are expensive, embarrassing, or bad, like losing data or letting sensitive data get out (Cox & Verbaan, 2018). The interview transcripts were kept in a secure under lock and key. The data collected is only accessible to the researcher. All responders were promised that only the researcher and the supervisor would access the tape.

## 3.11 BIAS

According to Babbie and Mouton (2014) bias refers to that quality of a data collection instrument that may result in the misinterpretation of what is being measured. The researcher did not react to any answers that the participants provided. All the participants were asked the same questions in an interview to answer, and the

researcher ensured that all participants understand all questions and clarify questions that were not clear. The researcher avoided asking leading questions that would influence the answers of participants. Open-ended questions were asked to allow the participants to explain and describe their experience regarding the delivery of healthcare services during the COVID-19 pandemic.

## 3.11.1 Researcher subjectivity

According to Brink et al (2013), the researchers' experiences and expectations may distort the information in a specific direction. The researcher avoided this by not communicating the researchers' expectations to the respondents.

#### 3.11.2 Sampling bias

Sampling bias is the distortion that arises when a sample is not representative of the population which it was selected from (Brink et al., 2013). To ensure there is no sampling bias, the researcher adhered to the rules of non-probability, purposive, and convenience sampling methods to select the sample and avoided using the researchers' preferences in selecting the sample.

#### 3.11.3 Respondents' bias

To avoid respondents bias, prior to the study, the respondents were provided with comprehensive and clear information about their participation in the study. The questions in the interview were asked in English as a medium of instruction for the respondents in order to avoid misunderstandings that may lead to bias. An atmosphere that encouraged the healthcare workers to feel free and answer correctly and truthfully was provided. Anonymity and confidentiality were zed so respondents could respond to the questions freely without fear (Brink et al., 2013).

## 3.12 CONCLUSION

Chapter 3 discusses the research methodology, including introduction, research method, study site, research design, population and sampling, data collection, data analysis, data management, ethical consideration, and bias. Data was collected using a voice recorder and unstructured face-to-face interviews with healthcare workers

exposed to the COVID-19 pandemic. Interviews were conducted at clinics in sub-district A, city of Johannesburg municipality, Gauteng province in South Africa. The Turfloop Research Ethics committee at the University of Limpopo gave the go-ahead for the study. The next chapter presents the results in a thematic analysis trend, followed by their interpretation.

## **CHAPTER 4**

# **RESULTS AND DISCUSSION OF THE FINDINGS**

## 4.1 INTRODUCTION

This chapter describes the findings of data collected on the experiences of healthcare workers on the delivery of healthcare service during the COVID-19 pandemic in clinics sub-district a, city of Johannesburg municipality Gauteng province. The results were obtained from HCWs (22 professional nurses and two medical doctors) who were interviewed in the study. The city of Johannesburg municipality region A consists of only two medical doctors that serve all the clinics in sub-district A. The chapter presents the demographic characteristics of the participants, which are summarized in a table format. Open coding analysis was done, and four themes and sub-themes emerged from unstructured face-to-face interviews, and these themes and sub-themes are explained in this chapter.

## 4.2 DEMOGRAPHIC PROFILE OF HEALTHCARE WORKERS

The demographic profile of healthcare workers was presented according to professional nurses and medical doctors who participated in the study.

# 4.2.1 Demographic profile of medical doctors who participate in the study.

Table 4.1. outlines the demographic profile of professional nurses who participated in the study. The profile is categorized according to gender, age, years employed, and a number of professional nurses infected by COVID-19.

**Table 4.1:** Demographic profile of professional nurses who participate in the study.

VARIABLES	CATEGORIES	FREQUENCY
Gender	Females	17
	Males	5
Age	24- 39	13
	40-64	9
Number of years employed	3- 10 years	14
	10 years and above	8
Number of healthcare workers	Professional nurses	19
infected by COVID-19		

# 4.2.2 Demographic profile of medical doctors who participate in the study.

Table 4.2 outlines the demographic profile of medical doctors who participated in the study. The profile is categorized according to gender, age, number of years employed, and number of professional nurses infected by COVID-19.

**Table 4.2:** Demographic profile of medical doctors who participate in the study.

VARIABLES	CATEGORIES	FREQUENCY
Gender	Females	2
	Males	0
Age	24- 39	1
	40-64	1
Number of years employed	3-10 years	1
	10 years and above	1
Number of healthcare	Medical Doctors	2
workers infected by COVID- 19		

# 4.3 Findings from the primary research

Table 4.3. outline the main findings of the study as themes and sub-themes that emerged from unstructured face to face interview.

Table 4.3: Main findings of the study		
Themes	Sub-themes	
1. Diverse experiences of	1.1. Healthcare workers express difficulties when	
the healthcare workers	delivering service during the COVID-19 pandemic	
when delivering service	1.2. Healthcare workers expressed mixed feelings	
during the COVID-19	regarding the change of health delivery protocols to	
pandemic	the new COVID-19 pandemic	
	1.3. The COVID-19 pandemic demanded healthcare	
	workers to be resilient when providing service	
	delivery	
	1.4. Fear of contracting COVID-19 and infecting families	
2. Diverse experience	2.1. Mixed emotions regarding the availability and	
regarding support	unavailability of line managers to support healthcare	
systems when	workers	
providing health	2.2. Healthcare workers expressed more desire for	
services during the	psychological support when providing health	
COVID-19 pandemic	services	
	2.3. Collegial support was enhanced due to the	
	unavailability of the line managers during the	
	COVID-19 pandemic	
	2.4. Healthcare workers sourced psychological support	
	from external structure (NGO)	
3. Challenges regarding	3.1. The high influx of patients in the healthcare facility	

the provision of care	with a shortage of supplies (medication)
during the COVID-19	3.2. Shortage of healthcare workers due to contracting
pandemic	COVID-19 and quarantine protocol
	3.3. Supply of personal protective equipment impaired service delivery
	3.4. Education and training of COVID-19 to the healthcare workers
	3.5. Lack of knowledge on the implementation of COVID-19 protocols
	3.6. The COVID-19 erected site was too small to render effective healthcare service
	3.7. Barriers on patient's assessment and examination for proper diagnosis
4. Recommendations on	4.1. Hiring more permanent healthcare workers
how to improve the	4.2. Providing enough protective equipment and
service provision	medication
during COVID-19	4.3. Increasing infrastructure or building bigger clinics
pandemic	4.4. Providing health education about COVID-19 to the community

# 4.3.1 Theme 1: Diverse experiences of the healthcare workers when delivering service during COVID-19 pandemic

The health workforce, a pillar essential for the resilience of health systems, has been particularly challenged by COVID-19 in health systems worldwide. As a result, studying healthcare workers (HCWs) experiences and needs during pandemics can help increase the health system's resilience (Chemali, Mari-Sáez, Bcheraoui & Weishaar, 2022). This theme is based on the diverse experiences of the healthcare workers when delivering service during a COVID-19 pandemic; five sub-themes

emerged from this theme. Healthcare workers expressed difficulties when assisting the COVID-19 pandemic, and healthcare workers expressed mixed feelings regarding the change of health delivery protocols to the new COVID-19 pandemic. The COVID-19 pandemic demanded healthcare workers be resilient when providing service delivery and fear contracting COVID-19 and infecting families.

# 4.3.1.1 Sub-theme 1.1. Healthcare workers expresses difficulties when delivering service during COVID-19 pandemic

Globally, the coronavirus disease [2019] (COVID-19) pandemic has posed more and more difficulties for medical personnel. However, many developing nations, including South Africa, lack information on these difficulties. Healthcare workers were among the earliest and hardest hit by COVID-19 not just because of the illness but also because of roster changes, leave policies, school attendance issues, and family effects. Participant replies about challenges faced during service delivery are supporting the sub-theme.

**Healthcare worker 3:** "my experience was challenging because it was a new thing... provision of care it was difficult because this COVID-19 it was scary it was the first time we had of it." In the same vein, **healthcare worker 10 has reported difficulties:** "was very difficult because we were dealing with new diseases that we don't understand and because we had people were dying from other countries....."

**Healthcare worker 11:** "I can say it was difficult especially beginning because we didn't know much about it and we didn't know much about what to do and what not to do...."

**Healthcare worker 12:** *"in the beginning because COVID-19 was something new to everyone it was a bit difficult because we feared this pandemic that no one knows about… it was very hard in the beginning. When COVID-19 started it was a bit difficult to render services to our client because first, we didn't know, we didn't understand what pandemic was"* 

Healthcare workers reported difficulties providing care during the previous COVID-19 pandemic because the disease was unknown. The study's findings indicate that because healthcare workers had never dealt with a pandemic like COVID-19, it was

difficult for them to provide services. Working with PPE level 3 was difficult for healthcare workers. When using PPE while working, HCW reported being too hot, overly perspired, thirsty, and dehydrated were just a few of the problems mentioned by the participants (Herley, Ika, Lailatun, Zulfayandi, Arief, Rista & Vimala, 2021). The above has shown the level of difficulty faced by healthcare workers during COVID-19. A detailed survey to learn more about the demands, problems, and worries our healthcare workers face and how they deal with them (Razu et al., 2021). Because of COVID-19's changes, the healthcare system had a lot of problems, which made staff feel like they were overworked. In this study, healthcare providers talked about the difficulties they had to overcome to provide care during the COVID-19 epidemic.

# 4.3.1.2 Sub-theme 1.2: Healthcare workers expressed mixed feelings regarding the change of health delivery protocols to the new COVID-19 pandemic

The South African government underestimated the severity of COVID-19, which led to a delay in taking steps to stop the epidemic. Global prevention efforts have been significantly improved. The prolonged shutdown of psychosocial support services resulted in instability, acute panic, fear, despair, compulsive behaviors and social unrest. Participant replies about challenges faced during service delivery are supporting the sub-theme.

The above view is echoed by healthcare worker 1 who reported the following: "My experience during the pandemic was ok just that everything keeps on changing with protocols and how to handle patient with COVID-19 everything used to change quickly and faster we had to adapt to that. Our duties had to change we have to wear mask, gloves, sanitize and wash hands."

In the same vein, participant three has declared that he has been through many difficulties as cited by the participants

**Healthcare worker 3:** "my experience was very difficult because it was a new thing. We had to come up with the new set up where patient must be screened, they enter the clinic; we must have demarcated areas for different patient. When we are screening patient also, we had to sanitize them before they can enter the clinic. Also, when they are inside the clinic,

I must make sure that all the chairs have distance of at least 1,5metres so that they don't get close to each other and we have to sanitize each and every chair after they have move to inside the consulting room.it was not easy because even the staff we did not have enough staff to do all those COVID-19 requirements."

Many participants such as the four, eight and twenty-two reported that their biggest challenges for healthcare workers have been how they monitor patients and how they interact with them. Some have found it hard to adapt to the new way of doing things as reported below.

**Healthcare worker 4:** "COVID-19 as we all know having started in 2020 was a very dramatic experience for everyone whether as a healthcare worker or anyone just in general but in the health filled obvious the biggest challenge was the changes on how we monitor patients, how we address patient and how we interact with them."

**Healthcare worker 8:** "Definitely the first that came to our experience it was the overwhelming of extra activity that we had to perform, the new way of doing things now, the wearing of a mask, the indoor and outdoor protocols and so on. We were heavily overwhelmed. from the flow of the clinics the way that we used to do things we know that when the patient comes to the clinic its either they are coming for EPI, they are coming for ARVs treatment and chronic treatment or they are coming for the acute now when we had extra things to do like the COVID-19 testing all of sudden there is the introduction of immunization of COVID-19 all those thing they brought extra duties to us and Like as I said earlier this something they we have never experienced in our life time."

**Healthcare worker 22:** "it was difficult because they are many changes when it comes to the clinical setting itself, the staff allocation the fact that whenever we are seeing the patient, we need to be extra careful like more precautionary measures it is not easy for us...."

The results from the study have indicated that, during times of crisis, such as the COVID-19 pandemic, frontline healthcare workers may experience increased workloads, unfamiliar tasks outside of their normal scope of practice, disruption of established teams, and rapidly changing policies and procedures, which can exacerbate existing workplace stress. Together, these modifications pose severe risks to worker health and safety with possible repercussions for patients and healthcare professionals. Several participants noted knowledge overload due to numerous policies and working methods modifications. Due to the amount of information and the variety of information sources, it was challenging to stay on top of messages (Willis, Ezer, Lewis, Bismark & Smallwood, 2021).

# 4.3.1.3 Sub-theme 1.3: COVID-19 pandemic demanded healthcare workers to be resilience when providing service delivery

Healthcare workers on COVID-19 say they had to deal with people who did not believe and understand that the test was accurate. People who did not believe and understand that the COVID-19 vaccine was a real thing. Even though there were not enough PPEs, staff always reported at work.

**Healthcare worker 2:** "the challenges that we had it was material and protective clothing we were not provided on time most of the time. So sometimes we had to work without material things. Material I mean the test kit were not available, protective cloth I mean mask sometimes were not available we were supposed to use own mask."

**Healthcare worker 3:** "we have to sanitize each and every chair after they have move to inside the consulting room.it was not easy because even the staff we did not have enough staff to do all those COVID-19 requirements." **Healthcare worker 4:** "having to deal with people who did not believe and understand that the COVID-19 in a real thing coming in without mask and had to fight that was a constant battle, doing the whole

hands sanitizing various sanitizes and you had skin condition and skin problem that came from that however we have adjusted but it was not a good experience generally for myself as well as for the client and the patients"

**Healthcare worker 15:** *"we were expected to be at work and even though they were not enough PPE we were expected to be at work."* 

In support of this primary results, resilience as a mentorship approach that promotes connections, internal embeddedness, and support for coaches can help hospital staff members during a pandemic (DiBenigno, & Kerrissey, 2020). Due to the hospital's long history of consultation-liaison work, many physicians could take advantage of their connections to clinical teams naturally and comfortably. Despite these concerns and Libya's inadequate local healthcare infrastructure, healthcare professionals continue to work throughout COVID-19, risking their lives to save their patients (Muhammed et al., 2020).

