# OPERATIONALISATION AND IMPLEMENTATION EXPERIENCES OF THE CORONAVIRUS DISEASE 2019 (COVID -2019) RESPONSE GUIDELINES BY NURSE MANAGERS AT SELECTED PRIVATE HOSPITALS IN KWAZULU-NATAL, SOUTH AFRICA

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# Declaration

This is to certify that the work is entirely my own and not of any other person, unless explicitly acknowledged (including citation of published and unpublished sources). The work has not previously been submitted in any form to the Durban University of Technology or to any other institution for assessment or for any other purpose.

16 May 2022

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Signature of student Date

Approved for final submission

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# Abstract

## Background

The Coronavirus 2019 (COVID-19) pandemic is a complex global public health crisis presenting clinical, organisational and system challenges. In any healthcare organisation, management and leadership are key components and enablers of change for the delivery of health services. The uncertainty of the pandemic, emotional turmoil in the face of death and dying together with unfamiliar directives and the adoption of unaccustomed work practices has posed challenges in the work environment. The challenges of responding to COVID-19 national imperatives, such as response guideline adherence and preparation of vaccination rollouts has demanded meticulous coordination and control by all Nurse Managers. Furthermore, the role and functioning of the Nurse Manager as a change agent, during the pandemic, has undoubtedly determined the effectiveness of the COVID-19 risk mitigation strategies at an operational level.

## Aim of the study

The aim of the study was to explore the experiences of Nurse Managers regarding the operationalisation and implementation of the COVID-19 Response Guidelines.

## Methodology

The study was guided by a qualitative research design, using an exploratory, descriptive approach. This approach enabled the researcher to explore the experiences of Nurse Managers regarding the operationalisation and implementation of the COVID-19 Response Guidelines. Data was gathered through individual interviews from the study population based at two hospitals of different private hospital groups in KwaZulu-Natal, South Africa. Data saturation was achieved after interviewing 13 participants. The study was guided by Carl May's Normalisation Process Theory and Creswell's six steps of data analysis was utilised for content analysis and themes in this study.

**Findings**

Findings revealed three (3) major themes and associated sub-themes. Whilst management and leadership of Nurse Managers were constantly challenged, they appeared to lead by example, often placing themselves at the frontline. This study has revealed that leadership, during the pandemic in the health care sector, moved beyond just the recognition of the leader as a change agent. Their behaviors and approaches led these nurse leaders to effectively improvise and respond to the crises in the field of health care service delivery during disaster management. Furthermore, their shared vision, commitment and resilience ensured effective navigation during the COVID-19 pandemic.

**Key words:** COVID-19, pandemic, COVID-19 Response Guidelines, Nurse Manager, crisis management, disaster management, nursing leadership

# Dedication

This dissertation is dedicated to my parents Lalitha and Ramith Roopnarain, who spent their lives building mine and my parents by marriage the late Savitha Devi and Raghunath Harripersad who created a soulmate, just for me. Thank you Mummy and Daddy. Thank you, Ma and Dad.

Sri Bhagwan Sathya Sai Baba whom I have always relied upon to lead me. Thank you, Swami, for your teachings and guidance.

Neresh, my soulmate, thank you being you and the rock that I have come to rely upon.

Suhael, proud of you, love you more than you know. Thank you for taking care of me during this journey.

This dissertation is dedicated to all nurses who have braved the COVID-19 pandemic, your ongoing courage is acknowledged, your resilience saluted, your presence in the past and present is appreciated.

Finally, to all the Nurse Managers that have sacrificed much for the well-being of nurses, patients and the healthcare workforce, you are acknowledged and recognised. No number of words and gratitude can express your courage and resilience as change agents and leaders of the nursing fraternity.

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# Table of contents

# List of tables

# List of figures

# Appendices

# Glossary of terms

- **COVID-19 Response Guidelines**: Response guidelines prescribed by the World Health Organisation (WHO) for countries to implement during the COVID-19 pandemic. The guidelines were formulated after data was gathered, researched and evaluated, before disseminating to the world (WHO, 2020). In South Africa, the guidelines were mandated by the South Africa Department of Health (DoH), aimed at curbing the spread of the COVID-19 infection and promoting healthcare personnel and patient safety (WHO, 2020).

- **Crisis management**: Crisis management refers to improvement of safety during occurrences of unpredictable emergencies that have dire consequences. Yu, Wu, Yan, Luo, Zhang, Fan, Cui, Chen, Xu, Zhu, Bi and Sun (2021: 3689-3695) makes specific reference to Nurse Managers and crisis management as attitude towards crisis is preventative versus reactive.

- **Operationalisation**: A process that spells out precisely how a concept will be measured (De Reijke 2017:12-13). This entails significant transformation of the organisational dynamics and engagement of people to change behaviours and mindsets.

- **Nurse Manager –** A manager that is responsible for financials of a healthcare facility, policy implementation, staff and patient care, as well supervision, hiring and training of nurses. This is supported by Armstrong, Rispel and Penn-Kekana (2015: 26243) who refer to the Nurse Manager or Operational Manager as one responsible for the management their unit nursing and patient care; staffing and resources associated with health care delivery. In this study, the term Nurse Manager will refer to the Operational Manager, Nursing Unit Manager or Unit Manager.

# Acronyms

| Acronym | Full word/sentence |
|---|---|
| COVID-19 | Coronavirus 2019 |
| DENOSA | The Democratic Nursing Organisation of South Africa |
| DoH | Department of Health |
| DUT | Durban University of Technology |
| HCWs | Healthcare workers |
| HIC | High income countries |
| ICN | International Council of Nurses |
| IPC | Infection Prevention and Control |
| IREC | Institutional Research Ethics Committee |
| KZN | KwaZulu-Natal |
| LMIC | Lower-Middle Income Countries |
| NEI | Nursing Education Institution |
| NPT | Normalisation Process Theory |
| PPE | Personal Protective Equipment |
| R2598 | Regulation 2598, Nursing Scope of Practice |
| SA | South Africa |
| SANC | South African Nursing Council |
| SOP | Standard Operating Procedure |
| WHO | World Health Organisation |

# CHAPTER 1: ORIENTATION TO THE STUDY

## 1.1 INTRODUCTION AND BACKGROUND TO STUDY

Pandemics and epidemics are considered health emergencies that often result in death, dying and global socio-economic disruption. Health care professionals are known to play a vital role in the health response to such crisis situations as these professionals deliver direct patient care and are often at risk of exposure to the infectious disease or injury (Fernandez, Lord, Halcomb, Moxham, Middleton, Alananzeh and Ellwood 2020:4). Nurses, as health care workers are pivotal to the health care response to infectious disease epidemics or pandemics, and thus the experience of providing care in this context of crisis situations or disaster management has the potential to have significant short and long-term consequences for the nursing profession. The outbreak of Coronavirus 2019 disease (COVID-19) has had a catastrophic effect on the global health, welfare and safety of the human population. This disease was declared a pandemic by the World Health Organisation (WHO) in March 2020. Thus far, the WHO reported that COVID-19 had affected many countries. The WHOs statistics has recorded 147,763,730 cases of Coronavirus worldwide with 3,121,769 fatalities. South Africa recorded a total of 1,575,471 cases of coronavirus with 54178 deaths (Uzomah 2021:17552), being the highest COVID-19 count in the African continent. The COVID-19 virus was highly transmissible and virulent, that led to the overwhelming of countries' healthcare system due to the rapid increase of COVID-19 infection amongst members of the human population (Miller, Becker, Grenfell and Metcalf 2020:1212). Thus, the overburdening of the health care facilities has been presented with many challenges, one of which was whether there were adequate resources and facilities to treat and manage COVID-19 patients.

Effective allocation of medical and human resources, such as healthcare workers, protective equipment and other medical assistive devices such as ventilators, were required to manage healthcare crises and reduce the likelihood of the healthcare system being overwhelmed (Miller *et al.* 2020:1212). The study by Miller *et al*. (2020)

noted that the standard of care could be reduced if the treatment capacity of the healthcare facility was exceeded resulting in increased negative patient care outcomes. Notably, health care workers (HCWs) globally, such as nurses and doctors who occupy frontline during epidemics and pandemics, were and still are at increased risk concerning their physical and mental health. It has been reported that the global challenges that scientists were faced with at the onset of the COVID-19 pandemic were specific to the features of the causative virus, its virulence and a rather low level of scientific knowledge regarding the course of infection together with a lack of established treatment or vaccine regimens (Zerbini, Ebigbo, Reicherts, Kunz and Messman 2020: 2).

## 1.2 COVID-19 RESPONSE GUIDELINES

Epidemics have always been part of human history. However, a pandemic of such dimension as the COVID-19 one was rare. For the first time in recent history, almost the entire world was in lockdown (Zerbini *et al*. 2020:9). By networking with global experts, such as epidemiologists and scientists with a hope to identify ways of managing and limiting the spread of this pandemic, updated policies and response guidelines were formulated by WHO to reduce the risk of exposure and protect healthcare workers and patients. Health care facilities in South Africa and around the world offered a range of services including emergency, critical, medical and surgical services by qualified health care professionals. Nurses, being the largest group of health professionals at the frontline of the health care system, respond to both epidemics and pandemics (WHO, 2020). Soon after the declaration of COVID-19 as a pandemic, global health systems appeared to take strain, whilst buckling under pressure, which then caused a catastrophic surge in the global infection rates. The mounting infection rates of the COVID-19 pandemic saw the emergence of global COVID-19 Response Guidelines as per the WHO directive (Papoutsi, Giannakoulis, Ntella, Pappa and Katsaounou 2020:199).

These response guidelines were disseminated globally and released in South Africa in April 2020. South African Department of Health (DoH) mandated all provinces adopt

these evidence-based guidelines towards the reduction of the infection and prevention of transmission of the disease (DoH, 2020). The recommended response guidelines were further aimed at mitigating the risk in an appropriate and effective manner during evolving situations. The stipulated guidelines included workplace preparedness, infection control directives, quarantine and isolation measures, the use of personal protective equipment (PPEs), personal hygiene and social distancing, inpatient and outpatient care and management and monitoring. Emergency healthcare service provision become challenged with implementation of the continuously changing guidelines as issued by WHO, which was updated accordingly related to the evidence and feedback of the disease progression and the nature of the virus and its infection.

Guidelines are considered to be an essential foundation for healthcare policy, planning, delivery, evaluation and quality improvement by clinicians, managers and policymakers as they can translate the complexity of scientific research findings into recommendations that can enhance healthcare quality and outcomes (Bierbaum, Braithwaite, Arnolda, Delaney, Liauw, Kefford, Tran, Nic Giolla Easpaig and Rapport 2020:35448). The study by Bierbaum *et al*. (2020) reported that clinical guidelines are designed to reduce inappropriate clinical variation and improve the quality of care. Hence, limiting the use of the guidelines can lead to omission of preventable harm and benefits.

Simultaneously. nurses also faced a host of changing practice considerations, including redeployment to new roles and responsibilities, increased work times and pressures, fear of virus transmission and illness, complex patient and family dynamics, strained interdisciplinary team communication and difficult ethical issues in the delivery of care (Rosa, Schlak and Cynda 2020:30). This impacted on the personal lives of nurses in many ways such as death and exposure of family members. In addition, adherence to unfamiliar directives together with adoption of unaccustomed work practices and inexperienced staff posed challenges in the work environment.

Nurses humanise healthcare and possess unique skills that allow for the delivery of very specialised technical skills that are grounded in the human act of caring. They are

involved with patients during their most vulnerable time making their roles both unique and challenging, requiring a diverse set of skills and calmness under pressure (Madigan 2018: 1). Nurses comprise the largest component of the health workforce and play a key role in developing and preserving the core values of global health systems (Smith, Ng and Li 2020:1425). Notably, across the world, nurse leaders and Nurse Managers worked together within multidisciplinary health teams, prepared for and worked to overcome the worst pandemic humanity has seen in a century. Arguably, nurses have always played an instrumental role in infection prevention, infection control, isolation, containment and public health (Smith, Ng and Li 2020:1425). While nurses were predominantly depicted providing direct patient care; they were also well represented at every level of pandemic response from governmental advisory boards that led research studies, coordinated public health response teams and strategised humanitarian responses to the COVID-19 Response Guidelines.

### 1.3 COVID-19 VACCINATION ROLLOUT

Globally, COVID-19 became a public health emergency more transmissible than the influenza (Ghram, Moalla and Lavie 2021:33). This resulted in efforts to produce safe and effective vaccines, hence the first COVID-19 vaccine that received regulatory approval was Pfizer/BioNTech. In order to rapidly produce COVID-19 vaccines, the timeline to develop them were shortened and the stages compressed and overlapped in order to speed up the results in a short time frame (Ghram, Moalla and Lavie 2021:33). Vaccination remains the best and most cost-effective strategy with the greatest preventative benefit (Ghram, Moalla and Lavie 2021:33). Therefore, in addition to the social distancing, confinement and isolation, a large-scale vaccination rollout programme was planned to complement these social measures taken to limit the spread of the relentless COVID-19 virus. Rollout limitations included the distribution of large quantities of the vaccines rapidly whilst targeting the high-risk groups far and wide.

The DoH allocated COVID-19 vaccines to the respective hospitals and groups. The hospital employees were categorised into COVID-19 patient facing (Risk category 1)

and non-COVID-19 patient facing (Risk category 2) and non-patient facing (Risk category 3). All risk category 1 were prioritised for the administration of the COVID-19 vaccine with their consent. Setbacks were experienced in the initial rollout such as the first vaccines were found to be ineffective against the new variant.

## 1.4 NURSES IN LEADERSHIP AND MANAGEMENT DURING THE PANDEMIC

Nurses in general entered the nursing practice as enrolled nursing assistants after one year of training, enrolled nurses after two years of training and registered nurses after four years of training. Their role involves care of individuals in nursing homes, hospitals or clinics. According to D'Antonio and Buhler-Wilkerson (2021:2), a hospital setting is the most familiar with forms of nursing practice. Specialised nurse training aimed to keep ahead of trends and technology, such as Health Services Management, requires one to two years of training, which is dependent on the offering of the Nursing Education Institution (NEI). It is however, mandatory that a nurse applying to manage a health facility should be a qualified Professional Nurse and in possession of this qualification. This means that any HCW registered with the South African Nursing Council (SANC) as a Professional Nurse would have satisfied all the required skills and competencies of theory and practice during his/her training and should be able to function as per their Scope of Practice (SANC, R 2598). These nurses were therefore expected to practice in accordance with their scope of practice as per regulations of the South African Nursing Council and its prescripts (Democratic Nursing Organisation of South Africa [DENOSA] 2012).

Nurse leadership has become an important aspect of management practice in the changing health care environment. As health care organisations restructure to meet the demands for accessible, efficient, safe and affordable health care, nurses higher up in the hierarchical rung are under constant pressure to develop new management skills, and strategise to meet the challenges that accompany the system change (Cook, Hassem, Laher, Variava and Schutte 2021:1-10). All nurses in leadership positions were expected to have management and leadership skills in order to function effectively in their roles, allowing them to actively participate in organisational decision-making and reform. Nurse

leaders have a pivotal role in balancing the care of their staff with the care of the patients they serve despite the uncertainty and fear they encounter (Prestia 2020:326). Rapid and intelligent investment in nursing is needed at policy and leadership levels to ensure strategic workforce optimisation as management and leadership are important for effective service delivery. In healthcare organisations, they are key components for delivery of health services and enablers of change (Rosa, Schlak and Cynda 2020:30).

The role of the Nurse Manager, being in a frontline management position, especially during times of crisis management, allowed him/her to effect changes that were stipulated by other health care organisations or governance bodies, in an attempt to improve the quality of health care rendered (Yu *et al.*2021: 3689-3695). The same authors noted that while the aim of good leadership and management in any health care service delivery organisation was to provide services that were appropriate, efficient and equitable, the nursing unit was an independent unit operated and led by the Nurse Manager. This heightened role of the Nurse Manager made him or her embrace their role as change agents, while still effecting a positive practice environment highlighting the importance of supporting nurses not only during this crisis, but also during future pandemics and health disasters to promote health system resilience and maintain quality patient outcomes (Rosa, Schlak and Cynda 2020:30).

Irrespective of specialty, health care workers fear the reality of the present and uncertainty of the future due to the current pandemic (Balasubramanian, Paleri, Bennett and Paleri 2020:1638). The effect of the COVID-19 pandemic on the psychological well-being was equally important as nurses possess specialised skills that allow for the delivery of skilled technical work. However, adapting to change may have been perceived as a challenge as the COVID-19 Response Guidelines were situation related and in the face of uncertainty, it could drastically allow for resistance to change. Nurse leadership had become an important aspect of management practice in the changing health care environment.

De Reijke (2017:12-13) noted that operationalising meant planning and processing whilst implementing entails getting the job or task done. Therefore, during the current

COVID-19 pandemic, the roles and responsibilities of a Nurse Manager were further challenged regarding operationalisation and implementation as they mitigated risks to contain a highly contagious virus within the hospital setting (Aquila, Grimley, Jacobs, Kosturko, Mansfield, Mathers, Parniawski, Wood and Niederhauser 2020:140-143). Additionally, nurse leaders and managers have had to contend with the pressures of being under resourced whilst dealing with staff related issues and the demands of the multidisciplinary team (Joslin and Joslin 2020:528-529). Nurse leaders have a pivotal role in balancing the care and safety of their staff with the care of the patients they serve. Whilst leading and managing through crisis, they have had to ensure that their actions minimise negative impact and maximise success for all (Kyle, Skleparis, Mair and Gallacher 2020:1-8). Although a nurse leader's competency in disaster planning and preparedness was vital to effective management, it alone was insufficient. Nurse leaders required competencies to implement response plans and lead response and recovery efforts. Leadership contributed to the efficiency of a nurse leader in managing disaster responses and crises intervention. Effective implementation of disaster response plans such as the COVID-19 Response Guidelines, included processes such as vaccination roll-outs, improved staff engagement, workflow, and occupational health and well-being. It should also be noted that nursing expertise in managing crises situations constituted the difference between the success and failure. The manner in which Nurse Manager intervened in the midst of crisis to bring about safe and sustainable change does matter as organisation and leadership falls within the ambit of effective management (Joslin and Joslin 2020:531).

A 2020 research study highlighted gaps experienced by front-line workers amidst the COVID-19 pandemic, but seemingly omitted experiences of first-line Nurse Managers who have guided and supported the front-line employees during the pandemic (Bookey-Bassett, Purdy and Van Deursen 2020:21). The pandemic impacted the role of Nurse Managers and the effective response to its guidelines were influenced by factors such as support, enablers or facilitators and challenges, concerns or barriers. A study by Rosser, Westcott, Ali, Bosanquet, Castro-Sanchez, Dewing, McCormack Merrell and Witham (2020:459-461) supported and highlighted similar gaps in the

United Kingdom where little was apparently known about the critical role of the leaders that responded to this pandemic.

The researcher therefore posited that exploring the practices of Nurse Managers within a private health care facility, with the operationalisation and implementation of the COVID-19 Response Guidelines, would provide an understanding to the current leadership concerns in the face of adversity. Whilst, the importance of nurses as enablers of change was critical to the success of health sector reform so is effective nursing leadership and management in the workplace during this COVID-19 pandemic.

## 1.5 PROBLEM STATEMENT

COVID-19 Response Guidelines were prescribed by the World Health Organisation and mandated by the South African Department of Health (DoH), as a national strategy, aimed at curbing the spread of the COVID-19 infection and promoting healthcare (DoH, 2020). This made it necessary for all health care professionals to understand and implement specific guidelines in response to the global pandemic. While training of HCWs in the proper use of respiratory devices and handling of COVID-19 patients, has become mandatory in all health care organisations, vaccination roll-out and implementation strategy training in sectors has set new norms for the healthcare systems and effective leadership worldwide (Papoutsi *et al.* 2020:198). In view of the current pandemic, Nurse Managers required all staff members to adhere to the mandated COVID-19 Response Guidelines. Leadership, coordination, management and control by Nurse Managers was therefore vital for any health care facility to be able to navigate through crises situations. During disasters, barriers to effective operationalisation such as increased stress levels, information overload, situational chaos, disruption of services and casualties, demanded that the Nurse Manager took the lead in those situations. Given the complexities and the uncertainties in times of disrupted change, those that lead nursing teams, needed to learn to shift their decision-making styles to match the changing environment so that they could promote or facilitate change. This emphasised the need for Nurse Managers to display characteristics that fostered a culture of innovation, change, empathy, integrity and shared governance. McKnight and Moore (2021:1-3) revealed that together with a flexible

leadership and management approach from Nurse Managers, communication, staff engagement and adequate resources were just some of the factors that could influence positive outcome, the successful implementation of the COVID-19 Response Guidelines. The same study has recommended a critical appraisal of the evidence around leadership and management during times of crisis.

