Experiences of Senkatana Healthcare Professionals during the First Wave of COVID-19

By

'Malitšoanelo Maloisane

A Dissertation Submitted to the Department of Sociology and Social Work in Partial Fulfillment of the Requirements for Master of Science in Sociology

National University of Lesotho
Roma

May, 2023

Declaration

Name: Malitšoanelo Mary Maloisane

Degree: Master of Science in Medical and Health Sociology

I declare that “Experiences of Senkatana Healthcare Professionals during the First Wave of Covid-19” is my own work and that all sources that I have used or quoted have been indicated and acknowledged by means of complete references.

_____ _____

Signature Date

Certification

This to certify that this dissertation has been read and supervised as having met the requirements of the faculty of Social Sciences and the National University of Lesotho for the award of Degree of Master of Science in Sociology

---

Main Supervisor

Co-Supervisor

Head of Department

External Examiner

Acknowledgements

First of all I am grateful for the answered prayers, for it was God's grace that carried me through this journey. Thank you God, I would not have made it without your grace. I would also like to pass my deepest thanks to my supervisors Dr. Morojele and Dr. Phokojoe with awesome guidance throughout the course of this study.

All thanks to Mrs. L. Mohaesa who also provided significant support. Her inspiring and unflagging assistance kept me going. I remember her motivating me that a dissertation is doable but it needs time, and that boosted the love I had for school.

To my loving husband Mr. Phoka Sekonyela, no words are enough to thank you. You have been my pillar of strength. You saw the ugliest parts of this journey, when I studied through the night months on end, and when I cried and felt overloaded. You were a voice of reason and reassured me that I can walk an extra mile. The little gestures you did for me did not go unnoticed. Thank you for words of encouragement, for submitting my assignments when I could not because of conflicting priorities; and thank you for the financial support.

To my parents Mr. Molatuli Maloisane and Mrs. Mampolokeng Maloisane, your prayers definitely got me where I am today. I am grateful for your support and the belief you had in me that I could do it. For babysitting my babies so I could focus on my studies, I thank you.

To my beautiful babies, Seabata Sekonyela and Sebabatso Sekonyela, please know that you are the greatest motivation to getting this Master's degree. Your Momma did it!

To my colleague, Maletsatsi Tjemolane, I could not have done this without you. Your support was overwhelming. I would be amiss if I do not thank my friends Mrs. Nthatisi Liphoto, Mrs. Nthabeleng Tsela and Mrs. Ditshewana Kojoane for their emotional support all the time.

Dedication

To my grandmother Mrs. Mahali Albertina Machepha, I am so grateful I had such a power house in my life. You were the greatest influence in my master's degree "*Mary ngwanaka I wish you could do masters*". I dedicate this to you. I know you always wanted the best for me. I wish you were here to celebrate with me, and may your soul continue to rest in peace.

TABLE OF CONTENTS

Abstract

The emergence of Coronavirus disease 2019 (COVID-19) has affected healthcare professionals' psychological and mental health. Despite a plethora of research exploring the experiences of healthcare professionals during the first wave of COVID-19 globally, very little of this research has explored this issue in the context of Lesotho.

The purpose of this study was to examine Senkatana HCPs' experiences of work-related stress during the first wave of COVID-19 in March 2020; to understand how healthcare professionals felt when providing care to patients during the first wave of COVID-19; to establish challenges brought by the COVID-19 emergence on Senkatana healthcare professionals in the first wave of COVID-19, and to investigate how healthcare professionals coped with work-related stress and the kind of support that was available for Senkatana healthcare professionals during the first wave of COVID-19. A qualitative research design was adopted. Data was collected using interview guide from a sample of ten purposively selected nurses at Senkatana clinic. The majority of the participants were registered nurses. Thematic analysis was used to analyse the data collected. Therefore, the study used Stress Process Model by Pearlin, Menaghan, Lieberman and Mullan (1981) to theorize the experiences of Senkatana healthcare professional during the first wave of COVID-19.

The findings revealed that the nurses experienced work-related stress. The sources of work-related stress were significantly associated with lack of knowledge, lack of PPEs, increased workload, strained marital relationships and no support from the union (LNA), as the findings show. Therefore, stress manifested in fear of COVID-19 and depression. It also emerged that the kind of support that was available during the first wave of COVID-19 included social support and organisational support. Again, it emerged that the nurses coped with work-related stress either by oath retaken at work or with religion (prayer).

List of Acronyms

ART	Antiretroviral Therapy
COV	Coronaviruses
COVID 19	Corona Virus Disease 2019
EGPAF	Elizabeth Glaser Paediatric AIDS Foundation
HCPs	Health Care Professionals
HCW	Health Care Workers
ICN	International Council of Nurses
ILO	International Labour Organization
LNA	Lesotho Nursing Association
MERS-COV	Middle East Respiratory Syndrome-Coronavirus
NIOSH	National Institute for Occupational Safety and Health
OSHA	Occupational Safety and Health Administration
PFA	Psychological First Aid
PMTCT	Prevention of Mother to Child Transmission
PPE	Personal Protective Equipment
REBs	Research Ethics Boards
SARs	Severe Acute Respiratory Syndrome
SARS-COV	Severe Acute Respiratory syndrome Coronavirus
SPM	Stress Process Model
TCPS	Tri-Council Policy Statement
TB	Tuberculosis
WHO	World Health Organization

CHAPTER ONE

INTRODUCTION

1.0 Background of the Study

Coronavirus disease 2019 (COVID-19) pandemic is a global public health emergency that has had serious implications for the well-being of the population worldwide (Villa, Dellafiore, Caruso, Arrigoni, Galli, Moranda, et al., 2021). It was first observed among a cluster of patients with pneumonia linked to a wet market in Wuhan, China in late December 2019. Since then, Covid-19 has rapidly evolved into a full-blown pandemic. Over 5 million people had been infected across 213 countries and territories worldwide (Bandyopadhyay, Baticulon, Kadman, et al., 2020).

On May 13th, 2020, Lesotho recorded its first index case of COVID-19. According to Shaban (2020) Lesotho was the last country in the African continent to record a case, even though it had already been under lock down restrictions from midnight 29th March 2020. Across Africa, Covid-19 cases were surging by 20% on a weekly basis (Partners in Health, 2021). In Lesotho, 3 794 new cases of COVID-19 were reported in January 2021, while in February 2021 there was a very sharp decrease to 1102 new cases reported (WHO, 2020). The fluctuations in infection rates were attributed to influx of labour migrants crossing the border from neighbouring South Africa during the festive season. Since South Africa had the highest number of COVID-19 cases in Africa, cross-border labour migration led to border towns, Leribe, Butha-Buthe, and Maseru districts, to record particularly high COVID-19 infections (Partners in Health, 2021).

While many countries in Africa were stepping up their fight against COVID-19, assessments by WHO (2020) pointed out substantial limitations in response capacity. In particular, there were severe shortages of human resources, critical care beds and laboratory capacity. For example, in 2018 the number of nurses or midwives to 10,000 people was about 6.0 in Côte d'Ivoire and Mozambique, and

around 11 in the Democratic Republic of the Congo and Kenya. It is not surprising then for Muiruiri (2021) to contend that in Africa, doctors, nurses and other HCPs were stretched to the limit as the total cumulative number of infections per week rose above 4.1million, with more than 110,000 fatalities at the end of December 2020. South Africa alone led with more than 1.5 million reported cases and more than 52,000 deaths (Shepherd & Mohohlwane, 2021).

1.1 Nurses and COVID-19

During the COVID-19 pandemic, healthcare professionals were particularly at a high-risk of developing symptoms of mental health problems due to being on the frontline in the battle against Covid-19 (Yıldırım & Arslan, 2020).

The International Council of Nurses (ICN) (2021) and Kennedy (2021) revealed that more than 1.6 million of HCPs had been infected in 34 countries in Africa, with approximately 10% of all confirmed COVID-19 infections among HCPs. In Europe, a total of 152 888 infections and 1413 deaths were reported (Bandyopadhyay, Baticulon, Kadman, et al., 2020). For example, in Italy, Chersich, Gray, & Fairlie, et al. (2020) revealed that around 10,000 health-care professionals (HCPs) had been infected and 74 had lost their lives to Covid-19 as of 3rd April 2020. By 31st December 2020, the cumulative number of reported COVID-19 deaths among nurses in 59 countries was 2,262, although this figure was likely a significant underestimation. The actual number of HCPs' fatalities remains unknown in the absence of a global systematic and standardized surveillance system (International Council of Nurses, 2021; Kennedy, 2021).

The Americas had more reliable surveillance and more than 60% of the nurses died, the United States and Mexico had the highest number of reported nurses died due to COVID-19 (Llop Gironés, Vračar, Llop-Gironés, Benach, Angeli-Silva, Jaimez, Bhatta, Mahindrakar, Bontempo, & Devi, 2021). However, it was observed that the overall infection and death trends among health care workers (HCWs) followed that of the general population. Infections were mainly found in females, but deaths mainly affected males. Infections were also seen more in nurses, and deaths more in doctors (Chersich, Gray, Fairlie, et al. 2020). For Matthewman & Huppatz (2020),

such trends could be attributed to the fact that women were on the frontline of coronavirus. The World Health Organization (WHO) (2020) puts the current global figure of female HCWs at 70%.

Undoubtedly, all healthcare professionals assumed the greatest responsibility in the fight against the epidemic (Yel & Kasapoglu, 2021). However, they faced uncertainties related to the fear of COVID-19 exposure, anxieties related to shortages of personal protective equipment (PPE) or other essential equipment. They also experienced challenges gaining family support and childcare while they worked. Others were at risk of burnout due to irregular hours and higher workloads, coupled with anxiety, as they entered new or unfamiliar clinical roles (Ayanian, 2020; Hogan, 2020). Consequently, there is a clear need for immediate action to safeguard the welfare of HCWs (Moazzami, Razavi-Khorasani, Moghadam, Farokhi, & Rezaeia, 2020).

1.2 Problem Statement

The first case of COVID-19 in Lesotho was reported on the 13th May 2020 even though the country had already been under lock down restrictions from midnight 29th March 2020. As mention before on the background of the study new cases of COVID-19 were reported in January 2021 with 3 794 cases (WHO, 2020). Similar to other healthcare facilities, Senkatana healthcare professionals were at frontline and they were likely to experience stressful situation as well as numerous pressures. These were probably due to a variety of factors including high risk of infection, insufficient personal protective equipment, heavy workloads and burnout. Given this observation, the study, therefore, aimed to examine Senkatana healthcare professionals' experiences of work-related stress during the first wave of COVID-19 in March 2020 and how they coped.

1.3 Objectives of the Study

1.3.1 Main Objective

The general objective of the study was to describe HCPs experiences of work-related stress during the first wave of COVID-19.

1.3.2 Specific Objectives

The specific objectives of the study were:

- To understand how healthcare professionals felt when providing care to patients during the first wave of COVID-19;
- To establish challenges brought by the COVID-19 emergence on Senkatana healthcare professionals in the first wave of Covid-19,and
- To investigate how healthcare professionals coped with work-related stress and the kind of support that was available during the first wave of Covid-19.

1.4 Significance of the Study

COVID-19 is an inherently social disease, with exposure, illness, care and outcomes stratified along familiar, social, economic and racial lines. However, interventions from public health and clinical medicine have focused primarily on the scale-up of technical and biomedical solutions that fail to address the social contexts driving its distribution and burden (Trout & Kleinman, 2020). The experiences of HCPs during the first wave of COVID-19 pandemic may be used to inform policy, thereby helping to tackle the negative effects of COVID-19 pandemic on HCPs in general. Secondly, the findings of the study could aid the design of resilience-enhancing interventions that provide positive coping strategies for HCPs caring for individuals with infectious diseases during future pandemics.

It is intended that the findings of this study will be shared with Lesotho Ministry of Health, Senkatana Centre as well as related stakeholders including Elizabeth Glaser Pediatric AIDS Foundation (EGPAF) and other healthcare managers and policy makers in Lesotho. The findings will also contribute towards understanding how the emergence of COVID-19 pandemic has affected HCPs wellbeing. This study is important for me as a researcher to graduate for Master's Degree.

1.5 Research Questions

The study addressed the following research questions:

- How did healthcare professionals feel when providing care to patients during the first wave of COVID-19?
- What were the challenges brought by the COVID-19 emergence on Senkatana healthcare professionals in the first wave?
- How did healthcare professionals cope with work-related stress and what kind of support was available during the first wave of COVID-19?

1.6 Scope of the Study

This study focused on the experiences of Senkatana healthcare professionals during the first wave of COVID-19. As such, it was only focusing on nurses, the registered nurses and the trained assistant nurses who were already working at Senkatana during the first phase of COVID-19. Given duration of the study and the period within which the study was conducted the findings would only be applicable to Senkatana healthcare professionals.

1.7 Definition of Key Terms and Operationalization

This study adopted the following definitions.

1.7.1 Coronavirus Disease (COVID-19)

The World Health Organization (2020) defines COVID-19 as a type of coronaviruses (CoV) that cause illness ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS-CoV) and severe acute respiratory syndrome (SARS-CoV). In this study the same definition has been adopted.

1.7.2 Pandemic

A pandemic is a contagion of an infectious disease that has spread across a large region (Rosenwald, 2020). This conceptualisation of pandemic was adopted in this study.

1.7.3 Healthcare Professionals

HCPs (also called healthcare workers) are all people engaged in actions whose primary intent is to enhance health. This encompasses doctors, nurses, midwives, paramedical staff, hospital administrators and support staff and community workers (World Health Organization, 2020). In this study HCPs refer to registered nurses and nurse assistants.

1.8 Overview of the Chapter

This dissertation comprises five chapters. Chapter One provides background information on the experiences of healthcare professionals. There is also the problem statement, the objectives and research questions. Chapter Two entails the literature, both empirical and theoretical. The third chapter, which is the methodology, sheds light on the methods and strategies that were utilized during data collection and analysis. Chapter Four focuses of the findings of the study whilst Chapter Five presents the discussion and conclusion.

1.9 Chapter Summary

Chapter One introduced the study. It characterized the research problem, the research objectives, research questions, as well as significance of the study and definition of terms.

CHAPTER TWO

LITERATURE REVIEW

2.0 INTRODUCTION

This chapter presents a review of the literature with regards to the research questions. It focuses on the theoretical framework and the empirical literature. The literature review focuses on empirical findings based on the experiences of healthcare professionals during the COVID-19. Lastly, this chapter presents the gaps in the literature. This section on the review of the literature focuses on experiences of HCPs during the COVID-19 pandemic. First, it focuses on the work-related stress among HCPs during the first wave of COVID-19. Secondly, it focuses on the available support for HCPs and, lastly, it focuses on psychological including psychosocial support, communication and organizational support, and social support.

2.1 Challenges Faced by Healthcare Professional during the First Wave of COVID-19

HCPs are key players in the management of the COVID-19 pandemic and are inevitably in the front line of exposure to the virus (Draper, Wilson, & Ives, 2008). During the first months of the outbreak, HCPs were exposed to a variety of new and unprecedented events and experienced a range of feelings in response to them (Holmes, O'Connor, Perry et al., 2020; Xiong & Peng, 2020). These ‘events’ are called stressors; essentially, they are conditions in which stress can develop (Wheaton & Montazer, 2010). Stressors can also develop from conditions of threat, challenge, demands or structural constraints that call into question the operating integrity of the organism (Aneshensel, 1996). For example, Razu, Yasmin, Arif, Islam, Islam & Gesesew, (2021) conducted a qualitative study in Bangladesh on the challenges faced by healthcare professionals which revealed that these

professionals experienced anxiety attacks as well as frustration due to a lack of knowledge, environmental changes, and fear of infection both by themselves and by their family members (Razu, et al., 2021). HCPs are also likely to face enormous work pressure during outbreaks due to a variety of factors. These include a high risk of infection, insufficient personal protective equipment, heavy workloads and manpower shortages, confusion, discrimination, isolation, patients with negative emotions, separation from families, and burnout (Kim, 2018; Chou, Ho, Wang et al., 2010). Therefore, pressure can lead to mental health problems such as stress, anxiety, depression, insomnia, denial, anger and fear. These not only affect HCPs attention, understanding and decision-making abilities, but could have a lasting effect on their physical and psychological wellbeing after the COVID-19 crisis is over (Ayanian, 2020; Kang, Li, Hu et al., 2020).

2.1.1 Causes of Stress among HCPs during the COVID-19 Pandemic

The nature of work drastically changed for HCPs during the COVID-19 pandemic. These changes (e.g. high healthcare demands, increased patient mortality and anxiety) caused emotional and physical stress amongst HCPs (Maben & Bridges, 2020). HCPs were also at a risk of emotional strain and physical exhaustion from the provision of care to growing numbers of patients who often rapidly deteriorated and died. Furthermore, they were at a risk of exposure to critical illness themselves or to the death of their co-workers (Ayanian, 2020). They also had to face moral dilemmas in decision making around provision of care with limited resources (Shryock, 2020). Work-related stress disproportionally affects healthcare workers (Russell, Maître, Watson et al., 2018) and is linked to excessive workloads, working in emotionally charged environments and where demand outweighs capacity (Shanafelt, Mungo, Schmitgen, et al., 2016).

[1] In this study Health care professionals and Health care workers is used interchangeably

In addition, Naushad, Bierens, Nishan, Firjeeth, Mohammad, Maliyakkal et al. (2019) reported that the common risk factors among HCP for developing psychiatric morbidities were lack of social support, communication, maladaptive coping and lack of training.

The emotional and behavioural responses of healthcare workers and professionals who work under high stress environment are naturally adaptive in the face of extreme (unpredictable and uncertain) stress, and counselling and psychotherapy based on the stress-adaptation model might act as early and prompt intervention. Addressing the mental health issues in medical workers is thus important for the better prevention and control of the pandemic (Banerjee, 2020).

Nurses, in particular, face stressors related to assuming responsibility for another person's life, caring for a large number of patients suffering from disease and pain (Lee, Wong, McAlonan, Cheung, Cheung, Sham, Chu, Wong, Tsang, Chua, 2007). During the peak of COVID-19, nurses' stressors were intensified. Therefore, regular stressors became acute and exacerbated (i.e. more patients, longer work shifts, risk of infection, etc.) whereas there was a shortage of resources (i.e. lack of protective equipment, insufficient facilities, lack of training or experience for this kind of situation, etc.).

2.1.1.1 Lack of Personal Protection Equipment

The shortage of personal protection equipment (PPE) in clinical settings gave rise to the development of adverse mental status of frontline HCPs (Chang, Xu, Rebaza et al., 2020). HCPs are also impacted by practical and environmental issues in the settings in which they work. Whilst, for the most part, HCPs fears were allayed by adequate PPE, it caused discomfort and impacted on communication (Billings, Ching, Gkofa, Greene & Bloomfield, 2021). According to United States Department of Labour, Occupational Health and Safety Administration (2007) personal protective equipment is stressed throughout as a key factor in keeping workers safe, especially those in high-risk environments such as healthcare workers. Guidelines for these

environments include respiratory protection (masks, respirators and face shields), medical/surgical gowns, gloves and eye protection.

Similarly, the lack of PPE was identified as a top concern for U.S. nurses in a survey conducted by the American Nurses Association (ANA) (2020) and results of the study indicated that lack of PPEs was a significant factor in nurses' mental health and more nurses were afraid to go to work. McCauley & Hayes (2020) also revealed that difficult work conditions during the first months of the pandemic were characterized by the lack of PPE. Occupational health established that the employer should minimize health risks for employees. However, the scope and the transmission of the new disease were not anticipated by health organizations worldwide and this lack of knowledge and supply planning resulted in a lack of PPE for frontline healthcare workers as reported in 63 countries (McCauley & Hayes, 2020). This shortage immediately resulted in increased risk of COVID-19: frontline health-care workers were at increased risk for positive Covid-19 tests compared with the general community (McCauley & Hayes, 2020).

In addition, some hospitals in Spain did not have sufficient or adequate PPE (gloves, surgical masks, goggles, gowns medical, etc.) for fully effective protection during the peak period of the pandemic (Lorente, Vera & Peiró, 2021).Therefore, Diamantopoulous, Sarstedt, Fuchs, Wilczynski, Kaiser (2012) also argue that nurses exposed to Covid-19 and having inadequate PPE are associated with worse mental health outcomes. Adequate PPE attenuates the possible adverse impact of COVID-19 exposure on mental health by helping nurses feel safer in terms of their own health, their patients and their loved ones.

2.1.2 Coping with Work-Related Stress during COVID-19 Pandemic

Stress may be a universal phenomenon but the way in which people respond to and cope with it differs (Lo, 2002). Coping is defined as a process of constantly changing one's cognitive and behavioural efforts in order to manage specific external or internal demands appraised as taxing or exceeding the resources of the person (Lazarus & Folkman, 1984). Coping strategies are considered to be those specific

efforts (both behavioural and psychological) that individuals employ to master, reduce and tolerate stressful events (Sreeramareddy, Shankar, Binu, et al. 2007).

Resilience or an individual's capacity to 'bounce back' from stress (Hart, Branman, & De Chesnay, 2014) amongst HCPs helps them cope with stress caused by the COVID-19 pandemic and to adapt successfully to changing circumstances (Cooper, Phelps, Ng, & Forbes, 2020). From this, it is, therefore, vital to strengthen healthcare professionals' mental well-being and their capacity to continue to perform at work (Labrague & De Los Santos, 2020; Hogan, 2020).
For instance, greater promotion of self-care is needed (e.g. healthy eating, hydration and physical activity) since HCPs often deprioritize their own health and wellbeing in favour of patient care (Chan & Huak, 2004).

Research has demonstrated individual differences in coping with stress (Matthews & Campbell, 2009; Ptacek, Smith, & Dodge, 1994). For example, Adriaenssens, Gucht and Maes (2015) found that emergency nurses who used positive coping strategies such as active problem-focused coping had lower levels of burnout, whereas those with negative coping strategies such as passive avoidant coping were ineffective in coping with stress. In addition, Labrague (2021) indicates that health care workers utilized both problem-centred and emotion-centred coping to manage the stress associated with the coronavirus pandemic. Coping behaviours, resilience and social support were associated with positive mental and psychological health outcomes.

Evidence suggests that during stressful events (including disasters, calamities and disease outbreak) individuals are more likely to suffer adverse mental and psychological outcomes when they are not equipped with sufficient levels of resilience and coping abilities (Duncan, 2020; Labrague et al., 2018). Hence, support from peers, colleagues, family and friends has also been shown to help individuals sustain emotional balance in the face of threats and stress-inducing events (Nowicki et al., 2020). For instance, earlier studies conducted during the infectious disease outbreaks such as SARS, Ebola and MERS-CoV identified a protective role for psychological resilience, coping behaviours and social support in healthcare workers against the psychological and mental health burden of caring for infected patients

(Baduge et al., 2018; De Brier et al., 2020). Studies conducted during the COVID-19 pandemic have shown a similar pattern: psychological resilience, coping behaviours and social support safeguard mental health and well-being among health care workers who are on the frontlines of the fights against this deadly virus (Blanco-Donoso et al., 2021; Chew, Ngiam ,Tan, Tham, Tan & Jin , 2020 ; Labrague & De los Santos, 2020a, 2020b).

Therefore, the use of positive coping mechanisms such as seeking social support, positive thinking and problem solving is associated with lower levels of traumatic stress, stigma (Chew et al., 2020), psychological distress (Babore, Lombardi, Viceconti, Pignataro, Marino, Crudele, Candelori, Bramanti, & Trumello, 2020), stress symptoms (Nie et al., 2020), anxiety and depression (Mi , Yang, Sun, Li,Tam, Zhou, & Shen, 2020; Zhu et al., 2020). On the other hand, utilization of negative coping skills, such as avoidance, were strongly linked with increased levels of emotional stress (Chew et al., 2020), PTSD symptoms (Hou, Dong, Zhang, Song, Zhang, Cai & Deng, 2020) , psychological distress (Babore et al., 2020; Nie et al., 2020) and fatigue (Hou et al., 2020).

2.1.2.1 Religion and COVID-19

Religion has an impact on well-being when people encounter stressful situations and adversities in life. It acts as an important philosophical orientation that influences how people understand the world and comprehend reality and suffering (Prazeres, Passos, Simoes, Simoes, Martins & Teixeira, 2021). A study conducted in Italy revealed that people personally close to the effects of COVID-19 turned toward religion as a coping strategy. However, a study in China did not find an association between religiosity and perceived stress in healthcare professionals during the COVID-19 pandemic. An empirical study also found that only one out of 11 studies reviewed displayed a significant association between religion and traumatic stress (Chang, et al., 2021).

Some professionals expressed that belief in God kept them relaxed (Razu, et al., 2021). Similarly, in a recent cross-sectional study in the Brazilian general population, religious coping during the COVID-19 pandemic was associated with higher levels of hopefulness and lower levels of fear, worrying, and sadness (Prazeres, et al., 2021). In the US, healthcare providers who attended religious services at least once per week had a lower risk of dying from despair, compared with those who had never attended (Chang, et al., 2021).

Religious coping mechanisms such as praying were also reported as important coping mechanism in three cross-sectional studies. For instance, in two separate studies involving health care workers in Pakistan (Selman, Chao, Sowden, Marshall, Chamberlain & Koffman, 2020) and in Palestine (Maraqa, Nazzal, & Zink, 2020), praying and other religious activities were the highest-ranked coping mechanisms. In the United States, where prevalence of COVID-19 is highest, frontline emergency health care workers identified religious coping mechanisms such as praying as some of the most important ways to combat the mental and psychological burden of the pandemic (Shechter et al., 2020).