#### 4.3.1.4 Sub-theme 1.4: Fear of contracting COVID-19 and infecting families

Some healthcare workers shared the same experiences with regard to fear of contracting COVID-19 and infecting families. Healthcare workers were afraid of contracting COVID-19; some were even anxious to go to work because they thought they might spread COVID-19 to their families. Most Healthcare workers were worried about unintended occupational contact with the virus and spreading it to their coworkers while being adequately protected in isolation. They regularly evaluate their health to prevent infection. Providers who share a home with a family are worried about infecting their loved ones, particularly their parents and children. Their responses were expressed as follows:

**Healthcare worker 1:** "...And we use to be scared because we come to the clinic everyday meeting and testing other people for COVID-19 and going back home with this. We don't know whether we are taking it from here at work going back to our families or it was just around

**Healthcare worker 2**: "my experience was not easy at all because we were afraid of having COVID-19 our self and dying because of COVID-19 and exposing our family to COVID-19 also."

**Healthcare worker 8:** "...when coming to staff it was a serious challenge. Already there was some people who are anxious and resigning and so on, others were saying that I can't go, and test am anxious what if get this disease at home to my husband to my family to my kids, it was real roll costar from the beginning."

**Healthcare worker 10:** "it was very difficult because we were dealing with new disease that we don't understand and because we had people were dying from other countries when it comes here in south Africa already we had that fear even when we consult with the patient you don't know whether you should do a full examination because I was scared if I touch the patient maybe I will be taking COVID-19 home, as somebody who is having a family husband and kids I was scared that I might take it home to my family because they were working from home and if they were to get COVID-19 I will be the source, I will be the one who was like transferring it from clinic to home."

**Healthcare worker 20:** *"will start with the fear, I believe as healthcare providers we had too much fear at that time so it was not easy providing to the patient because at the same time you are fearing for your health for your life so it was just a challenge which we face every day and yet we still had to continue providing health I mean services to them, but it was not easy at all so it was just not a nice experience at all."* 

Healthcare workers were worried about unintended occupational contact with the virus and spreading it to their coworkers while adequately protected in the isolation units; they regularly evaluated their health to prevent infection. HCWs who shared a home with a family were apprehensive about infecting their loved ones, particularly their parents and children (Ayush, Piyush, Arjun, Keerthana, Vishwesh, Naval, Amandeep, Ashish, Upendra, Kamal, Avinash, 2021). Furthermore, COVID-19 can cause various types of fear, including those associated with infection and hygiene, or the need to conform to the rules to avoid criticism. Extreme fear has also been associated with depressive

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symptoms and perceived job security, suggesting that it is necessary to manage fear as the pandemic continues (Gasparro et al, 2020, Sit, et al, 2021).

# 4.3.2. Theme 2: Diverse experiences regarding support system when providing the health services during COVID-19 pandemic

In this theme healthcare workers mentioned diverse experience regarding support systems when providing the health services during COVID-19 pandemic. Four sub-themes emerged from this theme namely; Mixed emotions regarding the availability and unavailability of the line managers to support healthcare workers, healthcare workers expressed more desire for psychological support when providing health services, collegial support was enhanced due to unavailability of the line managers during COVID-19 pandemic, healthcare workers sourced psychological support from external structure (NGO).

# 4.3.2.1 Sub-theme 2.1: Mixed emotions regarding the availability and unavailability of the line managers to support healthcare workers

In this study, healthcare workers had mixed emotions about the availability and unavailability of the line managers' support. Some healthcare workers reported that they were getting support from their management visiting them in the clinics, checking up on them how they are coping and giving them hope not to give up, each member of staff was supposed to stay at home and look after herself or himself for 10 days before she could come back to work. On the other hand, healthcare workers in Johannesburg who tested positive for COVID-19 say they received little or no support from management. They needed psychological support to deal with the trauma of not knowing what's going to happen to you, will you die or not because of the disease.

**Healthcare worker 3:** "we had the support system through our managers and our regional deputy directors, they were supporting us should anyone test positive the whole clinic was sanitized if there was a positive case. The staff was infected was supposed to stay at home and look after herself or himself for at least 10 days before she could come back to the clinic." **Healthcare worker 10:** "...our managers they were also giving that support visit to check on how we are doing because, myself I was doing the outreach I was working outside the clinic but providing the healthcare service so they were doing the visit to check on us how we are doing and also to encourage us to say don't be scared it will come to pass will get used to it."

**Healthcare worker 12:** "we were provided with support a lot because firstly we are encouraged to test, we are screened before we get in to the facility and if you have any of the symptoms we go to Midrand or Diepsloot to test for COVID-19 and then also I tested positive in December, I was provided with lot of support because I also used to get calls from management just to check how am doing so yah everything has been good."

**Healthcare worker 18:** "the support system available for us as the city of Johannesburg employee is that we've got a center that is available for all the staff member to go and test for COVID-19 also when you are being tested positive every day in the morning, they would call us hear about our progress the symptoms that we have developed." However, some healthcare workers that there was no support received from the management. They needed psychological support especially those who tested positive for COVID-19.

**Healthcare worker 4:** "however in terms of the psychosocial part of it there was not much support in that area but nonetheless we did receive some sort of support to protect us health wise and availability for us to test as healthcare professionals and get assistant whenever we needed it. So with COVID-19 obviously didn't just happen around us and as a healthcare professional I was also infected with COVID-19 and the only support you got was just to stay at home however the post exposer counselling having to deal with it, having the trauma of not knowing whether what's going to happen to you, will you die or not because obviously the number of people dying was high at that time there wasn't much support at that time it was basically you are sick ok stay at home come back to work. So, we would have appreciated more support from that end."

Despite giving countless examples of times, they felt unsupported, healthcare workers enjoyed the help from their employers. Some workers said they were made to work in unsafe conditions or around diseased patients. Employees reported feeling supported by their employers when senior managers and front-line healthcare professionals made decisions together and with apparent alignment. Many study participants felt that it was the institutional responsibility of their organizations to provide employees with the appropriate protection so they could perform their duties in a secure manner. When worker safety was not a key focus, they felt less supported. The workers also appreciated the fact that their employers let them take time off from work. Employee assessments of how prepared their company is varying, and numerous studies have shown that no standard processes are in place (Billings, Ching, Gkofa, Greene & Bloomfield, 2021).

# 4.3.2.2 Sub-theme 2.2: Healthcare workers expressed more desire for psychological support when providing health services

A pandemic strains healthcare professionals' short-and long-term mental health. A growing body of recent material contends that psychological anguish is an actual result for medical workers working in the COVID-19 pandemic. On March 23, 2020, a study polled 1257 healthcare professionals in 34 hospitals in China (Lai et al., 2020). It was discovered that there were high rates of psychological stress: 71.5% had overall psychological discomfort, 50.4% had symptoms of depression, 44.6% had symptoms of anxiety, and 34% had symptoms of insomnia. Staff members that worked directly with patients, nurses, female employees, Wuhan employees, and staff members were more likely to have "severe" scores on these outcomes. The participants believe they must improve the support system mostly from the management to the staff.

From their perspective, it is not easy for us to provide quality health while we are stressed wish in the department, they have established the mental health unit by at least top psychologist that we can gather and hire for that specific time to offer the

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employee wellness typical around the issue to deal with COVID-19 and the anxiety, grievance losses and so on. Even though in study healthcare workers reported that they received psychological support from NGO, some felt it was not enough. They wanted the management to provide them with emotional and psychological support especially those who were infected by COVID-19 and those who lost they are loved ones.

**Healthcare worker 2:** "we must improve the support system mostly from the management to the staff because with COVID-19 a staff will get frustrated that if I get sick and something happened and I also think about my family, so mentally you get disturbed. it's not easy for us to provide quality health while we are stressed. I think the management must improve on the support system to help healthcare workers."

HCWs are encouraged to use their breath as a grounding technique with the STOP, GROUND, and BREATHE techniques. For example, breathe in through your nose and out of your mouth. Breathe for two seconds, hold for two, and then exhale fully (take three breaths) (Holmes et al., 2020). Balance your time between work and home by limiting the amount of news you watch and concentrating on non-COVID-19-related activities. Taking a break at home is crucial because the pandemic will overwhelm you at work. Use reliable sources, and stay in touch with loved ones, but be selective about what you read and participate in on social media. Do not let "Sandra" on Facebook further affect your emotions because she probably knows far less than you do. Connect with friends, family, and peers through social connections. According to recent studies of the general people in the United Kingdom (Holmes et al., 2020), this was one of the most beneficial coping methods. To see faces, use video. Play board games and participate in virtual game nights. Social interaction with those going through similar struggles is crucial. Utilize buddy systems, keep tabs on one another, but strike a balance with family time and unscheduled downtime (Williams et al., 2020).

**Healthcare worker 8:** *"the main thing that I think was left behind was more of mental health support to the staff the was never a unit established* 

to deal with the mental health of the staff to alleviate anxiety. Staff members some of them they lost close family member so what do we do in kind of situation, people had to be off work and sick help externally. So, I wish in the department they have stablished the mental health unit by maybe by at least top psychologist that we can gather and hire for that specific time to offer the employee wellness typically around the issue to deal with COVID-19 and the anxiety, grievance losses and so on."

Exercise is essential for physical health and stress relief by making people feel accomplished and develop masteryskills (Linehan, 2014). Being consistent with the routine and making a list of the tasks to be done around the house can assist and balance this with downtime. Watch funny, uplifting, or enlightening programs and movies instead of too much news, programming, or movies on the world's problems or depressing topics. Avoid gloomy or depressing music and, instead, listen to uplifting ones. Instead of withdrawing and avoiding individuals, you care about, take this opportunity to get in touch with them and discover new things about them (Linehan, 2014).

**Healthcare worker 9:** "department was providing support which I feel it was not enough because people were traumatized with all this experience and then some needed support remember that there was high death rate some people were losing family members, some staff died during the pandemic, we needed lot of support when it comes to emotional and psychological part of it."

Regular mental health screenings and monitoring are necessary for healthcare worker who contact infected individuals, particularly for depression, anxiety, and suicide ideation. Similarly, it is crucial to find experts with a history of being exposed to psychological risk factors. Therefore, those with more severe mental health issues should receive psychiatric treatment. In the context of COVID-19, it is crucial to identify secondary psychosocial elements that may cause stress, such as healthcare workers who have chronic illnesses, those who live with small children or elderly family members, among others (Ornell, Halpern, Kessler & Narvaez, 2020).

# 4.3.2.3 Sub-theme 2.3: Collegial support was enhanced due to unavailability of the line managers during COVID-19 pandemic

The study reveals that due to a lack of support from management, they thought the only way to get support since the management was not offering any is better to support each other as colleagues. They would share their experiences and frustration with each other.

**Healthcare worker 11:** "the support system that we were getting I can say as colleagues we were supporting each other from the low levels." **Healthcare worker 18:** "so the support system I would say the first is internally ourselves the in-service routine that we have as well as general meeting that we have is a way of debriefing what happening, what's experiences are we going through, what challenges our we are facing so that in ourselves we try and work out the solution that is best for that moment and fix it..."

**Healthcare worker 22:** "the support system that we are having we were just trying by all means to make sure the clinic is running smoothly, we used to like reassure each other's like that we mustn't panic, and we must just do the right thing..."

**Healthcare worker 24:** "our support system we had each other as a healthcare worker we would talk to each other about our frustration and fears..."

Working with coworkers during the pandemic was frequently acknowledged as a vital source of support, a chance to learn from one another, and potential opportunities to foster connection. Opportunities for informal group reflection and buddying arrangements, in which more seasoned staff assist less seasoned employees, appeared to be valued. Groups of staff members appeared to be able to normalize

difficult replies and provide the necessary reassurance as a result (Billings, Ching, Gkofa, Greene & Bloomfield, 2021).

# 4.3.2.4 Sub-theme 2.4: Healthcare workers sourced psychological support from an external structure (NGO)

The COVID-19 pandemic has launched a global mental health crisis, with unprecedented numbers of individuals meeting the criteria for depression, anxiety and other mental health disorders. This commentary outlines the experience of a psychiatrist working in a frontline team of a large public-sector hospital in Cape Town (Groote Schuur Hospital). Fear and anxiety are pervasive in COVID-19 high care, which many patients describe as "terrifying." In a modest proportion of patients, this needed to be supplemented with medication, including antipsychotics and antidepressants. A clinical ethics consultation goes beyond legal capacity issues and theoretical ethical principles; it also requires a knowledgeable clinician who understands the role of psychological factors in resolving conflicts that are inherent in making life-and-death decisions. Liaison psychiatrists are ideally placed to manage these difficult situations. Healthcare workers reported that they were provided with a help line from non-governmental organization (NGO), which some could call when they feel like they are depressed and tell them about their experiences. For example, they will try to assist them with a coping mechanism.

**Healthcare worker 5:** "only available support system that I remember was the number that we use to dial to get psychological support especially when you tested positive for COVID-19 but money wise no we didn't get anything."

**Healthcare worker 6:** "I didn't feel like were being supported enough, the only think I remember there was help line, but it was an NGO help line, whereby you could phone and then share with them experiences and they will give you some try to equip you with some coping mechanism." **Healthcare worker 10:** "I remember with nurses they were a link that was saying if you feel that you are depressed you can call this number; they will give you full support."

When psychological support services were addressed, having them on-site, being flexible and casual, and providing them individually or in small groups that fit the workers' shifts seemed to be the most valuable. Several studies has also found positive reviews of coping skills and emotional support workshops. Some participants found the helplines helpful (Billings, Ching, Gkofa, Greene & Bloomfield, 2021). How do healthcare workers dare to experience and be open to vulnerability when doing so invites our suffering? We need to learn a different style of functioning, one in which sadness is acknowledged and actively processed. At the same time, we continue with our work and dismantle the cultural and medical narrative that says vulnerability is a sign of weakness. We have encountered several challenges in returning to "regular life" in between the "waves." It is critical to normalize these feelings to reduce isolation and self-stigma. Many people report low moods, irritation, exhaustion, and problems with eating, sleeping, paying attention, and concentrating.