Thus far, the literature search has revealed many publications relevant to crisis intervention of the COVID-19 pandemic and related strategies to contain its spread. However, the preparedness and challenges experienced specifically by Nurse Managers with the implementation of COVID-19 Response Guidelines, remained an under-researched area. This prompted a need to explore the experiences that Nurse Managers have undergone related to the operationalisation and implementation of the COVID-19 Response Guidelines at a hospital level.

### 1.6 AIM OF THE STUDY

The aim of the study was to explore the experiences of Nurse Managers regarding the operationalisation and implementation of the COVID-19 Response Guidelines.

### 1.7 OBJECTIVES OF THE STUDY

The objectives of the study were to:

1. Explore the facilitators or enablers to the implementation of the COVID-19 Response Guidelines at an operational level.

2. Explore the barriers to the implementation of the COVID-19 Response Guidelines at an operational level.

3. Recommend strategies that could influence the operationalisation and implementation of the COVID-19 Response Guidelines at a hospital level, which can be utilised as best operating practices

## 1.8 RESEARCH QUESTIONS

This study aimed to answer one (1) main and three (3) specific research questions as follows*:*

### 1.8.1 Main question

What were the experiences of Nurse Managers with the operationalisation and implementation of COVID-19 Response Guidelines?

### 1.8.2 Specific research questions

1. How did Nurse Managers ensure that their actions minimised negative impacts for all stakeholders during crises management?

2. How did Nurse Managers ensure that their actions maximised success for all stakeholders during crises management?

3. What were some of the best operating practices that used to operationalise and implement the COVID-19 Response Guidelines and how could these be adopted?

## 1.9 SIGNIFICANCE OF THE STUDY

Apart from providing patient care, nurses needed to manage change effectively. With this in mind, managing change in the time of COVID-19 became an immense challenge. Deficiencies in structure, management, together with shortage of appropriately trained staff, insufficient resources contributed to difficulties in the response guidelines implementation (Wang, Zhou and Liu 2020:100). The significance of this study lay in identifying the needs and challenges of the Nurse Manager regarding management and implementation of COVID-19 Response Guidelines based on their experiences as professional nurses and Nurse Managers. Exploring these perspectives proposed improved methods of execution and resulted in acquired knowledge, skill and efficient methods of guideline application. It is therefore hoped that management teams of the specific healthcare facilities be made conscious of the challenge nurses faced and therefore strengthen existing crisis leadership and crisis management strategies. Furthermore, the findings from this study have sensitised management structures of

healthcare facilities to enhance the professional capacity building of nurses in leadership or supervisory roles. These developed strategies could be used as a basis and be adapted to facilitate in-service education for other nursing units and disciplines of nursing experiencing the similar problems.

## 1.10. OUTLINE OF DISSERTATION

Table 1.1 Structure of the dissertation**.**

| CHAPTER | TITLE | OUTLINE |
|---|---|---|
| Chapter one | Introduction to the study | Introduces and gives an overview of the study by identifying the topic of inquiry, research questions, study aims and objectives and the significance of study. The background information on nursing leadership, crisis intervention and COVID-19 pandemic are provided in order to highlight the importance of the topic and justify this study. |
| Chapter two | Literature review | This is an analysis of the existing literature and evidence serves to inform the study's focus and design. Literature review also highlights and compares the issues of COVID-19 experiences in the health and public sector from global, African and South African contexts. |
| Chapter three | Theoretical framework. | Presents the theoretical framework that guides this study. |
| Chapter four | Research design and methodology | Provides detailed description of the study methodology with the rationale for the research design and methodological selection, implementation strategies and ethical consideration. The study population, sample, data analysis methods are described. |
| Chapter five | Presentation of the results | Using the thematic analysis to present the qualitative results. This will include findings regarding the study in relation to the implementation of the COVID-19 Response Guidelines and an elaboration on the themes and the sub themes. |
| Chapter six | Conclusion and recommendations | Conclusions drawn from the findings are presented and limitations and strength of the study are identified in the chapter. Key findings are related to the chosen theoretical framework and recommendations. |

## 1.11 SUMMARY OF THE CHAPTER

Chapter 1 provided an overview of the study by identifying the topic of enquiry, research questions and study aims and objectives, significance of study and the structure of the dissertation. Background information was provided to highlight the importance of the topic under study. The following chapter will provide a review of scholarly literature from global, African and South African contexts that will highlight and compare the issues of COVID-19 response guideline implementation together with nursing management and leadership during disaster situations.

# CHAPTER 2: LITERATURE REVIEW

## 2.1 INTRODUCTION

This literature review analysed literature on insights and perspectives of healthcare professionals regarding implementation and operationalisation of COVID-19 Response Guidelines at operational levels. The purpose of the literature review aimed to explore global and national impact of COVID-19, identify risk mitigation factors, explore the impact of the COVID-19 Response Guidelines and identify the roles of the Nurse Managers in implementing and operationalising the COVID-19 guidelines at their workplace.

## 2.2 LITERATURE SEARCH STRATEGIES

Literature search for this study were conducted using the following electronic databases; Host search engine focusing on nursing journals (EBSCO), Cumulative Index of Nursing and Allied Health Literature (CINAHL), Medical literature online (MEDLINE) and PubMed-Public/Publisher Medline databases. The Durban University of Technology (DUT) library resource institutional repository, South African Nursing Council (SANC); South African Department of Health and The World Health Organisation (WHO) were consulted. Literature from national and international books and journals were accessed from the DUT library, including online resources. The search terms used included a combination of key words namely COVID-19, impact, nurse leaders, healthcare workers, global effect and leadership.

## 2.3 IMPACT OF COVID-19 GLOBALLY

Globally, COVID-19 had impacted all spheres of life including security, political, economic, social, technological and healthcare facilities. Healthcare, which was the epicentre of dealing with the virus, has been the worst affected (Etyang 2020:1). According to the World Health Organisation (WHO), the disease arose in January 2020 as a considerable public health emergency of international importance, and later, in March of the same year, it was classified as a pandemic (Da Silva, Da Silva, Pinto and

Menezes 2021: 1-8). Frontline healthcare workers (HCWs) were directly exposures to the virus in becoming infected and a transmitter of the infection to colleagues and uninfected patients (Timmis and Brussow 2020:1987). This was supported by a study conducted by Khalid and Ali (2020: 552) that described the COVID-19 pandemic as a relentless and highly contagious pandemic that resulted in significant number of deaths amongst health care workers. Countries around the world experienced the impact of this pandemic and its implications on healthcare delivery. Okereke, Ukor, Adebisi, Ogunkola, Iyagbaye, Owhor and Lucero-Prisno (2020:13-16) noted that Lower-Middle-Income Countries (LMIC's) and Higher Income Countries (HIC's) with well-structured and adequately financed systems, experienced major setbacks in the delivery of quality care due to poorly resourced health care facilities. Other challenges included inadequate space to accommodate patients, insufficient funds for adequate personal protective equipment (PPE) and staff shortages.

Health sectors in various countries experienced the burdened of ill-resourced health systems, poor infra-structure to accommodate patients and depleted human resources to care for the ill and infected patients given the heavy burden of healthcare needs and severely under-resourced healthcare frameworks and systems (Okereke *et al.* 2020:13). Furthermore, certain countries were severely affected by rapid increases of infections whilst other countries maintain steady rates of cases (Al Thobaithy and Alshammari 2020:88). At the frontline of health care systems, nurses who form the backbone, ensured that their core function of hands-on care (Salmond and Echevarria 2017:12-25) was provided to the presenting suspected COVID-19 positive patients, including citizens that utilised the health care system for regular health care needs. As core staff in any health care facility, nurses are the first line of caregivers to receive patients that enter the health care facility. A study conducted by Rosa, Schlak and Cynda (2021:29) highlighted that nurse spend a higher proportion of time in close contact with patients than other disciplines. Furthermore, nurses were identified as the key group of healthcare workers with an increased rate of COVID-19 infections, as noted by a 2021 which noted that,25.3% of deaths from COVID-19 among HCWs were nurses (Galanis, Vraka,

Fragkou, Bilali and Kaitelidou 2021: 3287). Infected nurses were quarantined and expected to remain at home until full recovery. This impacted on service delivery as remaining staff ensured wards and departments were adequately staffed at the expense of working increase in shift lengths, consecutive shifts, and on-call times; rest periods were likely insufficient (Rosa, Schlak and Cynda 2020:29). This had serious implications at operational levels as the pandemic saw nursing staff work additional shifts with decreased periods of rest in an attempt to treat and manage infected and complicated cases of patients as a result of the pandemic (Rosa, Schlak and Cynda 2020:30). Nurses not only experienced an increase in volume and intensity of work, but adjusted to new protocols in practice. The 'new normal' (Maben and Bridges 2020:2742) was a new skillset that had to be incorporated in this evolving profession. Isolation and quarantine along with concern for loved ones saw HCWs burdened with the uncertainty of the future. Despite these exposures, the pressure was so high they are likely kept working even though they had lost beloved ones such as family and team members (Upashe, Gosh and Chandrakar 2020:266). This was the case in countries around the globe, for example, first world countries like Italy, with a superior health system, had seen a significant impact of the number of COVID-19 infected patients that required specialised care, and nurses were at the forefront to ensure such patients received quality care even at the expense of becoming infected and losing their lives (Etyang 2020:1-15). This has resulted in concern, anxiety and fear within the nursing field (Etyang 2020:1-15). These situations warranted that robust leadership and management in ensuring that all parties involved were fully prepared to cope with the implications of the disaster situation.

Leadership and management play an instrumental role in the uptake of new or revised guidelines at operational levels. As countries around the world adopted the WHOs guidelines on dealing with the virus within a country's specific health context, the South African DoH issued its first version of the COVID-19 Infection Prevention and Control Guidelines in March 2020. Leadership was impacted upon as effective roll-out of disaster and preparedness plans by leadership was critical to implementation at operational levels as nurse leaders guided emergency management, adapted infection prevention

guidance, prioritised supply chain practices and directly engaged with patients and families while caring for the workforce through continuous on-site presence (Aquila *et al*. 2020:136). Leadership at facility levels introduced these guidelines to operational levels in all vital sectors such as health sectors in the hope of implementation.

However, the uptake of the COVID-19 Response Guidelines at operational levels did not transition well as Nurse Managers experienced an increase in volume and intensity of work while adjusting to new protocols in practice (Maben and Bridges 2020:2742). At the same time, the introduction of the COVID-19 Response Guidelines caused stress and confusion on how to effectively implement the guidelines at ward or unit levels. According to Timmis and Brussow (2020: 1987), effective leadership entails cooperation and coordination during crisis management whilst preventing the dissemination of misinformation and confusion amongst staff. Etyang (2020:1) agreed and stated that with the introduction of the COVID-19 Response Guidelines, came an increase in concern, anxiety and fear within the nursing sector. Accordingly, a study conducted by Thomas*,* Laher, Mahomed, Stacey, Motara and Mer (2020:965), confirmed that coping mechanisms of frontline staff, particularly nurses, were insufficient due to the ineffective operationalisation of the COVID-19 Response Guidelines.

While preparedness plans for healthcare systems were designed to ensure health disasters were promptly addressed and effectively managed, the impact of COVID-19 had revealed the poor response to preparedness and resources that had resulted in the healthcare facilities experiencing challenges with staffing, equipment, finances and space to accommodate infected patients. According to a study done by Peiffer-Smadja *et al*. (2020:670), the training of HCWs on handling of an outbreak in the hospitals surfaced as a challenge. This further caused delayed uptake of prompt responses to the management of the outbreak (Augustin *et al*. 2020:6)**.** The authors also note that it was crucial that healthcare personnel were prepared, with knowledge and skill on how to effect response guidelines to mitigate further damage and the spread of the infection. This saw the DoH

turn its focus to the training and awareness of organisational preparedness to COVID-19 Response Guidelines and in particular, on nurses, at an operational level.

In Canada and internationally, the COVID-19 pandemic created chaos, complexity and uncertainty for healthcare leaders. The study by Bookey-Bassett, Purdy and Van Deursen (2020:21) highlighted that current literature and media focus were the experiences and impact of COVID-19 on front-line workers but had omitted the experiences of first-line Nurse Manager who have guided and supported the front-line employees during the pandemic. A study by Rosser *et al.* (2020: 459-461) supported and highlighted similar gaps in the United Kingdom, where little was known about the critical role of the leaders that responded to this pandemic.

## 2.4 PANDEMIC RISK MITIGATION IN THE HEALTH SECTOR

In response to the COVID-19 pandemic worldwide, countries had implemented control measures aimed to reduce transmission of the virus by reducing close contact (Douglas, Katikireddi, Taulbut, McKee and McCartney 2020:1). Many countries engaged in disease mitigation, preparedness and responses. However, these measures for coping with the events of COVID-19 proved insufficient (Al Thobaity and Alshammari 2020:88). Contrarily, in January 2020, China implemented unprecedented containment strategies, including the restriction of human movement and suspended flights and trains, which contributed significantly to the decline in reported cases. The WHO has congratulated China on a “unique and unprecedented public health response that reversed escalating cases” (Nicola, O'Neill, Sohrabi, Khan, Agha and Agha 2020:208-209). Hence time-critical measures contributed positively to the decline in cases as concluded by Nicola *et al.* (2020:209). The implementation of control measures a week earlier could have prevented approximately 67% of all Chinese cases according to a model simulation from the University of Southampton, United Kingdom.

Amidst the development of the pandemic, health care workers remained as frontline personnel involved in the screening and treatment (Spoorthy, Pratapa and Mahant 2020: 1-5) of patients and exposed themselves to possible transmission of the virus. Along with

the frontline global nursing response, the International Council of Nurses (ICN), the World Health Authority and the International Confederation of Midwives (Catton 2020:301), set out what was required from a global perspective to protect nurses and the people they serve. It was concluded that at a time of crisis, it was imperative that the world's nursing leaders, through ICN's National Nursing Associations, step up to give support and guidance at this historically unsettling time (Catton 2020:301). On an operational level, the strategic response by leadership and management played an instrumental role in the uptake of new or revised policies and guidelines.

The African countries' attempts aimed to mitigate and prepare for this pandemic saw the Zambian Government procuring 400 doctors and 3,000 paramedics to speed up responses to the call for assistance. Simultaneously the Kenyan Department of Health employed 6,000 healthcare workers that ensured healthcare facilities were adequately staffed in dealing with the increasing number of patients presenting with COVID-19 symptoms (Otu, Charles and Yaya 2020:38). In an attempt to strengthen the health care system, the World Bank provided financial resources to aid to support and strengthen health care systems in vulnerable areas in order to combat the pandemic (Etyang 2020:13). The exposure of healthcare workers was highlighted by the same author, as these professionals were in direct contact with the treatment, care and rehabilitation of COVID-19 patients. It could be argued that the situation in Africa was similar to European countries such as France and Italy where HCWs were in shortage as a result of infection or death. Compounding challenges like staffing and ailing health care systems, including non-availability of resources, were problematic in LMIC's (Etyang 2020:14).

South African attempts aimed to mitigate and prepare for the pandemic saw the South African Department of Health issue the first version of COVID-19 Infection Prevention and Control Guidelines as guided by the South African National Infection Prevention and Control Strategic Framework in March 2020 (DoH 2020). The guideline was amended in May 2020 considering specific usage of Personal Protective Equipment (PPE). The unique health care context of South Africa with the quadruple burden of disease, required policy makers to consider all aspects of protecting the health care professionals and in

particular nurses. Furthermore, the psychological impact of dealing with the virus and consequences landed nurses in role conflict and overload (Rosa, Schlak and Cynda 2020:30-31).

Nurse leaders' coordination of infection control processes and reassuring staff with adequate PPE supply reiterated the concern for the well-being and safety of all individuals (Aquila *et al.* 2020:137). Acknowledgment of staff and their opinions led to trust development and encouraged nurses to engage in planning and problem-solving. A study by Jeffs, Merkley, Taggart, Andress and Harris (2020:17-18) revealed that some challenges described by nurse leaders included the lack of a playbook as a guide to the constant need to increase ICU beds, surge staffing, training and ever-changing information. These constant changes and need to reinvent impacted on building staff and patient trust going forward. During this crisis, communication was hindered by increased stress levels, service disruption and constantly changing information. This situation could be dispelled by factual information communication timeously and transparency (Timmis and Brussow 2020:1989). Truthful communication ensures that staff sees the leader as authentic, relevant communication builds emotional relationships and mindful communication avoids incorrect message transmission.

The coronavirus pandemic and risk mitigation presented demands and challenges to the healthcare leadership and management. One such challenge was compliance of social distancing as a method of risk mitigation that aimed to reduce spread of infection thus avoiding the overwhelming of the health services. Social distancing measures included isolation at home, banned social gatherings, essential services continued and non-essential services closed, public transport stopped and physical distance of at least 1.5 metres between individuals.

Where leadership is suboptimal, dissemination of misinformation flourishes (Timmis and Brussow 2021:1989). Therefore, leadership and management in the face of adversity needed to be examined and this further emphasised the need for nursing leadership that nurtures a culture of innovation, change, empathy and integrity. Hence it should be noted that during a crisis, nurse leaders did not need predefined response plans, but behaviours

and approaches that assisted them to effectively respond and improvise in navigating crises such as the COVID-19 pandemic. This is supported in a study done by Ahern and Loh (2021:266) who revealed that leaders across all sectors have been required to respond to both direct and indirect effects of this crisis, with little time for preparation, and in a constantly changing environment.

The DoH higher-level management structures identified the need to curb infection rates amongst health care and Allied Health professionals, particularly nurses. A study conducted in Pakistan by Khalid and Ali (2020:551) found that the lack of standard operating protocols for dealing with the pandemic impacted on poor management of the pandemic resulting in increased number of deaths amongst patients and staff. When compared to countries such as the United States of America and the United Kingdom that are well resourced in dealing with the virus, Pakistan lacked financial resources to ensure preventative measures were followed as required (Khalid and Ali 2020:552). This impacted on HCWs that were caring for patients, as concerns about their safety were at risk and that of their family whom they risked infecting should resources not be available to protect themselves adequately when caring for COVID-19 positive patients.

## 2.5 COVID -19 RESPONSE GUIDELINES

The COVID-19 pandemic moved at a rapid rate, both in global transmission and in knowledge about the disease (Gallaher and Charles 2020:42). Health authorities across the world employed numerous preventative strategies and non-pharmaceutical interventions to mitigate the rapid spread of disease including careful infection control, the isolation of patients, and social distancing (Nicola *et al*. 2020:206). The WHO collaborated globally with healthcare experts to learn about the virus, its transmission, risk populations and practices to limit further transmission. The efforts of the collaborations resulted in guidelines that was benchmarked in countries globally, aimed at mitigating the risk of COVID-19 spread during the evolving situations. These guidelines include workplace preparedness, infection control directives, quarantine and isolation measures, the use of PPEs, personal hygiene and social distancing.

The European Respiratory Society urged its citizens and national governments to prioritise health and safety at frontlines spaces in the fight against COVID-19 (Papoutsi *et al*. 2020:195). Recommendations included the provision of PPE as a priority, HCWs shift adjustments to incorporate time off, opportunities to minimise exposure and the accommodation of mental well-being. Additionally, adequate training of HCWs on the proper use of respiratory devices and handling of COVID-19 patients (Papoutsi *et al.* 2020:195) was highlighted in guidelines relative to the European Health context. COVID-19 Response Guidelines incorporated lessons learnt from Swine flu (H1N1) in 2009 and Avian virus (H7N9) in 2013 as similar challenges were experienced (Kisely, Warren, McMahon, Dalais, Henry and Siskind 2020:2). Health service management increased focus on the appropriate and rational use of PPEs and the need for training of HCWs who feared contracting the disease. Each of these past outbreaks raised similar problems for both health services and staff in terms of the psychological impact of increased workload, the need for personal protection and fears of possible infection of themselves and their families (Kisely *et al.* 2020:2). However, lessons learnt and adapted proved inadequate to the catastrophic impacts of COVID-19 on the health care systems and personnel, particularly nurses that endured the physical and psychological reality of increased workload, fears of possible infection of themselves and their families (Kisely *et al*. 2020:2), loss of life, stigmatisation and uncertainty of the future.

The COVID-19 Response Guidelines within the South African health care context covered comprehensively all aspects of the healthcare facility management such as COVID-19 infection precautions implementation, rational and appropriate PPE usage, environmental control, patient placement, hand hygiene, and vaccination rollout. The guidelines were also specific to certain non-negotiable aspects such as training of donning and doffing and the usage of the different masks to ensure the fit is correct with the intent to curb transmission of this virulent virus. Despite the strategic implementation of these measures, the number of new reported cases continued to rise at a profoundly alarming rate (Nicola *et al*. 2020:206).