A recent review pointed out the importance of spirituality as a coping stratagem and in maintenance of psychological well-being for both patients and HCWs during the pandemic (Roman, Mthembu & Hoosen, 2020). Furthermore, in the same review, spirituality was found to aid HCWs in coping with stress, encourage recovery, resilience and reduction in burnout. Another study in Brazil also revealed the significant role of religiosity and spirituality in reducing fear, sorrow and anxiety in relation to the COVID-19 pandemic and consequent social isolation (Lucchetti et al., 2020). However, religious coping consists of positive and negative religious coping strategies. Positive religious coping involves benefitting and favourable bond with God by praying or connecting to God during crises. On the other hand, negative religious coping refers to blaming God for one's own hardships. Positive and negative religious coping strategies have been associated with higher and lower levels of psychological health, respectively (Pargament et al., 2001).

2.1.3 Social Support

Social support outside work is also an essential coping mechanism (Chan & Huak, 2004). Social acceptance from neighbours, colleagues and peer groups could act as a lifeline in removing this psychological stress (Lewis & Smallwood, 2021). However, HCPs have neglected many relationships with their friends and family due to heavy workloads or concerns around infecting others due to their own occupational exposure to COVID-19 (Razu, et al., 2021).

Under the epidemic, healthcare workers in various countries were also suffering from different levels of psychological distress (Chew et al., 2020). Increasingly, evidence shows that social support is positively related to psychological health and quality of life; that is, enhancing social support would improve the mental health and quality of life of the recipients (Leavy, 1983; Kessler, Price, & Wortman, 1985; Tani, & Castagna, 2017). In addition, it has been reported that social support has a protective effect on mental health; it plays a direct role via social relationships and exerts an indirect effect through the inhibition of excessive stress (Thoits, 1995; Jou & Fukada, 1997). Several lines of evidence indicate that social support can provide beneficial effects to reduce the risk of depression in children, adolescents, young adults, middle-aged people, the elderly and healthcare workers (Wu et al. 2019; Dar et al., 2018; Lee & Dik, 2017; Bhaskar et al., 2020).

Regarding anxiety assessment, a large number of studies suggest that the anxiety score is inversely related to social support (Bhaskar et al., 2020). In other words, social support also has a protective effect against anxiety and a low social support score can be used to predict the incidence of anxiety (Chen & Zeng, 2018; Xu, Chen & Ma, 2018). Therefore, during the spread and control of COVID-19, it is particularly important to pay attention to social support for the general public.

Among fourteen studies reporting specific coping styles among health care workers during the pandemic, eleven quantitative studies (Blanco-Donoso et al., 2021; Chen et al., 2020; Cai, 2020; Chew et al., 2020; Dong et al., 2020; Giusti et al., 2020; Labrague & De los Santos, 2020a, 2020b; Maraqa et al., 2020; Nie et al., 2020; Vagni et al., 2020; Xiao et al., 2020) indicate that health care workers use support from and communication with family, friends and colleagues as their primary coping mechanisms to manage the adverse mental health consequences of the COVID-19 pandemic.

In an online cross-sectional study involving nurses in China, higher perceptions of social support explained significant variance in the psychological distress measure (Nie et al., 2020) while in Italy health care workers who perceived greater support from family and friends reported a significant reduction in burnout symptoms (Giusti

et al., 2020). In the same way a study involving Filipino nurses shows a similar pattern: frontline nurses who perceived higher social support were less likely to demonstrate dysfunctional anxiety related to the coronavirus (Labrague & De los Santos, 2020a, 2020b). In addition, adequate social support for health care workers is associated with a significant reduction in stress and an improvement in self-efficacy during the pandemic (Xiao et al., 2020).

2.1.3.1 Psychosocial Support

The COVID-19 pandemic had negative psychological impacts on HCPs (Blake, Bermingham, Johnson, et al., 2020). For the HCPs to perform to their full potential over an extended time-period, healthcare employers must provide early psychosocial support for all employees. Such an environment will foster individual resilience and sanction self-compassion and self-care (Blake, Bermingham, Johnson et al., 2020). For example, McNicholas, Sharma, O'Connor, et al. (2020) found that clinician-perceived lack of management and government support, coupled with unrealistic public expectations and distrust about the possibility of change, compounded work-related stress issues among HCPs in Ireland. In such instances, psychological and social support is advocated (Maunder, Leszcz, Savage, et al., 2008; Balicer, Omer, Barnett, et al., 2006).

Blake, Bermingham, and Johnson et al. (2020) suggest that managers could attempt to provide psychologically safe workspaces by improving communication, peer and family support, as well as self-care strategies. For protecting the mental wellbeing of HCPs caring for people with COVID-19 has been identified as imperative for the long-term capacity of the health workforce (WHO, 2020; Kluge, 2020). Meditation practices were also found to be effective in reducing stress and burnout and in increasing health benefits, especially during the COVID-19 pandemic (Osman, Hamid & Singaram, 2021).

Maben & Bridges (2020) revealed that supporting nurses practically and psychologically is essential to preserving their health in the short and long term, particularly when occupational stress levels are so high. Therefore, ensuring

psychological wellbeing requires a layered response, with different components at different times: comprising strategies aimed at prevention through to treatment, and strategies/actions at different levels, from organizational and team/ward responses to those aimed at individual self-care and peer support. However, response to the specific unprecedented challenge of COVID-19 will also need a flexible strategy as needs and requirements are likely to change over the course of the pandemic response (Maben & Bridges, 2020).

In addition, Cole-King & Dykes (2020) recommend that while at work and outside of work, nurses should prioritize their own wellbeing as much as possible, paying attention to meeting their essential needs for drinks, food, rest and sleep, and building in rest and comfort breaks. At times of crisis, human physiological and safety needs come to the forefront - adequate food, shelter, rest, sleep and safety needs for example (Kenrick et al. 2010).

2.1.3.2 Organizational Support

Organizational support plays an important role in ensuring positive outcomes among HCPs. It improves work performance, patient satisfaction and reduces the impact of anxiety in hazardous circumstances (Jung, Jung, Lee, & Kim, 2020; Labrague et al., 2018). Organizational contexts have been found to have powerful effects on workers' psychological outcomes (Chan, & Huak, 2004). For example, Kripke (1987) found that cultural norms within an organization, leadership styles and patterns of management communication were key in reducing or increasing workers' stress. In pandemic situations clear communication of directives and precautionary measures reduce the likelihood of emotional distress, as does peer support (Chan, & Huak, 2004).

Communication within an organization is a form of support; it encourages the acknowledgement of difficult emotions (e.g. fear and anger) (Walton, Murray & Christian, 2020), thereby ensuring that HCPs have a means to seek the support they need (Walton et al., 2020). Formalized communication may also positively impact on work performance (Saeng, Chi-Keun, & Kyu, et al. 2020). Positive leadership can also be a form of organizational support. Positive leadership also focuses on communication; however, in this case, managers are encouraged to be open and honest about the realities of a given situation, including its finances. All these play a positive role in making HCPs feel informed (Labrague, McEnroe Pette, Leocadio, et al., 2018).

West et al. (2018) recommend that organizations prioritize the provision of support services to HCPs such as peer-to-peer counselling, self-monitoring, working in teams, and organizational supervision. These strategies would mitigate the negative impacts of continued HCPs' exposure to death and dying, emotional exhaustion, desperation and suffering. Billings et al. (2021) also found that HCPs should be provided with financial incentives (e.g. risk allowance) for the hazardous work that they undertook during the COVID-19 pandemic.

Labrague (2021) argues that protective factors for psychological and mental health among health care workers are vital for the formulation of effective organisational strategies to better support the mental health of health care workers on the frontlines of the COVID-19 pandemic. Furthermore, Labrague & De los Santos (2020a)and Maraqa et al. (2020) recommend that effective leadership and organizational support through the implementation of a safe and resilient work environment, provision of complete and quality PPE and supplies to prevent infection, provision of updated and evidence-based guidelines for infection prevention, provision of accurate and timely information regarding the disease, and implementation of trainings relevant to COVID-19 are vital to support the needs of HCWs and improve their mental well-being.

Savitsky, Radomislensky & Hendel (2021) revealed that a time of crises is the time to take care of those who take risks on the frontline. Since COVID-19 is a severe disease, healthcare workers and their families were exposed to infection. Therefore, healthcare organizations should prevent any shortage of PPE which could compromise the basic values of the nursing profession and taking care of those who need care.

2.1.4 Signs of Distress among HCPs during the COVID-19 Pandemic

During the COVID-19 pandemic, the visible expression of healthcare professionals' feelings and emotions was largely hidden behind masks, harmful unprecedented events andhigh work pressure, all of which had devastating effects on HCPs mental health (Xiong & Peng, 2020). According to Pappa, Ntella, Giannakas, Giannakoulis, Papoutsi & Katsaounou (2020), a sudden onset of a potentially life-threatening illness such as COVID-19 leads to an extraordinary amount of pressure on nursing staff coupled with an increased workload, physical exhaustion, inadequate personal protective equipment and fear of being infected.

In addition, many studies have shown that nursing is one of the most stressful occupations (McGrath et al., 2003; Oyeleye et al., 2013). Recent research also postulates a significant relation between COVID-19 and adverse mental health issues like anxiety, depression, burnout and stress (Mo et al., 2020; Nemati et al., 2020; Wu et al., 2020; Xing et al., 2020). However, the detrimental effect is most significant among nurses who were directly in contact with infected or suspected Covid-19 patients on the frontline (Nie, Su, Zhang, Guan, & Li, 2020).

2.1.4.1 Fear

The fear of infection and transmission of the virus may lead the HCPs to be isolated from their family members, to change their routines, and to reduce their social support network (Huang, Han, Luo et al., 2020). According to Mohindra et al., (2020)

there is a study conducted in India in 2020 and HCPs reported certain personal fears and worries regarding several factors. These factors include HCPs being the possible sources of infection, being isolated or quarantined, putting family members and other staff at risk, fear of improper use of personal protective equipment and fear of household problems due to lockdown.

Additionally, media reports document nurse exhaustion from long working hours compounded by fear for oneself, one's co-workers and one's family members or friends contracting the virus, and by the frequent and daily deaths of patients. However, nurses experience trauma by risking infection themselves, witnessing colleagues get sick and even die (Jervis, 2020) and by seeing patients die alone, without any loved ones, due to the risk of contagion (Gonzalez & Nasseri, 2020).

Labrague & De los Santos (2020) concluded that an increase in fear of COVID-19 among HCPs increases psychological distress, professional turnover and organizational turnover and decrease job satisfaction. Labrague and De los Santos (2020) further indicated that maintaining HCPs psychological and mental health is essential for nurses to play a useful role during this pandemic. Labrague & De los Santos (2020) show that excessive fear may severely affect mental health, leading to anxiety and then finally affecting their job outcomes (e.g. turnover intention, job performance and job satisfaction).

Hospital administrators must give due attention to the nurses' mental, emotional and psychological health. Proactively taking these measures may improve job performance, job satisfaction, enhance perceived health, and reduce professional and organizational turnover and psychological distress among nurses. During pandemic situations, mental health professionals are instrumental in supporting and caring about the mental health of frontline nurses (Labrague & De los Santos, 2020).

Conversely, Khattak, Saeed, Rehman, & Fayaz (2021) report that there are several important factors which may help to reduce nurses' fear. These factors are support from supervisors, colleagues, family and friends, adequate break time, sharing work experiences, and on the job training. These factors may create a sense of safety, boost their morale and motivate them to perform their assigned duties and

responsibilities better. Khattak et al. (2021) also reveal that supervisor support may reduce nurses' psychological distress, secondary trauma and turnover; hence, support from peers enables them to take proactive decisions confidently. Also, supervisors may help nurses by providing them training opportunities related to the current pandemic, provide personal protection equipment, share accurate information, give appreciation, and motivate them through certain financial and career advancement rewards.

2.1.4.2 Anxiety and Depression

During the COVID-19 pandemic, HCPs experienced irregular hours and higher workloads, coupled with anxiety, as they entered new or unfamiliar clinical roles (Ayanian, 2020; Hogan, 2020). Physical exhaustion, emotional fatigue, and fear of self-infection or infecting someone in their family also caused even more anxiety and stress. It also led to the development of mild to severe psychiatric disorders such as depression, anxiety, compulsive behaviours and post-traumatic stress (Blake, Bermingham, Johnson et.al, 2020).

Leo et al. (2021) concur and argue that during the COVID-19 pandemic, the rate of depressive disorders among HCPs was alarmingly high when compared to that of the general population. They were tormented by making difficult decisions daily and by the pain of losing both patients and colleagues. Additionally, they were worried about their own and their families' safety. Kisely et al. (2020) found that HCPs in contact with patients diagnosed with COVID-19 had greater levels of acute or posttraumatic stress. Nonetheless, these symptoms were nothing new. During the outbreak of similar respiratory infectious diseases such as SARS, 87% of HCPs were more stressed when caring for infected patients (Leo et al., 2021; Wang, et al., 2020). Similarly, during the COVID-19 pandemic, HCPs endured tremendous physical pressure, and excessive workload which led to increased mental stress likely to induce anxiety and depression (Leo et al., 2021; Khalid & Ali, 2020).

Additionally, mounting evidence indicates that health care workers have suffered a deterioration in their mental and psychological health during the coronavirus

pandemic, with reports from individual and review studies showing higher prevalence rates of anxiety, burnout, depression, PTSD and psychological distress among health care workers (Chew et al., 2020; Shechter et al., 2020). Similarly, Rossi, Socci, & Pacitti, (2020) reported that 1257 frontline healthcare workers who were taking care of COVID-19 patients in China found that nurses were at increased risk, and experienced greater illness severity, for depression, anxiety, insomnia and psychological distress compared to other healthcare professionals (Lai, Ma, & Wang, 2020).

Accordingly, Kilic & Simsek (2019) findings show that frontline nurses' anxiety and depression are moderately negatively correlated with self-efficacy and resilience, which means that when nurses have better self-efficacy and resilience, they may experience less mental health problems. Therefore, the higher self-efficacy is beneficial for disaster preparedness. Resilience can also mitigate the negative impact of work related stress and prevent poor psychological health outcomes among nurses (Delgado et al., 2017). However, Badu et al. (2020) suggest that individual attributes and organizational resources should be addressed to build self-efficacy and resilience in order to achieve improvement in the mental health of nurses.

2.1.4.3 Sleeping Disorder

The primary outcome was the estimated prevalence of sleep disturbances during the COVID-19 pandemic (Alimoradi et al., 2021). Sleep disturbances refer to a group of disturbances characterized by trouble falling or staying asleep, which can result in excessive drowsiness throughout the day as a result of sleep deprivation or change in terms of quantity, quality, or timing (Alimoradi et al., 2021).

According to Kurina, Knutson, Hawkley et al. (2011) & Cacioppo, Hawkley, Crawford, et al. (2002) sleep disturbances and deprivation, particularly in a chronic form, are linked to immune system suppression and impaired memory. Furthermore, during the COVID-19 pandemic, this was particularly alarming in HCPs whose main

responsibility was to care for the sick and critically ill, to make decisions and to calculate doses, the responsibilities in which there is no space for error (Abbas, Al-Otaibi, Gheith, Nagib, Farid, & Walaa, 2021). Also, during the COVID-19 pandemic loneliness, helplessness and depression from witnessing the sudden demise of colleagues led to insomnia amongst HCPs (Daria & Islam, 2021; Razu, et al., 2021; Altena, Baglioni, Espie et al., 2020). For example, a survey amongst Spanish hospital staff by Benedict, Partinen, Bjorvatn and Cedernaes, (2021) revealed that sleep disturbances were more frequent among HCPs than non-healthcare workers during the first COVID-19 outbreak in March to April 2020.

A similar study in the United States by Hassinger, Breuer and Mishra (2021) revealed that during the initial wave of COVID-19, a majority of HCPs reported a decline in sleep and an increase in daytime sleepiness and insomnia, although physicians were found to be at a higher risk. In addition, sleep quality is crucial for nurses to provide optimal care to patients (Ramar et al., 2021). However, due to the nature of the work, nurses are at a higher risk for decreased sleep quantity and quality, as well as continuous sleep deprivation (Ramar et al., 2021). Fatigue resulting from poor sleep tends to reduce nurses' ability to concentrate and make correct decisions, leading to the possibility of errors and injuries (Jahrami et al., 2021; Alimoradi, 2021). For instance, risk of medication errors was associated with poor quality of sleep among nurses (Salari et al., 2020). Furthermore, poor sleep quality was related to a decreased quality of life in nurses. Female nurses who reported a good quality of life had significantly higher reported sleep quality than those with moderate or poor quality of life (Serrano-Ripoll et al., 2021).

In a study involving 720 health care workers in the United States, resilient participants were more likely than non-resilient participants to report reduced levels of anxiety, stress, fatigue and insomnia (Huffman et al., 2021). In Italy a sample of 1379 healthcare workers, particularly the nurses, were at increased risk of severe insomnia according to the American Nurses' Association American Nurses Association (ANA) (2020).

2.1.3.5 Burnout

Burnout is defined as a state of psychological, emotional and physical stress in response to prolonged exposure to occupational stress. It includes feelings of emotional exhaustion, depersonalization and reduced professional accomplishment (Maunder, et al., 2021; Maslach et al., 1996). Prior to COVID-19, severe burnout was typically found in 20%-40% of HCPs. Contributors included workplace factors (e.g. workload, interpersonal conflict, moral distress, administrative burdens and documentation) and provider factors (e.g. low self-efficacy, emotional exhaustion, reduced sense of personal accomplishment). In the period of global public health crisis due to the COVID-19, Aranda-Reneo, Pedraz-Marcos & Pulido-Fuentes (2021) found that levels of burnout in HCPs jobs had increased for all the subtypes of burnout. In this way, COVID-19 exposed HCPs to more physical and mental exhaustion (Leo, et al., 2021).

Burnout is an occupational hazard in healthcare; it harms HCPs specifically (Leo, et al., 2021) and the healthcare system generally (Maunder, et al., 2021). For example, the 10,000 HCPs who contracted COVID-19 and 43 who died posed increased pressure on HCPs work-loads and shifts, thereby tremendously affecting the Iranian healthcare system's ability to care for COVID-19 patients (Ing, et al., 2020). It is for this reason that Maunder et al. (2021) opine that the COVID-19 pandemic increased burnout and threatened the maintenance of a well-functioning healthcare workforce. Worryingly, the effects of elevated burnout are anticipated to persist long after the pandemic.

In addition, burnout can have serious consequences for both the patients and the healthcare professionals. It not only results in poor physical and mental health outcomes, lack of motivation, absenteeism and low morale in the staff, but also leads to deterioration of the quality of care provided by the affected staff with resulting poor outcomes for patients (Jalili et al. 2020). For example, several systematic reviews have found that high levels of burnout in health care professionals are associated

with less-safe patient care (Dewa et al. 2017; Hall et al. 2016). These consequences impose immense costs on the society (Dewa et al. 2014; Shanafelt et al. 2016).

Guo et al. (2020) revealed that the deadly and uncontrollable nature of COVID-19 together with relatively high rate of infection and mortality among HCPs can provoke the feelings of anxiety and stress in medical staff. Therefore, issues such as social stigmatization, shortage of personal protection equipment supplies and heavy workload on the staff can aggravate this situation. Hence, this pandemic is expected to have substantial psychological impact on HCPs and burnout is prevalent among healthcare workers caring for COVID-19 patients. Age, gender, job category and site of practice contribute to the level of burnout that the HCPs experience (Jalili et al. 2021).

The frontline nurses' anxiety and depression were weakly positively correlated with skin lesion, which means that the worse the skin lesion, the higher the burnout, anxiety and depression levels. Currently, in the context of a lack of definite and effective treatment for COVID-19, wearing PPE is the most effective way to prevent infections, especially in HCWs (Cheng et al., 2020).

2.1.4.4 Occupational Injuries

The International Labour Organization (ILO) (2010) defines occupational injuries as relating to any disease caused by any biological agent that can be experienced while working or while commuting to work (ILO, 2010). Moral injuries are a form of occupational injuries that cause psychological distress and can lead to psychological injury. They result from performing actions that contradict one's own moral and ethical code, and lead to symptoms such as emotional guilt, shame and anger (Williamson & Greenberg, 2020). HCPs have been found to experience moral injuries (Chirico & Magnavita, 2021) and stress in response to doing front-line work during the first-wave of the pandemic (Heath, Sommerfield, &Von Ungern-Sternberg, 2020). Furthermore, rapid increases in the number of suspected and confirmed positive cases, low supplies of PPE, overwhelming work-loads, widespread media

coverage of the pandemic, perceived inadequate organizational support, and an increased risk of contracting the disease and transmitting it to one's own family have also caused psychological distress among health-care workers anxiety (Maben & Bridges, 2020).

It is essential to consider both the psychological and physiological influence of the pandemic on health-care workers. Failure to assess and address psychological responses to pandemic-associated stressors can negatively impact health-care workers' physiological and psychological functioning (Heath, Sommerfield, &Von Ungern-Sternberg, 2020). Notably, during pandemics, health-care workers who provide care to patients are most likely to experience psychological distress, including depression and anxiety (Maben & Bridges, 2020).

Research by Halbesleben, (2010), Tucker et al., (2020) and Van Der Veen et al., (2018) show that safety workarounds are associated with medical errors and injuries by uncovering that safety workarounds are associated with increased experiences of near misses, which could be due to committing more errors when performing safety shortcuts.

Day et al., (2012) and Elfering et al., (2015) revealed that in line with prior work suggesting that cognitive failures play a key mediating role in the relationship between occupational stress and near misses, and that their study found that expertise understaffing strengthens the relationship between safety workarounds and near misses through increasing cognitive failures. Therefore, a greater cognitive strain or burden may be placed on nurses when they are tasked with duties outside of their expertise, which in turn can increase the likelihood of safety workarounds resulting in near misses (Day et al., 2012; Elfering et al., 2015).

In addition, identifying events that have the potential to result in accidents and injuries has become an increasingly important practice in healthcare, as recognizing such events allows organizations to investigate underlying system failures, and take corrective and preventative actions against accidents and injuries (Occupational Safety and Health Administration (OSHA), 2015; WHO, 2005). Therefore, drawing

upon the transactional model of stress and coping (Lazarus & Folkman, 1984) which states that individuals respond to stressful situations with various coping strategies, Andel et al. (2022) contend that the heightened and severe levels of personnel understaffing commonly faced by hospitals during this pandemic serve as a work-related stressor to increase the frequency of such near-miss events.

In a nutshell, Andel et al. (2022) also suggest that policymakers at the state and hospital levels are encouraged to consider the safety implications of personnel understaffing when setting nurse-to-patient ratio mandates or staffing policies, as inadequate personnel in a unit may be associated with increased safety workarounds and, in turn, near misses.

2.2 Theoretical Framework

Durkheim (1897) was the first sociological theorist to explain social determinants of stress while studying suicide in 1951. He believed suicide suggested how a society induced enough stress among people to cause them to take their own lives (Cockerham, 2017). For example, egoistic suicide is a result of stress brought about by the separation of a strongly integrated individual from his or her group.

Wheaton & Montazer (2010) state that stress is a “social process” involving a sequence of causation, including stressors, which may precipitate “stress,” depending on the social circumstances attending the occurrence of the stressor and, therefore, its meaning, which in turn may precipitate distress, depending on the state of coping with resources when the stressor occurs. The multiple contingencies in this process suggest that many things people think of as stressful turn out not to be, and even when they are stressful, they may not translate into increased distress. Furthermore, a stressor may not be threatening to one person as it is to another because he or she has experienced it before. Stress may also not turn into distress because that person has levels of social support or engages in active attempts to resolve the situation.

In the stress process model (SPM) Pearlin, Menaghan, Lieberman & Mullan (1981) argued that stress was the result of stressor located in broader social context in

statuses, and roles that shape exposure and response. When theorizing stress, Pearlin et al. (1981) argued that the focus should be on (1) the sources of stress (stressors), (2) the mediators of stress (social support) and (3) the manifestation of stress (distress). Pearlin et al.'s (1981) SPM has embodied the dominant perspective of researchers attempting to identify potentially modifiable social contingencies in mental health (Turner, 2010).

However, today Stress is viewed as a 'response' (Khan, Shah, Kayani & Aqeel, 2017; Wheaton et al., 2013; Seyle, 1956). Hence, response has become a dependent variable in stress research (Lyon, 2000). However, it is important to choose a theory that recognizes the effects of stressors on individuals depending on the meanings they attribute to stressful situations (McLeod, Caputo & Erving, 2014). Additionally, sociological analysis of the stress process should start from sociological theories aimed at understanding links between individuals' daily lives and experiences, as individuals are embedded in social networks and in broader sociocultural and historical context (Lennon, 1989).

To theorize the experiences of Senkatana healthcare professionals during the first wave of COVID-19, this study has utilized Pearlin, Menaghan, Lieberman and Mullan (1981) stress process model.

2.2.1 Pearlin's et al. (1981) Stress Process Model

According to Pearlin et al. (1981) stress is a process. Pearlin's stress process model (Pearlin, 1999 & Wheaton, 2010) begins by locating stressors in their broader social context: the structural positions, statuses, and roles that shape exposure and response. Therefore, stressors come in many different forms, including major life events, chronic strains, daily hassles and traumas. However, the effects of stressors on outcomes depend on the extent to which stressors proliferate as well as on social and personal resources to which people have access, including social support and the self-concept. These moderating resources may themselves be affected by stressors, as when a job loss diminishes one's access to supportive social relations, and may, therefore, mediate as well as moderate stressors' effects (Pearlin 1999; Wheaton 2010) as shown in figure 1.1 below.