# 4.3.3 Theme 3: Challenges regarding the provision of care during COVID-19 pandemic

The hospital is a tertiary-level institution with a university affiliation, 1100 beds, more than 4,000 professionals, and supports employees. The institution had been recognised as a COVID-19 facility in the province of Gauteng because the WHO had deemed COVID-19 a public health emergency. At that point, none of the staff members had any experience with the upcoming tasks. Nevertheless, given the availability of specialists, and more modern equipments at the hospital, it was believed that this institution would be more suited to handle this unusual infectious disease than primary or secondary-level hospitals. Despite this, as suspected COVID-19 cases started to present at the hospital, many difficulties appeared.

In this theme specifically, healthcare workers describe the challenges associated with providing care during the COVID-19 pandemic. Seven sub-themes emerged from this theme, namely; a high influx of patients in the healthcare facility with the shortage of

supplies (medication), a shortage of healthcare workers due to contracting COVID-19 and quarantine protocol, supply of personal protective equipment, impaired service delivery, education and training of COVID-19 to the healthcare workers, lack of knowledge on the implementation of COVID-19 protocols, the COVID-19 erected site was too small to render effective healthcare service, barriers on patient assessment and examination for proper diagnosis.

### 4.3.3.1 Sub-theme 3.1: High influx of patients in the healthcare facility with a shortage of supplies (medication)

The study reveals that there was a high influx of patients in the healthcare facility presenting with COVID-19 symptoms and coming to test for COVID-19, it resulted in a shortage of medication because healthcare workers were seeing lots of patients per day compared to before COVID-19 started.

**Healthcare worker 5:** *"it was very hectic very busy, and we had a lot of patients."* 

**Healthcare worker 6:** "also the other challenges that we were experiencing was that on top of the burden that we always experience a high number of patients we had to deal now with this new disease that we also didn't know."

**Healthcare worker 7:** "Sometimes long que for COVID-19 testing patients becoming frustrated requiring medication which at that point there is no medication for COVID-19, and they couldn't understand that why we are saying there is no medication for COVID-19 we can only test and also they have to treat the symptoms at home."

**Healthcare worker 8:** *"Also there are some companies that will come here to some COVID-19 testing so it was an overwhelming experience for us. The number of patients we had to see had to increase…"* 

**Healthcare worker 11**: *"the challenge was that we were running in short of medications, so we did provide so much care during the pandemic…"* 

Healthcare worker 14: "there was an overloading of patients and people were scared to even a patient was scared so the main thing it was a burden for us because a lot of work, the patient was many, and they were sick most of them."

Unprecedented resource shortages were brought on by the significant influx of patients with COVID-19 cases into hospitals. A large-scale outbreak was not adequately anticipated by any healthcare system including among the most well-known and developed healthcare systems in the world are those of Italy and the United States. Italy has 3.2 hospital beds per 1000 population, compared to 2.8 in the USA. But during this COVID-19 pandemic, it has been difficult for them to concurrently care for so many critically ill individuals. Patients with a good chance of surviving were given preferred treatment to ration resources (Onigbinde, Babatunde & Ajagbec, 2020).

### 4.3.3.2 Sub-theme 3.2: Shortage of healthcare workers due to contracting COVID-19 and quarantine protocol

Healthcare workers are the front liner in this COVID-19 pandemic, so they are at risk of contracting COVID-19. In this study, healthcare workers reported that most of them tested positive for COVID-19 and had to adhere to COVID-19 regulations by going for quarantine. This resulted in having a shortage of healthcare workers to render healthcare services. According to many participants, some healthcare workers contracted COVID-19 and had to go into quarantine, we had fatigue due to a shortage of staff. There were lot of patients that need to be taken care of with less staff. Providing care, was compromised because like patients are coming every day, they are many.

**Healthcare worker 1:** "The other challenges were because we had to test other people, so shortage of staff become high because others had to check the normal patient without COVID-19, others had to deal with COVID-19 patients as well. Challenges mainly were us healthcare workers to be infected with COVID-19 it was very challenging because others must quarantine." **Healthcare worker 2:** "The staff was absent due to infection, those that were infected were supposed to stay at home for quarantine. So, there was a lot of shortage at work, so it was hard for us to cover our work due to the shortage. For quarantine others were staying for 14 days others their quarantine was extended to more than 21 days because others were admitted also due to infection."

**Healthcare worker 4:** "some healthcare workers contracted COVID-19 had to go for quarantine, we had fatigue due to a shortage of staff because some staff was on quarantine and there were lot of patients that needed to be taken care of with less staff."

**Healthcare worker 22:** "The challenges that we are having staff being infected by COVID-19, staff shortage as well because when we are sick, people who are closer to that person will also have to stay at home for quarantine, so it wasn't easy for us, so we were forever short. Providing care was compromised because like patients are coming every day, they are many, coming to the facility for testing."

In healthcare settings, exposure to pathogens such as airway infections is frequent, which directly impacts front-line staff. When a worker becomes unwell and requests time off, it may strain the remaining workers since they may have to work unscheduled shifts or with fewer people than usual. As a result, some workers may downplay their symptoms and continue to work while ill, a practice is known as presenteeism. According to research, staff shortages are one of presenteeism's primary indications, and they are linked to higher work demands, job burnout, and eventually more sickness absence. Perhaps due to concern about contracting COVID-19, there is less chance of working when ill (Gohar, Larivière &Nowrouzi-Kia, 2020). This was made worse by staff shortages (caused by insufficient personnel or staff absences due to illness or caring duties), which demanded overtime work from the workforce. The consequence resulted in workers ing worn out and making mistakes (Billings, Ching, Gkofa, Greene & Bloomfield, 2021).

## 4.3.3.3 Sub-theme 3.3: Supply of personal protective equipment impaired service delivery

In this study, healthcare workers reported that they had a shortage of person protective equipment, and they had to compromise and work with whatever they have. They could not provide proper healthcare due to a shortage of personal protective equipment.

**Healthcare worker 2:** "the challenges that we had it was material and protective clothing we were not provided on time most of the time. So sometimes we had to work without those things. Material I mean the test kit was not available, the protective cloth, I mean mask sometimes were not available we were supposed to use own mask."

**Healthcare worker 10:** "*my* challenges were mostly the PPE because is not like we were having the full gown when we were consulting with the patient, but without having proper PPE it was very difficult because sometimes you use a mask, we were provided with the mask and gloves and aprons but if you are provided with one mask, you use it then it tears off and you need to get another mask."

**Healthcare worker 13:** *"We didn't have enough PPE so at that time we didn't have enough PPE it was difficult for us to provide quality care to the patient."* 

Participants emphasized time and time again that the PPE provided by their hospitals was either insufficient or of low quality. Although the administration insisted via the media that each hospital receives the necessary number of PPEs, the reality was quite different. Remarkably, study participants in private medical facilities were advised to purchase their own PPEs because they were unsure of their availability there (Herley, Ika, Lailatun, Zulfayandi, Arief, Rista & Vimala, 2021)

# 4.3.3.4 Sub-theme 3.4: Education and training of COVID-19 to the Healthcare workers

In healthcare facilities, when there is a new disease or virus, healthcare workers need to

be trained to manage such cases but with COVID-19, it was a different thing. Healthcare workers reported that there was not enough training. They needed more education and training about COVID-19. Their responses were captured as follows:

**Healthcare worker 6:** *"we were not equipped with information because even the health department itself wasn't really sure what we should do or what we shouldn't."* 

**Healthcare worker 23:** "the training was not enough we mostly will rely on what we hear on the television or radio like they will give us information like they will send us SOPs but sometimes you don't have time to read those because you are at work when you get home you have to see your family. So, they did support us but not to the fullest."

There were worries that some nurses were assigned to new locations without considering their skill set. It was also necessary to provide clearer guidelines earlier on, especially regarding training. Some senior physicians believed they should be in charge and provide training rather than allowing managers to do so (Vindrola-Padro, Andrews & Dowrick et al., 2020).

## 4.3.3.5 Sub-theme 3.5: Lack of knowledge on the implementation of COVID-19 protocols

Adhering to a new norm or protocols that you are not used to its not easy. Some healthcare workers stated that it was not easy to adhere to COVID-19 regulations like wearing masks almost the whole day and implementing social distance protocols.

**Healthcare worker 3:** "adhering to COVID-19 safety regulations it was difficult because it was the first time experiencing this disease. Others will conform to the regulations but sometimes, we used to be close to each other it was difficult. Like the sharing of food during breakfast, lunch and teatime, it was very difficult even to though we tried our best. we kept all the windows opened, minimal gathering in the kitchens and boardroom

even inside the clinic some patient was accommodated outside so that they will improve the ventilation. It was difficult because we had to sanitize and wash hands after seeing a patient, which sometimes you can forget to do. We had to sanitize all the handles where we enter in the kitchen, main doors and the office we tried but sometimes it was very difficult."

**Healthcare worker 8:** "the first challenge it was the lack of education, but we thank God that our department was able to quickly and swiftly at the beginning call, the staff and have the COVID-19 regulation because initially we were very anxious, so we didn't know what to do."

**Healthcare worker 12:** "the thing that has been a challenge just social distancing from the patients and on Fridays because I also do mental health my patients don't really understand the importance of wearing a face mask, of keeping a social distance but other services that I render like ANC the patients understand that I must clean a bed after every patient they have to wear a mask. The only challenges we have are social distancing and mental health patients who don't understand the importance of wearing a mask."

Delay in diagnosis, disease transmission among HCWs, and poor infection control procedures are usually due to a lack of knowledge of the novel pathogen and pandemic readiness to control and manage infections among HCWs (Herley, Ika, Lailatun, Zulfayandi, Arief, Rista & Vimala, 2021).

### 4.3.3.6 Sub-theme 3.6: The COVID-19 erected site was too small to render effective healthcare service

In this study, the healthcare workers noticed that most clinics are small and render service to a large community. During the COVID-19 pandemic, healthcare workers reported that they had a challenge because they could not put all the patients inside the clinic. Those presenting with COVID-19 symptoms were seen outside in the tent due to

space.

**Healthcare worker 9:** "the challenges were space having to keep patient outside the clinic yard for a long time because now we had to minimize contact between themselves and the patient and the healthcare workers. **Healthcare worker 17:** "we treat our patient in a chest clinic which is a tent its very cold when it's cold its cold, when it's hot its hot it falls when its windy that thing goes away you can't plan in the tent it's not conjunctive at all it's been very difficult and challenging. The patient must sit outside they are complaining its cold outside if it's hot they will tell you it's hot so it's a new environment that we still trying to get used to."

**Healthcare worker 20:** "yet spacing was also a challenge whereby you find that we have maybe three patients experiencing respiratory problems and the tent is so small to make occupancy to this kind of patient to the number of patients, so it was just a challenge."

The fact that the nation's health system is underdeveloped, particularly in terms of infrastructure, would be one major contributing factor to the increased morbidity and mortality of patients from the COVID-19 pandemic. A preexisting lack of facility space has contributed to the prevention and management of bad outcomes about COVID-19 at healthcare facilities. One important informant mentioned concerns with COVID-19 suspects who have chronic illnesses and stay at home as a related typical difficulty. He talked about the difficult times these patients had dealing with the epidemic and underlying chronic conditions. The requirement that suspected COVID-19 patients stay at home results from inadequate infrastructure (Shimels, 2021).

## 4.3.3.7 Sub-theme 3.7: Barriers to patient's assessment and examination for proper diagnosis

When the patient comes to the clinic to consult, as a healthcare worker, you must do a

full examination of the patient to come up with the diagnosis. In this study healthcare workers reported that it was not easy for them to examine a patient wearing a mask while maintaining social distancing.

**Healthcare worker 9:** "You know it seems unrealistic the things that we were supposed to do the social distancing, having to see patient far from you, you were not comfortable with examination, so it was very challenging, we didn't have enough contact with the patient"

**Healthcare worker 19:** "it becomes a difficulty for me as a professional nurse to nurse a patient that is wearing a face mask because when they are telling us they got pain is difficult for us to actually scale it except listening to what they are telling us, normally will assess the patient even the facial expression would tell us the amount of pain that the patient is experiencing and also we end up mistreating the patient, especially those complaining of the sore throat sometimes you find that they have tonsillitis but because everything now is COVID-19 we start first by thinking of COVID-19 instead of giving the proper treatment."

Challenges in providing patients and families with health examinations and information,11 of the participants said that it was challenging to conduct health exams and education for COVID-19 patients' families. Participants claimed that the forced diagnosis of COVID-19 was stigmatized by the community, which led families or patients to contest the information given by HCWs. Patients and their families lied about their interaction with COVID-19 patients and their travel history in the red zone throughout the assessment

(Herley, Ika, Lailatun, Zulfayandi, Arief, Rista & Vimala, 2021). The institution's virology department had to validate many kits and decide which ones were best to utilize before using them. This caused problems with treatment and patient care, as well as delays in test results. Patients who presented with pathology unrelated to COVID-19 experienced significant effects on their care and outcomes. The frequency of delayed presentations for life-threatening illnesses was seen, including myocardial infarction, acute stroke, and

diabetic ketoacidosis.

PPE shortages were brought on by overuse or theft in the ward areas where they were installed. The institution's decision to stop conducting antimicrobial stewardship rounds led to an increase in other healthcare-associated infections (i.e., multidrug-resistant pathogens and Clostridium difficile). Epidemics of infectious diseases demand a coordinated and multidisciplinary management strategy. The hospital's chief executive officer established the COVID-19 group to address staff concerns (Motara, Laher, Du Plessis & Moolla, 2020). To allay staff members' concerns, daily debriefing sessions were implemented in high-risk areas like the ICU. Once they reach the hospital, all personnel and patients undergo a COVID-19 screening using a guestionnaire. Those patients who meet the requirements for a potential infection are sent to the ED. Early in the reaction, the infectious diseases team's bold choice for patient admissions was awarded. All provincial hospitals were required to screen potential COVID-19 cases and treat any positive patients. All scheduled elective surgery procedures were canceled to reduce the number of patients at the hospital (Thomas et al;2020). The fewer patients allowed staff to be dispatched to the EDs and wards under the most strain. In the past, stores handled its management and distribution, and it did not appear that any records of ward orders were kept. The development of barrier devices was facilitated by constructing a prototype aerosol box in March 2020 (Motara, Laher, Du Plessis & Moolla, 2020).