A study by De Reijke (2017:12-13) concluded that education for professionals or patients were the most commonly employed strategies for translating guidelines to practice and

identified gaps in guideline implementation that represent opportunities for future research. The same study recommends that individuals with expertise in implementation be involved in guideline development from the outset. In unpacking and ensuring implementation of the COVID-19 Response Guidelines to staff, information overload, demonstration of practices and sustainability of practices were adequately explained by higher management. This resulted in nurses experiencing increased fear and anxiety and role overload. Nurse Managers were strategically positioned as champions to teach and demonstrate the guidelines and allay fears experienced by nursing staff by management, who predominantly are involved in supportive care (Nicola *et al.* 2020:206).

## 2.6 THE ROLE OF ORGANISATIONAL MANAGEMENT IN THE IMPLEMENTATION OF THE COVID-19 RESPONSE GUIDELINES IN THE WORKPLACE

Conscientiousness is the strongest driving force of the work role performance (Ellershaw, Fullarton and Mcwiliams 2016:244), therefore in such health emergencies as the COVID-19. Attention to nurse conscientiousness and enthusiasm was important in curbing the pandemic. Considering that knowledge regarding COVID-19 was constantly evolving and consequences of the infection impacting being life-threatening, formulation of plans to train staff and related health care personnel on the COVID-19 pandemic was directed to frontline personnel and nursing in particular to prevent further spread.

### 2.6.1 Infection prevention and control

Good nursing practice requires the maintenance of the health status of patients by the prevention of infection. Infection prevention prevails by implementing detailed, specific yet comprehensive and accurate infection control standards and guidelines. Without these guidelines, there is no evidence to prove that preventative measures were provided to the healthcare team to guide the particular staff in infection prevention. (Carrico, Garrett, Balcom and Glowicz 2018:28-29). Furthermore, poor infection control measures allowed for poor control of the spread of illnesses and health care workers became more vulnerable to contracting the infection. The South African Nursing Council (SANC) Rules and Regulation R387 of 1985, relating to Acts and Omissions requires a nurse to maintain the health status of patients by the prevention of infection (SANC 1985).

Policies, designs, strategies, and actions to cope with infectious diseases change over time. Standard operating procedures (SOPs) play a vital role to hinder virus transmissions as an outbreak generally creates major challenges for the healthcare systems (Khalid and Ali 2020: 554). Infection prevention policies and practices are a foundation of any healthcare institute; hence PPE was essential for HCWs. Global shortage left HCWs exposed and unable to protect themselves that resulted in HCWs feeling unsafe. HCWs increased risk of infection was related to the initial pandemic outbreak when the pathogen was not well known and awareness surrounding appropriate use of PPEs was not well understood. Hence implementation of correct PPE usage was ineffective. HCWs risk to infection increased due to prolonged exposure to infected patients. Shortage of PPEs lead to the initiation of emergency responses that led to rapid demand for PPEs (Wang, Zhou and Lui 2020:100). HCWs received inadequate training for Infection Prevention and control (IPC), leaving them with a lack of knowledge of IPC for respiratory-borne infectious diseases (Wang, Zhou and Lui 2020:100). Professional supervision and guidance, as well as monitoring mechanisms, were lacking. This situation further amplified the risk of infection for healthcare workers.

### 2.6.2 Disaster management

Healthcare facilities such as hospitals have an important role in the preparedness of emergency procedures and policies. The aim of preparedness is an effective response to a disaster situation. The preparedness of the healthcare facility and the staff is to adequately cope and manage the workload of treatment that is required during a disaster event (Wurmb *et al*. 2020:387).

A health care facility disaster plan should include identifying, preparing for, responding to and recovering from potential disasters and utilise resources available to the organisation (Sonneborn, Miller, Head and Cross 2018:23). Continuous education is imperative to their preparedness including assessing and participation in mock drills in an attempt to familiarise this important aspect, thus ensuring effective response in an emergency disaster. Individuals need to have an awareness of the disaster plan within their healthcare facility and understand the role expected of them if a disaster event occurs

(Sonneborn *et al.* 2018:23). Health care professionals also want to have confidence that their voice and expertise are a part of the conversation as organisations develop their emergency preparedness plans to respond to the pandemic. Shanafelt, Ripp and Trockel (2020:2134) also support that HCWs want to participate in the disaster planning from initiation, not when a disaster occurs. Holge-Hazelton, Kjerholt, Rosted, Stine, Borre and McCormack (2021:1409) clarify that engagement is an essential quality and evidence suggests that goals are more easily achieved and teamwork improved.

## 2.7 FACTORS THAT CHALLENGED THE IMPLEMENTATION OF THE COVID -19 RESPONSE GUIDELINES IN THE WORKPLACE

### 2.7.1 Preparedness of healthcare facilities

Preparedness plans for healthcare systems were designed to ensure whatever health disaster/ epidemic or pandemic was encountered, the systems would be effective in handling causalities. However, the impact of COVID-19 had revealed the poor response to preparedness and resources that resulted in the healthcare facilities experiencing challenges with staffing, equipment, finances, space to accommodate infected patients and litigation cases. According to a study by Peiffer-Smadja *et al*. (2020: 669-672), several challenges in the hospitals including training HCW's on the handling of an outbreak, technical supervision specially by the head nurse, technical maintenance of equipment example oxygen apparatus, adequate supplies, a 24/24 circuit outpatient department that screens patients and the need for additional health care personnel particularly nurses, delayed the uptake of prompt response to the COVID-19 virus. Similarly, a study conducted by Augustin *et al*. (2020:6) identified the need for a stand-alone-building to accommodate the influx of infected patients as this was a predisposing factor for the large number of infection rates and deaths.

Equally important is the preparedness of healthcare personnel to the swift uptake of COVID-19 Response Guidelines at grassroots levels to curb further spread or infection to others. Nurses as the first line of contact with the patient should be adequately trained on the preparedness response guidelines and effect practices at initial contact with patients. Ohta, Matsuzaki and Itamochi's study (2020:136) confirm nurses fear of being

infected resulted in absenteeism from the workplace, which impacted staffing issues and compromised patient care. This study further described nurses as being fearful of practices due to lack of direction and instruction, illustrating the need for clear concise instructions or standard operating procedures on how to effectively implement response guidelines for effecting safer, resourced work environments that staff feel safe to work in.

### 2.7.2 The shortage of staff, supplies and equipment

As frontline workers, a continuous supply of PPE was essential to ensure nurses protect themselves, their families and others. COVID-19 has posed a substantial challenge on continuous supply of PPE's, medical equipment, for example, oxygen cylinders and breathing apparatus including access to ventilator machines. A lack of medical resources means COVID-19 care could impinge on healthcare work conditions (Ohta, Matsuzaki and Itamochi 2020:135). Supply chain failure in providing a continuous flow of PPE's lead nurses to taking further uncertain risk when providing care to COVID-19 positive patients. The increased need for isolation beds and higher levels of nursing care (Rosa, Schlak and Cynda 2020:29) resulted in an increased need for nursing staff. In an attempt to meet the health care demand, institutions had expanded their care facilities, transforming their space into isolation sections in an attempt to create more bed space. This rippled into the need for more HCWs, resulting in increased stress for existing staff, with additional implications for the well-being of new members of the team and deployment of nursing staff to new roles and responsibilities (Rosa, Schlak and Cynda 2020:29)) such as areas of higher acuity and specialised units.

According to Moyimane, Matlala and Kekana (2017:100), equipment and supplies were vital tools to ensure nurses provide holistic care for patients and in the absence of such, the breach of care, medico-legal hazards, litigation and unethical practices were possible consequences. A significant challenge in the implementation of COVID-19 guidelines in the workplace was the lack of adequate and functional equipment and supplies in caring for patients during the COVID-19 era of nursing. Lack of equipment was a barrier to the delivery of quality health care. Shortage of equipment was due to non-availability or poor maintenance of those that were available. This challenge with equipment led to the

inability to render quality care. Shortage or malfunction of equipment resulted in nurse's frustration and demotivation as these limits nursing care, led to dissatisfaction and feelings of guilt, especially if a COVID-19 patient demised as a result these challenges (Rosa, Schlak and Cynda 2020:31).

Nurses have spoken openly about their concerns, citing the danger to patients who may become infected, as well as to themselves and their families, and have considered refusing to provide care unless adequate PPE was available (Bassett and Stanley 2020:19). Hence, the pressures of caring for patients in the context of a health emergency without the certainty of a safe working environment was causing considerable distress and, for some, physical and emotional ill health (Maben and Bridges 2020: 2742-2744). Therefore, the ability of the leader to be adaptable, make sense of the event and lead effectively could support and reassure those nurses who have raised concerns about their working environment. A study by Hamal, Pokhrel, Pandey, Malla and Lamsal (2020:170) supports those provisions related to the availability of facemasks, airborne isolation systems, critical care preparedness, and training to healthcare staff were not adequate during the pandemic.

### 2.7.3 Vaccination rollout

Vaccination is the best and most cost-effective strategy with the greatest preventative benefit (Ghram, Moalla and Lavie 2021:1). Despite being among the first countries in Africa to receive COVID-19 vaccines, South Africa had vaccinated less than 0.6% of its population and as at May 2021, 350 000 of South African population of 58 million received the vaccine (Mlaba 2021:1). However, to date, 45.14% of the South African adult population vaccination (DoH 2022: 12). In December 2020, South Africa experienced one of the first coronavirus variants in the world, 501Y.V2, a more contagious mutation of the SARS-CoV-2 virus. Despite the country being on strict lockdown measures, initial setbacks in the rollout was that the first vaccines that had never been tested on this new variant and was later found to be ineffective against the new variant. The J & J vaccine not only proved to be effective in protecting against the 501Y.V2 variant, but it also could be manufactured on home soil, making distribution of the vaccines easier (Mlaba 2021:1).

The second set back experienced was the investigation of blood clots as a side-effect of the vaccine. Along with the J & J vaccine, South Africa distributed the Pfizer-BioNtech vaccine. A three-phase rollout was planned.

*Phase one***:** As with many countries, frontline health care workers were prioritised

*Phase two:* People over 60 years old, frontline essential workers, and people over 18 years old with co-morbidities were next in line after health care workers.

*Phase three***:** Finally, at this phase of the rollout, the remainder of the South African population will be able to register for a vaccine. Officials had committed to prioritising 22.5 million South Africans over the age of 18 in order to vaccinate 67% of the population by March 2022, in order to achieve herd immunity.

### 2.7.4 Health Care Workers (HCWs)

The WHO (2020) recognised that nursing professionals were demonstrating outstanding compassion and courage towards the battle against COVID-19 and never before had their value been more clearly demonstrated. However, the COVID-19 pandemic was a public health challenge that put health systems in a highly vulnerable situation, where nurses have provided care to patients with COVID-19 under pressure and uncertainty (González-Gil *et al*.2021:1-9). The study by González-Gil *et al.* (2021:1-9) revealed that nurses reported feeling insecure for fear of becoming infected and potentially carrying the virus. Patient management, either COVID-19 positive patients or suspected ones, were effort coordinated between the multidisciplinary specialists such as intensivists and hospital management teams such as IPC officers. Initially, the management of the first infected patients were based on scientific data published since the start of the outbreak, as well as experience from previous outbreak of SARS and MERS-CoV (Peiffer-Smadja *et al.* 2020:670), until the new guidelines of clinical management of patient and use of PPEs evolved. This resulted in a challenge to update all the healthcare workers (HCWs) of the new guidelines that was met with regular training and education practice.

The unfolding of the COVID-19 pandemic was dynamic, and a number of factors increased the complexity of leading practice change (Jones, Comerford, Curry and

Holubiec 2020:66). The study by Jones *et al. (*2020) found that as a result of frequently emerging facts about the virus, leaders were required to paddle quickly amid these fast-moving currents without a map to find or develop internal direction for sector-specific practice (Jones *et al.* 2020:66). Through all this, the nursing profession demonstrated courage and compassion during the COVID-19 pandemic, clearly defining their value. Health care professionals dealt with more than their stress; they also had to deal with others' anxieties, which enhanced despair and produced vicarious trauma, acquired through close contact with trauma victims and patients' struggles, reflected directly in individuals' mental health (Upashe *et al.* 2020:266). Health professionals dealt with the frustration of making inappropriate decisions due to the lack of resources. Jones *et al*. (2020:66) clarify that whenever the course is not clear, a cautious direction is chosen, based on the cumulative knowledge available to best mitigate risk. Hence decisions regarding the pandemic were taken based on prior or best available knowledge, experience, intuition, consensus and common sense (Kaul, Shah and El-Serag 2020: 308).

Health professionals faced the dilemma between carrying out actions of promotion and care assistance to people suspected of being infected by the virus or to those already diagnosed with COVID-19 (Da Silva *et al*. 2021:1). Healthcare workers underwent unique risks and emotional strain when exposed to the COVID-19 highly contagious virus, although they had supportive environments. Restriction on visiting times led to the HCWs being the only people available to offer emotional support and comfort to all hospitalised patients during their illness and, for those who did not survive, while dying (Lake 2020: 213). This resulted in ethical dilemmas, as their professional values conflicted with their personal values and HCWs were concerned for themselves and their loved ones. Leaders' abilities were critical in this situation of guidelines implementation for well-being and safety to collaborate, communicate, safety focus, tenacity, transparency and precision to navigate the crisis (Jones *et al*. 2020:66).

The study by González-Gil *et al. (*2021:8) revealed the discomfort experienced by nurses during the response to this pandemic as a result of the imbalance between workload and human resources and the lack of communication with mid-level managers. Nurses

expressed a high degree of emotional exhaustion with difficulty in expressing their emotions. Together with the rapidly evolving nature of the COVID-19 epidemic, ever changing statistics and constant unravelling of new research findings, challenges increased.

## 2.8 FACTORS THAT PROMOTED THE IMPLEMENTATION OF THE COVID -19 RESPONSE GUIDELINES IN THE WORKPLACE

### 2.8.1 Employee well-being and safety

The healthcare team's experiences and exposures to the COVID-19 pandemic have increased workload resulting in mental, physical and emotional exhaustion that led to burnout and moral distress. Nurses are the most prevalent healthcare workers with the highest proportion of direct patient care time. This requires distinct considerations to protect and sustain them throughout the pandemic (Rosa, Schlak and Cynda 2020:31). Nurse leaders are held at a higher standard of ethical behavior due to the duality of their responsibility: doing what is right for a patient, and doing what is right for the staff they serve (Prestia 2020:327). The study by Prestia (2020) noted that for nurse leaders, moral distress can occur when the right course of action is not pursued because of an error, lack of judgment, or a decision made at a higher level or beyond one's control. The COVID-19 pandemic presented a challenge to the healthcare leadership and management. However, these challenges have provided opportunities for the healthcare sector to improve on shortfalls and deficits. Such an example that can cause moral distress to nurse leaders as described by Prestia (2020:327), is an attempt to ensure adequate supply of PPEs and to be informed that a delay has occurred in the shipment as the event is beyond the control of a manager. Lack of PPEs may lead to moral distress of staff as they fear exposure to the COVID-19 illness and fear the lack of protection. Nurse leaders ensuring and reassuring staff with adequate PPE supply and rational usage re -iterates the concern for the well-being and safety of the individuals. This will instill in staff a sense of being cared for. Physical and emotional distress can be reduced avoiding feelings of burnout and distress. Shanafelt, Ripp and Trockel's (2020: 2134) study supports that HCWs voiced certain concerns that required attention from their

leaders, who in turn could reduce their anxieties and assure them that they being cared for. The concerns were related to the lack of PPEs, fear of transmitting the virus to their family, uncertainty if their organisation would support them and their families in the event that they are infected and lack of access to updated information. All HCWs may not be affected by anxieties but the lack of confidence in themselves can occur compromising the healthcare delivery.

### 2.8.2 Communication

The COVID -19 pandemic presented demands and a challenge to the healthcare leadership and management. However, these challenges have provided opportunities for the healthcare sector to improve on shortfalls and deficits by improved communication. Effective communication impact on patient care and the pivotal role in the administration of nursing departments, has been raised by two studies done by Vasli and Dehghan-Nayeri (2016:62) and Zhuravsky (2015:135). Good communication enabled nurse leaders to handle the human dimension of a crisis, particularly through the use of empathy (Edmonson, Sumagaysay, Cueman and Chappell 2016:175). This can be practiced by nursing management conducting hospital rounds that lead to interaction with nurses creating opportunity to better understand best practice barriers and facilitators. Acknowledgement of staff and their opinions lead to trust development, encouraging nurses to engage in planning and problem solving. During a crisis, communication is hindered by increased stress levels, service disruption and constant changing information. This can be dispelled by factual information communicated timeously and transparently. Truthful communication ensures that staff see the leader as authentic, relevant communication builds emotional relationships and mindful communication avoids incorrect message transmission. The nurse leader must exemplify a behavior of clear communication, ensuring truth, mindfulness and relevance (Prestia 2020:327).

### 2.8.3 Leading

Along with the provision of high quality, cost-effective and safe care, nurse leaders are also committed to creating environments that support excellence in patient and family experience (Aquila *et al.* 2020:136). Hospital departments are differentially affected by the COVID-19 pandemic. Front-line departments such as ICUs were largely affected in all investigated aspects of work environment, including workload, lack of recovery and managerial support. (Jonsdottir, Degl'Innocenti, Ahlstrom, Finizia, Wijk and Åkerström 2021:1-7). Jonsdottir *et al.* (2021:1-7) alludes that staff relocation ensures promotive work environments and that departments such as Human Resources could render support to managers, thereby providing them with more time to organise the work and support their staff during the pandemic, especially during the times that workload is higher. Nurse leaders working side-by-side with staff with a “boots on the ground” attitude promotes the implementation of the response guidelines and the aim to keep patients and staff well-being the center of their efforts is voiced. The study by Da Silva *et al*. (2021:3) highlighted nurse leadership for effective and incisive work of those professionals fighting directly against the new coronavirus.

The key to leaders establishing action plans in order to ensure the sustainability of care management was to explore experiences of nurses providing nursing care for patients under pressure and under stressful conditions. Some important factors to consider is the nurse: patient ratio, patient complexities compared to nursing clinical competence and the provision of the appropriate and adequate PPEs with training and clear clinical practice guidelines. These interventions along with emotional support is key to communication between frontline nurses and mid-level managers, ensuring efficient care management in times of crisis (González-Gil *et al.* 2021:1).

## 2.9. SUMMARY OF THE CHAPTER

This chapter provided the information, arguments and debates related to COVID-19 and health care workers. The following chapter will describe the theoretical framework that guides this study.

# CHAPTER 3:

# THEORETICAL FRAMEWORK

## 3.1 INTRODUCTION

The previous chapter analysed literature on insights and perspectives of healthcare professionals regarding COVID-19 Response Guidelines at operational levels. The literature review explored global and national impacts of COVID-19, identified risk mitigation factors, explored the impact of COVID-19 Response Guidelines and identified roles of the Nurse Managers in the implementation of COVID-19 guidelines at the workplace. This chapter presents the theoretical framework that guided this study.

## 3.2 THEORETICAL FRAMEWORK

A framework is the overall conceptual underpinning of a study (Polit and Beck 2017:119). A theory enables accurate description of phenomena, offers systematic explanation of processes and leads to knowledge claims. The researcher used Carl May's Normalisation Process Theory (NPT) to guide the study. NPT is a theoretical model that helped to explain the process of how complex interventions became embedded as everyday practice. NPT (Figure 3.1) is made up of four constructs that represent the understanding of how processes were implemented and integrated in daily operations by people (coherence), how people engaged (cognitive participation), how people enacted (collective action) and appraised the effects (reflexive monitoring) (Agreli *et al*. 2019:1-8).

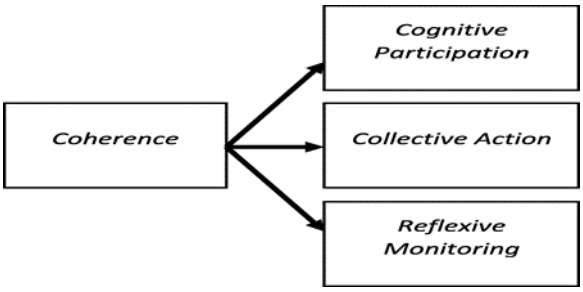


Figure 3.1: Components of Carl May's Normalisation Process Theory (Agreli *et al*. 2019).