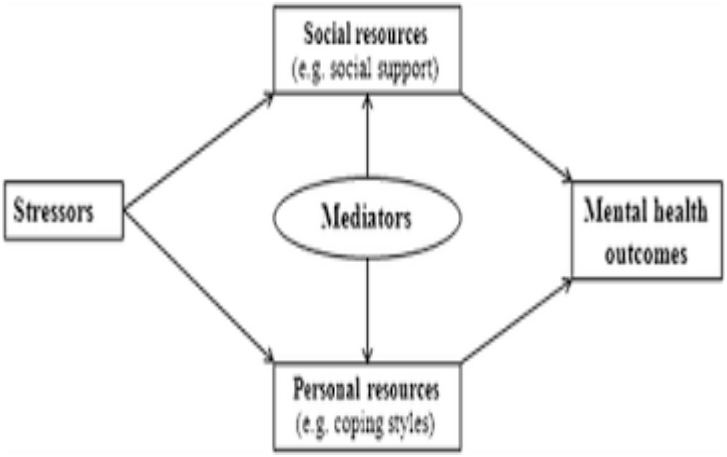

Figure1.1: Pearlin, Menaghan, Lieberman & Mullan (1981) Stress Process Model. The stress process model theorizes that individuals of different social statuses are exposed to different levels of stress, which can lead to psychological outcomes.

2.2.1.1 Stressors

Stressors are conditions from which stress can develop (Au, 2017). Hence, stressors can be thought of as conditions and events that evoke strain (Beehr, 1995; Kahn & Byosiere, 1992) or precipitate stress (Wheaton et al., 2013). Accordingly, Pearlin et al. (1981) indicated that the sources of social stress can be traced to the very boundaries of societies, their structures and cultures. As one moves closer to individual experience, then stress can be seen as arising out of two broad circumstances, namely the occurrence of discrete events and the presence of relatively continuous problem.

Turner (1999) and Sonnentag and Frese (2002) share similar sentiments; they state that stressors can be caused by single events such as critical life events or traumatic experiences or they may be chronic as a result of exposure to enduring problems or life strains that occur over a longer period of time. In addition, the stressors are derive from its arrangement, values and social status within the social structure and are revealed through how people are affected by their jobs (Pearlin, 1983).

The literature also indicated that COVID-19 is a pandemic that causes and amplifies suffering through physical illness, death, stresses and anxieties that the entire healthcare workforce is currently facing across multiple countries (Adams & Walls,

2020). Understanding the stressors that COVID-19 is placing on Italian clinicians due high confirmed cases and high death rates, nurses' perceptions about job demands and job resources, and their impact on physical and mental health can assist in recognizing what is needed to return to a point of wellness during and after such emergencies (Barello & Guendalina, 2020). Previous research also reports that specific components of the stress process model are related and different types of social support work to alleviate many of the negative effects of stressors (Whitlatch and Noelker, 1996). In a nutshell, a stressor can be considered as a trigger that causes a stress response.

2.2.1.2 Mediators

According to Pearlin et al. (1981), it is now consensually accepted that the intensity of the stress that people exhibit cannot be adequately predicted solely from the intensity of its sources, whether the sources be life events, chronic role strains, the diminishment of self or all three. Instead, people typically confront stress-provoking conditions with variety of behaviours, perceptions and cognitions that are often capable of altering the difficult condition or of mediating their impact. According to Pearlin et al. (1981), mediators have a crucial place in stress process, and they include social support and coping strategies.

Pearlin et al. (1981) also state that social support is referred to as the access to and use of individuals, groups or organizations in dealing with life's vicissitudes. For instance, in a pandemic situation, clear communication of directives and precautionary measures reduces the likelihood of emotional distress, as does peer support (Chan & Huak, 2004). Likewise, social support outside of the workplace may also buffer stress, but healthcare workers often neglect relationships with their friends and family due to heavy workloads or concerns around infecting others due to their own occupational exposure to the virus. Maintenance of social contact is increasingly challenging in the context of social distancing requirements, and there are reports of healthcare workers experiencing social stigma and abuse due to public fears of contracting the virus from those with greatest exposure (Chan & Huak, 2004).

The second mediating resource that has a prominent part in the stress process is coping strategy and that is according to (Pearlin et al, 1981). Coping has been largely shaped by clinical perspectives, although some current psychologically oriented work is also keenly sensitive to social factors underlying individual coping (Folkman & Lazarus, 1980). Pearlin & Bienman (2013) indicates that coping has been the most extensively studied resource, a cognitive response to a stressor that prevents the harm caused by it. Besides, there are differences between individuals in how they deal with the increased work-related demands and stressful situations.

2.2.1.3 Distress

Manifestations of stress are conditions that harm well-being and that also tax exceed the individual's coping resources and are appraised as stressful (Lazarus, 1966). Thus, distress refers to a manifest maladaptive response pattern in the presence of stress, such as anxiety, depression, anger, fear or aggression (Wheaton et al., 2013). In addition, stress can also rise when strain or stressors are internalized by a person, and the damage or disorder it inflicts can be measured by a study of its psychological, physical and behavioural manifestations. Thus, distress is an outcome or manifestations of stress or symptoms (Pearlin, 1989). This explains why the application of the stress process model by most sociologists highlights a structural over a cultural conceptualization of social arrangements.

The literature also indicates that healthcare professionals have been exposed to traumatic events and situations that could lead to significant distress and moral suffering (Delfrate et al., 2018; Barello and Guendalina, 2020; Radbruch et al., 2020; Barello et al., 2020b) such as difficult triage decisions regarding the allocation of limited resources to the patients that they are personally taking care of (Selman et al., 2020). The extreme pressures experienced by healthcare workers during a pandemic may increase their risk of burnout, which has adverse outcomes not only for individual wellbeing, but also for patient care and the healthcare system (Patel, Bachu, Adikey, Malik, & Shah, 2018).

In addition, distress is a behavioural response to stressful conditions, manifest in the form of a mixture of depression and anxiety (Wheaton & Montanzer, 2010). Distress is a form of bad stress (Wheaton, Young, Montazer, & Lahman, 2013) which reflects the intensity and long-range negative effects of stress (Gmelch, 1993) and ultimately makes individuals vulnerable to illness (Wheaton et al., 2013).

In this regard, Pearlin's stress process model serves as an organizing instrument for the study of mental health by delineating the pathways by which stress is both created and subsequently influences mental health. In its most recent iteration (Pearlin 1999), the model emphasizes the sociological study of stress by bringing attention to the way in which social status is endemic to each aspect of the stress process.

2.3 Gaps in the Literature

Even though HPCs were at front line during the first wave of Covid-19, not much research focuses on understanding their experiences of work-related stress during phase one of Covid-19. Prior studies focus on nurses´ stressors and psychological distress during the COVID-19 pandemic (Lorente, Vera & Peiró, 2021), impact of fear of COVID-19 Pandemic on the Mental Health of Nurses in Pakistan (Badu et al. 2020), Impact of Fear of COVID-19 Pandemic on the Mental Health of Nurses in Pakistan (Khattak et al. 2021). Therefore, this study is anticipated to provide information and filling up empirical knowledge in literature on experiences of HCPs of work-related stress in Lesotho.

2.4 Chapter Summary

The chapter has presented two sections, the theoretical framework and empirical literature. The theoretical framework of this study used the Stress Process Model by Pearlin et al., (1981) to explain the experiences of Senkatana healthcare professionals during the first wave of COVID-19 since it is argued by Pearlin et al., (1981) that stress is a social process involving sources of stress, mediators of stress and manifestations of stress. This perception is reinforced by the literature which revealed that stress is a response to the work situation. Hence, both the theoretical

framework and the literature specify that stress in the work place is not the same from person to person.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

The methodology chapter describes the specific steps that were used in conducting research. It covers the research design, study site, population, research instruments, data collection and data analysis.

3.1 Research Approach

This study is qualitative in nature. Bryman (2012) defines qualitative research as a research strategy that usually emphasizes words rather than quantification in the collection and analysis of data. For Creswell and Creswell (2018), qualitative approach is an approach for exploring the meaning of individuals or groups that give to a social or human problem. It involves emerging questions and procedures, data typically collected in the participant setting, data analysis inductively building from particulars to general themes and the researcher making interpretations of the meaning of the data. Accordingly, Stone (2015) states that qualitative research design is holistic in nature and that it involves discovery. It builds its premises on the basis of inductive reasoning and a researcher is highly involved with the subjects to collect, analyse and interpret the results, and give new insights about that phenomena. It is highly subjective research and needs a researcher ability to analyse and interpret the results. Qualitative method allows one to better understand the complexity of a phenomenon.

According to Borg & Gail (1989) and Bogda & Binkle (1982), qualitative researchers are themselves a primary instrument in data collection; researchers rely partly or entirely on their feelings, impressions, and judgment in data collection. They also rely strongly on their own interpretation in understanding the meaning of their data. Qualitative researchers attempt always to study human action from the perspective of the social actors themselves. However, the primary goal of the studies using this

approach is defined as describing and understanding (Verstehen) rather than explaining human behaviour (Babbie, 2012).

3.1.1 Interpretivism Approach

Interpretivism has been adopted in this study. According to Meyer (2008) interpretivism allows the researcher to interpret elements of the study and in this case the experiences of health care professionals during the COVID-19 era. Interpretivism is the research philosophy that will be used in this study since it investigates human experiences. Interpretivism is also used for in-depth investigations in small samples according to (Bryman, 2012). Therefore, studies like this one tends to be trustworthy and honest.

Interpretivist research is based on a naturalistic approach to collecting data. It involves researchers to interpret the element of the study (Saunders, Lewis, & Thornhill, 2012). Bryman (2012) showed that one of the leading intellectual traditions that have been responsible for the anti-positivist position has been phenomenology. This philosophy is concerned with the question of how individuals make sense of the world around them and how the philosopher should bracket out preconceptions in his or her grasp of that world.

According to Crossman (2021), qualitative research is a type of research which has long appealed to social scientists because it allows the researchers to investigate the meanings people attribute to their behaviour, actions and interactions with others hence is suitable for is study. Qualitative research is designed to reveal the meaning that informs the action or outcomes that are typically measured by quantitative research, so qualitative researchers investigate meanings, interpretations, symbols, and the processes and relations of social life. This aspect of qualitative research method will be able to answer the research objectives of this study. On the plus side, it creates an in-depth understanding of the attitudes, behaviours, interactions, events and social processes that comprise everyday life (Crossman, 2021). In doing so, it helps social scientists understand how everyday life is influenced by society-wide things like social structure, social order and all kinds of social forces. This type of

method also has the benefit of being flexible and easily adaptable to changes in the research environment, and can be conducted with minimal cost in many cases.

3.1.2 Phenomenological Research Design

Phenomenology was chosen as the study's research design. Phenomenology is concerned with how actual actors perceive and experience situations (Lester, 1999). The aim is to provide comprehensive understanding of situations, and to produce thorough descriptions gained from 'live' experiences (Qutoshi, 2018; Guilbeau, 2014). Phenomenology is most suited for this study since it concentrates on studying individuals' lived experiences within the context of their world (Neubauer, Witkop & Varpio, 2019). Phenomenology also corresponds with the methodological orientation of the study as it is a unit of the constructivist/interpretivist approach (Qutoshi, 2018). According to Rodriguez & Smith (2018) phenomenology allows the researcher to produce results that portray well-articulated descriptions and interpretations of the research participants' lived experiences.

3.2 Study Site

The study was conducted at Senkatana Centre of Excellence. While it is true that most healthcare professionals were probably facing various stressors affecting their well-being during the first wave of COVID-19, Senkatana was chosen as the study site of this study solely because it is Centre of Excellence for HIV and TB in the country. Furthermore, Senkatana was one of the few clinics conducting COVID-19 tests in the country.

Senkatana has various departments, namely Tuberculosis (TB) Department, Antiretroviral Therapy (ART) Department and Cervical Cancer Screening Department and Prevention of Mother-to-Child Transmission (PMTCT) for HIV Department. In this regard the researcher was interested in examining the different experiences of work-related stress amongst nurses from those different departments.

3.3 Population

A population is the whole group of individuals with qualities the researcher is interested in studying (Bryman, 2012). A population is also the total group of persons, actions or things that are of interest to the researcher, and he or she desires to explore (Sekaran & Bougie, 2016). David & Sutton (2011) also add that the population encompasses all the likely cases with definite features that could be included in the research. For purposes of this study, the target population was all the nurses working at Senkatana.

3.4 Sample

According to Bailey (1982) a sample is a part of the population which represents the characteristics of the population and suits the purpose of the research. It represents a proportion of the objects, events or persons which together comprise the subject of the subject. In this study sample was 10 nurses.

3.4.1 Purposive Sampling

Purposive sampling was used to select participants for this study. Babbie (2012) states that this type of sampling technique is also known as judgmental sampling and is based on the characteristics of the population and objective of the study, and is known to be judgmental, selective or subjective. For this study 10 nurses were chosen purposively to participate but not forced.

3.4.2 Inclusion and Exclusion Criteria

According to Government of Canada (2018), Tri-Council Policy Statement (TCPS) (2018) the Principle of Justice holds that particular individuals, groups or communities should neither bear an unfair share of the direct burdens of participating in research, nor should they be unfairly excluded from the potential benefits of research participation. Inclusiveness in research and fair distribution of benefits and burdens should be important considerations for researchers: research ethics boards

(REBs), research institutions and sponsors. Issues of fair and equitable treatment arise in deciding whether and how to include individuals, groups or communities in research, and the basis for the exclusion of some (Government of Canada, 2018).

Garg (2016) also added that inclusion and exclusion criteria specify who can be involved or omitted from the study sample. The inclusion criteria identify the study population in a reliable, dependable, eve, and impartial manner. Similarly, the exclusion criteria include issues or features that make the participants eligible to participate in the study. To be included in the study, a potential study participant had to be a nurse who was already working at Senkatana during the first wave of Covid-19. Candidates were excluded from the study if they did not meet the inclusion criteria

3.5 Method of Data Collection

For this study, the data was collected using face to face interviews, and responses were given verbally by participants and were recorded. Stone (2015) indicates that researchers conduct in-depth interviews by speaking with participants in a one-on-one setting. However, a researcher sometimes approaches the interview with a programmed list of questions for discussion but allows the conversation to change based on how the participant responds. At times, the researcher categorizes certain topics of interest but does not have a formal guide for the conversation but allows the participant to guide it.

Emir (2020) concurs and posits that interview consists of several questions which are addressed to people who become the research subjects. In addition, Creswell (2012) states that the interview is a period when researchers ask one or more participants, asking questions and recording their answers. The advantages of the face-to-face in-depth interviews include seeing facial expression of the participants and it allows the researcher to probe. As a result the qualitative researcher is able to gather rich and raw data.

3.5.1 The Administration of Individual Interviews

Data was collected between May and June 2022. Semi-structured interview guides were prepared for the nurses and they comprised of open-ended questions. During the interviews, an audio recorder was used and individual interviews lasted from 15-20 minutes. The recordings were all done with the agreement of the participants as per the consent forms that they had signed. In the administration of individual interviews, a copy of the informed consent form was shared with each subject and the researcher read the form. Interviews were done at work-place during tea time and lunch time; however, there were slight disturbances here and there. Interviews were done in Sesotho and English, transcribed and translated into English. In addition, a dairy was used to help the researcher to note down important points to facilitate further probing where the need for explanation arose.

A piloting was also done in the study with 2 participants at Senkatana. Formplus (2022) reports that pilot testing covers multiple activities that allow a researcher to evaluate the different aspects of a research project ahead of time. Formplus (2022) also indicated that piloting helps a researcher to develop the right research questions and a comprehensive research plan for research project before beginning its execution. After piloting, the researcher was able to identify that some participants did not understand some of the questions in English; hence, interview guide was also translated into Sesotho. See appendix C, Sesotho interview guide.

3.6 Data Analysis Techniques

Thematic analysis was used to analyse data collected for this study. Braun & Clarke (2006) define thematic analysis as a method for identifying, analysing and reporting themes in a data set. Thematic analysis organises and describes the researcher's data in detail as well as interprets aspects of the research topics aligned with research objectives. Javadi & Zarea (2016) defined a theme as a kind of agreement that when compared to the main text from which the theme is derived it is more precise, accurate, shorter and simpler. Hence, thematic analysis process analyses

the data without engaging pre-existing themes (Ibrahim, 2012). Braun & Clarke (2006) state that thematic analysis follows six phases when analysing data and they were used in this study. The six phases to follow for this type of analysis were:

- Familiarizing oneself with their data: Firstly, one has to read and re-read the transcripts (Maguire & Delahunt, 2017). According to Braun and Clarke (2006), it is imperative to read through the entire data set before beginning to code, as ideas and patterns will be shaped as one reads. Therefore, to achieve this stage, all data that would be transcribed were thoroughly read after collecting to give the researcher an idea about what was interesting about it. This was done to enable the researcher to allocate codes and categorise themes that emerged.

- Generating initial codes: In this phase, once all data have been read, it should be organised into meaningful groups (Braun & Clarke, 2006). Additionally, Javadi & Zarea (2016) show that at this stage data should be organized in significant groups and given initial codes. Coding reduces the data into small meaningful chucks which is determined by the study's research questions. Therefore, the researcher had to go through the data, identify parts of the text that were regarded as important and attached labels to them.

- Searching for Themes: Themes are sought from codes whenever initial codes are formed (Javadi & Zarea, 2016). Braun and Clarke (2006) state that in this phase refocus in the analysis is the broader level of themes rather than in codes which involves sorting codes into potential themes some of which form the overarching theme. After labels are attached to identify texts, they were categorized and all data extracts coded into themes to see if there was any pattern which emerged from the themes.

- Reviewing Themes: Braun & Clerk (2006) state that this phase involves two things, refining and reviewing the themes. This involves gathering together all useful data that is relevant to each theme and data associated with theme is colour coded (Maguire & Delahunt, 2017).

- The themes in the data set were identified, then reviewed once again to check if they were valid and to ensure that there were no inconsistencies

- Defining themes: Themes are defined and refined by identifying the essence of what each theme is about and figuring out what aspect of the data each theme captures (Braun & Clarke, 2006). This is the final resettlement of themes, stating subthemes and how they interact and relate to the main theme (Maguire & Delahunt, 2017). Therefore, the researcher went through the themes once again in order to recognise the meaning they were portraying. A very clear analysis was then written out of these themes, which led to the analyses of data in general. Theme names chosen were selected so that they attracted and gave the reader an idea of what it was about.

Table 1: Definition of Themes

Research questions	Themes	Sub-themes	Sub-sub themes	Theme definition
How did healthcare professionals felt when providing care to patients during the first wave of COVID-19?	Experiences of strain	1.Lack of knowledge 2.Lack of PPE 3.Increased workload 4.Strained marital relationships 5.No support from the union (LNA)		This theme entails all experiences of strain that the nurses experienced during the first wave of COVID-19.
What were the challenges brought by the COVID-19 emergence on the Senkatana healthcare workers in the first wave?	Experiences of distress	1.Fear of Covid-19 2.Depression due to Covid-19 pandemic		All problems brought by COVID-19 emergence on healthcare professionals during the first wave of COVID-19.
How healthcare professionals coped with work-related stress and the kind of support that was available for Senkatana healthcare professionals during the first wave of COVID-19?	Carrying on resources	1.Social support 2.Organizational support 3.Coping mechanisms	1.Spousal and family support 2. Compensation funds, provision of PPEs, Trainings and workshops, and Implementation of rotating shifts. 3. Oath retaken at work and religion the phase of COVID-19.	Coping mechanisms and kinds of support that was available during the first wave of COVID-19.

This table present a summary of all themes and how this themes relate to the research questions of this study.

- Writing Up: This phase involves the final analysis and writing of the report.

3.7 Ethical Considerations

The nature of this study rests upon the researcher protecting and being ethical to participants. Permission to carry out the study was sought from the Director at Senkatana Centre of Excellence. All COVID-19 precautionary measures were observed by the researcher to ensure safety for all participants as well as herself. The researcher adhered to the following ethical considerations: voluntary participation, confidentiality and anonymity as well as informed consent.

3.7.1 Seeking Permission

I, the researcher, sought permission from the Director to conduct research by interviewing the staff of Senkatana. The Director allowed me to conduct the study. To formalize this matter, I, the researcher, requested an introductory letter from the Head of Department of Sociology and Social Work of the National University of Lesotho and submitted it to the Director of Senkatana.

3.7.2 No Harm to Participant

According to Lani, Moran & Dsouza (2021) no harm to the participants means to maintain the welfare of human research participants by not harming the participants. This include physical harm that may be associated with experimental research studies, as well as emotional and psychological harm. Qualitative researchers are most often concerned with the emotional and psychological harm that participants may experience during data collection, especially if the research focuses on a sensitive issue. When appropriate, qualitative researchers would provide participants with a list of resources, such as crisis hotlines or online support group information. In

addition to providing these resources, qualitative researchers must disclose, on the informed consent form, the potential risks associated with participating in the study.

3.7.3 Confidentiality

According to Kaiser (2009) for qualitative researchers, maintaining respondent confidentiality while presenting rich, detailed accounts of their social life presents unique challenges. O'Donnell (2011) indicated that confidentiality entails the management of private information to protect the subject's identity. In this study, the researcher ensured that research participants remained anonymous by not using real names and only referring to them by their occupations in the report.

3.7.4 Voluntary Participation

For Klenke (2008), voluntary participation means that participants are not coerced to participate in the study and, at any time during the research, may withdraw their participation with no penalties. A major tenet or research ethics is that participation must be voluntary. To ensure that participation was voluntary, the researcher made all participants to be aware that they were participating in a study voluntarily. Ten participants were informed of all the consequences of the study and consent to participate (Rubin & Babbie, 2010). The researcher ensured that there was no element of coercion, either explicit or implied, or of undue influence (Wallace & Fleet, 2012).

3.7.5 Informed Consent

According to Babbie (2012) informed consent is described as an agreement between the researcher and the participant that assures and protects the participants about information they provided, and that the researcher will abide by the terms of the agreement. Therefore, informed consent forms were issued to all participants as agreement that they would take part in the study. They were debriefed on what the study was about, who the researcher was and what the information be used for.

Informed consent is an on-going process, not a one-time event according to (Vilma, 2018).

The researcher provided potential study participants time and chance to make an informed decision about whether they wanted to contribute or not. The researcher clarified the purpose of the study to the participants and participants were given an opportunity to pose questions for clarity. The researcher also informed participants that participation was voluntary and that they could refuse or withdraw from the study at any time they wanted and there would be no penalties.

3.7.6 Avoiding Bias

It is very important for the researcher to remain objective and impartial in research. Vilma (2018) stated that the researcher must always avoid bias in all aspects of the study, from data collection and analysis to interpretation of results. Mills, Durepos & Wiebe (2010) showed that researchers tend to make regular efforts to consider their own thoughts and actions considering different contexts. The relationships between a researcher and the researched have always been the subject of debate and scrutiny in qualitative research (Coffey, 2002).

Thakhathi, Shepherd & Nosizo (2017) state that it is unethical for the researcher to be biased in any form. Being biased is often confused with subjectivity but the two are different. Being biased is a deliberate effort by the researcher to either highlight something disproportionately to its true reality or hide what the researcher has found in the study (Kumar, 2011). According to Allen & Preiss (1997) subjectivity is generally conceptualized as the way research is influenced by the perspectives, values, social experiences, and viewpoint of the researcher.

3.7.7 Risks and Benefits for the Participants

Vilma (2018) showed that a study should increase the benefits of the participants and the society for participating. The study should benefit the researcher and

participants as well. According to Atkinson (2009) and Dingwall (2008) all activities pose some level of risk and research participation is no exception. It is generally accepted that participation in research should pose no more than minimal risk to participants, that researchers should assess the potential risks and that participants should be fully informed of these as well as the benefits of taking part in research. In response to the increased ethical regulation of social research, various authors have noted that the risks of harm arising from social research are minimal at most, if not non-existent (Atkinson, 2009; Dingwall, 2008). Certainly, in comparison with medical research the risks from social research are slight. However, this does not mean that risk of harm does not exist and authors such as Kent et al. (2002) and Van Teijlingen (2006) are doubtful of the assumption that social research is risk-free.

Despite some researchers' claims that social research is relatively risk-free, there is evidence that it poses a range of potential risks for both research participants and researchers. The greatest risk in social research is to researchers' and their participants' emotional and psychological well-being. Consideration also needs to be given to the risks of lone working for researchers (Wiles, 2013). The researcher in the current study ensured that research ethics were adhered to by clarifying the purpose of the research to the identified participants and ensured that participants would not be harmed socially and emotionally by participating in this study.

3.8 Criteria for Measurement Quality

There is a need to ensure quality in the study. The following criterion for measurement of quality to be undertaken is trustworthiness. Transferability and Authenticity are most important in qualitative research and Shenton (2004) stated that establishing authenticity and transferability is vital in qualitative research to ensure study findings' credibility.

3.8.1 Trustworthiness

Polit and Beck (2010) defined trustworthiness as the degree of confidence in data, interpretation and methods used to ensure the quality of study findings. Frey (2018)

stated that in qualitative research this refers to conveying the procedures researchers employ to ensure the quality, rigor, and credibility of a study while re-establishing congruence of the epistemological and ontological underpinnings of the researcher with the design, implementation and articulations of the research study. To ensure trustworthiness the researcher used Lincoln and Guba (1985)'s four criteria for measurement quality, trustworthiness, credibility, transferability, dependability and confirmability.

3.8.1.1 Credibility

Credibility is defined as the confidence that can be placed in the truth of the research findings. Credibility establishes whether the research findings represent plausible information drawn from the participants' original data and is correct interpretation of the participants' original views (Lincoln & Guba, 1985). In addition, credibility is the equivalent of internal validity in quantitative research and is concerned with aspect of truth-value (Korstjens & Moser, 2018).