# 4.3.4 Theme 4: Recommendations on how to improve the service provided during COVID-19 pandemic

The healthcare workers in this theme came up with suggestion on how to improve the service provided during the COVID-19 pandemic. Four sub-themes emerged from this theme: hiring more permanent healthcare workers, providing enough protective equipment and medication, increasing infrastructure or building bigger clinics, and providing health education to the community.

#### 4.3.4.1 Sub-theme 4.1: Hiring more permanent healthcare workers

In this study, we discover a shortage of healthcare workers, so healthcare workers propose that the management hire more healthcare workers to render healthcare services. According to the participants, increasing the number of nurses by looking at the nurse-patient ratio and the disease burden gave them an idea of how many nurses we at least need per clinic. They would also like their municipality to at least try to employ more staff during a pandemic so that they do not become sicker and stressed out just by merely providing quantity instead of quality.

**Healthcare worker 6:** "I think we need to have more staff, the nursepatient ratio needs to be investigated, why am saying that is because the burden of the disease is increasing while the nurse-patient ratio is not being altered. For example, if about 5 years or 10 years back at clinics settings maybe a nurse was expected to see at least a minimum of 20 patients that was going to be possible because at that time they had the idea of what the diseases and problems are the community that are coming to the clinics are coming with, so now that we have this other problems like your COVID-19 that we have to deal with, we have to see patients from outside, we have to have a nurse allocated to see those COVID-19 patients but the number of nurses per clinic is not being increased that becomes a problem. So I think increasing the number of nurses looking in the nurse patient ratio and also looking into the disease burden will give u an idea as to how many nurses do we at least need per clinic unlike relaying on the old nurse patient ratio."

**Healthcare worker 11:** "I think what should be improved is that since we are short staffed, we need more staff maybe they can provide us with enough staff so that when some are sick, some can still cover then routine goes on."

**Healthcare worker 19:** "we would also like our municipality to at least try to employ more staff members just for a period of pandemic so that we don't see ourselves being sicker and also being stressed out just only rendering quantity instead of quality and that will also help us with attitude towards our patients for all of us to have satisfaction both patients and staff members."

In many nations, the gap in the employment of healthcare professionals between urban and rural areas aggravates the shortage. Because of the population increase, the World Health Organization (WHO) projected a global shortage of competent healthcare personnel. The World Health Report 2013 addressed the issue of insufficient healthcare staffing levels many years ago and referred to the global shortfall as a "crisis." Considering COVID-19, the issue has become even more urgent, given that nurses comprise a significant portion of the front-line medical staff. Through cross-border health worker migration to developed countries, push factors such as low pay and unfavourable working conditions have contributed to the shortage of trained medical doctors and nurses (Mbunge, 2020).

#### 4.3.4.2 Sub-theme 4.2: Providing enough protective equipment and medication

Due to industrial lockdowns, travel restrictions, and social isolation, the COVID-19 pandemic has caused a decline in the worldwide economy across numerous industries, including the production of personal protective equipment (PPE). At the height of the outbreak, demand for PPE outstripped supply, creating a severe crisis capacity (Shaharuddin, Sany & Hasan, 2021). Healthcare workers reported a challenge of a shortage of personal protective equipment and medication. This study suggested that management should provide them with enough protective equipment to work with and supply them with enough medication to treat the patients.

**Healthcare worker 7:** "...make provision of enough PPE for a healthcare provider, that could really help we need enough PPE and again enough medication in the health facilities making medication available to patients." **Healthcare worker 9:** "ensure that people have enough working resources, so we don't have to move things around, we don't have to have a long waiting time for patients. just ensure that there are resources for staff, especially human resource."

**Healthcare worker 14:** *"protective clothing should be regularly there, and there should be monitored, especially the shortages and then I think that's the that."* 

**Healthcare worker 15:** *"enough PPE, enough cleaning materials to maintain a healthy clean safe environment for the patients and the staff."* 

Significant PPE shortages exist in high-income nations, and scarce supplies will likely be distributed to countries with lower resources. These limited PPE resources must be used effectively and distributed relatively worldwide. However, stockpiling, mismanagement, fierce competition between and within nations, price gouging, and export restrictions are too likely to become the norm. Without international assistance, any PPE stockpiles in hospitals in African countries are likely to be quickly depleted, and new supplies will be quite challenging to receive (Chersich, Gray, Fairlie, Eichbaum, Mayhew, Allwood, English, Scorgie, Luchters, Simpson, Haghighi, Pham & Rees, 2020).

#### 4.3.4.3 Sub-theme 4.3: Increasing infrastructure or building bigger clinics

In this study, healthcare workers were challenged when caring for a patient because of spacing; they mentioned that their clinics were too small to care for a large community. They suggested that management should try and build large clinics so that they will not be patients seen outside of the clinic's building.

**Healthcare worker 18**: *"I think the main one and also infrastructure, we need more infrastructure to help us render the service that we need, space is obviously the problem now that there is social distancing everything must be multiplied by 1,5metre separation between patients so like our reception area is quite a small area so whenever the patient comes in has to sit in the waiting area, you will find that there is only an occupation space of about 15 if not mistaken so that is not enough for actually catering a large community around lvory park."* 

**Healthcare worker 19:** "they need to assist us trying to restructure our clinic so that it can, later on, accommodate all this pandemic, it might not be only COVID-19, but yah we need to prepare ourselves for further

#### outbreaks."

Due to the high pre-existing vulnerability of the poor public health infrastructure combined with the diversion of necessary medical resources for the provision of specialized care and management of suspected COVID-19 cases, health systems in lower and lower-middle-income nations are facing significant difficulties in coping with the COVID-19 pandemic. The expansion of screening and referral of presumed COVID-19 cases at these locations may have been hindered by insufficient infrastructure provision capacity at most PHCs, poor ventilation, scant airborne infection control measures, and challenges in achieving the minimal physical distancing requirements between patients required to reduce the risk of COVID-19 transmission (Garg, Basu, Rustagi & Borle, 2020).

## 4.3.4.4 Sub-theme 4.4: Providing health education about COVID-19 to the community

During this study, healthcare workers had a challenge with a patient who is not adhering to COVID-19 protocols due to a lack of information about COVID-19. Some healthcare workers suggested that health education about COVID-19 should be given to the community, and the community should be able to assess information about COVID-19 everywhere. From the participants' perspective, television, radio, and pamphlets must be used to give more information to our community because we do not work alone; we work with them. Maybe if we could have more posters that patients can read for themselves, healthcare promoters should continue giving patients health education.

**Healthcare worker 3:** "education especially to our clients those our patient, we professionals it was easy we were getting information through the virtual training and seminal, but it was very difficult to work with the patient who have the minimal information. Even the television must be used and radios a pamphlets to inform our community because we don't work alone, we work with them. Even at school and other institutions, in shopping malls there must be information that is freely available so that we can get the cooperation of the users of our facilities."

**Healthcare worker 7:** "first of all patients they have to be well informed about COVID-19, they have to be enough information to the patient, and they have to be newly updated guidelines on COVID-19."

**Healthcare worker 10:** "to educate the community because this thing is something new that we have never came across and to encourage people also to comply because other people when you tell them please sanitize, put on your mask they feel like it's a burden they don't understand that is something done to protect themselves and also to protect the loved ones."

**Healthcare worker 12:** "maybe to reinforce the message like of adhering to COVID-19 regulations to patients when they come into even before they come into the facility, maybe if we can have more posters the patients can read for themselves, healthcare promoter she should just continue with what she does like giving health education to patients so that they can be able to understand or to reinforce what they already know."

Numerous COVID-19 awareness initiatives are being stepped up to combat stigma and anxiety and dispel misconceptions about the disease, including the 5G technology conspiracy hypothesis. To raise awareness about COVID-19, the Ministry of Health used media outlets like radio, television, social media, SMS, pamphlets, banners, and road campaigns. These forums instruct the public on proper hand-washing practices and other preventive measures like mask use, sanitizing, and social seclusion, among others (Mbunge, 2020).

### 4.4 CONCLUSION

In this chapter, the findings were discussed, and themes and subthemes were developed from the data analysis and supported by the literature control. Healthcare workers' needs during pandemics can help increase the health system's resilience.

Frontline healthcare workers may experience increased workloads, unfamiliar tasks, and rapidly changing policies and procedures. Africa's HIV/AIDS pandemic has reminded the expanding access to psychosocial assistance and mental health services. Psychological anguish results from medical workers working during the COVID-19 pandemic. Some workers said they were made to work in unsafe conditions or around diseased patients. Healthcare workers who contact infected individuals need mental health screenings and monitoring. The next chapter will discuss the application of theory to the findings.

#### CHAPTER 5

#### DISCUSSION OF RESULT AND INTEGRATION OF THEORY

#### **5.1 INTRODUCTION**

This chapter discusses the significant findings, as presented in chapter 4 in relation to the theory. The results are discussed according to the themes and sub-themes that emerged during the data analysis. The discussion of the results was in line with Roy's adaptation theory which is a conceptual model focused on the adaptation of human beings in the environment and the factors that influence the adaptation of human beings(Wayne, 2021), significant findings are discussed as follows:

### **5.2 DISCUSSION OF THE FINDINGS**

This section discusses the primary results in line with the research objectives and the themes we identify for the qualitative data analysis.

# 5.2.1 Diverse experiences of the healthcare workers when delivering service during the COVID-19 pandemic

The study's findings identified diverse experiences of healthcare workers when delivering service during the COVID-19 pandemic. The following sub-themes emerged: Healthcare workers expresses difficulties when delivering service during the COVID-19 pandemic, healthcare workers expressed mixed feelings regarding the change of health delivery protocols to the new COVID-19 pandemic, COVID-19 pandemic demanded healthcare workers to be resilient when providing service delivery and fear of contracting COVID-19 and infecting families.

Healthcare workers report difficulties providing care during the COVID-19 pandemic because the disease was previously unknown. The study's findings indicate that because healthcare professionals had never dealt with a pandemic like COVID-19, it was difficult for them to provide services. Participants faced difficult decisions to prioritize care, sacrifices in the ability to carry out the therapeutic function of their jobs, and compromises in clinical decision-making (Liberati, Richards, Willars, Scott, Boydell, Parker, Pinfold, Martin, Dixon-Woods & Jones, 2021). A focal stimulus is an internal or external stimulus that is immediately affecting the human system. Healthcare professionals' problems when delivering care during the COVID-19 epidemic are the focal stimulus in this study's findings.

Healthcare professionals expressed conflicted emotions regarding the adjustment of health service practices to the new COVID-19 pandemic. The study's findings indicate that the additional tasks healthcare workers had to do left them overburdened. Because they had to screen every patient for COVID-19 before they could enter the clinic building, which was not done before COVID-19, the daily distribution of employees and

duties had to change, and extra duties were created. Everyone was required to wear a mask, keep their distance from others, wash their hands, and sanitize. The study below conducted in England supports the result findings. In response to the pandemic, participants reported significant changes in the way secondary mental healthcare is organized and the nature of work, including the suspension of all services deemed to be "non-essential," the allocation of staff to various services' new and unfamiliar roles, and the adoption of remote working. The problem of finding new ways to work remotely, the limitations on the ability to receive informal assistance, and the rising levels of everyday challenge associated with trying to give care in difficult and constrained settings all reduced the quality of participants' working lives (Liberati et al, 2021). According to Roy's adaptation theory, residual stimuli are environmental factors within or without the human system with unclear effects on the current situation. In this study's results, the residual stimuli are mixed feelings regarding the change of health delivery protocols to the new COVID-19 pandemic, extra duties that needed to be done and change staff delegations. The residual stimuli in this study's findings include conflicting emotions over the modification of health service procedures in response to the new COVID-19 pandemic, more tasks that had to be completed, and adjustments to employee delegations.

COVID-19 pandemic demanded healthcare workers be resilient when providing service delivery. Healthcare workers continue to work despite occasional resource shortages, such as a lack of PPEs, during the COVID-19 pandemic. Even though they had a staffing shortage, every chair must be sanitized following every consultation. According to a Singaporean study, generalist nurses who work in general wards experience stress and anxiety due to the high exposure and risk associated with providing care for critically sick patients. Wherever they were located, nurses never changed in their dedication to their jobs. The resilience and well-being of nurses are crucially dependent on organizational factors (Efendi, Aurizki, Auwalin & McKenna, 2022).

One of the challenging experiences they encounter is the fear of getting COVID-19 and infecting their families. Healthcare workers were afraid to report to work because they

were worried about getting COVID-19. Because they were concerned about getting COVID-19, some healthcare personnel were apprehensive and left their jobs. It was challenging for the HCW because they were required to do the COVID-19 test on every patient who presented with COVID-19 symptoms. They dreaded losing their loved ones and their lives. They were afraid they may infect their relatives with COVID-19. The study conducted in Indonesia supports the result findings it was reported that during the pandemic, healthcare workers (HCWs) have become afraid and anxious that the virus will infect them and affect their families, especially when they witness their coworkers getting infected. Also, asymptomatic patients and the fact that there is still no cure for COVID-19 increase these concerns (Herley, Ika, Lailatun, Zulfayandi, Arief, Rista & Vimala, 2021).

## 5.2.2. Diverse experience regarding support system when providing the health services during the COVID-19 pandemic

The findings in the study reveal that healthcare workers had different experiences regarding support system when providing health services during COVID-19. The following sub-themes emerged; Mixed emotions regarding the availability and unavailability of the line managers to support healthcare workers, healthcare workers expressed more desire for psychological support when providing health services, collegial support was enhanced due to the unavailability of the line managers during COVID-19 pandemic and healthcare workers sourced psychological support from external structure (NGO)

The findings show that healthcare workers had conflicting feelings about whether their line managers could help them. Some healthcare workers reported that the managers and regional deputy director visited them to see how they were doing and offered support. HCWs were urged to go in for a COVID-19 test if they exhibited symptoms. Healthcare workers reported that once they test positive for COVID-19 and are placed on quarantine, managers would contact them to see how they were doing and to encourage them to keep going. According to some participants in the study conducted

in Indonesia, supports took the form of routine exams, dietary supplements, and psychosocial motivation and encouragement, and they were consistent with strong management suggestions to start staff surveillance and establish supportive workplaces (Efendi, Aurizki, Auwalin & McKenna, 2022).