Normalisation Process Theory was used to explore the experiences affecting Nurse Managers regarding the operationalisation and implementation of the COVID-19 Response Guidelines

### 3.3 Normalisation Process Theory (NPT)

The Normalisation process model is a sociological model that described how it was possible to embed new technology as everyday work. The NPT was developed to explore and understand how complex interventions were operationalised. The justification for applying the NPT to explore how COVID-19 Response Guidelines are used and understood by healthcare professionals is that this theory offers explanations of the mechanisms that drive implementation processes, and focuses on observable actions, rather than presenting a list of factors that need to be considered

#### 3.3.1 History of the Normalisation Process Theory (NPT)

The Normalisation process model is a sociological model that described how new technologies were embedded in healthcare, was developed by Carl R. May and his co-workers. Carl May appeared as a witness at a British House of Commons Health Committee Inquiry on New Medical Technologies in the National Health System in 2005. He looked at how people made it possible to make new technology become embedded as everyday work routinely (Corrigan, Lake and McGinnis 2021:205).

#### 3.3.2 Core propositions of the Normalisation Process Theory (NPT)

NPT is concerned with identifying and understanding the ways that people make sense of the work of implementing and integrating a complex intervention:

- Coherence: individuals must individually and collectively understand what the new way of working is.
- Cognitive participation: individuals must agree to start engaging with the new model of care, and continue working at it.
- Collective action: individuals need to have the resources to work in the new way.
- Reflexive monitoring: individuals need to receive feedback that reinforces the new way of working (Agreli *et al*. 2019:2).

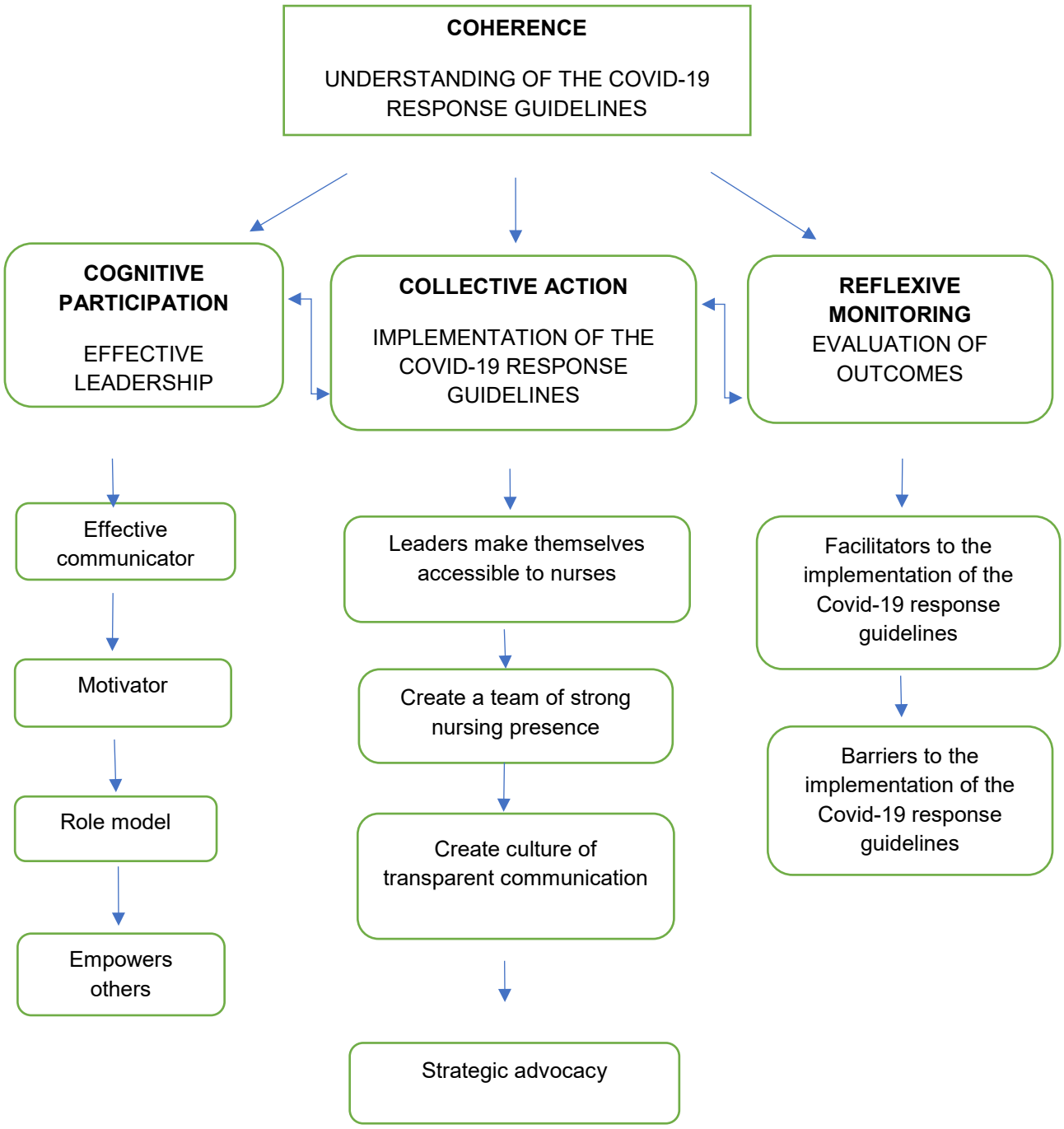


**Figure 3.2 Model outlining the implementation of the COVID-19 Response guidelines underpinned by Normalization Process Theory (NPT) constructs** (Agreli *et al*. 2019:3)

### 3.4 Application of The Normalisation Process Theory to the current study

This theory was apt for a health care setting that was innovative in its constant search for improved and best operating practices. The application of the various constructs of the model is depicted in Figure 3.2 above and further explained below in relation to the topic of inquiry.

a) Coherence

This occurred whereby Nurse Managers individually and collectively understood what the COVID-19 guidelines were and understood the dissonance or harmony experienced when implementing the COVID-19 Response Guidelines compared to the current practice of the healthcare layout.

b) Cognitive participation

With this construct, Nurse Managers agreed to engage in the implementation of the COVID-19 Response Guidelines. Effective leadership involved being a communicator, motivating others, role modelling that was led by good example thus empowered others.

c) Collective action

This construct related to how Nurse Managers used their abilities to implement the COVID-19 Response Guidelines. Making themselves accessible to nursing staff created a strong nursing presence and fostered a culture of strategic advocacy with transparent communication.

d) Reflective monitoring

This occurred whereby, Nurse Managers evaluated outcomes of implementing the COVID-19 Response Guidelines and thereby highlighted factors of good practice or concerns they had experienced.

Within the context of this study, this theoretical model was adopted to lead the discussion related to the topic of inquiry. Current studies on implementation of guidelines and practices have provided insights on how to overcome barriers, but few studies have applied a theory, such as the NPT, to explain how interventions were embedded in practice.

The NPT was developed to explore and understand how complex interventions were operationalised. This theory offered explanations of the mechanisms that drove the COVID-19 Response Guidelines implementation processes at an operational level, and focused on observable action, rather than presenting a list of factors that need to be considered.

## 3.5 CONCLUSION

This chapter discussed the NPT theory that guided the research question and focused on inspiring different challenges that required further research. This theory could be used at any time throughout the research project. The next chapter will present the research methodology that was used in the study.

# CHAPTER 4: RESEARCH DESIGN AND METHODOLOGY

## 4.1 INTRODUCTION

This chapter focused on the research methodology used in this study. It describes and discusses the research design and method, research setting, study population, sample and sampling technique, data analysis and the process of data collection. It also presents how research rigor and ethical considerations were ensured.

## 4.2 RESEARCH DESIGN

Creswell (2014: 12) described research design as types of inquiries within research approaches that provided specific direction for the procedures to be followed. A research design is an overall plan for addressing a research question, including specifications for enhancing the study's integrity (Polit and Beck 2017:743). A qualitative, exploratory descriptive design was followed to explore the experiences of Nurse Managers regarding the operationalisation and implementation of the COVID-19 Response Guidelines in KwaZulu-Natal, South Africa. A qualitative explorative description design was particularly relevant as this approach allowed engagement and interaction of the Nurse Managers through interviews whilst striving for objectivity.

### 4.2.1 Qualitative research

Qualitative research aims to investigate phenomena, typically in an in-depth and holistic fashion, through the collection of rich narrative materials using flexible research design (Polit and Beck 2017:741). The strength of qualitative research is its ability to provide descriptions of how people experience a given research issue and to provide information about the 'human' side of an issue. Qualitative designs are naturalistic in nature in that they seek to understand phenomena in context or real-world settings. The current study took place in a real world setting and in the natural setting where the participants worked. Information revealed was first-hand experienced, authentic and original. Participants presented their experiences verbally. Qualitative studies seek to gain greater insight and understanding of the dynamics of a specific situation,

hence the researcher sought to effectively obtain information directly from the managers who were operationalising the COVID-19 guidelines, information specific to values, opinions, behaviors and social contexts to this particular population.

### 4.2.2 Explorative research

Exploratory research begins with a phenomenon of interest, but rather than observing or describing the phenomena, the phenomena is investigated (Polit and Beck 2017:15). Since exploratory qualitative research is designed to shed light in the various ways in which a phenomenon is manifested and on the underlying processes (Polit and Beck 2017:15), this design suited this study in which the operationalisation and implementation of COVID-19 Response Guidelines was the phenomena. The study investigated the processes associated with its operationalisation and implementation.

### 4.2.3 Descriptive research

Descriptive research main objectives include accurate portrayal of people's characteristics or circumstances and/or the frequency with which certain phenomena occur (Polit and Beck 2017:726). Operationalisation and implementation of COVID-19 Response Guidelines as it occurred in its natural surrounding was described by managers who are directly involved in its implementation.

## 4.3 RESEARCH METHOD

The phenomenological research method was used to conduct this study, as it provided the opportunity for the Nurse Managers to share their experiences with the researcher, without the researcher imposing personal views. The phenomenological method was chosen in order to describe the lived experiences (Polit and Beck 2017:739) of Nurse Managers during the implementation of the COVID-19 guidelines at operational level. Phenomenology emphasised individuals experience in their world.

### 4.3.1 Study setting

According to Polit and Beck (2017: 744), a research study setting is the location where the study is being conducted. South Africa, officially the Republic of South Africa (RSA), is the southernmost country in Africa.

The study commenced after approval was obtained by the University Research Ethics Committee and participating institutions. This study was conducted at two hospitals of different private hospital groups in South Africa, one situated in the eThekwini district (Hospital A) and the other in the uMgungundlovu district (Hospital B). Both these hospitals were facilities that offered a full package of health services namely medical, surgical, orthopaedics, obstetrics and gynaecology, intensive care, operating theatre, psychiatric and out-patient facilities and served a community of approximately four million in total. For the purposes of confidentiality, the hospital names remained anonymous. The eThekwini District hospital was referred to as (Hospital A) and the uMgungundlovu District hospital as (Hospital B). These settings were chosen as the COVID-19 pandemic impacted significantly in these areas and during the lockdown period, these areas were classified as COVID “hotspots”. Due to the soaring infection rates, these hospitals further participated in the COVID-19 vaccine roll-out which is part of the COVID -19 response protocol.

Hospital A services Durban and the surrounding areas with a population of 3 702 231. This is a 160 bedded hospital, situated in the coastal city of Durban, and is part of a larger private health care group with a staff complement of about 300 and 10 Nurse Managers in their employ.

Hospital B belongs to the uMgungundlovu District and surrounding areas and has a population of 1 095 865. It serves the community of Pietermaritzburg and the KwaZulu-Natal Midlands. This is a 125 bedded private hospital with general and specialist units and has 10 Nurse Managers in designated hierarchical structures that participated in the COVID-19 vaccination roll-out. This hospital had a total staff complement of 260.

The entire world was in crisis and globally healthcare sector was burdened with disease and healthcare workers affected worldwide. Public and private healthcare sectors in South Arica were equally matched in this challenge. A study by Okereke, Ukor, Adebisi, Ogunkola, Iyagbaye, Owhor and Lucero-Prisno (2020:13-15), confirmed that health sectors in various countries experienced the burdened of ill-resourced health systems, poor infrastructure to accommodate patients and depleted

human resources to care for the ill and infected patients, given the heavy burden of healthcare needs and severely under-resourced healthcare frameworks and systems.

### 4.3.2 Research population

Population is all the individuals or objects with common, defining characteristics (Polit and Beck 2017:56). The population for this study were the Nurse Managers who were permanently employed at the private hospitals and had exposure to the implementation of the COVID-19 guidelines at operational level.

### 4.3.3 Sampling

Sampling refers to the process of selecting a portion of the population that conforms to a designated set of specifications to be studied. A sample is a subset of a population selected to participate in the study (Polit and Beck 2017:46). Purposive sampling refers to selection of sites or participants that will best benefit the study (Polit and Beck 2017:493).

The purposive sampling method was used to select all Nurse Managers who were instituting the COVID-19 Response Guidelines in an attempt to gain insight and better understanding of their first-hand experiences.

*Inclusion criteria*

- All Nurse Managers that were directly/indirectly involved in the implementation of the COVID-19 Response Guidelines as leaders and custodians of their respective nursing units

*Exclusion criteria*

- All clinical technicians, personal assistants and other non-nursing health care team members were excluded. Non -managerial nursing and administrative staff were not involved in implementation of the COVID-19 guidelines

### 4.3.4 Sampling technique and sample size

This study sought to interview specifically Nurse Managers. Currently, there are approximately 10 Nurse Managers per hospital that were tasked with overseeing the operations related to COVID-19 response and protocol. This approximated to 20 Nurse Managers eligible to participate in the study. A sample size of 13 Nurse Managers were interviewed. As with the nature of qualitative studies, data was generated through voluntary participation and was guided by data saturation. Polit and Beck (2017:744) state that data saturation refers to a situation during data gathering where a sense of closure is attained because new data yield redundant information.

## 4.4 RECRUITMENT OF RESEARCH SAMPLE

Ethical clearance was obtained from the Durban University of Technology's Institutional Research Ethics Committee (IREC). Gatekeeper permission was sought from the executive management of the participating hospitals to conduct research at the chosen study sites and participants. The researcher set up a meeting with the Hospital Managers of the participating hospitals, provided a letter asking for gatekeeper permission, the letter of provisional ethical clearance from DUT/IREC, a copy of the research proposal and its relevant appendices. On receipt of gatekeeper permission from the participating hospitals and only after full ethical clearance was received from IREC, the researcher then approached participants to arrange for data collection sessions. Once permission to conduct the study was received from the participating hospitals, the researcher personally approached and addressed the Nurse Managers to participate in the interviews during normal working hours, without disrupting daily work operations or work time. All participants were informed about the study prior to commencement and were given an opportunity to read the information letter (Appendix 3a) and provide written consent to participate in the study. Once informed consent (Appendix 3b) was obtained, the researcher scheduled interviews at a time that was convenient for the participants and the hospital. In addition, no other persons except the researcher and interviewee were allowed into the designated interview area where the interviews lasted between 10 to 45 minutes.

## 4.5 DATA COLLECTION

Data collection is the process of gathering information to address a research problem (Polit and Beck 2017:725). Data was collected using individual face-to-face in-depth semi-structured interviews with the participants. All interviews were audio recorded using the researcher's cell phone that is password protected. Interviews and its recordings were conducted with the permission of the participants, and later transcribed by the researcher. All the participants who agreed to take part in the study signed an informed consent form. The researcher had no personal relationship with the participants. All interviews were semi-structured, and questions were open-ended and designed to address specific research questions. During these face-face interviews, strict COVID-19 protocols such as maintaining a social distancing of 1,5 metres between interviewer and interviewee, hand sanitising and wearing of masks were followed. The interviews were conducted in a private room and the venue was set up by the researcher in advance for the scheduled interviews ensuring the environment was conducive for the interviews and where the participants felt comfortable to speak freely and were confident that their privacy, anonymity and confidentiality were maintained. All participants signed an informed consent (Appendix 3b) and were informed of the option to withdraw from the interview should they choose (Appendix 3a). The informed consent included interview materials such as confidentiality concerns and anonymity processes for all participants. Demographic data collection was guided by the participant demographic questionnaire (Appendix 4a). A semi-structured interview guide was used to conduct the interviews (Appendix 4b). The questions in the interview guide were designed to facilitate discussion about the topic of inquiry and are aligned to the four constructs of the chosen Normalisation Process Theoretical Framework, such as coherence, cognitive participation, collective action and reflexive monitoring. Open ended questions allowed for probing, which led to clarification and better interpretation of data. Probing is a method used in interviews to get detailed and reflective information from participants (Polit and Beck 2017:740), hence the goal being to ask questions that gave the participants an opportunity to provide rich, detailed information about the phenomenon under study. The participants were informed about these expectations such as the time the recording commenced. The timeframe for the planned interview was twenty (20) minutes. Participants were

reassured about the confidentiality of the interview and were told that they can withdraw at any time. An English interview guide was used. The number of interviews was guided by data saturation. This was reached after ten (10) interviews were conducted but the researcher continued with three (3) more interviews in order to confirm data saturation. A total of thirteen (13) interviews were conducted.

The study was guided by the following objectives:

1. Explore the facilitators or enablers to the implementation of the COVID-19 Response Guidelines at an operational level.
2. Explore the barriers to the implementation of the COVID-19 Response Guidelines at an operational level.
3. Recommend strategies that could influence the operationalisation and implementation of the COVID-19 Response Guidelines at a hospital level, which can be utilised as best operating practices.

Research questions

This study aimed to answer one (1) main and three (3) specific research questions as follows:

Main question

What are the experiences of Nurse Managers with the operationalisation and implementation of COVID-19 Response Guidelines?

Specific research questions

1. How can Nurse Managers ensure that their actions minimise negative and maximise success for all stakeholders during crises management?
2. What are some of the best operating practices that can be used to operationalise and implement the COVID-19 Response Guidelines and how can these be adopted?

The interviews were coded so as to protect the identity of the participants. The researcher gained no monetary remuneration for conducting the study. Documents will be stored for 5 years as per university policy, thereafter shredded.

## 4.6 DATA ANALYSIS

The researcher read and understood the collected data, sorted and organised the data according to Creswell's six steps of qualitative data analysis (Creswell 2014: 41). When analysing the data, the following six phases guided the researcher:

a) Phase 1: Organising and preparing data

The researcher organised and prepared the data that was collected. Notes were typed and interviews transcribed, the necessary material arranged and data sorted.

b) Phase 2: Read through all the data

Materials were read through and notes made of the relevant information.

c) Phase 3: Coding the data

The data was categorised and labelled with codes to identify the various components.

d) Phase 4: Description generated

The above categories were consolidated to generate themes, create headings and subheadings for this data analysis chapter.

e) Phase 5: Interrelate themes

The core of the themes was identified from the data and the findings revealed that were addressed in detailed discussion.

f) Phase 6: Constructing the report

The data finding was interpreted. Conclusions and results were logically and concisely formatted into a report.

## 4.7 RESEARCH RIGOUR AND TRIANGULATION

Rigor quality or state of being very exact, careful, or with strict precision (Cypress 2017:253). Qualitative research is trustworthy when it accurately represents the experiences of the study participants. Trustworthiness is validated in a qualitative study by principles as outlined by Lincoln and Guba's strategies of credibility, transferability, dependability and confirmability (Polit and Beck 2017:559; Lincoln and Guba 1985).

Polit and Beck (2017:161) define triangulation as the usage of many sources to conclude on constitution of the truth. These authors, describe triangulation as the use of multiple methods to collect and interpret data such as space triangulation. The data for a particular phenomenon requires to be collected from different sites to ensure cross-consistency. In this study, space triangulation was attained by collecting data from Nurse Managers from two different sites, private hospitals from two different groups, to ensure cross-site consistency (Polit and Beck 2017:563). Furthermore, these authors support the notion that validity and trustworthiness of a study is increased if data analysis is done concurrently as it is collected.

### 4.7.1 Trustworthiness

Trustworthiness refers to the degree of confidence qualitative researchers have in their data and analysis (Polit and Beck 2017:747). It is assessed by using the criteria of credibility, transferability, dependability, confirmability and authenticity (Polit and Beck 201:747).

#### 4.7.1.1 Credibility

Credibility refers to the confidence of the truth of the data and interpretation (Polit and Beck 2017:559). In this study, credibility was achieved by transcribing the interview which was read and agreed by each participant. During the interview, the researcher ensured clarification of information. Immediately following, the notes were summarised after each interview to clarify the obtained data. Conversations were audio -recorded for clarification of data.

The researcher enhanced credibility of the study by clarifying her role, knowledge, interest and emergence of the research topic to all participants. Knowledge that the researcher has a background in nursing management was made available to the participants at the beginning of data collection. The exposure and experience of the researcher to the COVID-19 pandemic and its challenges allowed for an open approach to the topic.

#### 4.7.1.2 Dependability

Dependability refers to data stability over time and conditions (Polit and Beck 2017:559). The researcher ensured dependability, whereby an external person was allowed to review and examine the research process and data analysis thus ensuring the findings were consistent and could be repeated.