3.8.1.2 Transferability

Lincoln & Guba (1985) defined transferability as the degree to which the results of qualitative research can be transferred to other settings with other participants. The researcher facilitates the transferability judgment by a potential user through thick descriptions. It is the responsibility of the researcher to make sure that information is satisfactory about the fieldwork site, and that it is made available to transfer. Therefore, thick description of the answers participants made are available for transferability of the results. The researcher provided dense description of the data to sufficiently allow for comparison. Thick description of participants' experiences, regarding their interpretations and feelings of the phenomenon in the disciplinary context took place (Holloway, 2005). This was done to provide rigor and clear decision trail so that the reader can consider if the findings could be transferable to other situations.

3.8.1.3 Dependability

To achieve dependability, researchers can ensure the research process is logical, traceable and clearly documented (Tobin & Begley, 2004). When readers are able to examine the research process, they are better able to judge the dependability of the research (Lincoln & Guba, 1985).

3.8.1.4 Confirmability

Confirmability is concerned with establishing that the researcher's interpretations and findings are clearly derived from the data, requiring the researcher to demonstrate how conclusions and interpretations have been reached (Tobin & Begley, 2004). According to Guba & Lincoln (1989), confirmability is established when credibility, transferability and dependability are all achieved. Koch (1994) recommended that researchers include markers such as the reasons for theoretical, methodological, and analytical choices throughout the entire study, so that others can understand how and why decisions were made.

3.8.3 Reflexivity

Researchers are encouraged to keep a self-critical account of the research process, including their internal and external dialogue (Tobin & Begley, 2004). Reflexivity is about acknowledging one's role in the research. According to Watt (2007) qualitative researcher is part of the research process, and prior experiences, assumptions and beliefs will influence the research process. Researcher reflexivity is a type of critical reflection about the position that the researcher is taking and how the researcher has taken this stance into account in the research. It is an important way to establish rigour in qualitative research, similar to the processes of defining measurement tools for validity in quantitative research.

3.9 Chapter Summary

In this chapter the methodological approaches used to answer the research questions were discussed in detail. This involved the research design, study population and study sites. This chapter described sample and purposive sampling, method of data collection and data analysis techniques. This chapter also presented ethical considerations and issues of trustworthiness, criteria for measurement quality and reflexivity. The subsequent chapter presents findings and discussion.

CHAPTER FOUR

PRESENTATION OF FINDINGS

4.0 Introduction

The purpose of the study was to examine Senkatana HCPs experiences of work-related stress during the first wave of COVID-19 in March 2020. The study was conducted specifically to understand how healthcare professionals felt when providing care to patients during the first wave of COVID-19. Secondly, the study was carried out to establish the challenges brought by the COVID-19 emergence on Senkatana healthcare professionals in the first wave of COVID-19. Lastly, it was meant to investigate how healthcare professionals coped with work-related stress and the kind of support that was available during the first wave of COVID-19.Therefore, this chapter presents the characteristics of study participants pertaining to the research objectives. Themes of the study are also presented in this chapter and they include experiences of strain, carrying on resources and experiences of distress as well as chapter summary.

4.1 Characteristics of the Participants

Table 2: Demographic Characteristics of Participants

Names	Age	Sex	Marital status	Number of children	Occupational status	Years in practice	Educational level
Agnes	29	Female	Married	1	Registered Nurse	4	Degree in Nursing
Mary	53	Female	Married	2	Trained Assistant Nurse	29	Certificate in Nursing
Eve	28	Female	Single	No Children	Registered Nurse	4	Diploma in General Nursing and Midwifery
Paula	33	Female	Single	No children	Registered Nurse	6	Diploma in General Nursing and Midwifery
Pretty	44	Female	Married	2	Registered Nurse	19	Advance University Diploma
Precious	36	Female	Married	2	Registered Nurse	7	Diploma in Midwifery
Rose	27	Female	Married	1	Registered Nurse	2	Diploma in General Nursing and Midwifery
Alfred	41	Male	Divorced	2	Trained Assistant Nurse	2	Certificate in Nursing
Jeannette	55	Female	Married	2	Registered Nurse	30	Diploma in General nursing
Emily	29	Female	Married	No children	Registered Nurse	6	Diploma in General Nursing and Midwifery

The study sample comprised ten participants between the ages 27 and 55 years (See Table 2). Of the ten participants in this study, nine were females and one was male. Only one male participant was able to participate in the study because all in all there are only two male nurses at Senkatana and the other male nurse was not working at Senkatana during the first phase of COVID-19 pandemic. Seven participants were married; two were single and only one was divorced. Only three

participants indicated that they did not have any children. Two participants were trained nursing assistants while eight participants were registered nurses. All participants had tertiary qualifications in the nursing field.

4.2 Experiences of Strain

Research Question 2 asked, “What were the challenges brought by the COVID-19 emergence on the Senkatana healthcare workers in the first wave?” The theme ‘*Experiences of strain”* emerged from the findings. The findings indicated that the nurses experienced strain caused by COVID-19 pandemic. These experiences of strain include lack of knowledge, lack of PPEs, increased workload, strained relationships and lack of support from the union (Lesotho Nursing Association). The findings also revealed that these experiences of strain were shared by the participants.

4.2.1 Lack of Knowledge

The findings revealed that COVID-19 was a new pandemic that no one knew anything about. The findings also showed that there was very limited knowledge of the disease: what had caused it and how to cure it. Alfred (ART) indicated that:

> *Even though I am healthcare worker, the problem was that I never went for training when I first heard of COVID-19 and some of the things I learned them from the internet; some I heard from the radio. Again the problem was, even the doctors could not understand or provide clear information about COVID-19. Actually, I did not know anything about COVID-19 and how to protect myself since I had inadequate resources. I really was scared.*

Alfred added that:

> *Again the problem was that when I see the patients coughing, I did not know what to do with such patients because by then I was having little information about COVID-19 pandemic. I only thought COVID-19 would attack me (he frowned) and die. I had fear of being infected and dying. Having inadequate knowledge about COVID-19 also scared me.*

Another participant revealed that they went for COVID-19 trainings and gained information and knowledge about COVID-19 pandemic. Pretty (TB) indicated that, t*hrough the trainings Ministry of Health provided to us healthcare professionals, I was able to carry out COVID-19 test by myself, also I had information on how I should protect myself and the patients as well. Furthermore, I had knowledge that patients can have COVID-19 pandemic without presenting any signs and symptoms of COVID-19 pandemic.*

Pretty added:

> *I remember the Director of Senkatana held onsite trainings as to remind healthcare professionals (staff) about safety precautionary measures. Senkatana supported healthcare professionals by allowing them to attend COVID-19 trainings. At Senkatana first training was attended by three people, two nurses and a doctor and I was included. Then onsite trainings were held as well.*

In summary, the findings revealed that one male participant was the only one who had limited knowledge and information about COVID-19 pandemic since he never went for trainings during the first wave of COVID-19. The findings also indicated that lack of knowledge heightened the risk behaviours of the participant unlike participants who attended trainings and workshops.

4.2.2 Lack of PPE

The findings revealed that since COVID-19 pandemic was a new disease, PPEs were insufficient in the country, even though participants were expected to continue working. Repeatedly the participants indicated that the supply of PPEs in the facility was insufficient Eve (PMTCT) stated that:

> *There were days when the we had to deliver services without considering safety precautionary measures due to lack of PPEs . For instance, at isolation areas where patients diagnosed with COVID-19 were kept, nurses were running in short of PPEs, but were expected to deliver services regardless of their safety.*

Other participants indicated that there was lack of PPEs during the first phase of COVID-19; however, EGPAF came to the rescue and provided healthcare professionals, including the nurses, with PPEs. Mary (TB) indicated that*:*

> *I was ensuring that patients were wearing masks, keeping social distancing and I was opening windows for ventilation. I was using protective clothes but during the first wave of COVID-19 there was insufficient personal protective equipment. The only things we had by then were gloves and masks. When COVID-19 emerged I was already using masks since it was a matter must on TB Department. I was merely bothered particularly by masks; since I was trained to wear masks every time and everywhere even at home. The only time was taking mask off was when I sleep. (She laughed).*

> Mary (TB) added that, *at times PPEs were running out of stock and EGPAF played important role more than anything. I heard that EGPAF provided us with PPEs.*

Alfred (ART) also explained that since COVID-19 was a new disease, resources such as PPEs were inadequate*, there were no resources like PPEs when COVID-19 emerged in Lesotho, however as time went on PPEs arrived but were insufficient.*

Emily (PMTCT) also pointed out that due to budget restriction PPEs were running out of stock, she explained:

> *I think the support was sufficient but again it was lacking maybe due to budget restrictions as much as the government wanted to provide adequate PPEs, and there would be stock outs for the reason being PPEs are required to the whole country. At times government would wait for donations and such resources would dela*y, *I was washing hands and sanitizing when soap and sanitizers were there since sometimes they were running in short. Again, at times when I had to wash my hands with water and soap, I would find that there is no water. This was putting me in a situation whereby I want to consider COVID-19 Safety pre-cautionary measures but I could not due to lack of resources. When resources were adequate I would sanitize and wear protective clothes all the time.*

In summary, the findings indicated that COVID-19 was a new pandemic; hence, during the first wave of COVID-19 there were insufficient PPEs and restricted budget was a barrier to adequate supply of PPEs. However, nurses were still expected to continue doing their work regardless of safety precautionary measures according to the findings. Again, the findings revealed that EGPAF contributed a lot to ensure that nurses were safe while providing healthcare services at work.

4.2.3 Increased Workload

The findings revealed that participants experienced heavy workload during the first wave of COVID-19. One participant pointed out that due to heavy workload, service delivery was also affected; hence, she tried to scale up the distribution of patients' medication as to minimize workload. Paula (ART) explained:

Workload was very heavy during the first wave of COVID-19 because we were working under a load of pressure. We had to deliver health services as fast as we could before patients become crowded and infected should anyone conduct COVID-19. Actually, I had to deliver services as fast as I could. Even though I was overloaded, I tried to scale up distribution of patients' medication to avoid crowding and to relieve myself. I would say COVID-19 also affected the quality of care, since we had to provide services as quick as we can.

One participant who was working in TB department pointed out that during heavy workload she took advantage of identifying TB cases since patients who had COVID-19 symptoms had similar symptoms of TB. Mary (TB) said:

(She shook head) hey! Workload was really bad; it was really bad. I saw all Maseru patients with signs and symptoms of COVID-19 coming to Senkatana. Most health facilities were closed due to COVID-19 cases they found and health facilities were closed due to disinfection. Actually, most patients were rejected from other healthcare facilities due to signs and symptoms of COVID-19 they were experiencing and referred to Senkatana for management. During that time, I took the advantage of identifying TB cases (patients) and TB presumptive cases (patients) particularly in my Department (TB ward) as to increase number of TB cases I have seen since I had to report those numbers.

Mary (TB) also added that*, Senkatana monthly reports revealed that nurses' workload was so heavy during the first wave of COVID-19 since more patients were being referred to Senkatana when identified as COVID-19 presumptive cases from other healthcare facilities. The statistics during that time also presented the increasing number of patients who were seen as TB presumptive cases yet they were COVID-19 cases since both diseases have similar symptoms.*

The findings also revealed that delegation of work was poor due to heavy workload and healthcare services were affected by heavy workload. Eve (PMTCT) explained that:

Workload was so heavy; even hand over was very poor lot of mistakes happened. Once more, due to rotation of shifts among the nurses, patients were not offered quality services due to heavy workload.

In summary, the findings indicated that nurses experienced heavy workload during the first wave of COVID-19, due to many patients who were seen at Senkatana. Again the findings revealed that heavy workload led nurses to be unable to deliver quality healthcare services to the patients due to poor delegation of work. The findings indicated that over other diseases that patients came with at the facility, nurses' workload increased since they also had to deal with COVID-19 which diverted all attention from the other diseases.

4.2.4 Strained Marital Relationships

The findings revealed that marital relationships were strained since some participants' partners could not go home and the family bonds were affected by COVID-19 restrictions, and other nurses were working with their spouses as nurses. The findings indicated that one participant's spouse, who was also working as a male nurse performing COVID-19 test at Likotsi Health Centre, showed that they were afraid of going home after work. Pretty (TB) explained:

The only thing that I and my husband were afraid of was what if we get infected at work, and it was obviously, we would bring the infection into our home with high rate since we were both healthcare workers. I was working at TB department and he was also consulting patients who are coughing and he was conducting COVID-19 tests at his work. Our fear was that we are going to infect our children with the infection we got from our work.

Another participant revealed that her relationship with her spouse was very straining during the first wave of COVID-19, particularly during lockdown restrictions when movements were restricted. Jeannette (PMTCT) a 55-year-old nurse said:

My husband was working in South Africa. During the first phase of COVID-19 it was very difficult for him to cross the border and come home. We were only

talking over the phone and giving each other support pertaining COVID-19 and its restrictions over the phone only. It was hard for me.

One participant also added that her marital relationship was strained by long distance relationship and COVID-19 pandemic restrictions. Jeanette explained:

Yes I would say psychologically COVID-19 has affected my marriage since it took us a long time without seeing each other. We were only talking over the phone. My husband even got sick while he was still in South Africa. It was just flu, not COVID-19, since he tested negative though he was scared. But I told him that it could have been better if he was here by my side. Still we were communicating over the phone.

In summary, the findings revealed that one participant indicated that her spouse was also screening patients for COVID-19. This couple was afraid of being infected while at work. Their fear was to take infection home to the children. The findings also revealed that a 55 year old participant have been psychologically affected by COVID-19 pandemic since she was not staying with her spouse. The findings also showed that the participant's spouse got ill and the assumption was that he was infected with COVID-19. Though the participant's partner tested COVID-19 negative he was scared. The participant could not be there for her spouse due to COVID-19 restrictions. The findings revealed that this married couple was only communicating over the phone; hence, the participant explained that she was psychologically affected by COVID-19 pandemic.

4.2.5 No Support from the Union (Lesotho Nursing Association)

The findings revealed that the union (Lesotho Nursing Association) did not support some of the nurses during the first wave of COVID-19. The participant pointed out that he did not receive any support from the union. Alfred (ART) said, *(He frowned), aaaah our union does not work and it is useless.*

Another participants revealed that the union did nothing for her since she was hired by a non-governmental organization (EGPAF). Paula (ART) explained:

> *Here in Lesotho we have Nursing Association. At Senkatana I could not recall interacting with the union during the first wave of COVID-19 but what I knew was that they were advocating for provision of PPEs to the nurses in order for us to work. They also advocated for compensation funds for the nurses. I was not part of the nurses who received it. The Union did nothing for me; I thought maybe it was because I am not hired by the government.*

Another participant showed that she was rejected from the union's office when she sought for support. Egnas (Cervical) explained:

> *Every year we register with Lesotho Nursing Council but this year we were unable to register due to emerged COVID-19 pandemic. However, there was no direct support from the union, except being denied from going to union's offices. We were told not to go to the union's office as to avoid contamination.*

The findings indicated that the union did nothing for the nurses during COVID-19 pandemic, though the participants were expecting support from it. The findings also showed that the nurses who were employed by non-governmental organization (EGPAF) did not receive any kind of support from the union.

In summary, these findings revealed that the sources of stress among the nurses were shaped by the lack of knowledge, lack of PPEs, increased workload, strained relationships and no support from the union (Lesotho Nursing Association). Again, the findings indicated that the sources of stress, which were the stressors, affected the quality of healthcare services nurses offer.

4.3 Carrying on Resources

Research Question 3 asked, "How did healthcare professionals cope with work-related stress and what kind of support was available during the first wave of COVID-19?" The theme, '*Carrying on resources',* emerged from the findings. The theme of

carrying on resources showed what influenced the nurses to continue with their job even during the difficult time of COVID-19. These carrying on resources were shared by the participants, and they included the kind of support that was available and the coping strategies.

4.3.1 Social Support

The findings revealed that social support played a very significant role during the first wave of COVID-19. The findings also revealed that the participants showed that the kind of support that was available for them during the first phase of COVID-19 under social support was spousal support and family support.

4.3.1.1 Spousal Support

The findings of this study presented that participants who were married have received greatest support from their spouses during the first wave of COVID-19 pandemic. In this regard, the findings showed that participants received support from their spouses in different ways. Eve (PMTCT) explained:

> *My husband was ensuring that I have everything to protect myself against COVID-19. He was giving me medicines that we were told by then that they are good to boost immune system, and such medicines were strong enough to suppress severity of COVID-19. My husband was also bringing supplements like vitamin C and concoctions such as ginger, lemon, garlic, artemisia afra "lengana" and eucalyptus and so forth.*

Precious (ART) who was also married shared the same sentiment:

> *Truly speaking, my spouse was also scared; I do not want to lie. But he was trying by all means to hide his emotions solely since he wanted to offer me the best support I needed. Every time when I got home from work he would ask*

me how work was, and whether I have encountered any challenges. My husband was so supportive.

Jeannette (PMTCT) who was 55 year old and married revealed that her spouse was supporting her over the phone since he was working in South Africa.

My spouse was giving me support over the phone because it was very difficult for him to cross the border. I and my husband were giving each other a support over the phone only since he was working in South Africa during the first wave of COVID-19.

Rose (Cervical) also indicated that her spouse was very supportive during the first wave of COVID-19; however, they were both nurses but working in different districts. They were supporting each other over the phone. She explained:

Yes my husband supported me a lot; we were both nurses and we were in a difficult situation of COVID-19 together. We were talking to each other over the phone since he was working in Quthing district and I was working in Maseru district.

One participant from TB department indicated that she received no support from the spouse. Mary a 53 year old nurse corroborated the issue, *I have not received much support from my spouse. But his was only concerned on how would I get to work since there were no taxis due to lock down.*

One participant who was a divorcee pointed out that he did not receive any support, Alfred (ART)*; during the first wave of COVID-19 things were still difficult between me and my former spouse and my children were still with their mother. So, I did not receive any support from them.*

In summary, the findings indicated that married participants received significant support from their spouses, except one participant who indicated that she did not receive any support from her spouse. The findings also revealed that some participants received support from their spouses over the phone since they could not go home due to COVID-19 restrictions and their spouses were working far from home. In addition, the findings revealed that one participant who is a divorcee did not receive any support since he was single.

4.3.1.2 Family Support

The findings indicated that participants did not only receive support from their spouses but also from their immediate families. Other participants revealed that their parents were very supportive and encouraged them to take into consideration safety precautionary measures during the pandemic era. Eve (PMTCT) explained:

> *My parents were providing emotional support. Remember when I said there was a colleague who tested COVID-19 positive, I was very scared on that day but my parents provided emotional support. My parents were reminding me to consider safety precautionary measure all the time.*

A 55 year old participant revealed that she received support from her family members through WhatsApp communication since COVID-19 restrictions could not allow them to meet physically. Jeannette (PMTCT) explained:

> *(She frowned), yes in family we were supporting each other. I am saying this because I come from the family that comes from Ministry of Health. We were supporting each other and discussing our fears also helping each other with advices like those of concoction including ginger and lemon. We were communicating with other members of the family through WhatsApp, and advising each other to take supplement in order to boost immune system. Me and my family we were having WhatsApp group.*

Another participant indicated that her family was looking up to her for support. Her family believed that since she was a healthcare worker, she was the one who was supposed to support them with the skills she had as a nurse. Mary (TB) explained:

> *(She laughed), I did not receive much support from my family but rather they were looking up to me as a healthcare professional to support them with the knowledge I had pertaining to COVID-19. The only thing they were saying was "It will be alright one day".*

Another participant indicated that he did not receive any support from the family: Alfred (ART) explained, (he *frowned) I did not get any support because I live alone and my family lives far from where I stay.*

In summary, the findings indicated that most participants received support from their families except two participants who revealed that they did not receive support from their families. Again, the findings revealed that family support during the first phase of COVID-19 was very significant to the nurses since they were dealing with different stressors.

4.3 2 Organizational Support

From the findings, organisational support was the kind of support that the participants indicated that they received during the first wave of COVID-19. The findings also revealed that not all of the participants received organisational support, particularly compensation funds.

4.3.2.1 Compensation Funds

The participants revealed that they received compensation funds as a form of support during the first wave of COVID-19. Precious (ART) who was employed by the Ministry of Health explained:

> *Union fought for us, the nurses, to get compensation funds for six months. If I recall well, we only received compensation funds and personal protective*

equipment as a support from the union. Mmmm….we received R3 000 per month for six months, R18 000 in a nutshell. Compensation funds were meant to compensate us for being at risk during COVID-19 pandemic.

Another participant (Eve, PMTCT) who was also employed by the Ministry of Health indicated that:

Lesotho Nursing Association (LNA) fought for us to get compensation funds. Since our government seemed to be reluctant. I remember the Minister of Health by then, when we were supposed to be given risk allowance. He said we want a lot of money yet when he started working at the government he was earning a little. This issue led to an extent that the nurses working at Tsepong Hospital and other healthcare facilities in the country went for strike. For these narratives LNA stood up and fought for our rights as nurses.

The findings revealed that the Union fought for the participants to receive compensation funds that were meant for healthcare professionals since they were at the frontline during COVID-19 pandemic. Most participants perceived compensation funds as the kind of support they received during COVID-19 pandemic.

Other participants showed that only the nurses received the compensation funds: Rose (Cervical) said that, u*nion fought for healthcare professionals, particularly the nurses, to receive compensation funds or risks allowance. But as for me Lesotho Nursing Association did nothing for me; I did not receive any risk allowance since I am hired by non-government organisation.*

Another participant, who was employed by Elizabeth Glazer Paediatric AIDS Foundation (EGPAF), indicated that she did not receive any compensation funds from the Lesotho Nursing Association (LNA). Paula (ART) shared the same sentiment:

I did not receive any support from Lesotho Nursing Association, including compensation funds, probably, because I am hired by non-governmental organization.

In summary, the findings revealed that the nurses who received compensation funds were only those who were employed by the Ministry of Health and nurses who were employed by EGPAF and other organisations did not receive compensation funds since their salaries already comprised of the compensation funds. Again, the findings indicated that the participants perceived compensation funds as a significant kind of support they received during the first wave of COVID-19.

4.3.1.2 Provision of PPE

The findings indicated that PPEs were seen by the participants as the most important support they received. Participants revealed that they were provided with PPEs by different donors during COVID-19. The findings also revealed that participants shared the same sentiments about provision of PPEs as the kind of support they received during the first wave of COVID-19 pandemic. Rose (Cervical) explained:

I would say yes; yes, because EGPAF provided us the nurses with masks and everything that would help us to stay protected against COVID-19 all the time. Ministry of Health also tried to ensure that we receive PPEs here at Senkatana.

Precious (ART) also stated that she received PPEs from her employer as to protect herself against COVID-19. Precious said, y*es I did receive a support from my employer (Ministry of Health). The support I received was PPEs which were meant for healthcare professionals to protect themselves against COVID-19 when providing healthcare services to the patients.*

One participant revealed that at times PPEs were running out of stock and EGPAF supplied Senkatana with PPEs. Mary (TB) stated:

> *Sometimes PPEs were running out of stock. Actually, EGPAF played important role more than anything, and I heard that EGPAF was providing Senkatana with PPEs to avoid stock outs.*

Paula (ART) indicated that Senkatana was willing to provide her with PPEs, but she was denying the offer since her employer was ensuring that she had adequate PPEs all the time. She explained: *Senkatana provided support through provision of PPEs, though I declined the offer since my employer was ensuring that I have sufficient PPEs all the time.*

In summary, it is indicated from the findings that participants received PPEs as a kind of support from the Ministry of Health in partnership with EGPAF. In addition, participants, when asked about the kind of support they received during the first of COVID-19, provision of PPEs were key support. From the findings, participants seemed to appreciate the significant role EGPAF played to ensure that healthcare professionals were safe while at work regardless of who employed healthcare professionals.

4.3.1.3 Trainings and Workshops on Safety Precautionary Measures and Treatment

The findings indicated that participants were offered COVID-19 trainings to improve their knowledge pertaining to the pandemic. Again, participants also revealed that trainings were intended to ensure that healthcare professionals were practicing safety precautionary measures accordingly while providing healthcare services. Agnes (Cervical) explained:

> *Senkatana provided all healthcare professionals with COVID-19 trainings, as to equip employees with knowledge about COVID-19 pandemic. For example, trainings entailed how to wear protective clothes, how often healthcare*

professionals should sanitize their hands as well as how to protect themselves against patients diagnosed with COVID-19.

Other participants indicated that it was through COVID-19 trainings that they were able to perform COVID-19 test at Senkatana. Mary (TB) stated:

I think with the trainings Ministry of Health provided, I was able to conduct COVID-19 tests. Again it was through the trainings that I was able to protect myself and patients against COVID-19. Ministry of Health also provided equipment for trainings held.

Eve (PMTCT) also indicated that, *I attended workshops and onsite trainings pertaining to COVID-19. Those workshops and trainings were intended to equip healthcare professionals on how to wear PPEs properly and on what conditions should certain PPEs be used.*

Emily (PMTCT) added that:

Ministry of Health provided trainings in order for us to know more about COVID-19 pandemic, including how to protect ourselves at work place and at home. Again, Ministry of Health helped us by implementing testing sites for COVID-19 so that we can refer patients for COVID-19 tests. If I recall well, in few months after trainings, we received COVID-19 test kits from the Ministry of Health, and that is when we started to test patients and deliver samples to laboratory. As time went on, the Ministry provided some facilities including Senkatana COVID-19 rapid test kits, which provide results immediately. In a nutshell, Ministry of Health provided PPEs, COVID-19 test kits and COVID-19 compensation funds.