However, some healthcare workers believed the management was not providing them with enough assistance. Healthcare workers claimed that after testing positive for COVID-19, they went through stress and were uncertain of their condition for survival. Because of COVID-19, people were dying, which made them afraid of dying. According to the study's findings, health workers need post-exposure counselling, which was not given to them. Participants expressed a desire for direct psychological help and therapy that is both easily accessible and cost-free. Participants also stressed the need for a particular focus on risk groups (Lavrič, Gomboc, Krohne, Podlogar, Poštuvan, Šedivy & Leo, 2020).

According to the study, healthcare workers offered each other assistance as coworkers when management failed to provide it. Healthcare workers reported that at general staff meetings, they used to discuss their concerns and fears to come up with the best answer. They ensured that the clinic was functioning smoothly while consoling one another to lessen the anxiety and tension. Relationships with coworkers were primarily described as empowering and supportive in the workplace, and numerous studies noted the importance of teamwork throughout the pandemic (Chemali et al.,2022).

The outward structure served as a form of psychological support for healthcare workers. The findings show that healthcare workers were given a help-line to call and share their experiences, as well as coping mechanisms and psychological support. In Slovenia, free phone lines have been set up for everyone needing psychiatric assistance, and many therapists provide their services without charge via video conversations (Lavrič, Gomboc, Krohne, Podlogar, Poštuvan, Šedivy & Leo, 2020).

### 5.2.3. Challenges regarding the provision of care during the COVID-19 pandemic

The study's findings demonstrate that the COVID-19 pandemic presented difficulties for healthcare workers in providing care. Sub-themes emerged as follows; High influx of patients in the healthcare facility with shortage of supplies (medication), shortage of healthcare workers due to contracting COVID-19 and quarantine protocol, supply of personal protective equipment impaired service delivery, education and training of COVID-19 to the healthcare workers, lack of knowledge on the implementation of COVID-19 protocols, the COVID-19 erected site was too small to render effective healthcare service, barriers on patient's assessment and examination for proper diagnosis.

The study's findings indicate that the clinic was seeing many patients. Healthcare workers noted that many patients reported presenting COVID-19 symptoms and required testing at the clinic. Healthcare workers reported seeing more patients after the COVID-19 epidemic than in the past. Due to the large number of patients, there was a lack of medication. In some cases, patients were only allowed to complete the COVID-19 test; no medication was given, and as a result, they complained.

Findings from the study indicate that one of the biggest problems during the COVID-19 pandemic was the shortage of healthcare workers brought on by COVID-19 infection and quarantine regulations. When many healthcare workers tested positive for COVID-19, they were forced to go into quarantine, which left only a small team available to provide services, according to the reports of the healthcare workers. The delivery of care was impacted since there were more additional tasks to be completed with fewer healthcare workers.

During the COVID-19 pandemic, a key difficulty for health workers was a lack of personal protective equipment. According to the study's findings, healthcare workers must use personal protective equipment (PPE) while delivering care to prevent themselves and the patient from catching COVID-19. Healthcare workers indicated they were at risk since they lacked PPE like masks and gowns. They occasionally had to purchase masks because there was not enough PPE available. One of the issues

mentioned by nurse managers was a lack of PPE. This included a lack of gowns, with maternity units receiving priority on the list while general wards went without any gowns (Moyo, Mgolozeli, Risenga, Mboweni, Tshivhase, Mudau, Ndou & Mavhandu-Mudzusi, 2021).

Healthcare workers expressed concern over their lack of knowledge and training on COVID-19. Results show that for healthcare personnel to deliver healthcare services, they must be trained and given access to sufficient information regarding COVID-19. Healthcare professionals claimed that despite receiving COVID-19 standard operation procedures, they could not read them due to their hectic schedules. Instead, they turned to social media, including television and radio, for information. Some HCWs stated the need for earlier, more accessible training for abroader spectrum of HCWs because they thought there was a "training gap." While some HCWs claimed to have had PPE training during prior outbreaks, most were not familiar with the PPE needed for COVID-19 patients (Hoernke, Djellouli, Andrews, Lewis-Jackson, Manby, Martin, Vanderslott & Vindrola-Padros, 2020). Furthermore, the study conducted in Indonesia indicated that Indonesian health practitioners still lacked sufficient knowledge about COVID-19. One participant mentioned "training by doing" because nurses didn't have enough time to learn before and during deployment. Despite several restrictions, management must support further training for nurses to ensure they are qualified to take on new jobs (Efendi, Aurizki, Auwalin & McKenna, 2022).

The study's findings indicate a lack of understanding regarding the application of COVID-19 standards. Healthcare workers noted that wearing face masks presented issues since they occasionally found breathing difficult because they weren't used to it. One of the difficulties was social distance; the clinics were crowded, and the patients couldn't comprehend the necessity of it. Healthcare professionals stated that while they made every effort to follow COVID-19 guidelines, some patients refused to wear masks, making it challenging to provide healthcare services. Despite stringent oversight and frequent warnings from the Ministry, many people in Malaysia appear to take the SOPs for granted. Many people ignore social distancing and enjoy attending crowded venues

even when not wearing masks, especially during the holiday season (Maung, Oo, May, Yi, Pathmanafan & Pai, 2022).

The COVID-19 site's dimensions were insufficient for providing quality medical care, according to the study's results. The health workers cited the lack of room at the healthcare center as a problem. Due to social distance standards, they could not accommodate a significant number of patients inside the clinic building. When a patient with COVID-19 symptoms was seen outside a tent because there weren't enough resources to provide treatment, the patient would complain about how cold it was and how long it was for someone to help them. Therefore the findings of the study support the above findings when the conditions changed, the hospital's infrastructure did not initially have enough room for the needed locker rooms, cafeterias, and isolation rooms. In several cases, improvised solutions were created or found, but the personnel felt that not all of their needs were addressed (Digby, Winton-Brown, Finlayson, Dobson, Bucknall, 2020).

According to the study, patients' assessments and examinations were hindered from making an accurate diagnosis. Since they were not permitted to remove the mask, medical professionals said it was difficult to examine patients wearing them. In addition, it can be difficult to gauge a patient's pain level when expressing it because the mask distorts their face, making it easy to diagnose the patient incorrectly. The following study supports the study findings. Some of these centered on their perceived incapacity to care for patients in a way that they believed would best meet their needs or on giving care that they felt was of poor quality and didn't "feel right." For instance, some staff members complained that they were forced to base their nursing diagnosis on a variety of unreliable information sources, such as hearsay from coworkers and insufficient nonverbal cues obtained through remote access technologies (Liberati et al,2021).

# 5.2.4. Recommendations on how to improve the service provided during the COVID-19 pandemic

The study findings reveal that the healthcare workers came up with suggestions on how to improve the service provision during COVID-19 pandemic. The sub-theme emerged: hiring more permanent healthcare workers, providing enough protective equipment and medication, increasing infrastructure or building bigger clinics, and providing health education to the community.

The study's findings indicate that the healthcare facility lacks healthcare workers. Considering the nurse-to-patient ratio and the prevalence of diseases, the healthcare workers recommended that management hire more healthcare workers. By hiring enough healthcare workers, the pressure on the workers will be lessened. Healthcare workers advised that since the study's findings indicated a PPE shortage, enough PPE and working resources should be available. All patients should have access to enough medication, and there should also be enough cleaning supplies to ensure a secure atmosphere for both patients and healthcare workers.

Healthcare workers recommended that management try to reconstruct the healthcare facility in order to later be able to accommodate all pandemics in the future. The results show that spacing or healthcare infrastructure was not large enough to accommodate high influx of patients that were at the clinic. Overall and across settings, there was dissatisfaction with the restricted infrastructure, but specific shortcomings were more pertinent in some situations. HCWs in low-resource settings, such as Pakistan, Zimbabwe, and India, reported deteriorating infrastructure conditions, defined by a lack of water supply and ventilation, contaminated isolation wards, and a lack of staff rest areas of good quality (Chemali et al.,2022).

According to the study's findings, several patients who were not following COVID-19 procedures showed a lack of knowledge about the pandemic. Healthcare workers recommended that the community's health education be strengthened. Information on COVID-19 should be widely available everywhere, including on social media, in churches, schools, stores, and clubs, in addition to the healthcare facility where patients

can obtain it. The population must practice excellent compliance behavior toward the COVID SOPs, such as donning face masks, keeping a safe distance from others, washing their hands, and avoiding crowded places, in as well as the government and the authorities. According to studies by Maung, Oo, May, Yi, Pathmanafan and Pai (2022), spreading knowledge about the COVID-19 disease to the entire population through print, electronic, and social media can improve people's attitudes toward it.

#### **5.3 CONCLUSION**

The study explored healthcare workers' experiences delivering services during the COVID-19 pandemic. Participants reported significant changes in how secondary mental healthcare is organized and the nature of work. Healthcare workers had to screen every patient for COVID-19 before entering the clinic building. Healthcare workers report difficulties in providing care during the COVID-19 pandemic. Many people ignore social distancing and enjoy attending crowded venues while not wearing masks. The suspension of all services deemed "non-essential," the allocation of staff to various services, and the adoption of remote working all reduced the quality of participants' working lives. Healthcare workers reported seeing more patients after the COVID-19 epidemic than in the past. Care delivery was affected because there were fewer healthcare workers to do more tasks. Suggestions on how to improve the service provided during the pandemic emerged. The next chapter has presented the recommendations and conclusion of the research.

### CHAPTER 6

### SUMMARY, LIMITATIONS, RECOMMENDATIONS AND CONCLUSION

### **6.1 INTRODUCTION**

The chapter presents the summary of the study results, limitations, recommendations

and conclusion. The COVID-19 virus has made the workplace stressful for medical personnel. Compassion fatigue is a concept used to describe the emotional stress and weight that comes with working with trauma victims over time. The longer a trauma is not treated, the more likely the health worker will get sick, catching depression, anxiety, or burnout. The summary is discussed in line with the objectives and their achievements based on the results.

### 6.2 AIM OF THE STUDY

The aim of the study was to determine the experience of the healthcare workers on the delivery of healthcare service during COVID-19 pandemic in clinics sub-district A, city of Johannesburg municipality Gauteng province.

### 6.3 RESTATEMENT OF OBJECTIVES OF THE STUDY

The objectives of the study were to:

To explore the experiences of healthcare workers on the delivery of healthcare services during COVID-19 pandemic in clinics sub-district A, city of Johannesburg municipality Gauteng province.

To describe the challenges of healthcare workers in the delivery of healthcare service during COVID-19 pandemic in clinics sub-district A, city of Johannesburg municipality Gauteng province.

### 6.4 SUMMARY OF THE FINDINGS OF THE STUDY

The study's findings identified diverse experiences of healthcare workers when delivering service during the COVID-19 pandemic. Participants faced difficult decisions to prioritize care, sacrifices, inability to carry out the therapeutic function of their jobs, and compromises in clinical decision-making. The additional tasks healthcare workers had to do left them feeling overburdened. Changes in how secondary mental healthcare is organized and the nature of work have led to significant changes, including the suspension of all services deemed "non-essential" and adoption remote working. According to Roy's adaptation theory, residual stimuli are environmental factors within or without the human system with unclear effects on the current situation.

The COVID-19 pandemic demanded healthcare workers be resilient when providing service delivery. One of the challenging experiences they encounter is the fear of getting COVID-19 and infecting their families. The resilience and well-being of nurses are crucially dependent on organizational factors. Healthcare workers had conflicting feelings about whether their line managers were available to help them or not. HCWs were urged to undergo a COVID-19 test if they exhibited symptoms.

According to the study's findings, health workers need post-exposure counselling, which was not given to them. Healthcare workers offered each other assistance as co-workers when management failed to provide it. The outer structure served as a form of psychological support for healthcare workers. The study's findings demonstrate that the COVID-19 pandemic presented difficulties for healthcare workers in providing care. Healthcare workers reported seeing more patients after the pandemic than in the past. The delivery of care was impacted since there were more additional tasks to be completed with fewer healthcare workers. A study in Indonesia indicated that Indonesian health practitioners still needed more knowledge about COVID-19. Healthcare workers noted that wearing face masks presented issues since they weren't used to it.

Despite stringent oversight and frequent warnings, many people take the SOPs for granted. The hospital's infrastructure initially needed more room for the locker rooms, cafeterias, and isolation rooms. Since they were not permitted to remove the mask, medical professionals said it was difficult to examine patients wearing them. It was hiring more permanent healthcare workers, increasing infrastructure or building more prominent clinics, and providing health education to the community. Healthcare workers in low-resource settings reported poor infrastructure conditions, a lack of water supply and ventilation, contaminated isolation wards, and staff rest areas. The population must practice excellent compliance behavior toward the COVID-19 SOPs, such as donning face masks, keeping a safe distance from others, washing hands, and avoiding crowded places.

### 6.4 RECOMMENDATIONS

The following recommendations are based on the four themes that emerged during the one-on-one interviews with the healthcare workers working at city of Johannesburg region A clinic.

# 6.4.1 Recommendations for Theme 1: Diverse experiences of the healthcare workers when delivering service during COVID-19 pandemic

The recommendations from this theme were made based on the following sub-themes: Healthcare workers expresses difficulties when delivering service during COVID-19 pandemic, healthcare workers expressed mixed feelings regarding the change of health delivery protocols to new COVID-19 pandemic, COVID-19 pandemic demanded healthcare workers to be resilience when providing service delivery and fear of contracting COVID-19 and infecting families.

# 6.4.1.1 Healthcare workers express difficulties when delivering service during the COVID-19 pandemic

The department ought to reassure healthcare workers, offers COVID-19 prevention counselling and provide daily updates and sufficient information regarding the progress of COVID-19 so that healthcare professionals are aware of the situation and up to date.

## 6.4.1.2 Healthcare workers expressed mixed feelings regarding the change of health delivery protocols to new COVID-19 pandemic

Developing a targeted training program to embrace inclusion and diversity. After training, employees are more equipped to understand how shifting conditions may alter how co-workers behave and interact. The healthcare industry might be relevant because of its distinct workforce and management structure, which complements its broad range of services, inclusiveness initiatives, and recognized challenges. Along with using internal resources, collaborating with outside companies can assist leaders to develop specific training programs for the organization as a whole as well as for various functional areas.