#### 4.7.1.3 Confirmability

Confirmability refers to the objectivity of the data such that two or more independent people will agree with data relevance of meaning (Polit and Beck 2017:559). The interviews for this study were audio- recorded so that the information provided by the participants were accurate and truthful.

#### 4.7.1.4 Transferability

Transferability in qualitative research refers to the extent to which findings can be transferred in other settings (Polit and Beck 2017:560). At the outset information were given included the number of participants, what data collection methods were used, data collection length and number held and the time period the data was collected.

## 4.8 ETHICAL CONSIDERATIONS

Ethics refers to the quality of research procedures, with regard to their adherence to professional, legal, and social obligations to the research participants (Polit and Beck 2017:727). As this research involves human participants, it was therefore necessary that the following ethical principles be adhered to:

### 4.8.1 Respect for persons

Respect includes the right to self-determination and right to full disclosure (Polit and Beck 2017:140). Self-determination means that the prospective participants can voluntarily decide whether to take part in the study without risk and prejudicial treatment. It also means that people have the right to ask questions, refuse to give information and to withdraw from the study (Polit and Beck 2017:140). This was adhered by providing all participants with sufficient information regarding the research; ensuring they understood the information; and their freedom of choice was respected in the event they chose to decline to participate in the study as their rights to withdraw will be accepted without prejudice.

Right to full disclosure is people's right to make informed voluntary decisions about study participation. The information letter drawn up for the study participants had accurate information on the study. The researcher's details were available allowing point of contact for participants if required, encouraging participants' queries and rights regarding their participation in the study.

Privacy refers to the participants' right to have their data kept in strictest confidence (Polit and Beck 2017:141). Participants were identified with a number not by their names and their anonymity respected.

### 4.8.2 non-maleficence and beneficence

Beneficence is an important research ethical principle. Participants were informed that information divulged were kept confidential and no discussion was held with anyone including their employers. Beneficence imposes a duty on researchers to minimise harm and maximise benefits (Polit and Beck 2017:139). The participants' rights were protected. No signs of distress were noted during the interview process. The researcher ensured no harm came to the participants during the data collection.

### 4.8.3 Justice

Inclusion and exclusion criteria were adhered to. All participants were treated in a similar manner regardless of differences in age and ranks. The participants were

informed to divulge what they are comfortable with and were not be forced divulge what they are uncomfortable with.

### 4.8.4 Informed consent

Participants were given adequate information in the form of information letters that could be read at their own time in order to gain more clarity about the study and the researcher ensured the information given to the participants was understood and participation was voluntary. Participants were given a written consent form that contains participation status, study goals, procedures potential risks and benefits, the purpose of the study, participant's expectations, time and any costs or benefits (Polit and Beck 2017:143-144). The informed consent included participants' choice to participate in the study. A voluntary consent was obtained from each participant with the right to withdraw from the study at any time.

## 4.9 CONCLUSION

This chapter described and discussed the research methodology that was used in this study. The next chapter will therefore present the evidence-based results of the study and highlight the common themes that emerged from the interviews.

# CHAPTER 5: PRESENTATION OF RESULTS

## 5.1 INTRODUCTION

The previous chapter outlined the research methodology used to conduct the study. This chapter presents the results of the data obtained during the individual semi-structured interviews that were conducted with the participants. It will also highlight the themes and sub-themes that emerged from data collection.

Notably, this study explored the operationalisation and implementation experiences of COVID-19 Response Guidelines by Nurse Managers at selected private hospitals in KwaZulu-Natal. Carl May's Normalisation Process Theory (NPT) was adopted to lead the discussion related to the topic of inquiry in the study, whilst depicting its various components as drivers to effective implementation and operationalisation of the COVID-19 Response Guidelines by Nurse Managers.

## 5.2 SAMPLE REALISATION

Data was collected from Nurse Managers employed at two private hospitals from two different hospital groups. The data was collected from Nurse Managers using face-to-face semi-structured interviews. These interviews were conducted by using a semi-structured interview guide to assist with the discussion and sample size for the study was guided by data saturation. Data was collected from a total of thirteen (13) Nurse Managers from both participating hospitals as per (Table 5.1) below. Although, data saturation was reached after ten (10) interviews from both hospitals, the researcher conducted a further three (3) face-to-face interviews to confirm data saturation was reached.

**Table 5.1: Sample realisation for the study population**

| Study Site | Nurse Managers |
|---|---|
| A | 8 |
| B | 5 |
| **Total** | **13** |

The purpose of this study was to understand the experiences of Nurse Managers with the operationalisation and implementation of COVID-19 Response Guidelines. This purpose was further augmented by the following research objectives which were to:

- Explore the facilitators or enablers to the implementation of the COVID-19 Response Guidelines at an operational level.
- Explore the barriers to the implementation of the COVID-19 Response Guidelines at an operational level.
- Recommend strategies that could influence the operationalisation and implementation of the COVID-19 Response Guidelines at a hospital level, which can be utilised as best operating practices

## 5.3 DEMOGRAPHIC DATA OF OPERATIONAL NURSE MANAGER PARTICIPANTS

Demographic data was collected from a total of 13 Nurse Managers from Hospital A in the eThekwini region and Hospital B in the uMgungundlovu region. Five (5) participants were of the Indian race, four (4) were African, two (2) were White, and two (2) participants were Coloured. Nurse Manager participant ages ranged from 32 years to 64 years of age. The participants were twelve (12) females and one (1) male. Their nursing experience ranged from 1 to greater than 20 years, whilst operational nursing experience ranged from less than one year to greater than

twenty years. A summary of the demographic data of operational Nurse Manager is presented (Table 5.2).

Table 5.2: Demographic data of Nurse Managers

| Study Site | Participant code | Gender | Age | Race | Nursing experience | Management experience | Role |
|---|---|---|---|---|---|---|---|
| **HOSPITAL A** | | | | | | | |
| A | 1 | Female | 46 | Coloured | >20 years | 1-5 years | Intensive Care Unit manager |
| A | 2 | Female | 46 | Indian | >20 years | 16-20 years | Hospital Nursing manager |
| A | 3 | Female | 61 | White | >20 years | >20 years | Infection Control and Prevention |
| A | 4 | Female | 40 | Indian | >20 years | >20 years | Operating theatre Manager |
| A | 5 | Female | 64 | White | >20 years | >20 years | Night hospital manager |
| A | 6 | Female | 40 | Indian | >20 years | 11-15 Years | Surgical Unit Manager |
| A | 7 | Female | 32 | Indian | 6-10 years | 1-5 years | Operating theatre manager |
| A | 8 | Female | 37 | Indian | 16-20 years | 1-5 years | Intensive Care unit manager |
| **HOSPITAL B** | | | | | | | |
| B | 1 | Female | 62 | Coloured | >20 years | >20 years | Infection Control and Prevention |
| B | 2 | Female | 43 | African | 11-15 years | 1-5 years | Medical unit manager |
| B | 3 | Female | 49 | African | 16-20 years | 1-5 years | Intensive care Unit Manager |
| B | 4 | Male | 35 | African | 11-15 years | 1-5 years | Surgical unit manager |
| B | 5 | Female | 43 | African | 16-20 years | <1 year | Operating room manager |

## 5.4 OVERVIEW OF PRESENTATION OF FINDINGS

In this chapter, the findings of this descriptive study are provided. The researcher utilised a qualitative research methodology with an exploratory and descriptive approach to explore the experiences of Nurse Managers regarding the operationalisation and implementation of the COVID-19 Response Guidelines at

selected private hospitals in KwaZulu-Natal. Semi-structured interviews were utilised to allow the Nurse Managers to share their opinions, thoughts and feelings by describing what they experienced during operationalising and implementing the COVID-19 guidelines.

## 5.5 THEMES AND SUB-THEMES THAT EMERGED FROM THE INTERVIEWS

Data analysis led to the identification of three (3) main themes with subthemes. The themes and sub-themes revealed in the Nurse Manager data collection interviews are illustrated in Table 5.3.

**Table 5.3 Themes and sub-themes from Nurse Manager's responses**

| **INTERVIEW THEMES AND SUB-THEMES** | | |
|---|---|---|
| **THEME** | **SUB-THEMES** | |
| **Theme 1:** Employee wellbeing and safety | 1.1 | Facilitation of ongoing education and training |
| | 1.2 | Employee support structures |
| | 1.3 | Utilisation of safe operating practices |
| | | |
| **Theme 2:** Leadership during crisis management | 2.1 | Effective communication and leadership presence |
| | 2.2 | Team collaboration and decision making in a crisis |
| | 2.3 | Staff motivation and crisis intervention |
| | | |
| **Theme 3:** Disaster management | 3.1 | Human resource management during a disaster |
| | 3.2 | Equipment and resource challenges during a disaster |

## 5.6 PRESENTATION OF FINDINGS

### 5.6.1. Theme 1: Employee well-being and safety

Nurse Managers from Hospital A and Hospital B understood their roles in the implementation of the COVID-19 guidelines. An important aspect noted during the implementing and operationalising of the guidelines was ongoing training and development.

5.6.1.1. Sub-theme 1.1: Facilitation of ongoing education and training

The majority of Nurse Manager participants at Hospital A and Hospital B realised the importance of ongoing training and development related to COVID-19. They stated that it was imperative that all staff were kept updated regarding policy and protocol regarding response guidelines. They added that the only way they could keep staff informed on a day-today basis was by ongoing in-service education.

The following texts disclose the Nurse Managers experience.

> *"Our gaps were the teaching of the staff about the virus so once the staff were taught about the virus… nurses needed further education" (Hospital A, Participant 3)*

> *"We covered all the shifts…. everybody had to attend the training" (Hospital A, Participant 1)*

> *"It was education…… it was every single day… it was whatever information we got it was going to the wards" (Hospital B, Participant 1)*

5.6.1.2 Sub-theme 1.2: Employee support structures

The limited knowledge relating to the novel virus posed a grave concern to nurse managers at the outset of the pandemic. Whilst operationalising the COVID-19 guidelines the Nurse Managers in both Hospital A and Hospital B acknowledged and recognised that employees were fearful and anxious for themselves and as well as their families, as they were afraid of transmitting the virus to their children and

contracting the virus themselves. This led to Nurse Managers creating supportive environments by organising group meetings, one-on-one discussions and involvement of a psychologist.

> *"They were scared because they had families and young children at home… afraid of taking the virus home and infecting their families, I think everybody was afraid of that including me" (Hospital A, Participant 5)*

> *"There was a lot of fear in the beginning amongst the staff… more fear of the unknown, people that are dying, the psychologist came in and did group therapy" (Hospital B, Participant 1)*

> *"Talking to the staff besides just the team meetings to talk about the protocols ……the staff needed to talk about whatever concerns that they had …That was a big gap, psychological support definitely from the beginning available to the staff" (Hospital A, Participant 1)*

5.6.1.3 Sub-theme 1.3: Utilisation of safe operating practices

Nurse Managers differed in their opinions regarding the similarities of the COVID-19 guidelines when compared to the current infection control safe operating practices. Although some agreed the COVID-19 guidelines were an extension of the infection control guidelines, others acknowledge that staff did experience the reality such as donning and doffing when implementing safe operating practices. Emotional health of the employees also took priority at times whilst the safe operating practices were believed to be side-lined. Nurse Managers ensured daily training such as the correct and appropriate use of PPEs to ensure safe operating practices were met. Further to this in-house measure, Nurse Managers personally ensured that the staff were well versed on the hygiene requirements when leaving the healthcare environment.

> *"I think that everybody has learnt what isolation really means because I don't think we really had a clue what very strict isolation was before and what it entailed" (Hospital A, Participant 5)*

*"The precautions that staff need to adhere to the donning and doffing disposing of waste protection of themselves use of the correct masks PPEs and also to ensure the patient is safe" (Hospital A, Participant 4)*

*"To make sure that know exactly how to don and dof and telling giving them good advice when they get home that's what I did before I greet my family go to the shower have a shower put clean clothes on and then go and greet my family" (Hospital A, Participant 5)*

### 5.6.2 Theme 2: Leadership and crisis intervention

The sudden overwhelming of the health care environments by the COVID-19 infected patients lead to a critical situation that challenged leaders and their intervention during the crisis. During the COVID-19 pandemic, the Nurse Managers lead frontline in assessing, planning, implementing and evaluating their clinical settings.

5.6.2.1 Sub-theme 2.1: Effective communication and leadership presence

Nurse managers related that being visible to staff, being present on the floor for the relevant information sharing and addressing concerns such as PPEs shortages allowed for the building trust with the staff. They believed that a trust relationship was important to alleviate fears and anxiety that employees experienced. Effective communication and being clinically present with staff ensured that the staff were well informed, updated and felt supported. Furthermore, Nurse Managers remained accessible to their staff after duty hours, ensuring the support for staff continued.

*"Communication worked very well and getting on the floor leading them showing them you are there with them it's just that support that they needed" (Hospital A Participant 8)*

*"Communication has been the most important thing, you lead from the front, I would not let them do something that I am not comfortable doing" (Hospital A Participant 6)*

*"I also lead by example, on a daily basis I spent an hour or 2 in the COVID units in the morning and again in the afternoon checking on the staff and how they are doing and how they are coping with being in the COVID units in the 12 hour shifts, also assisting them clinically on the floor to show them that I'm just as brave as them and relayed a lot of their fears as well seeing that I was with them on the floor and part of the team caring for the COVID patients and that made a huge difference in the staff knowing I was part of the team" (Hospital A, Participant 2)*

*"I had regular meetings I would encourage them to talk if they had a problem if they had an issue call me at home even at night "(Hospital B, Participant 2)*

5.6.2.2. Sub-theme 2.2: Team collaboration and decision making in a crisis

Increased hospital admissions further impacted on the human and material resource shortages. This encouraged Nurse Managers to collaborate with their multidisciplinary health team members and communities in an attempt to secure more resources. This resulted in collaborative relationships between the health teams and communities. This team collaboration contributed to best patient care despite challenges.

Nurse Managers acknowledged in the following statements their dilemmas and team collaboration:

*"Patients needing more than a certain level of oxygen, we did not have ICU or High Care beds at that time, the entire country was in this predicament so what I did differently was I reached out to some of my doctors or reached out to the gift of the givers and we were given high pressure high flow oxygen wall mounted machines" (Hospital A, Participant 2)*

*"The guidelines were coming fast and were changing, in terms of structure planning pharmacy including engineering , I also has relationships with quite a lot of reps I was able to pull on that and get assistance , the anaesthetist that I was working with there were really of so much support they had extra resources that they pulled on people they could call they had the power to make the big*

*changes that I wasn't able to and force things to happen I had really good relationships with them" (Hospital A, Participant 1)*

*"All team members came together to make sure that the best care is given to the patients regardless of us being shortage" (Hospital B, Participant 3)*

5.6.2.3 Sub-theme 2.3: Staff motivation and crisis management

The challenging situation of the pandemic required balancing personal responsibilities with caring for infected patients whilst being responsible for one's own health. Furthermore, nurses were rendered more support for the ill patients due to the absence of patients loved ones. Notably some nurses were the only support present when COVID-19 patients demised. Nurse Managers recognised this need and actioned these challenges with ongoing motivation and encouragement.

*"Encouragement and leading by example I looked after the COVID positive patients with them so that they can see it is not only done on them also looking after the patient as a role model" (Hospital B, Participant 3)*

*"I had to just talk to them motivate them all the time I was in the same situation as they were we were all concerned we were all there for each other kept on motivating them" (Hospital A, Participant 5)*

*"I wouldn't go home I would wait with them I would make sure we would order in meals "(Hospital A, Participant 6)*

**5.6.3. Theme 3: Disaster management and resource management**

The COVID-19 pandemic posed a danger to the healthcare environment. Recognising the shortfalls and taking the responsibility to prevent further spread and planned readiness for potential situations are extremely important. The Nurse Managers noted some deficits during their exposure to the pandemic**.**

5.6.3.1 Sub-theme 3.1: Human resource management during a disaster

Employee's feelings of fear and anxiety had a significant impact on the care environment as staff over-compensated with PPE usage whilst others declined to manage COVID-19 positive patients. The healthcare environment was expanded and demarcated according to the specific guidelines to accommodate the COVID-19 patients to create more isolation space required the necessary skilled staff. Staff from units were deployed, but lacked the knowledge and experience.

> *"The staff were scared in the beginning there were terrified in the beginning another thing they said they will not work in a COVID ward "(Hospital A, Participant 5)*

> *"Sister I don't feel happy wearing this surgical mask…Nurse Manager: you want to double mask yes please go ahead "(Hospital B, Participant 1)*

> *"We did what we call team nursing because we were having a lot of staff shortages teamwork" (Hospital B, Participant 3)*

5.6.3.2 Sub-theme 3.2: Equipment and resource challenges

Nurse Managers identified PPEs such as masks and necessary equipment such as ventilators equipment shortages early in the pandemic. Attempts were made to secure resources despite the increase in demand.

> *"COVID ward didn't have enough PPEs so we did have a battle in the beginning" (Hospital A, Participant 5)*

> *"There was a huge demand for it and the resources were not there so we would go from one hospital to another, phone, do you this piece of equipment are you using it, can we borrow it" (Hospital A, Participant 1)*

## 5.7 SUMMARY OF THE CHAPTER

Chapter 5 presented the research findings according to the themes and sub-themes which emerged from the data analysis of the semi-structured one-on-one interviews with the participants. The data revealed that the Nurse Managers recognised and

acknowledged the critical situation the pandemic presented and adopted the necessary approaches to and address and resolve these. Chapter six will conclude the research report with a discussion of the findings.

# CHAPTER 6: DISCUSSION OF FINDINGS

## 6.1 INTRODUCTION

The findings of the study were presented in chapter 5. In this chapter, the researcher will discuss the results from the findings of the one-on-one, semi-structured Nurse Manager interviews. The discussion is based on the themes that emerged from the analysis of the data collected during the interviews with participants.

## 6.2 DISCUSSION OF FINDINGS

*The main research question that was asked was:*
What are the experiences of Nurse Managers with the operationalisation and implementation of the COVID-19 Response Guidelines?

*The specific research questions that were asked were:*
1. How can Nurse Manager Nurse Manager ensure that their actions, minimise negative responses and maximise success for all stakeholders during crises management?
2. What are some of the best operating practices that can be used to operationalise and implement the COVID-19 Response Guidelines and how can these be adopted?

The study included a total of thirteen (13) Nurse Managers during the interview data collection phase. The data collected was based on the objectives of the study and was, guided by Carl May's Normalisation Process Theory.

## 6.3 RELEVANCE TO OBJECTIVES OF THE STUDY

*The objectives of this study were to:*

- Explore the facilitators or enablers to the implementation of the COVID-19 Response Guidelines at an operational level.
- Explore the barriers to the implementation of the COVID-19 Response Guidelines at an operational level.
- Recommend strategies that could influence the operationalisation and implementation of the COVID-19 Response Guidelines at a hospital level, which can be utilised as best operating practices.

The formulated objectives ensured that the researcher was able to gain relevant insight into the study. It guided the researchers' questions during the interviews, to gain an understanding of the Nurse Managers' experiences in operationalising and implementing the COVID-19 Response Guidelines. Exploring the implementation strategies leading to improved uptake of clinical guidelines is recommended by WHO (Agreli et al., 2019:1). However, understanding the integration of clinical guidelines into clinical practice is best obtained from the individuals implementing these. Since the COVID-19 guidelines were operationalised and implemented by the Nurse Manager, their experiences allowed for comprehensive insight into the enablers and challenges that resulted in strategies of its implementation and best practices that align itself to clinical practice.

## 6.4 RELEVANCE TO THE THEORETICAL FRAMEWORK

The Normalisation Process Theory describes how complex interventions become embedded as an everyday occurrence. Within the context of this study, this theoretical model was adopted to lead discussions related to the topic of inquiry, whilst various components were depicted as drivers to effective implementation and operationalisation of the COVID-19 Response Guidelines by Nurse Manager.

NPT is made up of four constructs that represent the understanding of how processes are implemented and integrated in daily operations by people (coherence), how people engage (cognitive participation), how people enact

(collective action) and appraises the effects (reflexive monitoring) (Agreli *et al.* 2019:2).

The following table 6.1 explains each concept of the NPT that correlates to the qualitative interview guides and responses from the Nurse Managers from the interviews conducted.