In summary, these findings revealed that participants were offered a chance to take part in COVID-19 pandemic trainings and workshops. Again, the findings revealed that healthcare professionals seemed not scared of COVID-19 pandemic after they went for trainings. The findings indicated that trainings offered to the participants

were very productive; hence, the participants indicated that after the trainings and workshops they were able to conduct COVID-19 tests on their own.

4.3.1.4 Implementation of Rotating of Shifts

The findings also revealed that implementation of rotating of shift were considered by the participants as coping mechanism during the first wave of COVID-19. Participants showed that the implementation of rotating shift relieved them from workload and stress they experienced. Alfred (ART) explained:

> *I was very scared of COVID-19 but my employer came with an idea that we should not all come to work so that when others get ill, others would be able to come to work. Actually my employer introduced alternating shifts so that the facility would not be closed and that made me feel better.*

Alfred also indicated that implementation of rotating shifts minimized infection rate and risks behaviour. Alfred (ART) explained*, Senkatana also helped all healthcare professions with implementing alternating shifts so that if one of the staff members got infected we do not all get infected.*

Similarly, Jeannette (PMTCT) explained*, rotating shifts were implemented to avoid crowd at work and to minimize risks behaviour and workload.*

Rose (Cervical) also shared her sentiment:

> *Senkatana management ensured that rotating shifts are being implemented to eliminate COVID-19 pressure among the nurses, the patients and to all healthcare workers.*

The findings revealed that participants considered implementation of rotating shifts as coping mechanism. Findings also revealed that implementation of rotating shifts minimized nurses' workload, infection rate and fear of being infected by COVID-19 disease.

4.3.1.5 Counselling

The findings indicated that the participants showed that counselling was provided to healthcare professionals during COVID-19 pandemic and it was helpful. Precious (ART) explained:

> *Senkatana provided healthcare professionals with COVID-19 trainings, as to equip them with knowledge about this disease. Again, time and again we were provided with counselling and the Professional Counsellors kept on reminding us that COVID-19 is here and dangerous but we should not panic above all. Therefore, we should ensure that we use personal protective equipment appropriately and we make use of them every day.*

Jeanette (PMTCT) also stated that:

> *Ministry of Health brought healthcare professionals including Professional Counsellors to intensify trainings pertaining to COVID-19 and all healthcare professionals who attended the trainings were able to learn more and better about COVID-19 pandemic.*

The findings showed that participants were offered counselling during the first wave of COVID-19 pandemic as to help them to accept and to understand that COVID-19 exited and safe precautionary measures had to be taken into consideration all the time. The findings also showed that provision of counselling sessions to the nurses was significant because nurses were able to cope with work-related stress, through counselling sessions provided.

4.3.3 Coping Mechanisms

The findings showed that coping mechanisms were mediators of stress during the first wave of COVID-19. The findings also revealed that these coping mechanisms included counselling, oath retaken at work, prayer (religion) and implementation of shifts.

4.3.2.2 Oath Retaken at Work

The findings also revealed that some participants reconsidered their oath at work as a significant coping strategy. Participants also pointed out that during the hard times of COVID-19 pandemic their oath at work made them to continue doing their work regardless of the situation. Pretty (TB) explained:

> *(She laughed) as a nurse I told myself that patients are here because they need my help. Again I told myself that I am already at work; therefore, I might as well deliver healthcare services to the patients. Even during that horrible phase of COVID-19 I kept providing healthcare services to patients since as healthcare personnel I kept telling myself that it is depending on individual's emotional state whether he or she help the patients or led them go without help. As a nurse at times I was scared but I had to help the patients. However, ethics as well as promise I made when I got hired encouraged me to continue helping the patients.*

The findings revealed that Alfred (ART), who was the only male nurse, indicated that during the first wave of COVID-19 he was scared. He further explained that due to the promise he made at nursing school and when he got hired, he had to provide healthcare services even in devastating situations like COVID-19 era. The findings indicated that nurses' pledge stated that nurses should consider patient's total health first. He explained:

I just told myself I am front line worker. At times I just found myself providing services though I know from the bottom of my heart that I was scared of COVID-19. However, my promise (oath) stated that patients first; therefore, my promise as a front liner made me to continue with provision of healthcare care services to the patients even when in devastating times.

Paula (ART) also shared the same sentiment, *I had to deliver healthcare survives regardless my fear; I am here for the patients.* Precious (ART) also indicated that oath retaken at work and knowledge she had about COVID-19 helped her to cope during the first wave of COVID-19, as well as the passion she had for her work. She explained:

I coped with COVID-19 solely because as a nurse I told myself that I am a front liner, and I made a promise that I will provide healthcare services to patients regardless of the situation. For instance, not all of people went to school and not all people are the nurses but through my knowledge I had to help patients so as to end this disease.

Precious (ART) added:

The knowledge I am talking about include safety precautionary measures of COVID-19. I was teaching patients on how to wear masks, how often they should sanitize their hands and how to wash their hands. Again I was encouraging my patients to keep social distancing all the time. Moreover, what made me continue with my job is the passion of my profession as a nurse; that I still had to help the sick; it was a passion for my work. As long as I protect myself I would still be protected and taking safety precautions accordingly. Even so, I would not reject the patients because of COVID-19, I had to help them but considering all the precautions we were told to consider.

In summary, the findings indicated that participants considered oath and ethics at work as coping mechanisms during the first phase of COVID-19. The findings also revealed that participants put patients' total health first and they continued proving healthcare services even in challenging situations like COVID-19 pandemic which scared almost everyone. Passion for work was also revealed by the participant as a coping strategy according to the findings.

4.3.2.3. Religion (Faith) During the Phase of Covid-19

The findings also showed that some participants considered their religion as coping mechanism when facing COVID-19 pandemic. Participants showed their faith and prayed for the pandemic. Paula (ART) explained:

> *You know, life is all in the hands of God. I was still hoping that God will help us. When I had patients first thing to do was to ensure that I provide best healthcare services regardless my fear. Also the fact that I am here for them, I was providing healthcare services regardless how fearful I was considering this pandemic.*

One participant also showed that during the first wave of COVID-19, when it was difficult to meet their loved ones, they prayed over phone and provided each other support over the phone. Jeanette (PMTCT) explained:

> *I could not go to South Africa and see my husband due to lockdown restrictions; it was a difficult time for us truly. But we were supporting each other over the phone. It even went to extra mile whereby we sat down and pray over the phone with my husband.*

In summary, the findings indicated that the participants considered prayer as a coping mechanism when facing devastating situations of COVID-19 pandemic, when they were unable to meet with their loved ones.

4.4 Experiences of Distress

Research Question 1 asked, “How did healthcare professionals feel when providing care to the patients during the first wave of COVID-19?” A theme *‘Experiences of distress*’ emerged from the findings. The findings also revealed that some

participants experienced distress such as fear of COVID-19 and depression due to lack of social support and insufficient implementation of coping mechanisms.

4.4.1 Fear of COVID-19

Participants indicated that they were afraid of infection and death due to COVID-19 pandemic. Pretty (TB) explained that:

> *I was afraid of infection and the way people were dying in Lesotho and in other countries. I was scared so much that I wished healthcare facilities could be closed and no one become in contact with other people and isolate ourselves. I also feared being referred to an isolation area where people diagnosed COVID-19 positive were kept, if I became infected by COVID-19".*

Other participants revealed that they were scared by this unknown pandemic and the way in which COVID-19 pandemic spread. Precious (ART) explained:

> *What scared me most about COVID-19 is that it was an unknown disease and how it transmits from one person who has COVID-19 to another. Again what strained me most was also the fact that COVID-19 does not have cure and how we would know that a patient has COVID-19, particularly the first time we meet him or her at the facility. We were also told initially that some people might not have signs and symptoms that portray COVID-19 while others might have just flu. My concern was how easily I can differentiate that this person has flu and this one has COVID-19.*

Mary (TB), who was 53-year-old, also shared her sentiment about COVID-19 pandemic. She explained that she was scared of COVID-19 like other people. Mary indicated that with her nursing experience she remembered that there were illnesses like leprosy which people used to fear but eventually people turned to live with it while others forgot about it. She further explained:

> *Like other people fear COVID-19, I was also scared. But as nurse with long service and experience, I remembered there were other diseases like leprosy which people used to fear back in the years and eventually people used to live with such diseases though they left unforgettable memories. It is true I was scared like other people but I realized as nurse I have to do something as to avoid this disease to end Basotho nation. If nurses are scared more than patients Basotho nation will all end.*

Another participant, a 55 year old female nurse, explained her fear about COVID-19. She was scared of COVID-19 pandemic because she heard that this pandemic attacked older people, particularly those who already had chronic illnesses like herself. Jeannette (PMTCT) explained:

> *What scared me most is the kind of deadly flu that kills people, especially older people. I was already assuming that COVID-19 will attack me, particularly because I had heard that this pandemic had killed older people who had chronic illnesses like high blood pressure and diabetes. The chronic illnesses and age made them more vulnerable.*

In summary, the findings revealed that participants feared COVID-19 pandemic since it was an unknown disease without a cure. The findings also indicated that a 55-year-old participant was very afraid of dying due to COVID-19 pandemic since she is already having chronic illnesses which made her prone to acquire COVID-19 pandemic easily. The findings also indicated that as much as some participants were scared of the pandemic, others no longer feared COVID-19 pandemic because they compared COVID-19 pandemic with other illnesses like leprosy. Leprosy used to scare a lot of people like COVID-19 did. Leprosy was killing many people and it had no cure by then but now it has.

4.4.2 Depression due to COVID-19 Pandemic

The findings revealed that COVID-19 pandemic caused depression. One participant revealed that most of the time during the pandemic, she was depressed from the

stressors that she went through every day. The findings identified that stressors included lack of knowledge, lack of PPEs, increased workload, strained marital relationships and no support from the Lesotho Nursing Association. Only Paula (ART) revealed that:

> *COVID-19 came with a lot of stress and depression because I was wondering what if I become infected and die. The pandemic made us stare at death in the face every day and healthcare professionals were all depressed. I kept wondering if I would survive, if I died who would take care of my family because I am the bread winner who provides everything. What if one of my family members got sick too? I would have to leave work to care for them meaning I do not get paid".*

In summary, the participant clearly indicated that the strain caused by this pandemic made her to wonder a lot of things, mostly dying, which ultimately led her to being depressed even though she continued caring for her patients in that trying devastating era.

4.5 Chapter Summary

This chapter presented the results of the study. The findings revealed how the nurses from different departments of Senkatana experienced strain due to COVID-19 pandemic, particularly while at work. These findings also showed that those experiences of strain were very challenging. The findings identified carrying on resources which were beneficial for the nurses to reduce the level of strain triggered by COVID-19 pandemic. These findings shaped the experiences of Senkatana healthcare professionals during the first wave of COVID-19.

CHAPTER FIVE

DISCUSSION AND CONCLUSION

5.0 Introduction

The focus of this chapter is on the discussion of the findings of the study. This chapter starts off by deliberating on the findings and linking them with the literature and the theoretical framework of the study and ends with the drawing of conclusions and recommendations based on the key findings.

5.1 Discussion of the Findings

The general purpose for this study was to describe HCPs experiences of work-related stress during the first wave of COVID-19. This study sought to understand how healthcare professionals felt when providing care to patients during the first wave of COVID-19. Secondly, this study sought to find out the challenges brought by the COVID-19 emergence on Senkatana healthcare professionals in the first wave of COVID-19. Lastly, this study sought to investigate how healthcare professionals coped with work-related stress and the kind of support that was available for Senkatana healthcare professionals during the first wave of COVID-19.

This study focused only on nurses from both government and non-governmental organizations (NGOs), since it asked questions about the experiences from the standpoint of the participants as suggested by Hammaberg et al (2016). The study utilized phenomenology as the research design. The data was collected using in-depth interviews among 10 purposively selected participants and was analysed using thematic analysis technique. From the findings, the key themes, '*Experiences of strain, carrying on resources and experiences of distress*', emerged; they were found to describe the experiences of healthcare professionals during the first wave of COVID-19. These themes were also found to have subthemes.

Theme one, '*Experiences of strain',* included the following subthemes: lack of knowledge, lack of PPEs, increased workload, strained marital relationships and no support from the union - Lesotho Nursing Association (LNA). The second theme, *'Carrying on resources',* entails the following subthemes: social support, organizational support and coping strategies. The third theme, '*Experiences of distress*', involves fear of Covid-19 and depression due to Covid-19 as subthemes.

5.1.1 How did healthcare professionals feel when providing care to patients during the first wave of COVID-19?

Manifestations of stress are conditions that harm well-being and also whose tax exceed the individual's coping resources are appraised as stressful (Lazarus, 1966). According to Wheaton et al. (2013) work-related distress refers to a manifest maladaptive response pattern in the presence of stress such as anxiety, depression, anger, fear or aggression. Research Question 1 asked: **'How did healthcare professionals feel when providing care to patients during the first wave of COVID-19?'** Therefore, the theme *experiences of distress* emerged from the findings (see Section 4.4) to answer this research question.

The findings revealed that participants experienced signs of distress such as fear of Covid-19 and depression. These findings showed the view that distress may manifest itself expressively with problems such fear (Huang, Han, Luo et al., 2020). Huang, Han, Luo et al. (2020) also confirmed that fear of infection and transmission of the virus may lead the HCPs to be isolated from their family members, to change their routines and to reduce their social support network.

The previous research also revealed that ensuring that nurses were always kept updated with the latest and most accurate information related to coronavirus reduces the fear and negative emotions associated with the disease (Labrague & De los Santos, 2020a). Therefore, this information should include the nature of the causative virus, precautions to prevent transmission of the virus to the self and others, how to effectively use hospital resources and new trends in the management of coronavirus patients (Labrague & De los Santos, 2020a). Gross & Canteras (2012)

added that fear associated with coronavirus may interfere with work performance in nurses, leading to higher levels of job dissatisfaction and increased intentions to leave the profession and the organization.

The findings also revealed that participants experienced depression difficulties due to distress. This finding confirmed the notion that distress results in depression, anxiety, burnout and stress (Mo et al., 2020; Nemati et al., 2020; Wu et al., 2020; Xing et al., 2020; McGrath et al., 2003; Oyeleye et al., 2013). The findings further revealed that during the COVID-19 pandemic, HCPs endured tremendous physical pressure, and excessive workload which led to increased mental stress likely to induce anxiety and depression (Leo et al., 2021; Khalid & Ali, 2020).

In summary, responses to Research Question 1 confirmed the study's theoretical framework which stated that distress is a behavioural response to stressful conditions, manifest in the form of a mixture of depression and anxiety (Wheaton & Montanzer, 2010). The findings revealed that nurses experienced symptoms of distress such as anxiety and depression. This confirmed the notion that distress is an outcome or manifestations of stress (Pearlin, 1989).

5.1.2 What were the challenges brought by the COVID-19 emergence on the Senkatana healthcare professionals in the first wave?

Research has found that nurses encountered challenges which can be considered as stressors, such as lack of knowledge, lack of PPEs, increased workload, strained marital relationship and no support from the union (LNA). However, literature also indicated that HCPs were also likely to face enormous work pressure during outbreaks due to variety of factors. These include a high risk of infection, insufficient personal protective equipment, heavy workloads and manpower shortages, confusion, discrimination, isolation, patients with negative emotions, separation from their families and burnout (Kim, 2018; Chou, Ho, Wang et al., 2010).

The key interest in this study was to examine the experiences of healthcare professionals during the first wave of COVID-19. Therefore, research question 2 asked, '**What were the challenges brought by the Covid-19 emergence on the**

Senkatana healthcare professionals in the first wave?' In the Literature Review challenges brought by COVID-19 were explored (see Section 2.1.1). Razu et al. (2021) confirmed that the COVID-19 outbreak has caused public stress as professionals went through a series of physical and mental challenges both inside and outside which affected their own subjective evaluations.

In addition, the literature confirmed that work-related stress disproportionally affected healthcare workers (Russell, Maître, Watson et al., 2018) and is linked to excessive workloads and working in emotionally charged environments where demand outweighs capacity (Shanafelt, Mungo, Schmitgen, et al., 2016). Similarly, the literature revealed that shortage of healthcare workers, lack insufficient knowledge about the virus and insufficient basic training were some of the reasons leading to excessive workload, which consequently gave rise to psychological stress (Razu, et al., 2021).

As indicated in (Section 4.2), the findings revealed the five subthemes of theme "*Experiences of strain"* among the nurses during the first wave of COVID-19. This subthemes included lack of knowledge, lack of PPEs, increased workload, strained marital relationship and no support from the union (LNA). This denotes that the experiences of strain among the nurses at Senkatana were mostly physical (Seerber & Iregren, 1992), task-related (Sonnentag & Frese, 2003) and attributable to task-design workplace conditions (CCOHS, 2020). This also verifies that occupational stress for the nurses was associated with workload issues (Gemlch, 1993, Burke, 2009, Voeller-Langemo, 1988).

The findings of the study also revealed that lack of knowledge was significantly associated with work-related stress among the nurses during the first phase of COVID-19. Therefore, this confirms with the literature that the lack of training commonly influenced risk factors among HCP for developing psychiatric morbidities (Naushad et al. 2019).

Lack of PPEs was also found to be associated with nurse's stress, which confirmed previous research findings that the shortage of personal protection equipment (PPE) in clinical settings gave rise to the development of adverse mental status of frontline HCPs (Chang, Xu, Rebaza et al., 2020). Equally, the lack of PPE was identified as a

top concern for U.S. nurses in a survey conducted by the American Nurses Association (ANA) (2020) and results of the study indicated that lack of PPEs was a significant factor in nurses' mental health and more nurses were afraid to go to work. Furthermore, McCauley & Hayes (2020) revealed that difficult work conditions during the first months of the pandemic was characterized by the lack of PPE.

In the present study, increased workload was also found to be significantly associated with stress found among the nurses during the first wave of COVID-19, confirming previous research findings that the spread of major pandemics such as COVID-19 creates an increasing demand on the health care workers (HCWs) (Chen et al., 2020). In a related research, findings revealed that nurses were prone to extreme work pressure. Therefore, US National Institute for Occupational Safety and Health (NIOSH) ranks the nursing profession among the top 40 professions with a high prevalence of diseases caused by a heavy workload (Safari et al., 2013). Huang et al. (2018) also added that particular nature of nurses' occupation showed that nurses are burdened with a great responsibility, a heavy workload, extreme work pressure and the need to work in rotating shifts.

The findings also revealed nurses experienced strained marital relationship during the first phase of COVID-19. Therefore, this confirmed the literature that healthcare workers used support from communication with family, spouses, friends and colleagues as their primary coping mechanisms to manage the adverse mental health consequences of the COVID-19 pandemic (Blanco-Donoso et al., 2021; Chen et al., 2020; Cai, 2020; Chew et al., 2020; Dong et al., 2020; Giusti et al., 2020; Labrague & De los Santos, 2020a, 2020b; Maraqa et al., 2020; Nie et al., 2020; Vagni et al., 2020; Xiao et al., 2020).

Apart from strained marital relationships, subtheme "no support from the union" (Lesotho Nursing Association) is also associated with work-related stress among the nurses according the findings. However, Billings et al. (2021) argued that HCPs should be provided with financial incentives (e.g., risk allowance) for the hazardous work that they undertook during the COVID-19 pandemic. Furthermore,

organizational support should play an important role in ensuring positive outcomes among HCPs. By so doing, it improves work performance, patient satisfaction and reduces the impact of anxiety in hazardous circumstances (Jung, Jung, Lee, & Kim, 2020; Labrague et al., 2018).

In summary, responses to Research Question 2 established that “Stressors” of the study’s theoretical framework argued that *stressors* are conditions and events that evoke strain (Pearlin et al., 1983; Wheaton et al., 2013). The findings revealed that the challenges and strains among the nurses at Senkatana were similar to those experienced by other nurses in different places (Burke, 2009; Gemlch, 1993; Maben & Bridges, 2020; Naushad et al. 2019; Voeller-Langemo, 1988). In addition, challenges and stress experienced by the nurses at work derived from lack of knowledge, lack of PPEs, increased workload, strained marital relationship and no support from the union (LNA).

5.1.3 How did healthcare professionals cope with work-related stress and what kind of support was available during the first wave of COVID-19?

According to Pearlin et al. (1981) mediators have a crucial place in stress process, and they include social support and coping strategies. Pearlin et al., (1981) further stated that social support is referred to as the access to and use of individuals, groups, or organizations in dealing with life’s vicissitudes. According to Lazarus & Folkman (1984) coping is defined as a process of constantly changing ones cognitive and behavioural efforts in order to manage specific external or internal demands appraised as taxing or exceeding the resources of a person.

Therefore, to find out how healthcare professionals coped with work-related stress Research Question 3 asked, **‘How did healthcare professionals cope with work-related stress and what kind of support was available during the first wave of COVID-19?’** The theme *“Carrying on resources”* emerged from the findings (see Section 4.3) to answer this research question. The findings revealed that nurses considered social support, organizational support and coping strategies to cope with work demands during the first wave of COVID-19.

The findings revealed that social support was available during COVID-19 to lower work-related stress. This aligned with Chan & Huak's (2004) assertion that social support outside work is also an essential coping mechanism. The findings also confirmed that gradually, social support is positively related to psychological health and quality of life. That is, enhancing social support would improve the mental health of healthcare professionals and quality of life of the recipients (Leavy, 1983; Kessler, Price, & Wortman, 1985; Tani, & Castagna, 2017).

Under social support the findings revealed that married participants identified spousal support as the most significant support they received when faced with work-related stress during the first wave of COVID-19. This confirmed the literature that healthcare workers used support from communication with family, spouses, friends and colleagues as their primary coping mechanisms to manage the adverse mental health consequences of the COVID-19 pandemic (Blanco-Donoso et al., 2021; Chen et al., 2020; Cai, 2020; Chew et al., 2020; Dong et al., 2020; Giusti et al., 2020; Labrague & De los Santos, 2020a, 2020b; Maraqa et al., 2020; Nie et al., 2020; Vagni et al., 2020; Xiao et al., 2020).

The findings also found that family support was associated with social supports among the participants. Giusti et al. (2020) confirmed that family support was reported by healthcare workers as the significant support they received during the first wave of COVID-19 (see Section 2.1.2.3).

Besides social support, organizational support is another factor that empowered HCPs to cope with work demands during COVID-19's first wave. This confirmed previous research findings that organizational support plays an important role in ensuring positive outcomes among HCPs. The findings also revealed that organizational support improves work performance, patient satisfaction and reduces the impact of anxiety in hazardous circumstances (Jung, Jung, Lee, & Kim, 2020; Labrague et al., 2018). Again, organizational contexts have been found to have powerful effects on workers' psychological outcomes (Chan, & Huak, 2004).

Under organizational support, the findings revealed that compensation was indicated by the participants as the most significant support they received during the first wave of COVID-19, *"Lesotho Nursing Association (LNA) contributed a lot by fighting for us to get compensation funds"* (Eve). Billings et al. (2021) also verifies that HCPs should be provided with financial incentives (e.g., risk allowance) for the hazardous work that they undertook during the COVID-19 pandemic. Savitsky, Radomislensky & Hendel (2021) also showed that at a time of crisis, it is time to take care of those who took risks on the frontline.

Provision of PPEs was also found to be significantly associated with organizational support. This finding confirmed previous research that effective leadership and organizational support through the implementation of a safe and resilient work environment, provision of complete and quality PPE and supplies to prevent infection are vital to support the needs of HCWs and improve HCP's mental well-being (Labrague & De los Santos, 2020a; Maraqa et al., 2020). The results further showed that adequate PPE could attenuate the possible adverse impact of COVID-19 exposure on mental health by helping nurses to feel safer in terms of their own health, their patients' and their loved ones' (Arnetz, Goetz, Sudan, Arble, Janisse & Arnetz, 2020).

The findings of this study also revealed that trainings and workshops on the safety precautionary measures and treatment were related to organizational support. Gebbie & Qureshi (2002) confirmed that trainings are critical components of nurses' readiness and competence in any disaster or disease outbreak response. The previous research also revealed that attendance of COVID–19-related training was identified as a significant predictor of fear of COVID–19 and nurses who reported having attended such trainings experienced decreased levels of fear of coronavirus than those who did not (Labrague et al. 2018; Labrague et al., 2016). This finding coincides with that of Wu et al. (2020), where nurses who received COVID–19 epidemic training reported a significant reduction in apprehension about the disease and increased mental health functioning compared with those nurses who had not received training related to the management of COVID–19.

The findings also revealed that implementation of rotating shifts was associated with organizational support among the nurses. Ha et al. (2022) confirm that nurses with rotating shifts have suffered from low physical activity during the COVID-19 pandemic. The findings revealed that counselling was related to social support among the participants. West et al. (2018) confirmed that organizations should prioritize the provision of support services to HCPs such as peer-to-peer counselling. The findings also confirm that regular counselling sessions and mental evaluation of healthcare professionals needs to be intensified in order to improve HCPs performance at work (Okediran et al. 2020).

Coping strategies are considered to be those specific efforts (both behavioural and psychological) that individuals employ to master, reduce and tolerate stressful events (Sreeramareddy, Shankar, Binu, et al. 2007). However, related stressful circumstances do not lead to the same stress outcomes in all people. Instead, mediators of stress exist and modify the stressor outcome relationship (Weiss & Lonnquist, 2017).

The findings revealed that most participants associated oath retaken at work as a coping strategy. The findings also revealed that seeing patients suffer or die due to conditions beyond their control puts a strain on nurses' psychological health (Lesley, 2021). Hence, nurses may experience conflict with ethical principles contained in the Nightingale Pledge commonly spoken at nursing school graduations: "I will do everything in my power to preserve life, alleviate suffering, and promote health for my patients and my community. I will refrain from any action which might be harmful to those in my care." However, the American Nurses Association's Code of Ethics (2015) is clear: "Nurses have the same obligations to self as to others. Investment in one's well-being is not optional. It is a moral mandate" (Lesley, 2021).