## 6.4.1.3 The COVID-19 pandemic demanded healthcare workers be resilience when providing service delivery

When properly managed and organized, resilience can help employees cope with stress

and motivate them to face challenges head-on. Managers might consider organizing wellness or exercise programs to teach their staff members effective stress management practices. Making wellness workshops for employees a habit rather than a requirement, whether over lunch breaks or any other specially defined time to promote resilience, can help control this. Guaranteed rewards and praise for outstanding work can be used as tools to promote stability at work.

### 6.4.1.4 Fear of contracting COVID-19 and infecting families

Sharing of knowledge and raising awareness of the disease instruction on how to use PPE correctly. Additionally, healthcare workers must continue to live their lives as if COVID-19 were still present, and they must wash their hands, sanitize, and avoid crowds.

### 6.4.1.5 Recommendations to research

Further research should be conducted on diverse experiences of the healthcare workers when delivering service during COVID-19 pandemic in other areas, to discover different experiences encountered by healthcare workers.

# 6.4.2 Recommendations for Theme 2: Diverse experience regarding support systems when providing health services during the COVID-19 pandemic

The recommendations from this theme were made based on the following sub-themes: Mixed emotions regarding the availability and unavailability of the line managers to support healthcare workers, healthcare workers expressed more desire for psychological support when providing health services, collegial support was enhanced due to unavailability of the line managers during COVID-19 pandemic and healthcare workers sourced psychological support from external structure (NGO).

## 6.4.2.1 Mixed emotions regarding the availability and unavailability of line managers to support healthcare workers

Create a reliable means of communication. Open door policy; mandatory weekly staff meetings facilitated by line managers in the facility to report on the week's outcomes and potential concerns. The manager should show their support by checking in on healthcare workers daily or sending them messages to show their support.

# 6.4.2.2 Healthcare workers expressed more desire for psychological support when providing health services

Due to time constraints and potential staff shortages, it is more practical to have an inhouse psychologist who is readily available for both group and individual sections. There ought to be a system in place that makes it simple to get psychological assistance without having to meet the person in person.

## 6.4.2.3 Collegial support was enhanced due to the unavailability of the line managers during the COVID-19 pandemic

Establishing support groups so that employees can confide in one another and offer one another support at work. The help of co-workers might give them the self-assurance they need to face challenges at work. Healthcare workers need to continue supporting one another.

## 6.4.2.4 Healthcare workers sourced psychological support from external structure (NGO)

Due to time constraints and a potential personnel shortage, it is more practical to have an on-site psychologist who is immediately available for either group or individual sessions. A psychologist specializing in the wellbeing of healthcare professionals should work at the facility, and their services should be provided to all healthcare workers without charge.

### 6.4.2.5 Recommendations to research

Further research should be conducted on diverse experience regarding support systems in different areas when providing health services during the COVID-19 pandemic, it will help to discover gaps that need to be filled interms of giving support to the healthcare workers.

# 6.4.3 Recommendations for Theme 3: Challenges regarding the provision of care during the COVID-19 pandemic

The recommendations from this theme were made based on the following sub-themes: High influx of patients in the healthcare facility with a shortage of supplies (medication), shortage of healthcare workers due to contracting COVID-19 and quarantine protocol, supply of personal protective equipment impaired service delivery, education and training of COVID-19 to the healthcare workers, lack of knowledge on the implementation of COVID-19 protocols, the COVID-19 erected site was too small to render effective healthcare service and barriers on patient's assessment and examination for proper diagnosis.

# 6.4.3.1 The high influx of patients in the healthcare facility with a shortage of supplies (medication)

Patients visited clinics in large numbers during the COVID-19 pandemic, which led to medication shortages. The government should provide enough drugs to healthcare facilities.

# 6.4.3.2 Shortage of healthcare workers due to contracting COVID-19 and quarantine protocol

The government must train more educated healthcare staff, and a budget must be set aside for this purpose. Career counseling is offered in high school to encourage or draw students to pursue careers in nursing and medicine.

### 6.4.3.3 Supply of personal protective equipment impaired service delivery

To address the scarcity of PPE issues in line with the fourth industrial revolution, the government must encourage domestic PPE manufacturing rather than relying mostly on supply from other nations. This can be done by giving interested citizens the tools they need to make PPE and by setting up the right mechanisms.

### 6.4.3.4 Education and training on COVID-19 to the healthcare workers

All health workers should receive COVID-19 training. Healthcare workers should be given access to COVID-19 rules and practices so they can use them regularly to carry out their job responsibilities. To ensure that students are fully informed about COVID-19, the Department of Health should integrate it in the curriculum.

### 6.4.3.5 Lack of knowledge on the implementation of COVID-19 protocols

Training on COVID-19 should be provided to all healthcare workers. COVID-19 guidelines and protocols should be made available to healthcare workers so that they can use them in their daily work tasks. The Department of Health should include COVID-19 in the curriculum so that students can learn more about it.

## 6.4.3.6 The COVID-19 erected site was too small to render effective healthcare service

Government should think about improving the structures of healthcare facilities; due to

limited space, and they should endeavor to reorganize facilities and construct doublestory clinics.

### 6.4.3.7 Barriers to patient assessment and examination for proper diagnosis

Personal protective equipment, or single-use, none reusable medical equipment, should be made available. Create sanitizing technology that can disinfect when a patient leaves the room.

### 6.4.3.8 Recommendations to research

Further research should be undertaken on challenges regarding the provision of care during the COVID-19 pandemic, it should include all the categories of heathcare workers.

Further research should be conducted on challenges encountered by patients during COVID-19 pandemic while receiving healthcare services.

# 6.4.4 Recommendations for Theme 4: Recommendations on how to improve the service provided during the COVID-19 pandemic

The recommendations from this theme were made based on the following sub-themes: Hiring more permanent healthcare workers, providing enough protective equipment and medication, increasing infrastructure or building bigger clinics and providing health education about COVID-19 to the community.

### 6.4.4.1 Hiring more permanent healthcare workers

The public health response to COVID-19 primarily depends on medical specialists. There was a staffing shortfall even before COVID-19, and COVID-19 made it worse. Recruiting more healthcare professionals is necessary.

### 6.4.4.2 Providing enough protective equipment and medication

The workload for healthcare workers is reduced when a facility has enough equipment and medication. The department needs to give the facilities enough equipment and medicine.

### 6.4.4.3 Increasing infrastructure or building bigger clinics

The department ought to think about constructing more extensive health infrastructure. Since there isn't a hospital in Sub-District A, the health department should think about creating one. This will assist in relieving some of the pressure on the facility's staff and benefit patients as well.

### 6.4.4.4 Providing health education about COVID-19 to the community

The inclusion of COVID-19 in the healthcare curriculum will aid healthcare professionals in educating the public about COVID-19. Social media platforms like TV, radio, Twitter, Facebook, Instagram, and others should be used to inform the public about COVID-19. All across the world, information regarding COVID-19 should be made available.

### 6.4.4.5 Recommendations to research

Further research should be undertaken on recommendations on how to improve the service provided during the COVID-19 pandemic, should include inservice training of all healthcare workers and health education about the pandemic to the patient.

### 6.5 LIMITATIONS OF THE STUDY

The study was conducted in the city of Johannesburg municipality Sub-District A clinics Gauteng Province in South Africa. Therefore, the study cannot be generalized to other clinics in other provinces.

### 6.6 CONCLUSION

The spread of SARS-CoV-2 brought on a contagious illness called coronavirus disease (COVID-19). Most people infected with it present symptoms such as coughs, sore throats, loss of smell or taste, headaches, fever, tiredness, chest pain, and shortness of breath. The COVID-19 pandemic in the UK brought to light cracks and problems in the healthcare system that was already there. These problems were caused by underfunding, a lack of workers, and fragmentation. Some major contributory factors to developing mental health problems among HCWs include a lack of practical communication skills, misinformation, stigma, and job-related stress. The COVID-19 pandemic has put a significant strain on healthcare systems around the world, including South Africa. Primary care nurses need comprehensive support to manage stress and anxiety. The lack of nurses may be partly due to the stress, anxiety, and depression that healthcare workers feel because of the pandemic. The study was based on the experiences of healthcare workers in community clinics around the Johannesburg

municipality sub-district A during the COVID-19 pandemic. The study was based on Roy's theory of adaptation. The approach is a conceptual model focused on adapting human beings to the environment.

Roy's Adaptation Model was developed due to Johnson's Nursing Model (Wayne, 2021). The relationship between theory, practice, and research must be reciprocal and cyclical. This will support theory-guided practice and bridge the perceived "gap" between theory and practice. The physiological adaptive mode concerns how healthcare workers interact with the environment through physiological processes such as nutrition, oxygen, elimination, activity, rest, and protection. A long-term absence of support in the workplace can have devastating outcomes for a group. Four adaptive modes allow for the carrying out of responses to stimuli: Because those who work in the healthcare industry require empathy for the traumas they encounter on the job, support structures are a crucial component of the interdependence mode. This entails emotional support, therapeutic communication and support for those experiencing secondary traumatic stress, fatigue and moral distress. The output is the response of the healthcare worker to stimuli. The study's results will be presented to the Gauteng health department and nurses. The study has examined the necessary intervention and support of healthcare workers to improve patient care. It will also provide policymakers with robust data to inform urgent decision-making regarding workforce protection, support, and sustainability.

#### REFERENCES

- Alligood, M.R. (2014). Nursing Theorists and their work. 8th edition. Missouri: Elsevier Mosby
- Almaghrabi, R.H., Alfaraidi, H.A., Al Hebshi, W.A & Albaadani, M.M. (2020). Healthcare workers experience in dealing with Coronavirus (COVID-19) pandemic. Saudi Med J, 41(6): 657-660
- Ardebili, M.E., Naserbakht, M., Bernstein, C., Alazmani-Noodeh, F., Hamideh, H & Ranjbar, H. (2021). Healthcare providers experience of working during the COVID-19 pandemic: A qualitative study. Am J Infect control, 49(5): 547-554.doi:10.1016/j.ajic.2020.10.001.

Babbie, E., & Mouton, J.(2014). The practice of social research. Cape Town: Oxford University Press

- Barrera, M. (1986). Distinctions between social support concepts, measures, and models. American Journal of Community Psychology, 14(4), 413–445. https://doi.org/10.1007/BF00922627
- Beirão, G., Patrício, L., & Fisk, R. P. (2017). Value cocreation in service ecosystems. Journal of Service Management, 28(2), 227–249
- Bimerew, DN Sonn, R & Kortenbout, M. A. (2016). A clarion call for action based on defined DALY estimates for South Africa. South African Medical Journal, 97(6), 438-440
- Booth, S., & Venville, A. (2020). Working it out—Hospital social work in the midst of a pandemic. Australian Social Work, 73(4), 510–511. https://doi.org/10.1080/0312407X.2020.1801124
- Braquehais, M. D., Vargas-Cáceres, S., Gómez-Durán, E., Nieva, G., Valero, S., Casas, M., & Bruguera, E. (2020). The impact of the COVID-19 pandemic on the mental health of healthcare professionals. QJM: An International Journal of Medicine, 113(9), 613–617. doi:10.1093/qjmed/hcaa207
- Brink, H., van der Walt, C. &, van Rensburg, G. (2013). Fundamentals of Research Methodology for Health-Care Professional.3rd edition. Cape town: Juta and Company Ltd

- Brink, H., van der Walt, C. &, van Rensburg, G. (2018). Fundamentals of Research Methodology for Health-Care Professional.4th edition. South Africa: Juta and Company Ltd
- Browning Callis A. M. (2020). Application of the Roy Adaptation Theory to a care program for nurses. *Applied nursing research: ANR*, *56*, 151340. https://doi.org/10.1016/j.apnr.2020.151340
- Buhalis, D., Harwood, T., Bogicevic, V., Viglia, G., Beldona, S., & Hofacker, C. (2019).Technological disruptions in services: Lessons from tourism and hospitality.Journal of Service Management, 30(4), 484–506.
- Cambridge English Dictionary. (2018). Meanings and Definitions. Cambridge University Press. https://dictionary.cambridge.org/dictionary/english/.
- Carroll, N., & Conboy, K. (2020). Normalising the "new normal": Changing tech-driven work practices under pandemic time pressure. International Journal of Information Management, 102186. https://doi.org/10.1016/j.jjinfomgt.2020.102186.

nttps://doi.org/10.1016/j.ijintomgt.2020.102186.

- Chemali, S., Mari-Sáez, A., El Bcheraoui, C & Weishaar, H. (2022) Healthcare workers' experiences during the COVID-19 pandemic: a scoping review. *Hum Resour Health* **20**, 27 (2022). https://doi.org/10.1186/s12960-022-00724-1
- Christensen, L.B., Johnson, R.B., & Turner, L. A. (2014). Research methods, Design and Analysis (12th Ed). New Jersey, USA: Pearson Education.
- Cox, A.M., & Verbaan, E. (2018). Exploring Research Data Management. https://www.semanticscholar.org/paper/Exploring-Research-Data-Management-Cox-Verbaan/32a0b652b9931368f3ef635b4be0ad966acab1b1
- Creswell, JW. (2013). Qualitative Inquiry & Research Design: Choosing Among the Five Approaches. Thousand Oaks, CA: SAGE Publications, Inc. (pp. 77-83)
- Creswell, JW. (2014). Research design: Qualitative and Quantitative mixed methods approaches. 4th edition. Los Angelo: Sage Publications, LTD.
- De Vos, A.S., Strydom, H., Fouché, S.H. & Delport, C.S.L. (2011). Research at Grass Roots for the Social Sciences and Human Service Professions. 4rd edition. Pretoria: Van Schaik.

DiBenigno, J., & Kerrissey, M. (2020). Structuring mental health support for frontline

caregivers during COVID-19: lessons from organisational scholarship on unitaligned support. *BMJ Leader*.