## Table 6.1 NPT correlation with the interview questions and Nurse Manager responses

| Concept | Interview questions illustrating the NPT constructs | Responses from interviews |
|---|---|---|
| Coherence:<br>the sense-making of work, individuals must understand what the new way of working is such as implementing a set of practice | • What do you understand about your role and function in the applying the COVID-19 Response Guidelines?<br>• What is your role in COVID-19 vaccination rollout process?<br>• How did the COVID-19 Response Guidelines make sense to you when applying it at your unit level?<br>• How different did you find the COVID-19 Response Guidelines compared to existing healthcare infection prevention and control protocols? Elaborate on this.<br>• What were your staff reaction to the implementation of the COVID-19 Response Guidelines? | Nurse managers revealed their understanding of:<br>• Their individual roles in applying the COVID-19 guidelines during the pandemic<br>• COVID-19 guidelines relative to the existing infection control policies yet different to the current implementation<br>• The staff reactions to the guidelines |
| Cognitive participation:<br>Individuals' engagement with the new model of care and practice to sustain a complex intervention | • Describe how you led your team through the process of implementing the response guidelines in your unit.<br>• What methods did you apply to ensure sustainability when implementing the response guidelines?<br>• How did you foster teamwork amongst nurses when implementing guidelines | Nurse managers revealed their capacity to invest in their work as individuals and as a team by:<br>• Engaging their staff<br>• Leading/Role modelling<br>• Knowledge sharing |
| Collective action:<br>The operational work that people do to enact a set of practices | • What changes were made by you, when implementing the guidelines to suit the environment and the situation?<br>• Elaborate on the strategies that you developed to accommodate and ensure the response guidelines were implemented in your unit? | Environment and staffing modifications to ensure maintenance of quality standards during the guideline's implementation |

| | | |
|---|---|---|
| Reflexive monitoring: The appraisal works that people do to assess and understand that ways in which a new set of practices affect them and others | • What benefits/ valuable insights you experienced with implementing the response guidelines?<br>• How did you promote these benefits and valuable insights that you experienced when implementing the COVID-19 response guideline?<br>• What challenges/barriers you experienced when implementing the response guidelines?<br>• How did you address these challenges/barriers?<br>• What suggestions and strategies would you recommend for future challenges with guideline implementation? | The Nurse Managers revealed both facilitators and challenges along with their implementation of best operating practice processes and recommendations |

## 6.5 OVERVIEW OF THE RESEARCH DISCUSSION

The data analysed revealed three (3) major themes and corresponding sub-themes as follows:

### 6.5.1. Theme 1: Employee wellbeing and safety

Theme 1 sub-themes included:

- Facilitation of ongoing education and training
- Employee support structures
- Utilisation of safe operating practices

### 6.5.2 Theme 2: Leadership during crisis management

Theme 2 sub-themes included:

- Effective communication and leadership presence
- Team collaboration and decision making in a crisis
- Staff motivation and crisis intervention

### 6.5.3 Theme 3: Disaster management

Theme 3 sub-themes included:

- Human resource management during a disaster
- Equipment challenges during a disaster

## 6.6 PRESENTATION OF THE RESULTS

The following themes are discussed, interpreted and supported with relevant literature

### 6.6.1 Discussion of themes and sub-themes discussion as per interviews with Nurse Managers:

#### 6.6.1.1 Theme 1: Employee well-being and safety

The findings of the study revealed that most participants made reference to the sensitive and somewhat scary situations that employees faced during the pandemic such as the fear of transmitting the virus to their loved ones. This had notably led to increase in participants' stress levels. Furthermore, the increase in deaths and the witnessing critically ill patients fight for survival in the COVID-19 units, aggravated the staff's reluctance to work in these COVID-19 units. These findings are in keeping with Deldar, Froutan and Ebadi (2021: 242) who stated that in critical situations, personnel often displayed a lack of motivation due to them being scared of the repercussions. Managers acknowledged that good understanding and practice of the pandemic guidelines improved staff levels of confidence and a positive mindset. Interviews also noted that after the second wave of the pandemic, staff were slightly more enthusiastic to work in the COVID-19 units as knowledge about the virus improved. A quantitative study by Nashwan, Abujaber, Mohamed, Villar and Al-Jabry (2020:700) supports a nurse's reluctance to work in COVID-19 zones and stated that this was further mitigated by knowledge about the virus.

Other managers interviewed, agreed and revealed that after taking the COVID-19 vaccine staff appeared more confident in the healthcare environment. Notably Nurse Managers also made mention of the uncertainty of personal support for the employees, such as concern for their families. The general incentives in place for these different situational realities and challenges seemed insufficient, hence Nurse Managers addressed these situations by

facilitating ongoing training and development as well as involving the services of professional psychologists. The much-needed avenues of training, development and psychological support, ensuring that employees may voice their stresses is recommended for employees during the COVID-19 pandemic and is supported by the American Psychiatric Association (2020:2). During work hours the Nurse Managers ensured rest periods, nutritional, elimination and emotional needs were met by being present and working with the team. Some managers mentioned holding meetings in their units allowing for relevant discussions and opportunities for employees to debrief. These support opportunities aimed at relieving staff of their distress situation is supported by Alizadeh, Khankeh, Barati, Ahmadi, Hadian and Azizi (2020:494). Availability of and accessibility of Nurse Managers were positive aspects that was revealed in this study. Most Nurse Managers stated that they were continuously and readily available to their personnel when off duty. Smith and Fraser (2020:649) note that during the pandemic, health leaders worked 24 hours 7 days a week.

Ongoing training and development were necessitated because of the continuous changing response guidelines that resulted in staff becoming challenged in adjusting and adapting to the situations as they arose. Most managers held an informal discussion in their respective units informing each shift as the updates occurred whilst others used social media such as WhatsApp to communicate with staff members. In a study conducted by Wong, Ho, Olusanya, Antonini and Lyness (2021:256), it was found that guidelines, protocols and standardised operating procedures, usually kept within institutions were shared at an unprecedented rate during the pandemic. The same study revealed that although, social media was being used as an effective vehicle, hands-on formal training was planned and executed by the hospital management on frequent basis. This included practice in the use of PPEs to don and doff in a correct manner. A study by Kredo *et al.* (2020:6) found that nurses were sometimes unskilled in practice and preparation was inadequate. In this study, Nurse Managers agreed and admitted that the need to understand and accept the current guidelines prior to sharing and implementing with the

rest of the staff was critical to ensure minimal shortfalls. The sense-making and attributing meaning to events by leaders is mentioned by Bassett and Stanley (2020:19). This was evident as nursing management ensured training was not limited to the healthcare workers only but extended to the ancillary services such as cleaning and catering services. Not only was ongoing education for staff based on the current COVID-19 updates and guidelines, but it included after work care of staff themselves and their families with an aim to minimise exposure and risk of contracting COVID-19. Karlsson and Fraenkel (2020:3944) agree and refer to the new practices of COVID-19 management, as ways of protecting healthcare workers in order to protect their families. All interviews clarified that the COVID-19 guidelines ruled out any confusion that the unexpected pandemic might have presented. Invariably, both hospitals have noted that times arose when the emotional well-being of staff outweighed the implementation of safe operating procedures. Hence ongoing training and development covered common areas of concern such as handwashing and correct use of PPEs ensuring that opportunities of education were continuously available.

Nurse Managers' experiences and exposure entitled each one of them to understand the COVID-19 Response Guidelines differently or similarly. However, according to the current South African infection control practices and guidelines, there was no reservation to encouraging and practicing the safest of operating practices. Training and group discussions were ongoing and continuous in an attempt to support the employee including the Nurse Managers themselves, availing themselves 24 hours in a day. Analysis from the interviews note that, despite the Nurse Managers being overwhelmed with psychological stressors, they continued in their leadership capacity.

#### 6.6.1.2 Theme 2: Leadership during crisis management

The unprecedented pandemic brought about many challenges, one of which was the limited information about the Novel Coronavirus (Deldar, Froutan and

Ebadi 2021:238). This forced leaders and managers in healthcare, despite the various challenges to operationalise and implement the response guidelines efficiently and effectively. Whilst adapting to these response guidelines, developing different strategies to ensure the operations of the healthcare institution, and caring for the affected patients and healthcare workers, operational Nurse Managers appeared to challenge themselves on a daily basis to give of their best. Interviews revealed that despite these Nurse Managers feeling stressed and overwhelmed during crisis intervention, they used this situation to find innovative methods of management to resolve issues such staffing and resource utilisation.

The analysis of the interviews from both study sites revealed clearly that leaders that were present and available to personnel in the clinical area during and beyond contractual hours. The Nurse Managers at both study sites effectively mitigated the risks associated with sharing updated information. Effective communication was identified as essential during a crisis (Petersen, Christiansen, Bor, Lindholt, Jørgensen, Adler-Nissen, Roepstorff and Lehmann 2022:1-5). Findings in this study revealed that nurse leaders ensured effective communication by intentionally circulating the current yet correct information amongst each other first and thereafter relayed this current information to personnel. This method aimed to allay fear and anxiety amongst employees. Furthermore, leaders chose to lead and direct with “boots on the ground” attitude and lead by example, whilst working as part of the team. This action allowed unwarranted and incorrect information to be immediately disposed of and the correct information conveyed. One such communication related challenge revealed during the interview process was that the continuous changes to guidelines created uncertainty and trust issues amongst employees. This concern is supported by study by Joslin and Joslin (2020:528), who warn about constant changes that could make building of trust amongst patients easier, whilst inconsistency could lead to mistrust.

Nurse Managers embraced crisis management by ensuring improved operations, building relationships with external organisations and other healthcare professionals. Information sharing and effective communication became vital and was deemed insightful in facilitating better decision-making during crisis situations. Decisions were made in collaboration with the various members of the healthcare team and stakeholders. Departmental meetings were held daily and more frequently with the relevant managers thus ensuring active planning and organisation. This led to effective and appropriate decision making. The decision to lead from the floor and the front lead staff to feel guided, inspired and supported leading to formation of positively encouraging environments. This is in keeping with Deldar, Froutan and Ebadi (2021:243) who emphasise the importance of supportive environments for nurses. According to the Nurse Managers, they lead by engaging and empowering staff on how to brave the current situation thus facilitating a trust relationship allowing for proactive yet sustainable crisis preparedness. Nurse leaders epitomise strength especially during a crisis and their ability to be courageous in the face of a pandemic led them to be an inspiration to staff to keep going despite the ongoing uncertainty (Bookey-Bassett, Purdy and van Deursen 2020:26).

In the midst of crisis intervention, this study highlighted managers' transparency and fairness in the management of the current situation that elevated levels of staff motivation. Staff were rotated between COVID-19 and non-COVID-19 zones. Initially staff that feared working in the COVID-19 zones soon become more challenged to do so. An example mentioned by a Nurse Manager was when the intensive care units were unable to accommodate patients requiring a higher level of care, separate units were setup with high-flow oxygen and previously reluctant staff nursed these COVID-19 positive patients on ward level resulting in positive patient outcomes.

Nurse Managers acknowledged the nurse's invaluable work. Similar findings in a study by Jeffs, Merkley, Taggart, Andress and Harris (2020:18) discuss valuing of nursing staff contribution by recognition of their hard work.

Furthermore, managers revealed that by fair allocation of staff to the COVID-19 zones and management availability to staff, staff became invested in their organisation and the challenges of the pandemic. Further to this, respecting employee's privacy inclined employees to confide in their leaders that allowed trust relationships to develop paving a way for a safe haven. As leaders became informed of the sensitive situations experienced by personnel to which they empathised, the relevant adjustments were made by managers to accommodate employees resulting in increased level of appreciation. This situation is supported by the study by Jeffs *et al*. (2020:16), where provision of transparency, communication and creating a safe place for personnel to share concerns can lead to trust building between employer and employee. The leaders worked alongside their personnel as team members such taking meals and leaving together, acknowledging the increased workload yet praising the employee positive traits, led to staff feeling invaluable and sent a clear message that nobody was alone in this crisis situation. Levels of motivation soared leaving improved employee satisfaction.

#### 6.6.1.3 Theme 3: Disaster management

Theme 3 sub-themes included:

- Human resource management during a disaster
- Equipment and resource challenges during a disaster

Healthcare facilities disaster readiness plans are aimed to evoke an effective response when a crisis situation arises. Disaster preparedness of healthcare institutions affects the level of care an institution can provide. Nurse Manager Interviews revealed that staff training, shortage of supplies and environmental space posed major challenges during the pandemic. A study by Wurmb, Scholtes, Kolibay, Schorscher, Ertl, Ernestus, Vogel, Franke and Kowalzik (2020:388) support the findings that staffing, supplies and space accommodation affects delivery of care. Increased numbers of COVID-19 patients led to an increased demand for PPEs, equipment and personnel.

Management of personnel and material resources reflect directly on the healthcare facility as a whole. Availability of nurses were a challenge prior to the onset of the pandemic. “Mass Critical Care” is an event of a mass influx of critically ill patients (Wurmb *et al*. 2020:386) that materialised during the pandemic. Gab Allah (2021:547) recognised additional challenges of increased demand particularly of specialised nurses such as critical care nurses occurred, as COVID-19 patients required intensive care treatment. Nurse Managers’ interviews revealed that the personnel were afraid for themselves and their loved ones. They feared becoming infected with the virus and then further transmitting the virus to their families, hence one of the challenges discussed during the Nurse Manager interviews, this notion was also supported by a study by Deldar, Froutan and Ebadi (2021:239).

Both study sites utilised in this study demarcated their care environments with the intention to accommodate surge capacity, the capacity of a healthcare institution that is available during disaster situations such as a pandemic. During the pandemic, separation of COVID-19 and non-COVID-19 patients occurred by differentiating units into the relevant clinical COVID-19 positive and negative zones. This required deployment of staff from less functional areas such an operating theatre to increased occupancy units such as an intensive care unit. This negatively impacted human resources since staff absenteeism increased as staff were not keen to work in alternate care units due to little experience and knowledge. This finding is in keeping with Deldar, Froutan and Ebadi (2021: 241). Some personnel that contracted the disease further impacting on absenteeism at work, leading to further staff deficits as healthcare workers also lost their lives in the fight against the virus. These fatalities further heightened the fear of staff getting infected, leading to further staffing challenges, as noted by Gab Allah (2021:543).

Other barriers pertaining to management of human resource was training of the staff in donning and doffing, a gap identified due to the lack of adequate practice.

Attention to the strict adherence to the different infection control measures was imperative. The aim of training was to mitigate nosocomial infections transmission and prevent staff from contracting the COVID-19 virus (Wurmb *et al.* 2020:389).

Nurse Manager's everyday workload and leadership were impacted by the management of the different categories of staff requiring their attention for specific physical and/or psychological needs. Human resource was impacted by several factors that compounded the challenge, either by staff that feared contracting the coronavirus or those that feared transmitting the disease to their family members. Training and development of the staff was important to either reinforce specific areas of knowledge deficit or complement the staff lack of exposure to particular disciplines. Nurse Managers' efforts were aimed to enhance best practice and outcomes; however, the individual needs of staff members were different, thus invoking different leadership approaches (Bookey-Bassett, Purdy and van Deursen 2020:22-24).

Whilst, Nurse Managers' interviews revealed the admirable traits of certain nurses, human resource management during this pandemic has been undoubtedly challenging. The Nurse Managers did not fail to recognise and appreciate those employees that remained available, resilient, self-driven and present during this crisis. Such an example, was where the nurses collaboratively volunteered to nurse COVID-19 positive patients, leading fearlessly with self-confidence and dedication. However, it was noted that their fears were reduced by abiding to the response guidelines. These findings were in keeping with study findings by Ohta, Matsuzaki and Itamochi (2020:5).

Each of the challenges demanded different strategies, resilience and versatility of the leaders accordingly. Basett and Stanley (2020:19) agree that a leader's effectiveness is a result of his adaptability, sense-making of a situation and agility. Accomplishment of these challenges were further impacted by other

practice barriers such as limited or non-availability of certain equipment and material resources.

The increased demand for certain equipment such as ventilators unfolded as the critically ill patient's admission increased, leading to an increase in demand. Equipment and supplies shortage was identified as a barrier by the Nurse Managers as it impacted negatively on functioning of the care units. The need for specialised equipment impacted the healthcare institution as nurses required specific medical equipment to render proper nursing care. The reasons for equipment shortage identified by Nurse Managers were malfunction of equipment. However, both study sites' Nurse Managers noted the deficiency in equipment and supplies such as masks. This demand appeared to increase as a result of the soaring COVID-19 infection cases increased (Alizadeh *et al*., 2020:494). This deficit in resources led to equipment sharing and managers borrowing for external sources. Nurse Managers revealed equipment and PPEs shortage as one of the major challenges experienced. This is in keeping with a study by Joslin and Joslin (2020:258), who stated that the deficiency in availability of PPEs was possibly the biggest setback in management and treatment of COVID-19 patients.

Nurse Managers revealed that building relationships and reaching out to other health care organisations, such as neighbouring hospitals to borrow supplies and equipment had to be done. The whole world was in crisis; hence it was accepted by both study sites that the challenges were not unique to them alone and neither did this result in making these challenges acceptable or any less easy to handle. The impact of the equipment led to community organisations contributing to the oxygenation devices to the institution. A study by Bikkina, Manda and Rao (2021) show similar contributions to oxygen shortage in India due to the pandemic, and industries diverted oxygen in cylinders to medical institutions. Internally, the elective patient care regime was altered to accommodate the demands of the population requiring admission by postponing elective surgeries, allowing for deployment of operating room nurses to areas in

need of staff for example, critical care units. Allocation of the limited material resources and equipment were dependent on the triage category of patients (Wurmb *et al*. 2020:388). Patient triage occurred frequently depending on the then current situation and the availability of resources.

An unexpected revelation during these interviews was that none of the managers mentioned the sacrifice of time and effort made by themselves. The leaders' personal limitations and well-being are similar to everyone else. Although 13 (thirteen) interviews were conducted from two study sites, it was evident from the findings that managers failed to admit their personal limitations experienced, but never hesitated to focus on the well-being of their staff, before their own. Their ongoing efforts to ensure safety of all hospital personnel with the constantly changing response guidelines demanded more time and effort on their part whilst they continued to manage their daily work. Emotional distress placed an extra burden as they dealt with patient, their families along with staff personal issues. It was very obvious by participant responses that they rallied together for support. This omission to make reference to these self-sacrifices were most commendable as these Nurse Managers may have felt sandwiched whilst balancing the needs of the health institution and their employee well-being (Bookey-Bassett, Purdy and van Deursen 2020:25). Nurse Managers have admitted to being available to their staff after work hours that directly impacted their personal time and space.

## 6.7 SUMMARY OF THE CHAPTER

This study explored the experiences of Nurse Managers regarding the operationalisation and implementation of the COVID-19 Response Guidelines. To date there is still a paucity of research to this nature in the searched literature. The Normalisation Process Theory was the framework of choice for this particular study as the NPT identified and understood the ways that people made sense of the work of implementing and integrating a complex intervention such as the COVID-19 Response Guidelines. The study revealed the Nurse

Managers were aware of the fears and anxieties healthcare workers faced and the care and support that was required to this effect. Whilst management and leadership were challenged constantly Nurse Managers led by example, often placing themselves at the frontline. The next chapter will discuss the best practices found and the conclusions drawn from the findings of the interviews conducted. The recommendations and limitations of the study will be further discussed.

# CHAPTER 7:
# SUMMARY, LIMITATIONS, RECOMMENDATIONS AND CONCLUSION

## 7.1 INTRODUCTION

In Chapter 6, the researcher discussed the results from the findings of the interviews conducted with Nurse Manager that emerged from the analysis of the data collected. In this chapter, the researcher will discuss the findings and the conclusions drawn from the interviews conducted. This chapter will also discuss the recommendations and limitations of the study.

## 7.2 OVERVIEW OF THE STUDY FINDINGS

The study followed a qualitative, exploratory, descriptive approach. A total of thirteen (13) interviews were conducted. The data obtained was analysed using Creswell's six steps of data analysis. The overall aim of the study was to explore the experiences of Nurse Managers regarding the operationalisation and implementation of the COVID-19 Response Guidelines at selected private hospitals in Kwa Zulu-Natal, South Africa.

The main research question that was asked was:
*"What are the experiences of Nurse Managers with the operationalisation and implementation of the COVID-19 Response Guidelines?*

Specific questions asked were:
*1. How can Nurse Managers ensure that their actions minimise negative responses and maximise success for all stakeholders during crises management?*
*2. What are some of the best operating practices that can be used to operationalise and implement the COVID-19 Response Guidelines and how can these be adopted?*

The COVID-19 Response Guidelines recommended by the WHO (2020) aimed to mitigate the spread of the COVID-19 virus. The Nurse Manager in their capacity as leaders were strategically positioned to integrate the response guidelines into clinical practice. It was evident from findings of this study that the Nurse Managers' leadership was impacted upon whilst operationalising and implementing the COVID-19 Response Guidelines during the pandemic. At operational level, infection control precautions were adapted, managers engaged with patients, their families and personnel whilst building relationships to secure resource supplies. Whilst managing their own personal aspects, they were still available to their teams and remained resilient, selfless and continued planning for future waves of this pandemic.