Previous research also confirmed that nursing staff has taken an oath to the *Hippocratic Oath* or *Nightingale Florence Pledge* that only integrity and honesty deserve the trust of patients and commitment of saving life (Zhu, 2022). However, HCPs were also facing ethical dilemmas during Covid-19 (Cai et al., 2020; Sun et al. 2020; Aliakbari et al. 2015).

The findings also tell that religion was associated with coping strategy among the participants. This finding highlights that *religious* coping strategies such as praying were also reported as an important coping mechanism in three cross-sectional studies (Salman et al., 2020; Palestine Maraqa et al., 2020). Salman et al. (2020) and Palestine Maraqa et al. (2020) further indicated that praying and other religious activities were the highest-ranked coping mechanisms among healthcare workers.

In summary, answers to Research Question 3 confirmed 'Mediators' of the study's theoretical framework which stated that mediators have crucial place in stress process, and they include social support and coping strategies (Pearlin et al., 1981). The findings highlighted the notion that the nurses mainly needed coping strategies, organizational support and social support to cope with work-related stress specifically during the first wave of COVID-19 (Pearlin & Aneshensel, 1986).

5.2 Limitations of the Study

This study examined the experiences of healthcare professionals at Senkatana during the first wave of COVID-19. Even though the study provided some interesting insights it was not without limitations. The main limitation of the study was that the researcher could not interview all the nurses since most of the nurses at Senkatana were not working there during the first wave of COVID-19. They were deployed to Senkatana after the first phase of COVID-19. However, increased workload and lack of resources remained a common problem in healthcare facilities all around the country and future research needs to examine the experiences of healthcare workers at Senkatana.

5.3 Conclusions

Three main themes, each with their own subthemes, were determined as a result of the thematic analysis. The themes of experiences of strain, carrying on resources and experiences of distress showed the need for social support, organizational support and coping strategies during the first wave of COVID-19.

The findings suggested that Senkatana healthcare professionals experienced work-related stress during the first wave of COVID-19. Lack of knowledge, lack of PPEs, increased workload, strained marital relationships and no support from the union (LNA) were seen to explain the work-related stress among Senkatana healthcare professionals during the first phase of COVID-19. However, understanding influences that donated to work-related stress and its effects on nurses' work outcomes is critical when planning and implementing measures to address nurses' needs and concerns. Again, healthcare professionals need to be supported with sufficient resources for physical and mental health.

5.4 Recommendations

The study revealed that Senkatana healthcare professionals experienced heavy workload and revealed the lack of PPEs during the first wave of Covid-19. Therefore, the study creates the following recommendations: (1) Healthcare organizations, along with Lesotho Ministry of Health, should intensify health system by increasing the number of healthcare professionals as it is essential for the development and to ensure that healthcare services are at best quality when pandemic emerge. (2) Compensation funds should be provided to all healthcare professionals regardless of the different employers since healthcare professionals were all at risk when the pandemic emerged. This will strengthen the quality of health service provided by the healthcare professionals. (3) The provision of pre-counselling and post-counselling to healthcare professionals should be highly taken into consideration when pandemics like COVID-19 arise as it left unforgettable marks on its victims and people who lost their loved ones. (4) Both healthcare organisations and Ministry of Health should ensure that healthcare professionals have adequate access to information when the pandemic emerge since lack of knowledge in this study triggered fear of COVID-19 and depression among healthcare professionals.

5.5 Suggestions for Further Research

The study identified the experiences of work-related stress among Senkatana healthcare professionals during the first wave of COVID-19. This study focused only

to the experiences of the nurses as healthcare professionals, not to all healthcare professionals who also had experiences of the first wave of COVID-19. Therefore, it is also recommended that future research should focus on other healthcare professionals and other healthcare facilities in Lesotho.

REFERENCES

Adriaenssens, J., De Gucht, V., and Maes, S. (2015). Determinants and prevalence of burnout in emergency nurses: *A systematic review of 25 years of research*, 52(2): 649-661.

Aliakbari, F., Hammad, K., Bahrami, M. and Aein, F., 2015. Ethical and legal challenges associated with disaster nursing. *Nursing Ethics*, *22*(4): 493-503.

Alimoradi, Z., Broström, A., Tsang, H.W., Griffiths, M.D., Haghayegh, S., Ohayon, M.M., Lin, C.Y. and Pakpour, A.H., 2021. Sleep problems during COVID-19 pandemic and its' association to psychological distress: A systematic review and meta-analysis. *Clinical Medicine*, *36*: 100916.

Alimoradi, Z., Gozal, D., Tsang, H.W., Lin, C.Y., Broström, A., Ohayon, M.M. and Pakpour, A.H., 2022. Gender-specific estimates of sleep problems during the COVID-19 pandemic: Systematic review and meta-analysis. *Journal of sleep research*, *31*(1): 13432.

Allaert, F.A. and Urbinelli, R., 2004. Sociodemographic profile of insomniac patients across national surveys. *CNS drugs*, *18*(1):3-7.

Allen, M., and Preiss, R. W. (1997). Comparing the persuasiveness of narrative and statistical evidence using meta-analysis. *Communication research reports*, *14*(2): 125-131.

Altena, E., Baglioni, C., Espie, CA. et al. (2020). Dealing with sleep problems during home confinement due to the COVID-19 outbreak: practical recommendations from a task force of the European CBT-I academy, 29(4): 13052.

American Nurses Association (ANA). (2020). More than 32k nurses share experience from the front lines. [Online]

Available at: https://anamichigan.nursingnetwork.com/nursing-news/179188-more-than-32k-nurses-share-experience-from-the-front-lines.

Andel, S., A., Tedone, A., M., Shen, W., & Arvan, M., L. (2022). Safety implications of different forms of understaffing among nurses during the COVID-19 pandemic. *Journal of Advanced Nursing*, 78:121–130.

Aneshensel, C.S. (1992). Social stress: Theory and research. *Annual review of sociology*, 15-38.

Aneshensel, C. S. (1996). The consequences of psychosocial stress: The universe of stress outcomes. In H. B. Kaplan (Ed.), Psychosocial stress: *Perspectives on structure, theory, life-course, and methods,* 111-136.

Aranda-Reneo, I., Pedraz-Marcos, A. and Pulido-Fuentes, M., 2021. Management of burnout among the staff of primary care centres in Spain during the pandemic caused by the SARS-CoV-2. *Human resources for health*, *19*(1):1-10.

Arnetz, J.E., Goetz, C.M., Sudan, S., Arble, E., Janisse, J. and Arnetz, B.B. (2020). Personal protective equipment and mental health symptoms among nurses during the COVID-19 pandemic. *Journal of occupational and environmental medicine*, *62*(11): 892-897.

Atkinson, P. (2009). Ethics and ethnography. *Twenty-First Century Society*, *4*(1): 17-30.

Au, A., 2017. The sociological study of stress: an analysis and critique of the stress process model. *European Journal of Mental Health*, *1*(12): 53-72.

Ayanian, J. Z. (2020). Mental health needs of health care workers providing frontline COVID-19 care. In *JAMA Health Forum*, 4(1): 97. [Online]

Available at: https://jamanetwork.com/channels/health-forum/fullarticle/2764228

Babbie, E. and Rubin, A. (2010). Essential research methods for social work. *Belmont, Ca*.

Babore, A., Lombardi, L., Viceconti, M.L., Pignataro, S., Marino, V., Crudele, M., Candelori, C., Bramanti, S.M. and Trumello, C. (2020). Psychological effects of the COVID-2019 pandemic: Perceived stress and coping strategies among healthcare professionals. *Psychiatry research*, *293*, 113366.

Badu, E., O'Brien, A.P., Mitchell, R., Rubin, M., James, C., McNeil, K., Nguyen, K. and Giles, M. (2020). Workplace stress and resilience in the Australian nursing workforce: A comprehensive integrative review. *International journal of mental health nursing*, *29*(1): 5-34.

Baduge, M.S.P., Morphet, J. and Moss, C. (2018). Emergency nurses' and department preparedness for an ebola outbreak: A (narrative) literature review. *International emergency nursing*, *38*: 41-49. [Online]

Available at: https://doi.org/10.1016/j.ienj.2017.12.002

Bai, Y., Lin, C.C., Lin, C.Y., Chen, J.Y., Chue, C.M. and Chou, P. (2004). Survey of stress reactions among health care workers involved with the SARS outbreak. *Psychiatric services*, *55*(9): 1055-1057.

Bailey, C., Yeoman, R., Madden, A., Thompson, M. and Kerridge, G. (2019). A review of the empirical literature on meaningful work: Progress and research agenda. *Human Resource Development Review*, *18*(1): 83-113. [Online]

Available at: https://doi.org/10.1177/1534484318804653

Balicer, R.D., Omer, S.B., Barnett, D.J. and Everly, G.S. (2006). Local public health workers' perceptions toward responding to an influenza pandemic. *BMC Public Health*, *6*(1):1-8. [Online]

Available at: https://doi.org/10.1186/1471-2458-6-99

Bandyopadhyay, S., Baticulon, R.E., Kadhum, M., Alser, M., Ojuka, D.K., Badereddin, Y., Kamath, A., Parepalli, S.A., Brown, G., Iharchane, S. and Gandino, S. (2020). Infection and mortality of healthcare workers worldwide from COVID-19: A systematic review. *BMJ global health*, *5*(12).

Banerjee, D. (2020). The COVID-19 outbreak: Crucial role the psychiatrists can play. *Asian journal of psychiatry*, *50*:102014.

Barello, S. and Graffigna, G. (2020). Caring for health professionals in the COVID-19 pandemic emergency: toward an "epidemic of empathy" in healthcare. *Frontiers in Psychology*, *11*: 1431. [Online]

Available at: https://doi.org/10.3389/fpsyg.2020.01431

Barello, S., Palamenghi, L. and Graffigna, G. (2020). Burnout and somatic symptoms among frontline healthcare professionals at the peak of the Italian COVID-19 pandemic. *Psychiatry research*, *290*: 113129. [Online]

Available at: https://doi.org/10.1016/j.psychres.2020.113129

Beehr, T. (2014). *Psychological stress in the workplace (psychology revivals)*. Routledge.

Benedict, C., Partinen, M., Bjorvatn, B. and Cedernaes, J. (2021). Sleep in female healthcare workers during COVID-19: a cross-sectional survey study in sweden during the flattening of the first wave of the pandemic. *Annals of the American Thoracic Society*, *18*(8): 1418-1420.

Bhaskar, S., Rastogi, A., Menon, K.V., Kunheri, B., Balakrishnan, S. and Howick, J. (2020). Call for action to address equity and justice divide during COVID-19. *Frontiers in Psychiatry*, *11*: 559905.

Bhaskar, S., Sharma, D., Walker, A.H., McDonald, M., Huasen, B., Haridas, A., Mahata, M.K. and Jabbour, P. (2020). Acute Neurological Care in the COVID-19 Era: The Pandemic Health System RE silience PROGRAM (REPROGRAM) Consortium Pathway. *Frontiers in Neurology*, *11*:579.

Bierman, A. (2010). Stress valuation and the experience of parenting stress in late life. In W. R. Avison, C. S. Aneshensel, S. Schieman, & B. Wheaton (Eds.), *Advances in the conceptualization and study of the stress process: Essays in honor of Leonard I. Pearlin* (pp. 198–205). New York: Springer.

Billings, J., Ching, B.C.F., Gkofa, V., Greene, T. and Bloomfield, M. (2021). Experiences of frontline healthcare workers and their views about support during COVID-19 and previous pandemics: A systematic review and qualitative meta-synthesis. *BMC health services research*, *21*(1): 1-17.

Blake, H., Bermingham, F., Johnson, G. and Tabner, A. (2020). Mitigating the psychological impact of COVID-19 on healthcare workers: a digital learning

package. *International journal of environmental research and public health*, *17*(9): 2997.

Blanco-Donoso, L.M., Moreno-Jiménez, J., Amutio, A., Gallego-Alberto, L., Moreno-Jiménez, B. and Garrosa, E. (2021). Stressors, job resources, fear of contagion, and secondary traumatic stress among nursing home workers in face of the COVID-19: The case of Spain. *Journal of Applied Gerontology*, *40*(3): 244-256.

Braun, V. and Clarke, V., 2006. Using thematic analysis in psychology. *Qualitative research in psychology*, *3*(2): 77-101.

Bryman, A. (2012). *Social Research Methods* (4th ed.). New York, NY: Oxford University Press.

Cacioppo, J.T., Hawkley, L.C., Crawford, L.E., Ernst, J.M., Burleson, M.H., Kowalewski, R.B., Malarkey, W.B., Van Cauter, E. and Berntson, G.G. (2002). Loneliness and health: Potential mechanisms. *Psychosomatic medicine*, *64*(3): 407-417.

Cai, H., Tu, B., Ma, J., Chen, L., Fu, L., Jiang, Y. and Zhuang, Q. (2020). Psychological impact and coping strategies of frontline medical staff in Hunan between January and March 2020 during the outbreak of coronavirus disease 2019 (COVID-19) in Hubei, China. *Medical science monitor: international medical journal of experimental and clinical research*, *26*(1).

Chan, A.O. and Huak, C.Y. (2004). Psychological impact of the 2003 severe acute respiratory syndrome outbreak on health care workers in a medium size regional general hospital in Singapore. *Occupational medicine*, *54*(3): 190-196.

Chang, D., Xu, H., Rebaza, A., Sharma, L. and Cruz, C.S.D. (2020). Protecting health-care workers from subclinical coronavirus infection. *The Lancet Respiratory Medicine*, *8*(3):13. [Online]

Available at: https://doi.org/10.1016/S2213-2600(20)30066-7

Chang, M.C., Chen, P.F., Lee, T.H., Lin, C.C., Chiang, K.T., Tsai, M.F., Kuo, H.F. and Lung, F.W. (2021). The effect of religion on psychological resilience in

healthcare workers during the coronavirus disease 2019 pandemic. *Frontiers in psychology*, *12*: 628894. [Online]

Available at: https://doi.org/10.3389/fpsyg.2021.628894

Chen, H., Sun, L., Du, Z., Zhao, L. and Wang, L. (2020). A cross-sectional study of mental health status and self-psychological adjustment in nurses who supported Wuhan for fighting against the COVID-19. *Journal of Clinical Nursing*, *29*(21-22): 4161-4170.

Chen, Q., Liang, M., Li, Y., Guo, J., Fei, D., Wang, L., He, L.I., Sheng, C., Cai, Y., Li, X. and Wang, J. (2020). Mental health care for medical staff in China during the COVID-19 outbreak. *The Lancet Psychiatry*, *7*(4): 15-16.

Chen, Y. and Zeng, Y. (2018). Correlation of depression and anxiety with social support and quality of life in patients with chronic wounds. *Zhong nan da xue bao. Yi xue ban= Journal of Central South University. Medical Sciences*, *43*(9): 1032-1036.

Cheng, V.C., Wong, S.C., To, K.K., Ho, P.L. and Yuen, K.Y. (2020). Preparedness and proactive infection control measures against the emerging novel coronavirus in China. *Journal of Hospital Infection*, *104*(3): 254-255. [Online]

Available at: https://doi.org/10.1016/j.jhin.2020.01.010

Chersich, M.F., Gray, G., Fairlie, L., Eichbaum, Q., Mayhew, S., Allwood, B., English, R., Scorgie, F., Luchters, S., Simpson, G. and Haghighi, M.M. (2020). COVID-19 in Africa: care and protection for frontline healthcare workers. *Globalization and health*, *16*(1): 1-6.

Chew, Q.H., Chia, F.L.A., Ng, W.K., Lee, W.C.I., Tan, P.L.L., Wong, C.S., Puah, S.H., Shelat, V.G., Seah, E.J.D., Huey, C.W.T. and Phua, E.J. (2020). Perceived stress, stigma, traumatic stress levels and coping responses amongst residents in training across multiple specialties during COVID-19 pandemic—A longitudinal study. *International Journal of Environmental Research and Public Health*, *17*(18): 6572.

Chew, N.W., Ngiam, J.N., Tan, B.Y.Q., Tham, S.M., Tan, C.Y.S., Jing, M., Sagayanathan, R., Chen, J.T., Wong, L.Y., Ahmad, A. and Khan, F.A. (2020). Asian-

Pacific perspective on the psychological well-being of healthcare workers during the evolution of the COVID-19 pandemic. *BJPsych open*, *6*(6).

Chirico F, Magnavita N. (2021). The crucial role of occupational health surveillance for health-care workers during the COVID-19 Pandemic. Workplace Health Safe, 69(1): 5-6.

Chou, T.L., Ho, L.Y., Wang, K.Y., Kao, C.W., Yang, M.H. and Fan, P.L. (2010). Uniformed service nurses' experiences with the severe acute respiratory syndrome outbreak and response in Taiwan. *Nursing Clinics*, *45*(2): 179-191.

Cockerham, W.C. (2017). *Medical Sociology*: Stress (14th ed, pp. 147-150). New York, NY: Routledge.

Coffey, A. (2002). Ethnography and Self: Reflections and Representations. Qualitative Research in Action, 313-331.

Cole-King, A. and Dykes, L., 2020. Wellbeing for HCWs during COVID19. *Retrieved*, *8*: 2020. [Online]

Available at: https://www.lindadykes.org/covid19

Cole-King, A., and Dykes L. (2020) Wellbeing for HCWs during COVID19, Cooper, J., Phelps, A.J., Ng, C.H., & Forbes, D. (2020). Diagnosis and treatment of post-traumatic stress disorder during the COVID-19 pandemic. *Australian Journal of General Practice*, 49(12), 785-789. [Online]

Available at: https://doi.org/10.31128/AJGP-07-20-5557

Council on Higher Education. (2020). National Health Training College Accredited Programs. Retrieved from Council on Higher Education. [Online]

Available at: http://www.che.ac.ls

Cronin-Stubbs, D. and Rooks, C.A. (1985). The stress, social support, and burnout of critical care nurses: The results of research. *Heart & lung: the journal of critical care*, *14*(1): 31-39.

Dar, K.A., Iqbal, N., Prakash, A. and Paul, M.A. (2018). PTSD and depression in adult survivors of flood fury in Kashmir: The payoffs of social support. *Psychiatry research*, *261*: 449-455. [Online]

Available at: https://doi.org/10.1016/j.psychres.2018.01.023

Daria, S. and Islam, M.R. (2021). The second wave of COVID-19 pandemic in Bangladesh: an urgent call to save lives. *Asia Pacific Journal of Public Health*, *33*(5): 665-666.

David, M. and Sutton, C.D., 2011. *Social research: An introduction*. Sage.

De Brier, N., Stroobants, S., Vandekerckhove, P. and De Buck, E. (2020). Factors affecting mental health of health care workers during coronavirus disease outbreaks (SARS, MERS & COVID-19): A rapid systematic review. *PloS one*, *15*(12): 0244052.

Delfrate, F., Ferrara, P., Spotti, D., Terzoni, S., Lamiani, G., Canciani, E. and Bonetti, L. (2018). Moral Distress (MD) and burnout in mental health nurses: a multicenter survey. *La Medicina del lavoro*, *109*(2): 97.

Delgado, C., Upton, D., Ranse, K., Furness, T. and Foster, K. (2017). Nurses' resilience and the emotional labour of nursing work: An integrative review of empirical literature. *International journal of nursing studies*, *70*: 71-88.

Delgado-Gallegos, J.L., Montemayor-Garza, R.D.J., Padilla-Rivas, G.R., Franco-Villareal, H. and Islas, J.F. (2020). Prevalence of stress in healthcare professionals during the covid-19 pandemic in Northeast Mexico: a remote, fast survey evaluation, using an adapted covid-19 stress scales. *International journal of environmental research and public health*, *17*(20): 7624. [Online]

Available at: https://doi.org/10.3390/ijerph17092997

Dewa, C.S., Loong, D., Bonato, S. and Trojanowski, L. (2017). The relationship between physician burnout and quality of healthcare in terms of safety and acceptability: a systematic review. *BMJ open*, *7*(6): 015141.

Diamantopoulos, A., Sarstedt, M., Fuchs, C., Wilczynski, P. and Kaiser, S. (2012). Guidelines for choosing between multi-item and single-item scales for construct measurement: a predictive validity perspective. *Journal of the Academy of Marketing Science*, *40*(3): 434-449.

Dong, Z.Q., Ma, J., Hao, Y.N., Shen, X.L., Liu, F., Gao, Y. and Zhang, L. (2020). The social psychological impact of the COVID-19 pandemic on medical staff in China: A cross-sectional study. *European Psychiatry*, *63*(1).

Dowrick, A., Mitchinson, L., Hoernke, K., Mulcahy Symmons, S., Cooper, S., Martin, S., Vanderslott, S., Vera San Juan, N. and Vindrola-Padros, C. (2021). Re-ordering connections: UK healthcare workers' experiences of emotion management during the COVID-19 pandemic. *Sociology of Health & Illness*, *43*(9), pp.2156-2177.

Draper, H., Wilson, S., Ives, J., Gratus, C., Greenfield, S., Parry, J., Petts, J. and Sorell, T., 2008. Healthcare workers' attitudes towards working during pandemic influenza: a multi method study. *BMC Public Health*, *8*(1): 1-7. [Online]

Available at: https://doi.org/10.1186/1471-2458-8-192

Duncan, D.L. (2020). What the COVID-19 pandemic tells us about the need to develop resilience in the nursing workforce. *Nursing Management*, *27*(3): 22-27.

Durkheim, E. (1897). 1951. Suicide: A study in sociology. *English translation. London: Routledge*.

Dowrick, A., Mitchinson, L., Hoernke, K., Mulcahy Symmons, S., Cooper, S., Martin, S., Vanderslott, S., Vera San Juan, N. and Vindrola-Padros, C. (2021). Re-ordering connections: UK healthcare workers' experiences of emotion management during the COVID-19 pandemic. *Sociology of Health & Illness*, *43*(9): 2156-2177.

Draper, H., Wilson, S., Ives, J., Gratus, C., Greenfield, S., Parry, J., Petts, J. and Sorell, T. (2008). Healthcare workers' attitudes towards working during pandemic influenza: a multi method study. *BMC Public Health*, *8*(1): 1-7.

Duncan, D. L. (2020). What the COVID-19 pandemic tells us about the need to develop resilience in the nursing workforce. Nursing Management, 27(3): 22-27.

Folkman, S. (2013). Ways of coping checklist (WCCL). *Encyclopaedia of behavioural medicine*, 2041-2042.

Formplus. (2022). Pilot testing: Meaning, Importance and Question Example. [Online]

Available at: https://www.formpl.us/blog/pilot-testing

Frey, B.B. ed. (2018). *The SAGE encyclopedia of educational research, measurement, and evaluation*. Sage Publications.

Garg, R., 2016. Methodology for research I. *Indian journal of anaesthesia*, *60*(9): 640.

Gebbie, K.M. and Qureshi, K. (2002). Emergency and Disaster Preparedness: Core Competencies for Nurses: What every nurse should but may not know. *AJN The American Journal of Nursing*, *102*(1): 46-51.

Giusti, E.M., Pedroli, E., D'Aniello, G.E., Stramba Badiale, C., Pietrabissa, G., Manna, C., Stramba Badiale, M., Riva, G., Castelnuovo, G. and Molinari, E. (2020). The psychological impact of the COVID-19 outbreak on health professionals: a cross-sectional study. *Frontiers in psychology*, *11*: 1684.

Gmelch, W.H. (1993). *Coping with faculty stress* (Vol. 5). Sage.

Gonzalez, D. and Nasseri, S. (2020). Patients have panic in their eyes': voices from a Covid-19 unit. *The New York Times. Retrieved May*, *22*: 2020.

Government of Canada, Panel on Research Ethics. (2018). Tri-council policy statement: ethical conduct for research involving humans—TCPS 2. [online]

Available at: ethics.gc.ca/eng/policy-politique_tcps2-eptc2_2018.html.

Gross, C.T. and Canteras, N.S. (2012). The many paths to fear. *Nature Reviews Neuroscience*, *13*(9): 651-658.

Guo, J., Liao, L., Wang, B., Li, X., Guo, L., Tong, Z., Guan, Q., Zhou, M., Wu, Y., Zhang, J. and Gu, Y. (2020). Psychological effects of COVID-19 on hospital staff: a national cross-sectional survey of China mainland. *Available at SSRN 3550050*.

Ha, Y., Lee, S.H., Lee, D.H., Kang, Y.H., Choi, W. and An, J. (2022). Effectiveness of a Mobile Wellness Program for Nurses with Rotating Shifts during COVID-19 Pandemic: A Pilot Cluster-Randomized Trial. *International Journal of Environmental Research and Public Health*, *19*(2): 1014.

Halbesleben, J. R. (2010). The role of exhaustion and workarounds in predicting occupational injuries: A cross-lagged panel study of health care professionals. *Journal of Occupational Health Psychology*, 15(1), 1–16. [Online]

Available at: https://doi.org/10.1037/a0017634

Hall, L.H., Johnson, J., Watt, I., Tsipa, A. and O'Connor, D.B., 2016. Healthcare staff wellbeing, burnout, and patient safety: a systematic review. *PloS one*, *11*(7): e0159015. [Online]

Available at: https://doi.org/10.1371/journal.pone.0159015

Harrison, K.L., Dzeng, E., Ritchie, C.S., Shanafelt, T.D., Kamal, A.H., Bull, J.H., Tilburt, J.C. and Swetz, K.M. (2017). Addressing palliative care clinician burnout in organizations: a workforce necessity, an ethical imperative. *Journal of pain and symptom management*, *53*(6): 1091-1096.