- Diomidous, M. (2020). Sleep and Motion Disorders of Physicians and Nurses working in hospitals facing the pandemic of COVID-19. Med. Arch.74:210-215
- Dragwidge, S. (2021). Psychosocial intervention during COVID-19 in a hospital mortuary: A social worker's reflection. Australian Social Work, 74(3), 387–388. https://doi.org/10.1080/0312407X.2021.1893799
- Feroz, A.S., Pradhan, N.A., Ahmed, Z.H., Shah, M.M., Asad, N., Saleem, S & Siddiqi, S. (2021). Perceptions and experiences of healthcare providers during COVID-19 pandemic in Karachi, Pakistan: an exploratory qualitative study. BMJ Open, 11(8):e048984.doi: 10.1136/bmjopen-2021-048984.
- Fiore, J. G. (2020). Anything but routine. Academic Pediatrics, 20(5), 571–572. doi: 10.1016/j.acap.2020.04.010
- Foureur, M., Besley, K., Burton, G., Yu, N., & Crisp, J. (2013). Enhancing the resilience of nurses and midwives: Pilot of a mindfulness based program for increased health, sense of coherence and decreased depression, anxiety and stress. *Contemporary nurse*, 45(1), 114-125.
- Gasparro, R., Scandurra, C., Maldonato, N. M., Dolce, P., Bochicchio, V., Valletta, A., Sammartino, G., et al. (2020). Perceived Job Insecurity and Depressive Symptoms among Italian Dentists: The Moderating Role of Fear of COVID-19. *International Journal of Environmental Research and Public Health*, *17*(15), 5338. MDPI AG. Retrieved from http://dx.doi.org/10.3390/ijerph17155338
- Grove, S.K & Gray, J.R. (2018). Understanding Nursing Research. 7th edition. USA:Elsevier
- Gupta S & Sahoo S. (2020). Pandemic and mental health of the front- line healthcare workers: a review and implications in the Indian context amidst COVID-19. General Psychiatry;33: e10028
- Highfield, J., Johnston, E., Jones, T., Kinman, G., Maunder, R., Monaghan, L., ... & West, M. (2020). The psychological needs of healthcare staff as a result of the Coronavirus pandemic. British Psychological Society.

Holmes, E. A., O'Connor, R. C., Perry, V. H., Tracey, I., Wessely, S., Arseneault, L., ...

& Bullmore, E. (2020). Multidisciplinary research priorities for the COVID-19 pandemic: a call for action for mental health science. *The Lancet Psychiatry*, *7*(6), 547-560.

- Holmes, M. R., Rentrope, C. R., Korsch-Williams, A., & King, J. A. (2021). Impact of COVID-19 pandemic on posttraumatic stress, grief, burnout, and secondary trauma of social workers in the United States. Clinical Social Work Journal, 1– 10. <u>https://doi.org/10.1007/s10615-021-00795-y</u>
- Irons, C., & Beaumont, E. (2017). The compassionate mind workbook: A step-by-step guide to developing your compassionate self. Robinson.
- James, OO., Olayinka, SI., Adedoyin, AF., Ikenna, O., Aanuoluwapo, AA., Oladipo, O., Lois, O., Ayi, VK., & Muhammad, SB. (2020). The experiences of healthcare workers during the COVID-19 crisis in Lagos, Nigeria: A qualitative study. Dec; 10(4): 356–366
- Jamshed, S. (2014). Qualitative research method-interviewing and observation. Journal of basic and clinical pharmacy, 5(4), 87-88. https://doi.org/10.4103/0976-0105.141942
- Jenna A. LoGiudice & Susan Bartos, P. (2021). Experiences of Nurses During the COVID-19 Pandemic: A Mixed-Methods Study. AACN Advanced Critical Care. 32 (1): 14-25
- Joseph, B & Joseph, M. (2016). The health of the healthcare workers. India J Occup Environ Med.20(2):71-72
- Kabadayi, S., O'Connor, G & Tuzovic, S. (2020). The impact of coronavirus on service ecosystems as service mega-disruptions. Journal of Services Marketing, 34(6), 809–817.
- Kabat-Zinn, J. (2013). Full catastrophe living, revised edition: how to cope with stress, pain and illness using mindfulness meditation. Hachette UK.
- Kaur, S. (2013). Sister Callister Roy's Adaptation Model. From: http://www.Slideshare.net. (Accessed: 27 May 2017).
- Khan, S., Siddique, R., Shereen, M.A., Ali, A., Liu, J., Bai, Q., Bashir, N & Xeu, M. (2020). Correction for Khan et al., "Emergence of novel coronavirus, severe

acute respiratory syndrome coronavirus 2: Biology and therapeutic options".J Clin Microbiol,58(8): e01297-20.doi: 10.1128/JCM.01297-20

Lai, J., Ma, S., Wang, Y., Cai, Z., Hu, J., Wei, N & Hu, S. (2020). Factors associated with mental health outcomes among healthcare workers exposed to coronavirus disease 2019. *JAMA network open*, *3*(3), e203976-e203976.

Leavy, P. (2017). Research design: Quantitative, qualitative, mixed methods, arts-

based, and community-based participatory research approaches. Guilford Publications.

Lee, J. (2016). Evolution of digital government systems in the Republic of Korea. In T.
 G. Karippacheril, S. Kim, R. P. Beschel, & C. Choi (Eds.), Bringing government into the 21st century: The Korean digital governance experience (pp. 61–88).
 Washington, DC: World Bank.

Lee, J. (Ed.). (2015). The impact of ICT on work. Singapore: Springer.

- Lee, J. J., Gottfried, R., & Bride, B. E. (2018). Exposure to client trauma, secondary traumatic stress, and the health of clinical social workers: A mediation analysis. Clinical Social Work Journal, 46(3), 228–235. doi:10.1007/s10615-017-0638-1
- Lee, J., & Moon, M. J. (2018). Coming age of digital automation: Backgrounds and prospects. In Transformation of work in Asia Pacific in the 21st century (pp. 11–56). Hong Kong: HKUST.
- Leiter, M. P., & Maslach, C. (1988). The impact of interpersonal environment on burnout and organizational commitment. Journal of Organizational Behavior, 9(4), 297– 308. <u>https://doi.org/10.1002/job.4030090402</u>
- Leiter, M. P., & Maslach, C. (2003). Areas of worklife: A structured approach to organizational predictors of job burnout. In Emotional and Physiological Processes and Positive Intervention Strategies. Emerald Group Publishing Limited. doi:10.1016/S1479-3555(03)03003-8
- Lewis, G. (2021). Suffering, social work and the old masters. Qualitative Social Work, 20(1-2), 48–53. doi:10.1177/1473325020973347
- Leo,C. G., Sabina, S., Tumolo, M. R., Bodini, A., Ponzini, G., Sabato, E & Mincarone, P. (2021). Burnout among healthcare workers in the COVID 19 era : A review of the existing literature. Front. Public health 9:750529. doi: 10.3389/fpubh.2021.750529

- Lewis, M. S. (2019). Technology change or resistance to changing institutional logics: The rise and fall of digital equipment corporation. The Journal of Applied Behavioral Science, 55(2), 141–160.
- Li, Z., Ge,J., Yang ,M., Feng ,J., Qiao,M., Jiang, R., Bi ,J., Zhan, G.,Xu , X.,Wang ,L., Zhou ,Q., Zhou ,C., Pan ,Y., Liu ,S., Zhang,H., Yang ,J., Zhu,B., Hu,Y., Hashimoto,K., Jia ,Y., Wang , H.,Wang, R.,Liu, C & Yang,C.(2020). Vicarious traumatization in the general public, members, and non-members of medical teams aiding in COVID-19 control. China: Elsevier Ltd. 88: 916–919

Linehan, M. (2014). DBT? Skills training manual. Guilford Publications.

- Lu, W., Wang, H., Lin, Y., & Li, L. (2020). Psychological status of medical workforce during the COVID-19 pandemic: A cross-sectional study. Psychiatry Research, 288. <u>https://doi.org/10.1016/j.psychres.2020.112936</u>
- Maree, JG(ed). (2016). First steps in Research 2nd edition. Pretoria: Vzn Schaik Publishers
- Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. Journal of Organizational Behavior, 2(2), 99–113. https://doi.org/10.1002/job.4030020205
- Molnar, B. E., Sprang, G., Killian, K. D., Gottfried, R., Emery, V., & Bride, B. E. (2017).
   Advancing science and practice for vicarious traumatization/secondary traumatic stress: A research agenda. *Traumatology*, 23(2), 129–142. https://doi.org/10.1037/trm0000122
- Morais-Storz, M., Stoud Platou, R., & Berild Norheim, K. (2018). Innovation and metamorphosis towards strategic resilience. International Journal of Entrepreneurial Behavior & Research, 24(7), 1181–1199.
- Morse, G. A., & Dell, N. A. (2021). The well-being and perspectives of community based behavioral health staff during the COVID-19 pandemic. Social Work in Healthcare , 60(2), 117–130. doi:10.1080/00981389.2021.1904315
- Morse, G., Salyers, M. P., Rollins, A. L., Monroe-DeVita, M., & Pfahler, C. (2012).
  Burnout in mental health services: A review of the problem and its remediation.
  Administration and Policy in Mental Health and Mental Health Services
  Research, 39(5), 341–352. doi:10.1007/s10488-011-0352-1

- Motara, F., Laher, A.E., Du Plessis, J., & Moolla, M. (2020). The "Intubox": Enhancing Frontline Healthcare Worker Safety During Coronavirus Disease 2019 (COVID-19). *Cureus, 12*. <u>https://www.semanticscholar.org/paper/The-</u> <u>%E2%80%9CIntubox%E2%80%9D%3A-Enhancing-Frontline-Healthcare-2019-</u> Motara-Laher/f763b4c3d4f45978ff88d4ef23fea50a339b6fe2
- Nyasulu, J & Pandya, H. (2020). The effects of coronavirus disease 2019 pandemic on the South African health system: A call to maintain essential health services. Afr J Prim Healthcare Fam Med. 12(1): 2480.
- Pawel, W., Alekasndra, S & Iwona, R. (2020). Assessment of Mental Health Factors among Health Professionals Depending on Their Contact with COVID-19 Patients. International Journal of Environmental Research and Public Health.17,5849; doi:10.3390/ijerph17165849
- Penwell-Waines, L., Ward, W., Kirkpatrick, H., Smith, P., & Abouljoud, M. (2018).
   Perspectives on healthcare provider well-being: looking back, moving forward.
   Journal of Clinical Psychology in Medical Settings, 25(3), 295–304.
   <a href="https://doi.org/10.1007/s10880-018-9541-3">https://doi.org/10.1007/s10880-018-9541-3</a>
- Polit, DF& Beck, CT. (2014). Essentials of nursing research: Appraising evidence for nursing practice, 8th edition. Philadelphia: Wolters Kluwer Health /Lippincott Williams & Wilkins
- Rathnayake, S., Dasanayake, D., Maithreepala, S.D., Ekanayake, R & Basnayak, P.L.
  (2021). Nurses' perspectives of taking care of patients with coronavirus disease
  2019: A phenomenological study. PLoS One, 16(9):e0257064.doi:
  10.1371/journal.pone.0257064
- Razu, S. R., Yasmin, T., Arif, T. B., Islam, M. S., Islam, S., Gesesew, H. A., & Ward, P. (2021). Challenges Faced by Healthcare Professionals During the COVID-19
  Pandemic: A Qualitative Inquiry from Bangladesh. *Frontiers in public health*, *9*, 647315. https://doi.org/10.3389/fpubh.2021.647315
- Reem,A., Majed, A., Hamdan, A., Khaled, AH., Mohammed,A., Mohammed,A., Khalid,
  A., Noura, A., Bader, A., Rawaih, F & Joseph, A.(2020). Awareness, Attitudes,
  Prevention, and Perceptions of COVID-19 Outbreak among Nurses in Saudi
  Arabia. Int. J. Environ. Res. Public Health

- Robinson, R. & Stinson, CK. (2021). The lived experiences of Nurses working during COVID-19 Pandemic. United States: Wolters Kluwer health,inc.
- Rosen, B., Preisman, M., Read, H., Chaukos, D., Greenberg, R.A., Jeffs, L., Maunder, R., & Wiesenfeld, L.A. (2022). Providers' perspectives on implementing resilience coaching for healthcare workers during the COVID-19 pandemic. *BMC Health Services Research*, 22.

https://www.semanticscholar.org/paper/Providers%E2%80%99-perspectives-onimplementing-resilience-Rosen-

Preisman/93340842f6a1c4f3802f453907b0521bb1ad0729

- Ross, A. M., Schneider, S., Muneton-Castano, Y. F., Caldas, A. A., & Boskey, E. R. (2021). "You never stop being a social worker:" Experiences of pediatric hospital social workers during the acute phase of the COVID-19 pandemic. Social Work in Healthcare, 60(1), 8–29. doi:10.1080/00981389.2021.1885565
- Ryu, H.-S., & Lee, J.-N. (2018). Understanding the role of technology in service innovation: Comparison of three theoretical perspectives. Information & Management, 55(3), 294–307.
- Santarone, K., McKenney, M., & Elkbuli, A. (2020). Preserving mental health and resilience in frontline healthcare workers during COVID-19. The American Journal of Emergency Medicine, 38(7), 1530–1531. https://doi.org/10.1016/j.ajem.2020.04.030
- Schaufeli, W. B., Desart, S., & De Witte, H. (2020). Burnout Assessment Tool (BAT)— Development, validity, and reliability. International Journal of Environmental Research and Public Health, 17(24), 9495. doi:10.3390/ijerph17249495
- Sit, S. M., Lam, T. H., Lai, A. Y., Wong, B. Y., Wang, M. P., & Ho, S. Y. (2021). Fear of COVID-19 and its associations with perceived personal and family benefits and harms in Hong Kong. *Translational behavioral medicine*, *11*(3), 793–801. https://doi.org/10.1093/tbm/ibab018
- Stuckey, H. (2013). Three types of interviews: Qualitative research methods in social health. Chicago: Medknow Publication and Media Pvt. Ltd

- Subramony,M., Solnet, D., Groth,M., Yagil, D., Hartley, N., Kim, P. B., & Golubovskaya,M. (2018). Service work in 2050: Toward a work ecosystems perspective. Journal of Service Management, 29(5), 956–974.
- Swift, C. (2020). A world in change. Health and Social Care Chaplaincy, 8(1), 1–4. https://doi.org/10.1558/hscc.41158
- Szczygiel, P., & Emery-Fertitta, A. (2021). Field placement termination during COVID 19: Lessons on forced termination, parallel process, and shared trauma. Journal of 54 Social Work Education, 137–148. https://doi.org/10.1080/10437797.2021.1932649
- Thomas, T, Laher, A E, Mahomed, A, Stacey, S, Motara, F, & Mer, M. (2020). Challenges around COVID-19 at a tertiary-level healthcare facility in South Africa and strategies implemented for improvement. *SAMJ: South African Medical Journal*, *110*(9)https://dx.doi.org/10.7196/samj.2020.v110i10.15143
- Tosone, C., Nuttman-Shwartz, O., & Stephens, T. (2012). Shared trauma: When the professional is personal. Clinical Social Work Journal, 40(2), 231–239. doi:10.1007/s10615-012-0395-0
- Vindrola-Padros, C., Andrews, L., Dowrick, A., Djellouli, N., Fillmore, H., Bautista Gonzalez, E., Javadi, D., Lewis-Jackson, S., Manby, L., Mitchinson, L., Mulcahy Symmons, S., Martin, S., Regenold, N., Robinson, H., Sumray, K., Singleton,G., Syversen, A., Vanderslott, S & Johnson, G. (2020). Perceptions and experiences of healthcare workers during the COVID-19 pandemic in the UK. BMJ Open
- Vo, C. (2021). The impact of COVID-19 for social work in the intensive care unit, Westmead Hospital, New South Wales. Australian Social Work, 74(1), 125–126. doi:10.1080/0312407X.2020.1833406
- Wayne, G. (2021). Nursing Theories and Theorists: An Ultimate Guide for Nurses. Nurseslabs
- Williams, R., Murray, E., Neal, A., & Kemp, V. (2020). Top ten messages for supporting healthcare staff during the COVID-19 pandemic. *London: Royal College of Psychiatrists*, 10.