It was also apparent that Nurse Managers made sense of the response guidelines by first understanding it themselves. These operational leaders implemented the response guidelines by adapting them to the relevant environment and personnel. Implementation of the constantly changing guidelines, despite the fears and anxieties of healthcare workers was indicative of the managers' abilities to adapt their roles and ensure safety of staff and patients. The managers' leadership were constantly challenged and they faced these by leading by example and placing themselves at the frontline. Selflessness, resilience and courage were some of the emerging characteristics of the nurse leaders that were noted. Notably, being present in the face of adversity developed trust amongst employees and paved the way for improved staff motivation, teamwork and self-confidence.

The data collected was based on the objectives of the study and was guided by Carl May's Normalisation Process Theory. Based on the findings of the study, the researcher is satisfied that the objectives of the study were met and all research questions were answered.

## 7.3 LIMITATIONS

While this qualitative study offers practical data regarding the implementation of the COVID-19 Response Guidelines, the findings pertain to the perceptions of a limited number of participants. The sample although small is sufficient and consistent for a qualitative inquiry. This study's intention was to explore the experiences of Nurse Manager and provide comprehensive knowledge and reality about their experiences and not to generalise the findings. Hence, limitations in this study include the interventions at two private hospitals in the KwaZulu-Natal region from two different hospital groups. Hospital A was situated in the eThekwini district and Hospital B in the uMgungundlovu district. Therefore, the findings of this study cannot be generalised to the experiences of Nurse Managers of other private hospital groups and the government facilities.

## 7.4 RECOMMENDATIONS

Nurse Managers were challenged during the pandemic regarding their leadership and management. Despite these challenges, they have found innovative methods to enhance patient, family and employee experiences, whilst ensuring a win-win situation for all. Whilst adapting, being flexible as well as proving their resilience during this difficult period, their abilities to manage these concerns and challenges proved to be a learning curve and served to enrich their knowledge and strategic planning around disaster and crises management. Findings from this study yielded the following recommendations which could serve to further enhance management and leadership during disaster management situations.

### 7.4.1 Nursing management

Nurse Managers have balanced the best interest of their staff against the best interest of patients thus maximising success and minimising harm. Three important themes that Nurse Managers highlighted were employee well-being and safety, leadership during crisis management and disaster management. Multiple challenges overwhelmed the Nurse Managers including staff training,

shortage of supplies and space. Nurse Managers acknowledged support from nursing administration during this crisis to deploy resources and planning of the care environment. However, personally most Nurse Managers identified peer support commonly as their support during the pandemic. Challenges experienced by the healthcare facilities during the pandemic are expected to continue into the future reflecting the importance of continued administrative support during a crisis or disaster situation.

- Outsourcing and utilisation of material resources during the pandemic was challenging, hence institutions are encouraged to draw policies specific to the procurement of PPEs and equipment during a disaster.
- Structures related to disaster preparedness to be communicated to all role-players, to ensure division of labour and operationalisation and implementation of procurement and maintenance of equipment.
- Proactive planning and building of supply chains related to health service delivery is suggested, to improve preparation for future crisis.

Nurse Managers, in their professional capacity, addressed their staff fears and anxieties, whilst some managers referred staff and personnel to psychologists. Therefore, structured support programmes that can aid in problem-solving and safety of employees, needs implementation. This will allow Nurse Managers to engage with these support systems to mitigate emotional concerns of staff members that can emerge during crisis.

Nurse Managers require recognition for their efforts in the management of personnel that reflect directly on the healthcare facility as a whole and impact on nursing care delivered during a crisis. Hence, organisations are encouraged to consider a decentralised approach when disaster management initiatives are drawn up. This means that all staff and nursing leaders to be directly engaged in the planning of initiatives, taking into account the specifics of certain hi-tech departments like the trauma units and operating theatre units during crisis management.

During these uncertain times, Nurse Managers clearly demonstrated their value by eliciting outstanding courage in the face of adversity during this pandemic. Their efforts to lead with their expertise and experience ensuring safest healthcare practices warrants recognition and reward as future challenges will continue. Therefore, appreciation of Nurse Managers and recognition initiatives are essential if future challenges are to be resolved efficiently. This will also boost staff morale and increase job satisfaction.

### 7.4.2 Training and development

The Nurse Managers have revealed that they felt overwhelmed with their management of their unit day-to-day activities whilst accommodating staff training and development. Nurse Managers recommend a dedicated training and development officer to design educational strategies to serve a two-fold responsibility of ongoing education and training, thus allowing for ongoing safe practice. Managers will no longer be weighed down by this role and therefore can continue to concentrate on their specific unit roles. Suggestions include:

- The development of a curriculum incorporating current needs and new trends of the constantly changing response guidelines in clinical practice.
- In-service training is recommended to discuss epidemics, pandemics, transmission of infection.
- Practice training for nurses regarding unfamiliar procedures such as donning and doffing is suggested.

Timmis and Brüssow (2020:9) emphasise the fact that some healthcare systems have for a long time been on the edge of the cliff, just waiting for an event to push them over. Whilst COVID-19 pandemic has disclosed inconsistencies in disaster preparedness globally, an opportunity for contingency planning is generated. The researcher in this study, therefore advocates for consistent and comprehensive Nurse Manager training in disaster and crisis management that will aim to guide personnel before, during and after a crisis. Any uncertainties experienced by Nurse Managers during this pandemic will be minimised in future health related challenges.

### 7.4.3 Nursing practice

Nurse leaders recommend accepting to co-exist with the COVID-19 virus as the “new normal”. It is suggested that Nurse Managers continue to lead front-line on the floor fostering teamwork and engaging staff. Therefore, creating support systems for Nurse Managers by engaging the skills of other specialties such as the infection prevention practitioner to be proactive in the clinical area will be an advantage. This is highly recommended as it can provide opportunities for the managers to continue with their specific tasks. Encouraging the expertise of the risk and quality managers to engage with patients and families can lead to an improved quality care environment.

### 7.4.4 Institutional management and policymaking

Nurse Managers voiced the challenges in deploying staff to the necessary areas as a result of limited knowledge, exposure to specific disciplines and expertise. It is suggested that the following be considered:

- Cross training curriculum to be developed and operationalised to ensure staff have exposure to more than one discipline in the healthcare facility that will facilitate effective deployment of personnel during a crisis
- Experienced and senior registered nurses to be involved in institutional evidence-based decision-making
- Attendance of leadership programmes for nurses aimed at developing or improving their leadership skills
- The nursing force migrating to other countries is impacting on the healthcare service. At hospital level a retention strategy to be devised and implemented to proactively address future nursing personnel deficits

### 7.4.5 Further research

Understanding the continued experiences of Nurse Managers during the COVID-19 pandemic is ongoing. Hence it is vital to conduct more research on the operationalisation and implementation of the response guidelines as the each of the pandemic waves was and will continue to be associated with unique challenges.

## 7.5 SUMMARY OF THE CHAPTER

The objectives of this study were to explore the facilitators and barriers to the implementation of the COVID-19 Response Guidelines at an operational level. Thereafter, strategies can be recommended that help influence the operationalisation and implementation of the COVID-19 Response Guidelines at a hospital level, which can be utilised as best operating practices. The findings of this study revealed that leading during the pandemic has been stressful for healthcare workers and for the Nurse Managers requiring to engage with these personnel. Other challenges included crisis intervention and disaster preparedness. Despite these the Nurse Managers revealed their abilities to facilitate challenges they experienced and related some best practices that resulted from their efforts such as effective communication, team collaboration and staff motivation.

According to Naidoo, Naranjee and Sibiya (2021:17-35), leaders do not need predefined response plans, but behaviours and approaches that will assist them to effectively respond and improvise in navigating crises such as the COVID-19 pandemic. In keeping with this notion, this study has revealed that leadership, during the pandemic in the health care sector, moved beyond just the recognition of the leader as a change agent. It considered a leader as one who, not only led, but was willing to be creative, committed, shared vision and ensured a collaborative approach to the field of health care service delivery during disaster management.

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# APPENDICES

**Appendix 1a: Letter for Gatekeeper permission-Hospital A**

15 Fighaven Place
Foresthaven
Phoenix
4068

The Group Nursing Manager
Busamed Hospital Group
Mrs Karen Viljoen
Durban
4001

**Request for Permission to Conduct Research**

I, Shamintha Raghunath, am a Masters for Health Sciences nursing student at the Durban University of Technology. My Research topic is as follows:

**Operationalisation and implementation experiences of COVID-19 Response Guidelines by Nurse Manager at selected private hospitals in KwaZulu-Natal, South Africa**

I am hereby seeking your consent to conduct my research at your facility and I have provided you with a copy of my proposal with all applicable appendices, as well as a copy of the approval letter which I received from the Durban University Institutional Research Ethics Committee (IREC).

If you require any further information, please do not hesitate to contact me 0846679646 or email shamintharaghunath16@gmail.com. Thank you for your time and consideration in this matter.

Yours sincerely,

Shamintha Raghunath
Masters of Health Studies Student
Durban University of Technology

**Appendix 1b: Letter for Gatekeeper permission-Hospital B**

15 Fighaven Place
Foresthaven
Phoenix
4068

Mr Qhubekanin Ndiweni
Hospital General Manager
Eden Gardens Private Hospital
100 Archie Gumede Drive
Masons Mill
Pietermaritzburg
3201

**Request for Permission to Conduct Research**

I, Shamintha Raghunath, am a Masters for Health Sciences nursing student at the Durban University of Technology. My Research topic is as follows:

**Operationalisation and implementation experiences of COVID-19 Response Guidelines by Nurse Manager at selected private hospitals in KwaZulu-Natal, South Africa**

I am hereby seeking your consent to conduct my research at your facility and I have provided you with a copy of my proposal with all applicable appendices, as well as a copy of the approval letter which I received from the Durban University Institutional Research Ethics Committee (IREC).

If you require any further information, please do not hesitate to contact me 0846679646 or email shamintharaghunath16@gmail.com. Thank you for your time and consideration in this matter.

Yours sincerely,

Shamintha Raghunath
Masters of Health Studies Student
Durban University of Technology

**Appendix 1c: Gatekeeper permission at Hospital A**

BUSAMED

Premium Care. Personal Touch.

8 November 2021

To whom it may concern

# Re: INSTITUTIONAL APPROVAL FROM BUSAMED HOSPITAL GROUP FOR THE INTERVIEWING OF STAFF

This letter serves to convey approval from Busamed head office on behalf that Shamintha Raghunath, as part of a Masters of Health Studies at the Durban University of Technology may interview nursing managers and Nurse Managers at Busamed Hillcrest Private Hospital and Busamed Gateway Private Hospital. Her research topic is: Operationalisation and implementation experiences of COVID-19 Response Guidelines by Nurse Managers at selected private hospitals in KwaZulu-Natal, South Africa.

It is acknowledged that the data will form part of her research. She received ethical approval from Durban University Institutional Research Ethics Committee (IREC).

Yours Truly

Dr Christelle de Jager
Group Clinical Manager

Eden Gardens
Private Hospital
"Caring for our community"

t: +27 33 815 4600
a:100 Archie Gumede Drive
Pietermaritzburg 3200

**Appendix 1d: Gatekeeper permission at Hospital B**

15 November 2021
Durban University of Technology
PO Box 1334

Durban 4001

c/o Mrs Shamintha Raghunath

Dear Mrs Shamintha Raghunath

**Re: Operationalisation and implementation experiences of COVID-19 Response Guidelines by Nurse Manager at selected private hospitals in KwaZulu-Natal, South Africa**

We hereby confirm knowledge of the above-named research application made to Eden Gardens Management Committee and in principle agree to the research application for Eden Gardens Private Hospital subject to the following:

1. A copy of the research report will be provided to Eden Gardens Management Committee once it is finally approved by the tertiary institution, or once complete.
2. Eden Gardens Management has the right to implement any recommendations from the Research.
3. That the Hospital Management reserves the right to withdraw the approval for research at any time during the process, should the research prove to be detrimental to the subjects or should the researcher not comply with the conditions of approval.

**Appendix 2a: Approval letter from the Ethics Board**

**Institutional Research Ethics Committee**
Research and Postgraduate Support Directorate
2nd Floor, Berwyn Court
Gate 1, Steve Biko Campus
Durban University of Technology

P O Box 1334, Durban, South Africa, 4001
Tel: 031 373 2375 Email: lavishad@dut.ac.za
http://www.dut.ac.za/research/institutional_research_ethics
**www.dut.ac.za**

17 November 2021

Mrs S Raghunath
15 Fighaven Place
Foresthaven
Phoenix

Dear Mrs Raghunath

**Operationalisation and implementation experiences of COVID-19 Response Guidelines by Nurse Manager at selected private hospitals in KwaZulu-Natal, South Africa. Ethical Clearance number 177/21**

The Institutional Research Ethics Committee acknowledges receipt of your gatekeeper permission letters.

Please note that FULL APPROVAL is granted to your research proposal. You may proceed with data collection.

Any adverse events [serious or minor] which occur in connection with this study and/or which may alter its ethical consideration must be reported to the IREC according to the IREC Standard Operating Procedures (SOP's).

Please note that any deviations from the approved proposal require the approval of the IREC as outlined in the IREC SOP's.

Yours Sincerely

Prof J K Adam
Chairperson: IREC

**Appendix 3a: Letter of information for Participants**


**LETTER OF INFORMATION**

**Title of the Research Study:** Operationalisation and implementation experiences of COVID-19 Response Guidelines by Nurse Managers at selected private hospitals in KwaZulu-Natal, South Africa

**Principal Investigator/s/researcher:** Mrs. Shamintha Raghunath (Masters of Health Science Candidate)

**Co-Investigator/s/supervisor/s:** (Supervisor) Masters Nursing (Co-supervisor)

**Brief Introduction and Purpose of the Study:** The unprecedented COVID-19 pandemic has made it necessary for all health care professionals in leadership roles to operationalise and implement specific COVID-19 Response Guidelines to the global pandemic. During a crisis, like the current pandemic, Nurse Managers need adherence from all staff to these specific guidelines, but their behaviours and approaches will assist them to effectively respond and improvise in navigating the crises. This study aims to explore the experiences of Nurse Managers regarding the operationalisation and implementation of the COVID-19 Response Guidelines.

**Greeting** Good day. Warm greetings to you.

**Introduce yourself to the participant**. My name is Shamintha Raghunath, I am a 2nd year student at DUT doing research for my Masters degree in Health Sciences

**Invitation to the potential participant** I would like to invite you to participate in the research

**What is Research:** Research is a systematic search or enquiry for generalized new knowledge. Research entails collecting of data; documenting, analysis and interpretation of the data collected. There are different methods of data collection. The study of note is an interview.
The interview will be conducted in English. You may ask as many questions as required so that you are comfortable and have an understanding of the study. You are entitled to discuss the study with your family hence you are not obligated to commit at this stage. Therefore, a copy of this Letter of Information document will be given to you to take home.

**Outline of the Procedures**: Permission from the Durban University of Technology will be obtained by the researcher to recruit you as a participant. Furthermore, permission will be obtained from your head of Department to recruit you as a participant. You are required to complete the consent form attached to this document to consent to partaking in this study. This research population includes Nurse Managers and excludes any other group of healthcare workers. The data collection tool is an interview including collection of demographic data within a duration of 20-30 minutes which will be done during your working shift in your department. Your responses will be documented by the interviewer. All information given will be confidential. You may withdraw from the interview at any time.

**Risks or Discomforts to the Participant:** There are no risks to you.

**Explain to the participant the reasons he/she may be withdraw from the Study:**
Participation is voluntary. You may decide to withdraw from this study at any time by advising the researcher. There will be no consequences to you should you wish to withdraw. The researcher may withdraw you from the study due to non-compliance, an adverse event or in the event of you being ill and cannot complete the interview.

**Benefits:** The knowledge and skills obtained by exploring the experiences affecting Nurse Managers regarding the operationalisation and implementation of the COVID-19 Response Guidelines may contribute different strategies of crisis management and leadership. This could further enhance professional capacity building of nurses in leadership or supervisory roles. In future planning, these strategies could be used as a basis and be adapted to facilitate in-service education for other nursing units and disciplines of nursing experiencing the similar problems.

**Remuneration:** There will be no remuneration to you for partaking in the study

**Costs of the Study**: There are no costs to you partaking in this study

**Confidentiality**: Your participation in this study is voluntary. It will involve an interview of approximately 20 – 30 minutes in length to take place in the hospital during work hours by a specified time agreed by both of us. You may decline to answer any of the interview questions if you so wish I will be writing the responses of the interview on a guide solely as a form of record keeping and referral for the study. At the end of the interview, I will you an opportunity to confirm the accuracy of our conversation and to add or clarify any points that you wish. All information you provide is considered completely confidential. Your name will not appear on the interview guide, you will be allocated a number. Neither will your details be in any report that will result from this study, however, with your permission anonymous quotations may be used. Data collected during this study will be retained for a period of five years in my locked cupboard. Only researchers associated with this project will have access.

**Results:** The researcher plans to disseminate the results of the research according to DUT standards. If any significant new findings developed during the course of the research, you will be contacted via your employer.

**Research-related Injury:** There are nil anticipated.

**Storage of all electronic and hard copies including tape recordings:** Hard copy of the interview guide and demographic data will be stored in a locked cupboard in the supervisor's office or in a locked cupboard in the researcher's home for a period of 5 years. Only the researcher and supervisor will have access to the data. The data will be securely shredded after 5 years. Electronic data will be password protected and stored on a secure laptop. Only the researcher and supervisor will have access to the data. Data will be securely deleted after 5 years.

**Persons to contact in the Event of Any Problems or Queries:**
Please contact the researcher, Mrs Shamintha Raghunath (0846679646), my supervisor Dr V Naidoo or the Institutional Research Ethics Administrator on 031 373 2375. Complaints can be reported to the Director: Research and Postgraduate Support Dr L Linganiso on 031 373 2577 or researchdirector@dut.ac.za.
A copy of the information letter should be issued to participants. The information letter and consent form must be translated and provided in the primary spoken language of the research population e.g., isiZulu.

## Appendix 3b: Consent

**CONSENT**

**Statement of Agreement to Participate in the Research Study:**

- I hereby confirm that I have been informed by the researcher, Shamintha Raghunath Shamintha Raghunath (name of researcher), about the nature, conduct, benefits and risks of this study - Research Ethics Clearance Number: **177/21**,
- I have also received, read and understood the above written information (Participant Letter of Information) regarding the study.
- I am aware that the results of the study, including personal details regarding my sex, age, date of birth, initials and diagnosis will be anonymously processed into a study report.
- In view of the requirements of research, I agree that the data collected during this study can be processed in a computerized system by the researcher.
- I may, at any stage, without prejudice, withdraw my consent and participation in the study.
- I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.
- I understand that significant new findings developed during the course of this research which may relate to my participation will be made available to me.

| | | | |
|---|---|---|---|
| **Full Name of Participant** | **Date** | **Time** | **Signature / Right Thumbprint** |

I, Shamintha Raghunath (name of researcher) herewith confirm that the above participant has been fully informed about the nature, conduct and risks of the above study.

| | | |
|---|---|---|
| Shamintha Raghunath<br>**Full Name of Researcher** | **Date** | **Signature** |
| **Full Name of Witness (If applicable)** | **Date** | **Signature** |
| **Full Name of Legal Guardian (If applicable)** | **Date** | **Signature** |

**Appendix 4a: Demographic data for the interview participants**

**PARTICIPANT DEMOGRAPHIC QUESTIONNAIRE**

**Title:** Operationalisation and implementation experiences of COVID-19 Response Guidelines by Nurse Managers at selected private hospitals in KwaZulu-Natal, South Africa.

**SECTION 1: DEMOGRAPHIC DATA**

1. Age of participant in years

| |
|---|
| |
| |
| |
| |

2. Gender

| Male | Female |
|---|---|
| | |

3. Ethnic Group

| Indian | White | Black | Coloured |
|---|---|---|---|

4. Number of years of nursing experience

| | |
|---|---|
| <1 year | |
| 1-5 years | |
| 6-10 years | |
| 11-15 years | |
| 16-20 years | |
| >20 years | |

5. Number of years of nurse unit manager/Operational Manager experience

| | |
|---|---|
| <1 year | |
| 1-5 years | |
| 6-10 years | |
| 11-15 years | |
| 16-20 years | |
| >20 years | |

6. Unit /Section that person is managing

| |
|---|
| |

**Appendix 4b: Interview guide**

**Interview guide that will assist in facilitating discussion with Nurse Managers/Nurse managers**

Title of Study: **Operationalisation and implementation experiences of COVID-19 Response Guidelines by Nurse Manager at selected private hospitals in KwaZulu-Natal, South Africa**

*The following questions will be used by the researcher to guide the interview process that is aligned to the theoretical framework*

**Coherence:** All persons must individually and collectively understand the new way of working

1. What do you understand about your role and function in the applying the COVID-19 Response Guidelines?

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2. What is your role in COVID-19 vaccination rollout process?