Hawkins, L., White, M., & Morris, L. (1982). Smoking stress and nurses. *Nursing Mirror,* 155 (15): 18-22.

Heath, C. and Sommerfield, A., von Ungern-Sternberg, B.S. (2020). Resilience strategies to manage psychological distress among healthcare workers during the COVID? 19 pandemic: a narrative review. *Anaesthesia*, *75*(10): 1364. [Online]

Available at: https://doi.org/10.1111/anae.

Hingley, P. (1984). The humane face of nursing. *Nursing Mirror*, 159 (21), 19–22.

Hogan, L. (2020). The 'Psychological First Aid 'Helping Healthcare Workers through Crisis. *RTÉ Ireland's National Television and Radio Broadcaster*.

Holloway, I. (2005). *EBOOK: Qualitative Research in Health Care*. McGraw-Hill Education (UK).

Holmes, E.A., O'Connor, R.C., Perry, V.H., Tracey, I., Wessely, S., Arseneault, L., Ballard, C., Christensen, H., Silver, R.C., Everall, I. and Ford, T. (2020). Multidisciplinary research priorities for the COVID-19 pandemic: a call for action for mental health science. *The Lancet Psychiatry*, *7*(6): 547-560.

Hou, T., Zhang, R., Song, X., Zhang, F., Cai, W., Liu, Y., Dong, W. and Deng, G. (2020). Self-efficacy and fatigue among non-frontline health care workers during COVID-19 outbreak: A moderated mediation model of posttraumatic stress disorder symptoms and negative coping. *PloS one*, *15*(12): 0243884.

Huang, C.L.C., Wu, M.P., Ho, C.H. and Wang, J.J. (2018). Risks of treated anxiety, depression, and insomnia among nurses: A nationwide longitudinal cohort study. *PloS one*, *13*(9): 0204224.

Huang, J.Z., Han, M.F., Luo, T.D., Ren, A.K. and Zhou, X.P. (2020). Mental health survey of medical staff in a tertiary infectious disease hospital for COVID-19. *Zhonghua lao dong wei sheng zhi ye bing za zhi*, 192-195.

Huffman, E. M., Athanasiadis, D. I., Anton, N. E., Haskett, L. A., Doster, D. L., Stefanidis, D., & Lee, N. K. (2021). How resilient is your team? Exploring healthcare providers' well-being during the COVID-19 pandemic. *The American Journal of Surgery,* 221(2), 277 284.

Ibrahim, A. (2012). Thematic Analysis: A critical review of its process and evaluation. *West East Journal of Social sciences*, 1(1): 39-47.

ICN. (2021). International Council of Nurses COVID-19 Update. International Council of Nurses.

Ing, E.B., Xu, Q., Salimi, A. and Torun, N. (2020). Physician deaths from corona virus (COVID-19) disease. *Occupational Medicine*, *70*(5): 370-374.

International Labour Office (2010). ILO list of occupational diseases. [Online]

Available at: https://www.ilo.org/wcmsp5/groups/public/—ed_protect/—protrav/

Jahrami, H., BaHammam, A.S., Bragazzi, N.L., Saif, Z., Faris, M. and Vitiello, M.V., (2021). Sleep problems during the COVID-19 pandemic by population: a systematic review and meta-analysis. *Journal of Clinical Sleep Medicine*, *17*(2): 299-313.

Jalili, M., Niroomand, M., Hadavand, F., Zeinali, K. and Fotouhi, A. (2021). Burnout among healthcare professionals during COVID-19 pandemic: a cross-sectional study. *International archives of occupational and environmental health*, *94*(6): 1345-1352. [Online]

Available at: https://doi.org/10.1007/s00420-021-01695-x

Javadi, M. & Zarea, K. (2016). Understanding Thematic Analysis and its pitfall. *Journal of client care*, 1(1): 34-40.

Jervis, R. (2020). Death is our greeter: Doctors, nurses struggle with mental health as coronavirus cases grow. *USA Today. May*, *3*. [Online]

Available at: https://www.usatoday.com/story/news/nation/2020/05/03/coronavirus-death-counthas-% 0Ddoctors-struggling-mental-health/3063081001/.

Accessed April 5, 2020.

Jones, M. K., Latreille, P. L., & Sloane, P. J. (2016). Job Anxiety, Work-Related Psychological Illness and Workplace Performance. *British Journal of Industrial Relations,* 54(4), 742-767.

Jou, Y.H. and Fukada, H. (1997). Stress and social support in mental and physical health of Chinese students in Japan. *Psychological reports*, *81*(3): 1303-1312.

Kaiser K. (2009). Protecting Respondent Confidentiality in Qualitative Research. *Qualitative Health Research*, 19(11):1632-1641.

Kang, L., Li, Y., Hu, S. et al. (2020). The mental health of medical workers in Wuhan, China dealing with the 2019 novel coronavirus*. Lancet Psychiatric*; 7:14.

Kennedy, A. (2021). The International Council of Nurses in the time of the COVID-19 pandemic. *International Nursing Review*, *68*(2): 144-146.

Kenrick, D. T., Griskevicius, V., Neuberg, S., L., & Schaller, M. (2010). Renovating the pyramid of needs: *Contemporary extensions built upon ancient foundations,* 5, 292-314.

Kent, J., Williamson, E., Goodenough, T. and Ashcroft, R. (2002), '"Social science gets the ethics treatment": research governance and ethical review', *Sociological Research,* 7 (4).

Kessler, R.C., Price, R.H. and Wortman, C.B. (1985). Social factors in psychopathology: Stress, social support, and coping processes. *Annual review of psychology*, *36*(1): 531-572.

Khalid, A. and Ali, S. (2020). COVID-19 and its Challenges for the Healthcare System in Pakistan. *Asian Bioethics Review*, *12*(4): 551-564.

Khan, A., Yusoff, R. B., Khan, M. M., Yasir, M., & Khan, F. (2014). Psychometric Analysis of Role Conflict and Ambiguity Scales in Academia*: International Education Studies*, 7(8): 104-112.

Khattak, S.R., Saeed, I., Rehman, S.U. and Fayaz, M. (2021). Impact of fear of COVID-19 pandemic on the mental health of nurses in Pakistan. *Journal of Loss and Trauma*, *26*(5): 421-435.

Kılıç, N. and Şimşek, N. (2019). The effects of psychological first aid training on disaster preparedness perception and self-efficacy. *Nurse education today*, *83*: 104203. [Online]

Available at: https://doi.org/10.1016/j.nedt.2019.104203

Kim, Y. (2018) Nurses' experience of care for patients with Middle East respiratory syndrome-coronavirus in South Korea. *Am j infecting Control*, 46: 781-87.

Kisely, S., Warren, N., McMahon, L., Dalais, C., Henry, I. and Siskind, D. (2020). Occurrence, prevention, and management of the psychological effects of emerging virus outbreaks on healthcare workers: rapid review and meta-analysis. *bmj*, *369*.

Klenke, K. ed. (2008). *Qualitative research in the study of leadership*. Emerald group publishing.

Kluge, H. (2020). Statement to the press by Dr Hans Henri P. Kluge, WHO Regional Director for Europe.

Korstjens, I. & Moser, A. (2018). Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing. *European Journal of General Practice*, 24(1): 120-124.

Kripke, S. (1987). Organizational stress: Implications for health promotion managers. Am. J. *Health Promote*, 2, 21–27.

Kumar, R. (2018). *Research methodology: A step-by-step guide for beginners*. Sage.

Kurina, L.M., Knutson, K.L., Hawkley, L.C., Cacioppo, J.T., Lauderdale, D.S. and Ober, C. (2011). Loneliness is associated with sleep fragmentation in a communal society. *Sleep*, *34*(11): 1519-1526.

Labrague, L. J., & De los Santos, J. A. A. (2020a). COVID-19 anxiety among front-line nurses: Predictive role of organisational support, personal resilience and social support. *Journal of Nursing Management*, 28(7): 1653–1661.

Labrague, L.J. and De Los Santos, J.A.A. (2021b). Prevalence and predictors of coronaphobia among frontline hospital and public health nurses. *Public Health Nursing*, *38*(3): 382-389.

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

Labrague, L.J. and de Los Santos, J.A.A. (2021). Fear of Covid-19, psychological distress, work satisfaction and turnover intention among frontline nurses. *Journal of nursing management*, *29*(3): 395-403.

Labrague, L.J., Hammad, K., Gloe, D.S., McEnroe-Petitte, D.M., Fronda, D.C., Obeidat, A.A., Leocadio, M.C., Cayaban, A.R. and Mirafuentes, E.C. (2018). Disaster preparedness among nurses: a systematic review of literature. *International nursing review*, *65*(1): 41-53.

Labrague, L. J., Yboa, B. C., McEnroe–Petitte, D. M., Lobrino, L. R., & Brennan, M. G. B. (2016). Disaster preparedness in Philippine nurses. *Journal of Nursing Scholarship*, 48(1): 98-105.

Labrague, L.J. (2021). Psychological resilience, coping behaviours and social support among health care workers during the COVID-19 pandemic: A systematic review of quantitative studies. *Journal of nursing management*, *29*(7): 1893-1905.

Labrague, L.J., & De los Santos, J.A.A. (2020). COVID-19 anxiety amongst front-line nurses: Predictive role of organizational support, personal resilience and social support. Journal of Nursing Management, 28(7), 1653–1661. [Online]

Available at: https://doi.org/10.1111/jonm.13121

Lai, J., Ma, S., Wang, Y., Cai, Z., Hu, J., Wei, N., Wu, J., Du, H., Chen, T., Li, R. and Tan, H. (2020). Factors associated with mental health outcomes among health care workers exposed to coronavirus disease 2019. *JAMA network open*, *3*(3):76.

Lani, J., Moran, M., & Dsouza, J. (2021) Complete dissertation by statistics solution. *Expert guidance every step of the way*.

Lazarus, R.S. and Folkman, S. (1984). *Stress, appraisal, and coping*. Springer publishing company.

Lazarus, R.S. (1966). Psychological stress and the coping process. New York, NY McGraw Hill.

Lazarus, R., 1999. Stress and emotion/A new synthesis. Free association book.

Lazarus, R.S., and Folkman, S. (1984). Stress, Appraisal, and Coping. New York, NY: Springer Publishing Company Inc.

Leavy, R.L. (1983). Social support and psychological disorder: a review. *Journal of Community Psychology.* 11:3–21.

Lee, A. M., Wong, J. G. W. S., McAlonan, G. M., Cheung, V., Cheung, C., Sham, P. C., Chu, C. M., Wong, P.C., Tsang, K. W. T., & Chua, S. E. (2007). Stress and psychological distress among SARS survivors 1 year after the outbreak. The Canadian Journal of Psychiatry, 52(4): 233–240.

Lee, C.Y.S. and Dik, B.J. (2017). Associations among stress, gender, sources of social support, and health in emerging adults. *Stress and Health*, *33*(4): 378-388.

Lennon, M. C. (1989). The Structural Context of Stress*. Journal of Health and Social Behaviour*, 30: 261-268.

Lesley, M. (2021). Psychoanalytic Perspectives on Moral Injury in Nurses on the Frontlines of the COVID-19 Pandemic. Journal of the American Psychiatric Nurses Association, 27(1): 72-76. [Online]

Available at: https://doi.org/10.1177/1078390320960535

Lewis, S., and Smallwood, N. (2021). A time for self-care? Frontline health workers' strategies for managing mental health during the COVID-19 pandemic. *SSM-Mental Health*, 2:1-15.

Li, Z., Ge, J., Yang, M., Feng, J., Qiao, M., Jiang, R., Bi, J., Zhan, G., Xu, X., Wang, L. and Zhou, Q. (2020). Vicarious traumatization in the general public, members, and non-members of medical teams aiding in COVID-19 control. *Brain, behavior, and immunity*, *88*: 916-919.

Lima, C.K.T., de Medeiros Carvalho, P.M., Lima, I.D.A.A.S., de Oliveira Nunes, J.V.A., Saraiva, J.S., de Souza, R.I., da Silva, C.G.L. and Neto, M.L.R. (2020). The emotional impact of Coronavirus 2019-nCoV (new Coronavirus disease). *Psychiatry research*, *287*: 112915.

Lincoln, Y.S., Guba, E.G. and Pilotta, J.J. (1985). Naturalistic inquiry Newbury Park. *Cal. Sage*.

Llop-Gironés, A., Vračar, A., Llop-Gironés, G., Benach, J., Angeli-Silva, L., Jaimez, L., Thapa, P., Bhatta, R., Mahindrakar, S., Bontempo Scavo, S. and Nar Devi, S., (2021). Employment and working conditions of nurses: where and how health inequalities have increased during the COVID-19 pandemic? *Human Resources for Health*, *19*(1):1-11.

Lo, R. (2002). A longitudinal study of perceived level of stress, coping and self-esteem of undergraduate nursing students: An Australian case study. *Journal of Advanced Nursing*, 39(2): 119-126.

Lorente, L., Vera, M. and Peiró, T. (2021). Nurses´ stressors and psychological distress during the COVID-19 pandemic: The mediating role of coping and resilience. *Journal of Advanced Nursing*, *77*(3): 1335.

Lu, W., Wang, H., Lin, Y. and Li, L. (2020). Psychological status of medical workforce during the COVID-19 pandemic: A cross-sectional study. *Psychiatry research*, *288*: 112936.

Lucchetti, G., Góes, L.G., Amaral, S.G., Ganadjian, G.T., Andrade, I., Almeida, P.O.D.A., do Carmo, V.M. and Manso, M.E.G. (2021). Spirituality, religiosity and the mental health consequences of social isolation during Covid-19 pandemic. *International Journal of Social Psychiatry*, *67*(6): 672-679.

Lyon, B. L. (2000). Stress, coping, and health. *Handbook of stress, coping and health: Implications for nursing research, theory, and practice*, 3-23.

Maben, J., & Bridges, J. (2020). Covid-19: Supporting nurses' psychological and mental health. Journal of Clinical Nurse 29(15–16): 2742–2750. [Online]

Available at: https://doi.org/10.1111/jocn.

Maguire, M. & Delahunt, B. (2017). Doing thematic analysis: A practical step by step quide for learning Teaching scholars. *Journal of Teaching and Learning in Higher Education,* 8(3): 3351-3354.

Mahon, N.E. (1994). Loneliness and sleep during adolescence. *Perceptual and motor skills*, *78*(1): 227-231.

Maraqa, B., Nazzal, Z. and Zink, T. (2020). Palestinian health care workers' stress and stressors during COVID-19 pandemic: A cross-sectional study. *Journal of Primary Care & Community Health*, *11*(10).

Maslach, C., Jackson, S.E. and Leiter, M.P. (1996). *Maslach burnout inventory*. Scarecrow Education.

Matthewman, S., and Huppatz, K. (2020). Sociology of Covid-19. Maraqa, B., Nazzal, Z., & Zink, T. (2020). Palestinian health care workers' stress and stressors during COVID-19 pandemic: A cross-sectional study. Journal of Primary Care & Community Health, 11(10): 1-9.

Matthews, G. and Campbell, S.E. (2009). Sustained performance under overload: personality and individual differences in stress and coping. *Theoretical Issues in Ergonomics Science*, *10*(5): 417-442.

Maunder, R., Heeney, N., Strudwick, G., Shin, H., O'Neill, B., Young, N., et al. (2021). Burnout in Hospital-Based Healthcare Workers during COVID-19. Science Table*; COVID-19 Advisory for Ontario*, 1-24.

Maunder, R.G., Leszcz, M., Savage, D., Adam, M.A., Peladeau, N., Romano, D., Rose, M. and Schulman, R.B. (2008). Applying the lessons of SARS to pandemic influenza. *Canadian Journal of Public Health*, *99*(6): 486-488.

Maunder, R.G., Lancee, W.J., Balderson, K.E, Bennett, J.P., Borgundvaag, B., Evans, S. et al. (2006). Long-term psychological and occupational effects of providing hospital healthcare during SARS outbreak. *Emerging infectious diseases*, 12(12):1924

McAlonan, G.M.; Lee, A.M.; Cheung, V.; Cheung, C.; Tsang, K.W.T.; Sham, P.C.; Chua, S.E.; Wong, J.G.W.S. (2007). Immediate and Sustained Psychological Impact of an Emerging Infectious Disease Outbreak on Health Care Workers. *Canadian Journal of Psychiatry*, 52: 241–247.

McCarthy, J. M., Trougakos, J. P., & Cheng, B. H. (2016). Are anxious workers less productive workers? It depends on the quality of social exchange. *Journal of Applied Psychology,* 101(2): 279-291.

McCauley, L. and Hayes, R. (2020). Taking responsibility for front-line health-care workers. *The Lancet Public Health*, *5*(9): 461-462.

McGrath, A., Reid, N., Boore, J. (2003) Occupational stress in nursing: *International journal of nursing studies*, 40: 555–565.

McMullan, C., Brown, G.D. and O'Sullivan, D. (2016). Preparing to respond: Irish nurses' perceptions of preparedness for an influenza pandemic. *International emergency nursing*, *26*: 3-7.

McNicholas, F., Sharma, S., Oconnor, C. and Barrett, E. (2020). Burnout in consultants in child and adolescent mental health services (CAMHS) in Ireland: a cross-sectional study. *BMJ open*, *10*(1).

Mi, T., Yang, X., Sun, S., Li, X., Tam, C. C., Zhou, Y., & Shen, Z. (2020). Mental health problems of HIV healthcare providers during the COVID-19 pandemic: The interactive effects of stressors and coping. *AIDS and Behavior,* 25(1), 18-27.

Mills, A.J., Durepos, G. and Wiebe, E. (2010). Sage encyclopaedia of case study research.

Mo, Y., Deng, L., Zhang, L., Lang, Q., Liao, C., Wang, N., Qin, M., & Huang, H. (2020). Work stress among Chinese nurses to support Wuhan in fighting against COVID-19 epidemic. *Journal of Nursing Management*, 28(5): 1002–1009.

Moazzamia, B., Razavi-Khorasania, N., Moghadama, A., Farokhia, E., Rezaei, N. (2020). COVID-19 and telemedicine: Immediate action required for maintaining healthcare providers well-being. Journal of Clinical Virology, 126.

Mohindra, R., Ravaki, R., Suri, V., Bhalla, A. and Singh, S.M. (2020). Issues relevant to mental health promotion in frontline health care providers managing quarantined/isolated COVID19 patients. *Asian J Psychiatric*, *51*(3): 102084.

Muiruri, P. (2021). COVID Third Wave may Overrun Africa's Healthcare, Warns WHO. Retrieved from the guardian.com: [Online]

Available at: https://www.theguardian.com/global-development/2021/mar/26/covid-third-wave-threatens-african-healthcare-who

Naushad, V.A., Bierens, J.J., Nishan, K.P., Firjeeth, C.P., Mohammad, O.H., Maliyakkal, A.M., ChaliHadan, S. and Schreiber, M.D. (2019). A systematic review of the impact of disaster on the mental health of medical responders. *Prehospital and disaster medicine*, *34*(6): 632-643.

Nemati, M., Ebrahimi, B., and Nemati, F. (2020). Assessment of Iranian nurses' knowledge and anxiety toward COVID-19 during the current outbreak in Iran. *Archives of Clinical Infectious Diseases*, 15(COVID-19).

Nie, A., Su, X., Zhang, S., Guan, W., & Li, J. (2020). Psychological impact of COVID-19 outbreak on frontline nurses: A cross-sectional survey study. *Journal of Clinical Nursing,* 29(21-22), 4217-4226.

Nowicki, G.J., Ślusarska, B., Tucholska, K., Naylor, K., Chrzan-Rodak, A. and Niedorys, B. (2020). The severity of traumatic stress associated with COVID-19 pandemic, perception of support, sense of security, and sense of meaning in life among nurses: Research protocol and preliminary results from Poland. *International journal of environmental research and public health*, *17*(18):6491.

Occupational Safety and Health Administration. (2007). Guidance on preparing workplaces for an influenza pandemic. [Online]

Available at: https://digitalcommons.ilr.cornell.edu/key_workplace/

OSHA, 2015. Incident Investigations: A Guide for Employers. *Occupational Safety and Health Administration*, 24. [Online]

Available at: https:// www.osha.gov/dte/IncInvGuide4Empl_Dec2015.pdf

Okediran, J.O., Ilesanmi, O., S., Fetuga, A. A., Onoh, I., Afolabi, A. A., Ogunbode, O., Olajide, L., Kwaghe, A. V, Balogun, M. S. (2020). The experiences of healthcare workers during the COVID-19 crisis in Lagos, Nigeria: A qualitative study. Germs, 10(4):356-366.

Osman, I., Hamid, S., & Singaram, V. (2021). Efficacy of a brief online mindfulness-based intervention on the psychological well-being of health care professionals and trainees during COVID-19 pandemic: *A mixed method design,* 26: 1-9.

Oyeleye, O., Hanson, P., O'Connor, N., & Dunn, D. (2013). Relationship of workplace incivility, stress and burnout on nurses' turnover intentions and psychological empowerment. *Journal of Nursing Administration*, 43(10): 536–542. Available at: https://doi.org/10.1097/NNA.0b013e3182a3e8c9

Pappa, S., Ntella, V., Giannakas, T., Giannakoulis, V.G., Papoutsi, E. and Katsaounou, P., (2020). Prevalence of depression, anxiety, and insomnia among healthcare workers during the COVID-19 pandemic: A systematic review and meta-analysis. *Brain, behavior, and immunity*, *88*: 901-907.

Pargament, K.I., Tarakeshwar, N., Ellison, C.G. and Wulff, K.M. (2001). Religious coping among the religious: The relationships between religious coping and well-being in a national sample of Presbyterian clergy, elders, and members. *Journal for the scientific study of religion*, *40*(3): 497-513.

Patel, R.S., Bachu, R., Adikey, A., Malik, M. and Shah, M. (2018). Factors related to physician burnout and its consequences: a review. *Behavioral sciences*, *8*(11): 98.

Pealin, L. I., Menaghan, E. G., Lieberman, M., A. and Mullan, J. T. (1981). The Stress Process. *Journal of Health and Social Behaviour*. 22(4): 337-356.

Pearlin, L. I. (1989). The Sociological Study of Stress. *Journal of Health and Social Behaviour*, 30: 241-256.

Pearlin, L.I. (1999). The stress process revisited. In *Handbook of the sociology of mental health*, 395-415.

Pearlin, L. I., & Bierman, A. (2013). Handbook of Sociology of Mental Health (2nd ed.). New York, NY: Springer.

PIH. (2021). Third Wave of COVID-19 Impacts Countries around the Globe. [Online]

Available at: https://www.pih.org/article/third-wave-covid-19-impacts-countries-around-globe

Polit, D.F. and Beck, C.T., 2010. *Essentials of nursing research: Appraising evidence for nursing practice*. Lippincott Williams & Wilkins.

Prazeres, F., Passos, L., Simões, J.A., Simões, P., Martins, C. and Teixeira, A., (2021). COVID-19-related fear and anxiety: Spiritual-religious coping in healthcare

workers in Portugal. *International Journal of Environmental Research and Public Health*, *18*(1): 220.

Preti, E., Di Mattei, V., Perego, G., Ferrari, F., Mazzetti, M., Taranto, P., Di Pierro, R., Madeddu, F. and Calati, R. (2020). The psychological impact of epidemic and pandemic outbreaks on healthcare workers: rapid review of the evidence. *Current psychiatry reports*, *22*(8): 1-22.

Ptacek, J.T., Smith, R.E. and Dodge, K.L. (1994). Gender differences in coping with stress: When stressor and appraisals do not differ. *Personality and social psychology bulletin*, *20*(4): 421-430.

Radbruch, L., Knaul, F.M., de Lima, L., de Joncheere, C. and Bhadelia, A. (2020). The key role of palliative care in response to the COVID-19 tsunami of suffering. *The Lancet*, *395*(10235): 1467-1469.

Ramar, K., Malhotra, R.K., Carden, K.A., Martin, J.L., Abbasi-Feinberg, F., Aurora, R.N., Kapur, V.K., Olson, E.J., Rosen, C.L., Rowley, J.A. and Shelgikar, A.V. (2021). Sleep is essential to health: an American Academy of Sleep Medicine position statement. *Journal of Clinical Sleep Medicine*, *17*(10): 2115-2119. [Online]

Available at: https://doi.org/10.5664/jcsm.9476.

Raudenska, ´ J., Steinerova, ´ V., Javůrkov´ a, A., Urits, I., Kaye, A. D., Viswanath, O., and Varrassi, G. (2020). Occupational burnout syndrome and post-traumatic stress among healthcare professionals during the novel coronavirus disease 2019 (COVID- 19) pandemic. Best Practice and Research: *Clinical Anaesthesiology*, 34, 553–560.

Ray, S., and Mash, R. (2021). Innovation in primary healthcare responses to COVID-19 in SUb-saharan Africa. *Primary Health Care Research & Development*, 22(44): 1-11.

Razu, S.R., Yasmin, T., Arif, T.B., Islam, M., Islam, S.M.S., Gesesew, H.A. and Ward, P. (2021). Challenges faced by healthcare professionals during the COVID-19 pandemic: a qualitative inquiry from Bangladesh. *Frontiers in public health*, 1024.

Robotham, D. (2008). Stress among higher education students: towards a research agenda. *Higher Education*, 56(6): 735-746.