World Health Organization. (2020). Coronavirus. Retrieved April 9, 2020

- World Health Organization. (2021). Preventing and mitigating transmission of COVID-19 at work: Policy brief
- Zhu, Z., Xu, S., Wang, H., Liu, Z., Wu, J., Li, G., ... & Wang, W. (2020). COVID-19 in Wuhan: Immediate psychological impact on 5062 health workers. MedRxiv. https://doi.org/10.1101/2020.02.20.20025338

# APPENDICES

## Appendix A: Interview guide

1. Central question: What is your experiences when providing care to the patients in the clinics during the COVID-19 pandemic?

- 2. Probing questions
- What are the challenges regarding the provision of care during the COVID-19 pandemic?
- What is the available support system during the COVID-19 pandemic?
- What are the health challenges that you are experiencing?
- Describe your experiences regarding adhering to COVID-19 safety regulations
- What do you think can be done to improve the health service provision during the

COVID-19 pandemic?

Appendix B: Ethical clearance certificate from MREC



University of Limpopo Department of Research Administration and Development Private Bag X1106, Sovenga, 0727, South Africa Tel: (015) 268 3935, Fax: (015) 268 2306, Email: anastasia.ngobe@ul.ac.za

### TURFLOOP RESEARCH ETHICS COMMITTEE

### ETHICS CLEARANCE CERTIFICATE

MEETING: PROJECT NUMBER: PROJECT:

Title:

Researcher: Supervisor:

School:

Degree:

Co-Supervisor/s:

TREC/51/2022: PG

**Master of Nursing Science** 

29 March 2022

The Experiences Of Health Care Workers On The Delivery Of Health Care Service During Covid-19 Pandemic In Clinics Sub-District A, City Of Johannesburg Municipality Gauteng Province. JS Ncube Mrs L Muthelo Prof MA Bopape Health Care Sciences

## PROF P MASOKO

CHAIRPERSON: TURFLOOP RESEARCH ETHICS COMMITTEE

The Turfloop Research Ethics Committee (TREC) is registered with the National Health Research Ethics Council, Registration Number: REC-0310111-031

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Note:		L
i)	This Ethics Clearance Certificate will be valid for one (1) year, as from the abovementioned	L
	date. Application for annual renewal (or annual review) need to be received by TREC one	l
	month before lapse of this period.	L
ii)	Should any departure be contemplated from the research procedure as approved, the	L
	researcher(s) must re-submit the protocol to the committee, together with the Application for	L
	Amendment form.	L
iii)	PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES.	h

Finding solutions for Africa

## **Appendix C: Permission letter**





### **Research Committee of Johannesburg Health District**

Enquiries: Prof S. Moosa | 0824466825 (WhatsApp) | shabir@profm

DATE: 25th April 2022

1

EMAIL: joysenzenincube@gmail.com

Dear Madam

ATT: Ms Joy Ncube

STUDY TITLE: The experiences of healthcare workers on the delivery of health care service during COVID-19 in clinics sub-district A, city of Johannesburg municipality Gauteng Province

NHRD REF. NO.: GP\_202204\_009

### OFFICIAL APPROVAL

The District Research Committee has reviewed your application. This letter serves as a final approval letter for this study.

#### The following conditions must be observed:

- The facilities in which the research will be conducted are listed below
- These facilities will be visited from: 2022/04/25 to 2023/03/028
- Participants' rights and confidentiality will be maintained all the time.
- Neither the District nor the facility will incur any additional cost for this study.
- No resources (Financial, material and human resources) from the above facilities will be used for the study.
- The study will comply with Publicly Financed Research and Development Act, 2008 (Act 51 of 2008) and its related Regulations.
- You will submit a copy (electronic and hard copy) of your final report. In addition, you
  will submit an annual progress report to the District Research Committee.
- If this is academic research then your supervisor and the University will ensure that these
  reports are being submitted timeously to the District Research Committee.
- The District must be acknowledged in all the reports/publications generated from the research and a copy of these reports/publications must be submitted to the District Research Committee.
- You will liaise with the manager/s listed below as relevant before initiating the study.

We reserve our right to withdraw our approval, if you breach any of the conditions mentioned above. Please feel free to contact us, if you have any further queries.

On behalf of the District Research Committee, we would like to thank you for choosing our District to conduct such an important study.

Regards,

Prof S. Moosa

 $\gg$ 

Chairperson: District Research Committee Johannesburg Health District

As delegated by Mrs M.L. Morewane, Chief Director, Johannesburg Health District, and Mr. Frans Moseane, Acting ED Health, City of Johannesburg Date: 25<sup>th</sup> April 2022

#### List of Facilities Approved

- Bophelong (Region 2) Clinic
- Halfway House Clinic
- Hikhensile Clinic
- Mayibuye Clinic
   Midrand West Clinic
- Mpumelelo Clinic
- Rabie Ridge Clinic

## Appendix D: Consent form (English)

## UNIVERSITY OF LIMPOPO ENGLISH CONSENT FORM

## Statement concerning participation in a Clinical Research Project.

**Name of Project / Study**: The experiences of healthcare workers on the delivery of healthcare service during COVID-19 in clinics sub-district A, city of Johannesburg municipality Gauteng Province.

I have read the information and heard the aims and objectives of the proposed study and was provided the opportunity to ask questions and given adequate time to rethink the issue. The aim and objectives of the study are sufficiently clear to me. I have not been pressurized to participate in any way.

I know that sound recordings will be taken of me. I am aware that this material may be used in scientific publications which will be electronically available throughout the world. I consent to this provided that my name and hospital number are not revealed.

I understand that participation in this Study / Project is completely voluntary and that I may withdraw from it at any time and without supplying reasons. This will have no influence on the regular treatment that holds for my condition neither will it influence the care that I receive from my regular doctor.

I know that this Study / Project have been approved by the Turfloop Research Ethics Committee (TREC). I am fully aware that the results of this Study / Project will be used for scientific purposes and may be published. I agree to this, provided my privacy is guaranteed.

The Study/Project envisaged may hold some risk for me that cannot be foreseen at this stage.

Access to the records that pertain to my participation in the study will be restricted to persons directly involved in the research.

Any questions that I may have regarding the research, or related matters, will be answered by the researcher/s.

If any medical problem is identified at any stage during the research, or when I am vetted for participation, such condition will be discussed with me in confidence by a

qualified person and/or I will be referred to my doctor.

I accept that if I advise the University of Limpopo that I or someone participating in the research is in danger, they may be required to report to appropriate authorities; they will consult with me first, but they may be required to report with or without my approval.

I hereby give consent to participate in this Study/Project.

Signature of researched person.....

Signature of researcher.....

Contact No: 0721341921

## **Appendix E: Requisition letter**

Gauteng department of health City of Johannesburg

municipality

Region A Private Bag X20 Halfway House Midrand 1685

University of Limpopo		
Turfloop Campus		
Private	Bag	x1106
Sovenga		
0727		

# REQUEST FOR PERMISSION TO CONDUCT THE RESEARCH STUDY

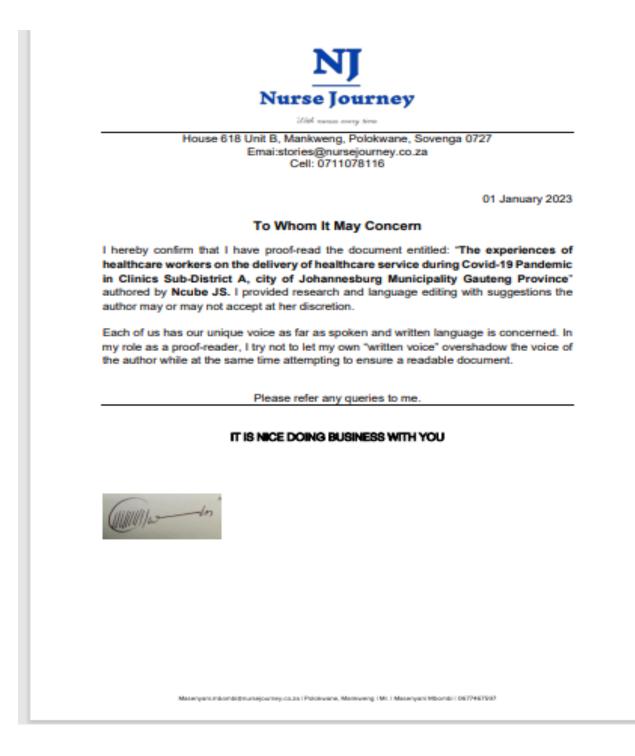
I Ncube Joy Senzeni student number:201105275, a student at University of Limpopo registered for Masters in Nursing hereby request permission to conduct a research study in City of Johannesburg municipality Region A. The title of the study is: The experiences of healthcare workers on the delivery of healthcare service during COVID-19 pandemic in clinics sub-district A, city of Johannesburg municipality Gauteng Province.

Your positive response will be highly appreciated.

Thanking you in advance for your assistance.

Researcher's signa	ture: Ncube JS	Date
Cell number	: 0721341921/ 0659	130587
E-mail address	: joysenzenincube@	<u>gmail.com</u>

## Appendix F: Certificate from the editor



# Appendix G: Interview transcripts with one of the participants

## **Researcher: R**

## Healthcare worker: HCW

**R:** What is your experiences when providing care to the patients in the clinics during the COVID-19 pandemic?

HCW: My experience was very difficult because it was a new thing.

R: Can you explain further?

**HCW**: We had to come up with the new set up where patient must be screened they enter the clinic; we must have demarcated areas for different patient. when we screening patient also we had to sanitize them before they can enter the clinic. Also when they are inside the clinic I must make sure that all the chairs have distance of at least 1,5metres so that they don't get close to each other and we have to sanitize each and every chair after they have move to inside the consulting room.it was not easy because even the staff we did not have enough staff to do all those COVID-19 requirements.

**R**: What are the challenges regarding the provision of care during the COVID-19 pandemic?

**HCW:** Provision of care it was difficulty because this COVID-19 it was scary it was the first time we had of it. we couldn't touch the patient, we couldn't go close to patient but at the end of the day we were expected to come up with the diagnosis without even examining the patient, you could only use the history taking and looking the patient from far. So it was very challenging because we couldn't interact as we used to with the patient. We were diagnosing them without touching them and examining them, only take history to get to a diagnosis and physical appearance.

R: What is the available support system during the COVID-19 pandemic?

**HCW:** We had the support system through our managers and our regional deputy directors we were provided with all the PPEs (disposable face masks, disposable gowns, apron, gloves, face shield, goggles) all the PPEs we need they were supporting us. they were supporting us should anyone test positive the whole clinic was sanitized if there was a positive case. The staff was infected was supposed to stay at home and look after herself or himself for at least 10days before she could come back to the clinic.

R: What are the health challenges that you are experiencing?

**HCW:** Health challenges almost more than 50% of the staff contracted COVID-19 and we were treated but still we are leaving with some of the symptoms like tiredness we still having it, sometimes we still having the forgetfulness result from the effect that we had after having being diagnosed with COVID-19. Even after 6months or a year we still experience some other symptoms that don't go away like fatigue and forgetfulness.

**R:** Describe your experiences regarding adhering to COVID-19 safety regulations?

**HCW:** adhering to COVID-19 safety regulations it was difficult because it was the first time experiencing this disease, others will conform to the regulations but sometimes we used to be close to each other it was difficult.

**R**: You keep saying it was difficult...can you please explain more?

**HCW:** Like the sharing of food during breakfast lunch and tea time, it was very difficult even though we tried our best. we kept all the windows opened, minimal gathering in the kitchens and boardroom even inside the clinic some patient was accommodated outside so that they will improve the ventilation. It was difficult because we had to sanitize and was hands every after seeing a patient of which sometimes you can forget to do it. We had to sanitize all the handles where we enter in the kitchen, main doors and the office we tried but sometimes it was very difficult.

**R**: What do you think can be done to improve the health service provision during the COVID-19 pandemic?

**HCW:** Education especial to our client those our patient, we professionals it was easy we were getting information through the virtual trainings and seminal but it was very difficult to work with the patient who have the minimal information.

**R:** Is the anything you want to add?

**HCW:** mmm...even the television must be used and radios, pamphlet to give more inform to our community because we don't work alone we work with them. even at school and other institutions, in shopping malls there must be information that is freely available so that we can get the cooperation of the users of our facilities.

**R**: Thank you so much for your participation.