Rodrigues, H., Cobucci, R., Oliveira, A., Cabral, J.V., Medeiros, L., Gurgel, K., Souza, T. and Gonçalves, A.K. (2018). Burnout syndrome among medical residents: A systematic review and meta-analysis. *PloS one*, *13*(11). [Online]

Available at: https://doi.org/10.1371/journal.pone.0206840

Roman, N.V., Mthembu, T.G. and Hoosen, M. (2020). Spiritual care 'A deeper immunity' A response to Covid-19 pandemic. *African Journal of primary health care and family medicine*, *12*(1): 1-3.

Rosenwald, M.S. (2020). History's deadliest pandemics, from ancient Rome to modern America. *Washington Post*, *7*.

Rossi, R., Socci, V., Pacitti, F., Di Lorenzo, G., Di Marco, A., Siracusano, A. and Rossi, A. (2020). Mental health outcomes among frontline and second-line health care workers during the coronavirus disease 2019 (COVID-19) pandemic in Italy. *JAMA network open*, *3*(5).

Russell, H., Maître, B., Watson, D. and Fahey, É. (2018). *Job stress and working conditions: Ireland in comparative perspective. An analysis of the European Working Conditions Survey* (No. 84). Research Series.

Saeng, L.A., Chi-Keun, Y., and Kyu, P.J. (2012). Effects of social support and ego-resilience on nursing performance of hospital nurses. *Korean Journal of Occupational Health Nursing,* 21(3): 283-289.

Safari, S., Mohammadi-Bolbanabad, H., and Kazemi, M. (2013). Evaluation mental work load in nursing critical care unit with national aeronau-tics and space administration task load index (NASA-TLX). *Journal of Health Systems Research*, 9(6): 613–619.

Salari, N., Khazaie, H., Hosseinian-Far, A., Ghasemi, H., Mohammadi, M., Shohaimi, S., Daneshkhah, A., Khaledi-Paveh, B. and Hosseinian-Far, M. (2020). The prevalence of sleep disturbances among physicians and nurses facing the COVID-19 patients: A systematic review and meta-analysis. *Globalization and health*, *16*(1):1-14.

Salman, M., Raza, M.H., Mustafa, Z.U., Khan, T.M., Asif, N., Tahir, H., Shehzadi, N. and Hussain, K. (2020). The psychological effects of COVID-19 on frontline healthcare workers and how they are coping: a web-based, cross-sectional study from Pakistan. *MedRxiv*.

Savitsky, B., Radomislensky, I. and Hendel, T. (2021). Nurses' occupational satisfaction during Covid-19 pandemic. *Applied Nursing Research*, *59*:151416. [Online]

Available at: https://doi.org/10.1016/j.apnr.2021.151416

Schultz, A.B., and Edington, D.W. (2007). Employee health and presenteeism: a systematic review. *Journal of occupational rehabilitation*, 1; 17(3):547-79.

Sekaran, U. and Bougie, R., 2016. *Research methods for business: A skill building approach*. john wiley & sons.

Selman, L. E., Chao, D., Sowden, R., Marshall, S., Chamberlain, C., and Koffman, J. (2020). Bereavement support on the frontline of COVID-19: recommendations for hospital clinicians. *Journal of pain symptom management*, 60: 81-86.

Selye, H. (1956). The stress of life. New York: McGraw-Hill.

Serrano-Ripoll, M.J., Zamanillo-Campos, R., Castro, A., Fiol-de Roque, M.A. and Ricci-Cabello, I. (2021). Insomnia and sleep quality in healthcare workers fighting against COVID-19: a systematic review of the literature and meta-analysis. *Actas Espanolas de Psiquiatria*, *49*(4):155-179.

Shaban, R. (2020, May 13). Lesotho records COVID-19 case, last African nation to be infected. Retrieved November 8, 2021, from Africa news. [Online]

Available at: https://www.africanews.com/2020/05/13/virus-free-lesotho-rolls-out-socio-economic-interventions/

Shaheen, F. and Alam, S. (2010) Psychological Distress and its Relational to Attributional Styles and Coping Strategies Among Adolescents. *Journal of the Indian Academy of Applied Psychology,* 36(2): 231-238.

Shanafelt, T. D., Dyrbye, L. N., West, C. P., and Sinsky, C. A. (2016). Potential impact of burnout on the US physician workforce. In *Mayo Clinic Proceedings*, 91(11): 1667-1668.

Shanafelt, T.D., Mungo, M., Schmitgen, J., Storz, K.A., Reeves, D., Hayes, S.N., Sloan, J.A., Swensen, S.J. and Buskirk, S.J. (2016). Longitudinal study evaluating the association between physician burnout and changes in professional work effort. In *Mayo Clinic Proceedings* ,91(4): 422-431.

Shechter, A., Diaz, F., Moise, N., Anstey, D. E., Ye, S., Agarwal, S., Birk, J. L., Brodie, D., Cannone, D. E., Chang, B., Claassen, J., Cornelius, T., Derby, L., Dong, M., Givens, R. C., Hochman, B., Homma, S., Kronish, I. M., Lee, S. A. J. and Abdalla, M. (2020). Psychological distress, coping behaviors, and preferences for support among New York healthcare workers during the COVID-19 pandemic. *General Hospital Psychiatry*, 66, 1–8.

Shelile, M. (2020). COVID-19 Preparedness in Lesotho. Retrieved November 8, 2021, from THET; Partnerships for Global Health. [Online]

Available at: https://www.thet.org/case-studies/covid-19-preparedness-in-lesotho/

Shenton, A. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22: 63-75.

Shepherd, D. and Mohohlwane, N. (2021). The impact of COVID-19 in education–more than a year of disruption. *National Income Dynamics (NIDS)-Coronavirus Rapid Mobile Survey (CRAM) Wave*, *5*.

Shryock, T. (2020) COVID-19 raises ethical dilemmas for many physicians. *Medical Economics Journal*, 97(9).

Smylie, J., Marsden, N., Star, L., Gahagan, J., Zarowsky, C., Mykhalovskiy, E., Masuda, J. and Potvin, L. (2020). Requirement for meaningful engagement of first

nations, Inuit, Métis, and Indigenous peoples in publications about them. *Canadian Journal of Public Health*, *111*(6): 826-830.

Sreeramareddy, C., Shankar, P., Binu V., Mukhopadhyay, C., Ray, B. and Menezes, R. (2007) Psychological morbidity, sources of stress and coping strategies among undergraduate medical students of Nepal. *BMC Medical Education*, 7(1): 1-8.

St. Patricks (2019). What is Healthcare Professional? Est. 1803. https://www.st-patricks.ac.uk.

Sun, N., Wei, L., Shi, S., Jiao, D., Song, R., Ma, L., Wang, H., Wang, C., Wang, Z., You, Y. and Liu, S. (2020). A qualitative study on the psychological experience of caregivers of COVID-19 patients. *American journal of infection control*, *48*(6): 592-598.

Tan, B.Y., Chew, N.W., Lee, G.K., Jing, M., Goh, Y., Yeo, L.L., Zhang, K., Chin, H.K., Ahmad, A., Khan, F.A. and Shanmugam, G.N. (2020). Psychological impact of the COVID-19 pandemic on health care workers in Singapore. *Annals of internal medicine*, *173*(4): 317-320.

Tani, F. and Castagna, V. (2017). Maternal social support, quality of birth experience, and post-partum depression in primiparous women. *The Journal of Maternal-Fetal & Neonatal Medicine*, *30*(6): 689-692. [Online]

Available at: https://doi.org/10.1080/14767058.2016.1182980

Thakhathi, D., Shepherd, M. and Nosizo, N., 2018. Ethical considerations in social research.

Thoits, P.A. (1995). Stress, coping, and social support processes: Where are we? What next? *Journal of health and social behaviour*, 53-79.

Tobin, G. A., and Begley, C. M. (2004). Methodological rigour within a qualitative framework. *Journal of Advanced Nursing*, 48, 388-396.

Trout, L., & Kleinman, A. (2020). Covid-19 Requires a Social Medicine Response. *Frontiers in Sociology*, 5, 1-4.

Tucker, A., L., Zheng, S., Gardner, J., W., and Bohn, R. E. (2020). When do workarounds help or hurt patient outcomes? The moderating role of operational failures. *Journal of operations management*, 66(1-2), 67-90. [Online]

Available at: https://doi.org/10.1002/joom.1015

Turner, J.R. & Lloyd, D.A (1999) 'The Stress Process and the Social Distribution of Depression'. *Journal of health and social behavior,* 40: 374–404.

Vagni, M., Maiorano, T., Giostra, V., & Pajardi, D. (2020). Coping with COVID-19: emergency stress, secondary trauma and self-efficacy in healthcare and emergency workers in Italy. *Frontiers in psychology*, *11*: 566912.

Van der Veen, W., van den Bemt, P., M., L., A., Wouters, H., Bates, D. W., Twisk, J. W. R., de Gier, J. J., Taxis, K., Duyvendak, M., Luttikhuis, K. O., Ros, J. J. W., Vasbinder, E. C., Atrafi, M., Brasse, B., & Mangelaars, I. (2018). Association between workarounds and medication administration errors in bar-code-assisted medication administration in hospitals. *Journal of the American Medical Informatics Association,* 25(4), 385–392. [Online]

Available at: https://doi.org/10.1093/jamia/ocx077

Van Teijlingen, E. (2006). Reply to Robert Dingwall's Plenary 'Confronting the Anti-Democrats: The Unethical Nature of Ethical Regulation in Social Science'. *Medical Sociology Online*, *1*(1): 59-60.

Villa, G., Dellafiore, F., Caruso, R., Arrigoni, C., Galli, E., Moranda, D., Prampolini, L., Bascape, B., Merlo, M.G., Giannetta, N. and Manara, D.F. (2021). Experiences of healthcare providers from a working week during the first wave of the COVID-19 outbreak. *Acta Bio Medica: Atenei Parmensis*, *92*(6).

Vilma, Z. (2018). Implementing ethical principles in social research: challenges, possibilities and limitations. *Vocational Training: research and Realities,* 29(1), 19-43.

Wallace, D., & Fleet, C. (2012). Knowledge into Action-Research and Evaluation in library and information science. *The Journal of new member round tables,* 4(1), 1-1.

Walton, M., Murray, E., & Christian, M.D. (2020). Mental health care for medical staff and affiliated healthcare workers during the COVID-19 pandemic. *European Heart Journal: Acute Cardiovascular Care*, 9(3), 241–247. [Online]

Available at: https://doi.org/10.1177/2048872620922795

Watt, D. (2007). On Becoming a Qualitative Researcher: The Value of Reflexivity. *Qualitative Report*, 12(1): 82-101.

West, C. P., Dyrbye, L. N., and Shanafelt, T. D. (2018). Physician burnout: contributors, consequences and solutions. *Journal of internal medicine*, *283*(6): 516-529.

Wheaton, B. (1999). Social stress. In *Handbook of the sociology of mental health* (pp. 277-300). Springer, Boston, MA.

Wheaton, B., & Montazer, S. (2010). Stressors, Stress and Distress*. A Handbook for the Study of Mental Health* (pp.117-199). Cambridge, UK: Cambridge University Press.

Wheaton, B., Young, M., Montazer, S. and Stuart-Lahman, K. (2013). Social stress in the twenty-first century. In *Handbook of the sociology of mental health* (pp. 299-323). Springer, Dordrecht.

Whitlatch, C.J. & L.S. Noelker. (2007). Caregiving and Caring, Editor(s): James E. Birren, Encyclopedia of Gerontology (Second Edition*), Elsevier,* 240-249.

Witteman, H.O., Haverfield, J. and Tannenbaum, C. (2021). COVID-19 gender policy changes support female scientists and improve research quality. *Proceedings of the National Academy of Sciences*, *118*(6): 23-47. [Online]

Available at: https://doi.org/10.1073/pnas.2023476118

WHO. (2020). Coronavirus Disease (COVID-19). Dashboard.

WHO. (2020). Coronavirus disease (COVID-19) situation report 194. Maesu: WHO.

WHO. (2020). Health Workers: a global profile 2020. Retrieved November 08, 2021, from World Health Organisation. [Online]

Available at: https://www.who.int/whr/2006/06_chap1_en.pdf

WHO. (2020a). Coronavirus Disease (COVID-19) Situation Reports 194. Maseru: World Health Organisation (WHO).

Wiles, R. (2013). Risk and safety. In what are Qualitative Research Ethics? (The 'What is?' *Research Methods Series, 55-68.* [Online]

Available at: http://dx.doi.org/10.5040/9781849666558.ch-005

World Health Organization. (2020). *Mental health and psychosocial considerations during the COVID-19 outbreak, 18 March 2020* (No. WHO/2019-nCoV/MentalHealth/2020.1). World Health Organization.

Wu, Y., Wang, J., Luo, C., Hu, S., Lin, X., Anderson, A.E., Bruera, E., Yang, X., Wei, S. and Qian, Y. (2020). A comparison of burnout frequency among oncology physicians and nurses working on the frontline and usual wards during the COVID-19 epidemic in Wuhan, China. *Journal of pain and symptom management*, *60*(1): 60-65. [Online]

Available at: https://doi.org/10.1016/j.jpainsymman.2020.04.008

Wu, Y., Zhu, B., Chen, Z., Duan, J., Luo, A., Yang, L. and Yang, C. (2019). Prevalence and predisposing factors of depressive symptoms in patients with stable coronary artery disease: A cross-sectional single-center study. *Aging (Albany NY)*, *11*(12): 58-68.

Xiao, H., Zhang, Y., Kong, D., Li, S., and Yang, N. (2020). The effects of social support on sleep quality of medical staff treating patients with coronavirus disease 2019 (COVID-19) in January and February 2020 in China. Medical Science Monitor: *International Medical Journal of Experimental and Clinical Research*, 26: 49-51.

Xiong, Y., and Peng, L. (2020) Focusing on health-care providers' experiences in the COVID-19 crisis*. Lancet Global Health*, 8:740-741.

Xu, J., Chen, P. and Ma, X. (2018). The relationship among preconception depression, anxiety, and social support of the reproductive-aged women in China. *Archives of Women's Mental Health*, *21*(4): 429-436.

Yel, C. and Kasapoglu, A. (2021). Effects of The Covid-19 Pandemic: A Sociological Study on Pharmacies in Sivas. *Reports on Global Health Research*, *4*,137.

Yıldırım, M. and Arslan, G. (2020). Exploring the associations between resilience, dispositional hope, preventive behaviours, subjective well-being, and psychological health among adults during early stage of COVID-19. *Current psychology*, 1-11.

Zhang, W.R., Wang, K., Yin, L., Zhao, W.F., Xue, Q., Peng, M., Min, B.Q., Tian, Q., Leng, H.X., Du, J.L. and Chang, H. (2020). Mental health and psychosocial problems of medical health workers during the COVID-19 epidemic in China. *Psychotherapy and psychosomatics*, *89*(4): 242-250.

Zhang, Y. E.l., Ghaziri, M., Dugan, A.G., and Castro, M.E. (2019). Work and Health Correlates of Sleep Quantity and Quality among Correctional Nurses. *Journal of forensic nurse,*15: 3-4.

Zhu J. (2020). Is it ethical to be a 'whistle-blower' during COVID-19 pandemic? Ethical challenges confronted by health care workers in China. *Journal of advanced nursing,* 76(8), 1873-1875. [Online]

Available at: https://doi.org/10.1111/jan.14376

Zhu, J., Sun, L., Zhang, L., Wang, H., Fan, A., Yang, B., Li, W. and Xiao, S. (2020). Prevalence and influencing factors of anxiety and depression symptoms in the first-line medical staff fighting against COVID-19 in Gansu. *Frontiers in psychiatry*, *11*: 386.

APPENDICES

Appendix A: Informed Consent Form

You are invited to participate in a study conducted by Malitsoanelo Maloisane, a student in Medical and Health Sociology in the Department of Sociology and Social work undertaking a research on **the experiences of Senkatana healthcare professionals during the first wave of COVID-19**. The purpose of the study is to investigate how Senkatana healthcare professionals coped with work-related stress during the first wave of COVID-19.

The study will observe the following ethical principles:

1. **Voluntary participation**

Please be mindful that participating in this study is voluntary. You are selected to participate in this research solely because you are a healthcare professional at Senkatana.

2. **Confidentiality**

Please be informed that information you provided in the study is strictly for research purpose. Thus, any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law, your identity in this study is concealed.

3. **No harm to participants**

COVID-19 experiences might be sensitive and remind you of your emotional experiences, but be assured that our conversation is not meant to harm you. Please do not hesitate to ask me to pause if you get emotional and we will continue the interview when you are ready. If you decide to withdraw, understand nothing will be held against you.

By signing this document, you agree to participate in the study. Please be informed that audio recording will be used as a form of data collection and you are free to opt out audio recording. If you have any questions about the study now or in future, feel free to contact me at any time. For additional clarification, you can contact my supervisors Dr Relebohile Morojele and Dr ‘Makhotsang Phokojoe at NUL, Department of Sociology and Social work at the following number: +266 6340601; +266 5221 3670; OR +266 5221 3749.

You will be given a copy of this form to keep.

YOU ARE MAKING A DECISION ABOUT WHETHER OR NOT TO PARTICIPATE. YOUR SIGNATURE INDICATES THAT YOU HAVE READ THE INFORMATION PROVIDED ABOVE AND DECIDED TO PARTICIPATE.

Signature of participant: _____

Date: _____

AUDIO

Signature of participant: _____

Date: _____

Signature of Researcher: _____

Date: _____

Appendix B: Interview Guide

Experiences of Senkatana healthcare professionals during the first wave of COVID-19

Biographical Questions

- Would you please tell me your age?
- Are you married?
- Do you have any children?
- What is the highest educational level you attained?

Work-related information

- What is your occupation?
- How many years in practice?
- What is the nature of your work?
- Do you interact with the patients and to what extent do you interact with them? (Few hours in the morning, the whole day etc.)
- How did you react when you first heard of COVID-19?
    - Were you scared?
    - What scared you about Covid-19 (Death, high rate of infections etc.).
- How did you feel when providing care to patients during the first wave of COVID-19? (Fear of infection, increased workload, death, etc.)

Coping strategies

- How did you cope with situation? Please explain
- Did you receive any form of support? Please explain

Organizational support

- Would you please share the kind of support that was available at Senkatana?
- Do you think you received support you were expecting from your employer? (Provision of PPE's, compensation, emotional support, etc.)
- What measures did the Ministry of Health take to ensure that you were safe at your work place? (Sufficient PPE's, compensation, emotional support etc.)

Apart from organizational support, what other form of support did you receive? Explain.

Family support

- How did the family support you?
- If you have children, what form of support did they offer to you?
    - What about your partner/spouse?
- Did your friends also offer any form of support?

Spousal support

- Did your involvement as a healthcare provider during this period affect your relationship with your partner/spouse? Explain.
- What kind of support you got from your spouse?

Union support

- What measures did your union take to ensure that you were safe at work? (Emotional support, compensation, adequate PPE's etc.)
- Did your union ensure that you attain support at work?

Outcome

- How did you feel when restrictions about Covid-19 were eased?
- Comparatively, how was your workload?
- Were there any other changes you observed? Please explain. (Low infections, low death rates, and untied COVID-19 rules and regulations)
- On a personal level, how would you describe your experience during this period? (Burnout, depression etc.)
    - How did you feel when the crisis was over?

Is there anything else you would like to tell me about your experience during this period?

Thank you…

Appendix C: Sesotho interview Guide
Sesotho Interview guide

Experiences of Senkatana healthcare professionals during the first wave of COVID-19

Biographical questions

- Ke kopa o njwetse dilemo tsa hao
- Ona le molekane
- O fihlelletse boemo bo feng sekolong

Work-related information

- O sebetsa ole eng?
- Ona le dilemo tse kae o etsa mosebetsi o?
- Mosebetsi wa hao ke eng ka kotloloho?
- O kopana le bakudi ho fihlelletse boemong bo feng? O kopana le bona hoseng feela kapa o kopana le bona dihoreng tsa mantsibuya feela?
- O ile wa ikutlwa jwang ha oqala ho utlwa ka lefu le la COVID-19?
    - Naa o ne o ikutlwa o tshuhile?
    - Ke eng eneng e o tshosa haholo ka lefu le la COVID-19?
- O ne o ikutlwa jwang ha o fana ka ditshebeletso nakong ya leqhubu la pele la COVID-19?

Coping strategies

- O ile wa tswelapele jwang ka boemo boo? Ke kopa o hlalose
- Naa hona le tshehetso eo o ileng wa e fumana? Ke kopa o hlalose

Organizational Support

- Ke kopa o nhlalosetse mokgwa wa tshehetso oo oileng wa ofumana ho tswa ho Senkataana?
- O nahana o ile wa fumana tshehetso eo oneng o e lebelletse ho tswa ho mohiri wa hao?
- Ministry of Health o ile wa etsang ho netefatsa hore o bolokehile mosebetsing wa hao?

Ntle le organizational support, ke tshehetso efeng hape eo o ile wa efumana? Ke kopa o hlalose

Family Support

- Lelapa le ile la o tshehetsa ka mokgwa o jwang?

- Haeba ona le bana, ba ile ba ofa tshehetso ya mofuta o feng?

    - Molakane/ mokgotsi yenaa?

- Naa metswalle ile ya fana tsheheso?

Spousal support

- Naa mosebetsi wa hao jwalo ka mooki o ile wa ama dikamano tsa hao le molekane wa hao nako ya leqhubu la pele COVID-19?
- ile wa fumana tshehetso ya mofuta o feng hotswa ho molekane wa hao?

Union Support

- Mokga wa basebetsi o ile wa etsang ho netefatsa hore o bolokehile mosebetsing?
- Naa mokga wa basebetsi o ile wa etsa hore o fumane tshehetso mosebetsing?

Outcome

- O ile wa ikutlwa jwang ha melao ya COVID-19 ene e nyehlisitswewa?
- Ha o bapisa, boima ba mosebetsi o bone bo le jwang?
- Naa hona le diphetoho tse ding tseo o ile wa dihlokomela? Ke kopa o hlalose
- Ka botho, oka hlolosa boemo bona ba COVID-19 jwang?
    - O ile wa ikutlwa jwang ha boemo bona ba sewa sa COVID-19 sefela? Le teng haeba se fela.

Naa hona le ho o lakatsang ho tlatselletsang tabeng tsebo ya hao ka COVID-19?

KEYA LEBOHA!!!!

Appendix D: Permission to conduct research study

THE NATIONAL UNIVERSITY OF LESOTHO
Faculty of Social Sciences
Department of Sociology and Social Work
P.O. Roma 180
Lesotho.

Telephone: (+266) 22340601/52213668/52213749
Fax: (+266) 22340000
Website: http//www.nul.ls

February 7, 2022

Botšabelo Hospital/ Senkatana
Private Bag A149
Maseru 100

Att: Dr P. Ntšekhe,

Permission to conduct research study

I write to request permission for 'Malitšoanelo Maloisane to interview healthcare providers at Botšabelo Hospital. 'Malitšoanelo is a postgraduate student at the National University of Lesotho majoring in Health and Medical Sociology, and as partial fulfilment of the requirements of the completion of her degree, she has to complete a research project-dissertation. Her research project seeks to understand the ***experiences of Senkatana healthcare professionals during the first wave of COVID-19.*** I request approval to allow her to interview about 20 healthcare providers who were already working at the Botšabelo Hospital during the first wave of Covid-19. In line with ethical principles in social research, 'Malitšoanelo fully understands that participation in her study will be voluntary and participants' identities will be protected.

We are developing the research instrument and consent forms, and these shall be forwarded to you when completed.

I thank you,

Relebohile Morojele, Ph.D.
Head of Department

LIST OF TABLES

Table 1: Definition of Themes

Research questions	Themes	Sub-themes	Sub-sub themes	Theme definition
How did healthcare professionals felt when providing care to patients during the first wave of COVID-19?	Experiences of strain	1.Lack of knowledge 2.Lack of PPE 3.Increased workload 4.Strained marital relationships 5.No support from the union (LNA)		This theme entails all experiences of strain that the nurses experienced during the first wave of COVID-19
What were the challenges brought by the COVID-19 emergence on the Senkatana healthcare workers in the first wave?	Experiences of distress	1.Fear of Covid-19 2.Depression due to Covid-19 pandemic		All problems brought by COVID-19 emergence on healthcare professionals during the first wave of COVID-19.
How healthcare professionals coped with work-related stress and the kind of support that was available for Senkatana healthcare professionals during the first wave of COVID-19?	Carrying on resources	1.Social support 2.Organizational support 3.Coping mechanisms	1.Spousal and family support 2.Compensation funds, provision of PPEs, Trainings and workshops, and Implementation of rotating shifts. 3. Oath retaken at work and religion the phase of COVID-19.	Coping mechanisms and kinds of support that was available during the first wave of COVID-19.

Table 2: Demographic Characteristics of Participants

Names	Age	Sex	Marital status	Number of children	Occupational status	Years in practice	Educational level
Agnes	29	Female	Married	1	Registered Nurse	4	Degree in Nursing
Mary	53	Female	Married	2	Trained Assistant Nurse	29	Certificate in Nursing
Eve	28	Female	Single	No Children	Registered Nurse	4	Diploma in General Nursing and Midwifery
Paula	33	Female	Single	No children	Registered Nurse	6	Diploma in General Nursing and Midwifery
Pretty	44	Female	Married	2	Registered Nurse	19	Advance University Diploma
Precious	36	Female	Married	2	Registered Nurse	7	Diploma in Midwifery
Rose	27	Female	Married	1	Registered Nurse	2	Diploma in General Nursing and Midwifery
Alfred	41	Male	Divorced	2	Trained Assistant Nurse	2	Certificate in Nursing
Jeannette	55	Female	Married	2	Registered Nurse	30	Diploma in General nursing
Emily	29	Female	Married	No children	Registered Nurse	6	Diploma in General Nursing and Midwifery