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3. How did the COVID-19 Response Guidelines make sense to you when applying it at your unit level?

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4. How different did you find the COVID-19 Response Guidelines compared to existing healthcare infection prevention and control protocols? Please elaborate on your answer.

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5. How would you explain your staffs' reaction to the implementation of the COVID-19 Response Guidelines?

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**Cognitive participation**: Individuals must agree to start engaging with the new model of care, and continue working at it

6. Describe how you led your team through the process of implementing the response guidelines in your unit.

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7. What methods did you apply to ensure consistency when implementing the response guidelines?

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8.Describe how you managed you foster teamwork amongst nurses when implementing the guidelines.

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**Collective action:** Individuals need to embrace the resources to work in the new way

9. Describe the changes made by you to assist with the implementation of the guidelines that helped to suit the needs of the working environment and the current environment and the situation?
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10. Where you part of any policy-making initiative related to the COVID-19 Response Guidelines at institutional or unit level and if so please elaborate on the strategies that you developed or helped develop to accommodate and ensure the response guidelines were implemented in your institution/ unit?
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**Reflexive monitoring**: Individuals need to receive feedback that reinforces the new way of working

11. What benefits/ valuable insights are you able to share from your experiences with implementing the response guidelines?
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12. How did you promote these benefits and valuable insights that you experienced to other staff and colleagues, whilst implementing the COVID-19 Response Guidelines?
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13. Describe any challenges or barriers that you might have encountered during the planning or implementation of the response guidelines?
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14. Explain your actions to overcome these challenges or barriers.
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15. What suggestions and strategies would you recommend for future guideline control, management and implementation?
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**Appendix 5a: Sample of transcript from Hospital A**

Interview Date: 24 November 2021

Interview Start Time :12h29

Interview Finish Time: 13h14

Duration of interview: 45 minutes

**The following questions employed the Coherence aspect of the chosen theoretical framework:**

***Researcher:*** *What do you understand about your role and function in the applying the COVID-19 Response Guidelines?*

**Participant:** (Participant smiling but appears anxious) My role was training and teaching the staff ……actually understand the guidelines and then implementation of it and of course follow up in terms of clinical supervision my role as a manager in terms of getting quality care to patient but in the same role protecting the staff and my first was giving them knowledge the process was fast in a week or every two weeks and adjustment to the protocols and we would role that out make sure that it covers all four shifts have gone through the process of training and understanding and……. if there are implemented and of course if there are implemented properly

***Researcher****: What is your role in COVID-19 vaccination rollout process?*

Participant: For the vaccine rollout at the time was in a government institution……. so there I was one of the people that was there to assist at vaccination centers I attended the training we did practical rollout that I left before I actually participated in centers

***Researcher****: How did the COVID-19 Response Guidelines make sense to you when applying it at your unit level?*

**Participant:** It did …..but I had to go test it so for me when guidelines came out the first thing I did was actually read them understand them first see how they can actually practically be applied in my units and when there were things I did not agree with or unclear about I did have the resource of having IPS to actually refer to but even then there was a lot where we were trying to figure ou…… so we get together IPS unit managers Nurse Manager and try and figure out can we actually do this is this practical how are we going to roll it out(Participant confident compared to start of interview)

***Researcher:*** *How different did you find the COVID-19 Response Guidelines compared to existing healthcare infection prevention and control protocols? Please elaborate on your answer.*

**Participant:** It was an extension of it however I don't want to use the word unclear we really wasn't sure really in the first wave so we were hoping that you know whatever guidelines we had were the correct guidelines as I said in the previous there were changes that would be made which made it very difficult as one protocol is in place and we know how to do this we can hold it up to all the staff and now we just need to supervise and as soon as we finish that, then now something else comes into play now we have got to adjust because the staff would say just last week you said A and B and now you say something else it is confusing we tend to be sure all the time

***Researcher:*** *How would you explain your staffs' reaction to the implementation of the COVID-19 Response Guidelines?*

Scared, scared there were not doing the correct thing because of continuous changes, there was a concern there as management that we did not know what we were doing we did not want my staff to lose confidence and then we had the issue of the k95 roles came into play and some articles were published that differentiate what we were originally telling the staff so planted the seed of doubt trust issues arose

**The following questions employed the Cognitive participation aspect of the theoretical framework:**

*Researcher: Describe how you led your team through the process of implementing the response guidelines in your unit*.

**Participant:** The first was discussion with them …what do you know vs what is fact what have you heard versus the facts that you got from the WHO that was the first part understand the actual disease or at the time process what information that we had and understanding why are we doing what we are doing who do we need to put the goggles and the shield why are we doing all of that

***Researcher:*** *What methods did you apply to ensure consistency when implementing the response guidelines?*

**Participant:** So, for me at the time the hospital I was at having an active IPS person was of great assistance so we had had our meeting and agreed on our plan of action with our shifts and how we were going to make it work for example the IPS…. so she could go and do an audit of the night staff then I can cover day staff we would work at night as a set sometimes it was an open, I don't have enough staff so I worked till seven or eight o clock we have also seen on a day to day basis what are the staff actually doing …... disposing of PPE correctly are we cleaning out our equipment so I was actively in the unit and I also had an IPC… that was in the unit I also had support from NSM that was also very much hands on so we were all saying the same thing we teaching the same protocols so that

was all readily available  besides then we did the stickers we had attendance registers ton keep track to make sure that we covered all the shifts everybody has attended the training

***Researcher:*** *Describe how you managed you foster teamwork amongst nurses when implementing the guidelines.*

**Participant:** Talking to the staff besides just the team meetings to talk about yes, the protocols and yes, the one on one where the staff needed to talk about whatever concerns that they had any issues that they had and if I found that there was a pattern with something than what it was then I would know … because now the team is breaking down keep telling me that they are struggling with a particular issue that we had …. I wish we had the time to do it ….. in retrospect regarding the first wave we needed it both ……. what do they think how could they improve on it …that was a big gap

**The following questions employed the Collective Action aspect of the theoretical framework:**

***Researche****r: Describe the changes made by you to assist with the implementation of the guidelines that helped to suit the needs of the working environment and the current environment and the situation?*

Participant: 13 beds in ICU so we were talking about converting the day ward into the ICU there was so much in terms of structure planning  pharmacy including engineering all of that commission this ICU so much went into that almost a 2 and a half week period to build an ICU to make an ICU the walls were there but that was it …tv lounge for the staff and now with COVID the kitchen is so small we could fit only 1 chair at a time  everyone else must stand and eat  which was very bad in terms of break time for the staff they can have a break  15 minutes 30 minutes …. so, we did have an alternative of a door that led to a garden …. use that door just to be able to breathe and have those few minutes of being outside with the 12 14 hour shifts they were working sometimes so psychologically their little tea break was helpful in terms of the structure of the unit as well initially they wanted to have a hall … at first we were not sure at first the thoughts were that it would work and the nurses would wear their mask and shield …. that is not going to happen it would not work

***Researcher:*** *Where you part of any policy-making initiative related to the COVID-19 Response Guidelines at institutional or unit level and if so, please elaborate on the strategies that you developed or helped develop to accommodate and ensure the response guidelines were implemented in your institution/ unit?*

**Participant:** I was part of the practice institution

**The following questions employed the reflexive monitoring aspect of the theoretical framework:**

***Researcher:*** *What benefits/ valuable insights are you able to share from your experiences with implementing the response guidelines?*

**Participant**: With regards to information of COVID patients …… well then now that was there actually to see if it works ……..with the nursing staff to do like training the whole healthcare team can we actually use this……..in terms of staff control ……..COVID ICU we did it in a 2 day turn around turned into ICU so that was one of the things in our minds we were okay if we have to minimise the number of staff that could get infected at a time and minimise the exposure so we had a 2 day turn around then they also converted a patient bathroom to accommodate the staff they showered before they left and bought laundry bits specifically for COVID then the staff would then fetch their laundry I put cupboard in where they could hang things and put their toiletries in terms of visitors we had no visitors at all we had to come up with a way when patients had died we had to find a strategy to get them out without having to go through the entire …… we built a ramp it was actually a side door that we minimised traffic in-`and through a door that no one would think would be a door for that and then we came up with the idea to change the parking lot as well so that would be where the funeral service would come through

***Researcher:*** *How did you promote these benefits and valuable insights that you experienced to other staff and colleagues, whilst implementing the COVID-19 Response Guidelines?*

**Participant:** The guidelines were coming fast and were changing but what I did take from that was there was a lot of…. be small changes in all honestly that we need to make adjustments to not like a guide would come through then like a month or 2 weeks later its completely changed so there was work put into these guidelines to guide us so it could be implemented

***Researcher:*** *Describe any challenges or barriers that you might have encountered during the planning or implementation of the response guidelines?*

**Participant:** When something worked then we would let everybody know …… that in our different hospital this is what we were doing

**Re*searcher****: Explain your actions to overcome these challenges or barriers.*

Financial resources were really expensive, that one as a big problem it was obtaining supplies then the change……...challenge with the staff and the cost equipment was the same thing as well definitely equipment and obtaining made it very difficult was a greater need for it nationally …... there was a huge demand for it and the resources were not there so we were sharing we would go from one hospital to another phone do you know this piece of equipment are you using it as much can we borrow it and

return it distance would be an issue as well was definitely a challenge the breakdown that happens between staff and management staffing was a big problem, we didn't have enough competent ICU nurses and then we didn't have enough nurses period then I came myself …. I was working till late, going home at 3 in the afternoon to bath and shower then back at work at 6 to take over and run shift there was a day when I had 3 ventilated pts…… with a junior staff nurse to assist me that day I left at 11 (PM) from 6 in the morning

I borrowed I also has relationships with quite a lot of reps I was able to pull on that and get assistance so when there was a hospital that didn't need a particular piece of equipment or they weren't using it as much I was able to call on them to say let me know when you get back your piece of equipment and they would let me know and ask if I need it and would be able to borrow it and eventually the hospital manager got on board with it and assisted in getting equipment when he realised the reality and a lot of pressure from the doctors that he actually really stepped in and was now actually starting to help with equipment the other thing regarding doctors and more the anesthetist that I was working with there were really of so much support they had extra resources that they pulled on people they could call they had the power to make the big changes that I wasn't able to and force things to happen I had really good relationships with them

***Researcher:*** *What suggestions and strategies would you recommend for future guideline control, management and implementation?*

Maybe improve on …… where I am right now, we should learn from others …. a lot of support with enabling teams like for example your IPS that is actively involved you are training development as a manager there is so much else that you are doing can't be those other people to your staff you are all about ……to get done you can't you are going to fall behind focus on management because the whole financial part of a unit is challenging then we had the pandemic finance is broken down to equipment staffing all of it psychological support definitely from the beginning to have someone who is available to the staff and we give the staff the time to actually go and attend and be able to speak and feel free and not afraid we could of definitely improved on that the staff had to the amount of deaths they experienced psychologically had such a negative impact on the staff and we also didn't know speaking for myself I don't know how much support everyone has at home we weren't offering that to them neither was it offered enough to us we had a help line but we didn't get a chance to phone we were too busy and if you dd get home you too tired you are dead asleep so somebody outside for those kind of things (look of concern)…..
One or 2 team leaders in the ethical committee that we had but decisions were made and the nursing staff would comment that is so cold but decisions had to be made nurses were not part of the decision you want to give everybody a chance (mild laughter) and unfortunately the pandemic didn't give us a chance people were getting sick really really quickly conditions were deteriorating ….clean that vent

because there was someone else that needed it those kind of things we should of paid a little more attention to come up with better ways to manage those kind of things with the staff included

I think at the time everything was go go I didn't even have time now I'm like okay me too much to think about too much to do too many people the staff were going through so much that there wasn't much time to think about what do I need and that is something that now I should pay more attention to you need to rest you need to hydrate but actually do those thing and not just pop all the multivitamins that's what we were doing most of us and having our water on the side and not actually eating proper meals because that leads to us getting sick then for myself as well for the first 2 waves I was not at home I was alone with no support so that was hard and video calling doesn't do any justice to actually having someone a loved one at home with you (sighs) we didn't allow ourselves to breakdown we would go on and that's how we managed to get on eventually we did we had somebody no I didn't yes it was but the staff had the time I would let them go for an hour and I would go look after the patients some staff found it valuable some just liked the hour to get away …(extremely emotional and tearful)

**Appendix 5b: Sample of transcript**

Interview Date: 30 November 2021

Interview Start Time :07H39

Interview Finish Time: 08H19

Duration of interview: 40 minutes

**The following questions employed the Coherence aspect of the chosen theoretical framework:**

***Researcher:*** *What do you understand about your role and function in the applying the COVID-19 Response Guidelines?*

(Participant clear, concise and confident)

**Participant** : I think basically having been the infection control manager at this hospital of ours it was a major eye opener being major front line there was it was just really a major task but what I would like to say the focus was obviously on infection control I was the one receiving all the documentation information from department of health getting it implemented deciding on where we going to put who colour coding the hospital starting from the beginning starting from the door where we had to screen everybody screening the staff explaining every single project that we did whatever we implemented into the hospital we had to inform the staff so from the beginning it was splitting our ward where we divided where we put panels in …….because our curtains we felt was not enough …… we have a 125 bed hospital ICU /High care which is a 10 bed we split we had to divide out hospital into a PUI ward which was an orange zone we had a green zone which was negative patients and we had a red which was for positive patients but the overall task was looking at infection control because I was the main person who had to go out and inform management with the help of management that was excellent support that I got form them as well was to actually say this is the direction that we have to go into

***Researcher:*** *What is your role in COVID-19 vaccination rollout process?*

**Participant:** We went and we got involve with Medi-clinic so we assisted we went we had meetings with Medi-clinic but because our hospital was such a smaller one we assisted Medi-clinic in the basic things like yes we were part of it although we were not a vaccination site but I think when it came to the vaccinating part it was more educating the staff about being vaccinated because so much going around on the media the negative connotations and the negative aspects of the vaccine it was just a matter of saying listen go to vaccine and explain to them why a lot of them didn't register a lot of them didn't know how to so it was myself going through the process showing them how to register and obviously telling them the side effects a lot of them didn't quite understand that well if I get the vaccine I won't get COVID and that is what I had to explain to them that COVID vaccine that you are getting is more to say that if you if you did get COVID it wouldn't be as severe but the questions the staff were asking wasn't always

easy to answer definitely not easy to answer but we assisted where we could we arranged transport we transported teams of staff down and to Medi-clinic which was our zone which we worked with and teams went down some of them I accompanied most of them with them just for that moral support knowing that my staff are going I need to be there for them nurses we are quick to give injections but we are scared when we are the ones that get the injection and of course as I say with all the negative impact that there was going around and the information going around about the vaccines things like that so a lot of the staff preferred to go for the Johnson & Johnson because they knew it was going to be a one off

***Researcher**: How did the COVID-19 Response Guidelines make sense to you when applying it at your unit level?*

**Participant:** Yes the guidelines that we received from the department of health fortunately well we have got our own hospital policies our IPC policies what we implemented was we added the department of health policies manuals as they sent it to us with in conjunction with what we were doing we weren't out per say like there was nothing we were doing majorly wrong because for example …….so we say those are the precautions however we did implement additional things like we gave the staff scrubs we had bought so when the staff came on duty they had to change so the staff changed out of their uniform into scrubs went to the unit wore whatever made the staff happy was some of them felt they want to wear scrubs apron a gown we allowed them to wear bandanas to cover their hair we put hair covers we had overshoes on so anything that would make the staff happy at no stage were we out of PPEs never so there was enough PPEs for everybody if the staff came and said sister I don't feel happy wearing this surgical mask you want to double mask yes please go ahead some of the guidelines said there were no need for us to wear like the staff had to come on duty wearing material masks and then when you are on duty you wear a surgical mask some of the staff didn't feel happy because they were using public transport so there for we supplied all the masks which are still doing even now we are supplying masks to all our staff when they go home they go home with the mask and when they come back so they get like 2 masks

***Researcher**: How different did you find the COVID-19 Response Guidelines compared to existing healthcare infection prevention and control protocols? Please elaborate on your answer.*

**Participant:** I think there was a lot of fear in the beginning amongst the staff there was a lot of fear, guidelines not different, and I would think it was more fear of the unknown because it was this thing now this virus that had come and they had been reading about the statistics and the people that are dying so there was a lot of fear surrounding our staff however infection control at one stage took a back seat (sighs) not to the extent where it was pushed aside but we had to start looking at the emotional aspect and the implications that this had on our staff so we gave them everything we gave them the masks we gave them whatever they needed and yes even up to emotional support because now they

are being faced with death and dying whereby all of a sudden you are getting 2-3 deaths and sometimes there was a decision where by nurse had to be with the doctor and say to the doctor and the doctor will say now I've got this 80yo and I've got this 40 year old who am I to use the monitor on and there are those decisions that the nurses also had to assist with ……..and say well doctor you know what do you think as far as possible the hospital supplied us with whatever we needed we got more vents we got more we opened up a new ICU where we had a green ICU we had a COVID ICU so it made it Easier in the sense that management supported us all the way and that it was just I always say if you were not in the shoes of a nurse during the COVID period you don't know what it feels like

***Researche****r: How would you explain your staffs' reaction to the implementation of the COVID-19 Response Guidelines?*

**Participant:** Not really more the fear and then I think the first wave it hi them a little bit but as they knew they had all the PPEs they got our support we made sure to say to them if you are going in to the cubical don't be there longer than 15 minutes so fortunately we have got negative pressure rooms so we couldn't put everybody in negative pressure rooms and because we had these dividers …… that we put in our ICU the nurse actually sat on the outer side so she only went into the patient when she needed to do whatever she had to do she did all of the procedures she came out and sat but I also felt that they also had the fear of knowing that what about my family what am I going to take home to my family am I going to infect my family so that was the main reason why they had to come on duty they had to change they went to scrubs and we even encouraged them to have a shower before they left so our staff showered before they left they put on their uniforms and that's how they left even we said to them if you want to have work shoes and outer shoes you are welcome to do that what I did encourage the staff was when you get home especially if you got children the first thing your child does runs to you mommy mommy you know so we had to say put a block and some of our staff who were a bit more fortunate actually did have like outbuildings at their homes the feedback that they gave me was sister we change outside and we leave our clothes outside in the garage or whatever we shower and then we come into our house or get our gown and we come in and we only talk to our family once we showered and things like that

**The following questions employed the Cognitive Participation aspect of the theoretical framework:**

***Researcher:*** *What methods did you apply to ensure consistency when implementing the response guidelines?*

**Participant:** It was education it was every single day it was whatever information we got it was going to the wards how do you feel today how you are feeling today it was daily chatting to staff so eventually as I said earlier it became more worried about the emotional status of staff because from the beginning

yes they were scared then they started settling in so it was that emotional support they really really needed we had like huddles where any time of the day we would call them together and say listen how you feeling today how you are doing  has anything changed from yesterday so it became more a supportive IPC role still maintaining the PPEs we had to increase on everything hand sanitizer washing etc but again it wasn't only affecting the nursing staff it affected from the cleaner to everybody whatever we did to the nursing staff I applied it to the cleaners I applied it to the security we applied it to our chefs in the kitchen and to everybody who was involved we also had our committee which was our emergency corvid committee whereby every single day we met every day we had a meeting at 8 o clock and it was the heads of each department in the hospital had to come so it was housekeeping kitchen etc Xray whoever was here so every department was presented at this meeting every morning and every morning everybody would be updated this is what went on in the hospital these are the changes that have been made this ward has now become a green ward its no more a red ward for example and there was a lot of education that also had to go on because whatever we did at the meeting had to take back to their units eventually you lost count of everybody signing in ___ because it became you walk in sister can I as you something sure my child my son is starting to cough and then they started bringing in their own things yes as I say it wasn't easy it was tough it was mentally and emotionally draining but I think the important thing was if you get your support from your management team I think that makes a difference and we also had like little incentives giving the staff like little things like giving them pens or cupcakes you know little incentives things to try cheer them up we had the psychologist who came in and did group therapy should come in and come and talk to the staff not only on death and dying because they seeing so many patients dying but actually on their emotional well-being so our staff were emotionally stable to deal with all of this

**<u>The following questions employed the Collective Action aspect of the theoretical framework:</u>**

***Researcher:*** *Describe the changes made by you to assist with the implementation of the guidelines that helped to suit the needs of the working environment and the current environment and the situation?*

**Participant:** We had to mark the whole hospital we had to make sure entrances were closed we had to close up quite  a bit of the hospital then we had to put up notices informing the public stopping visiting there is no more visiting the only time we allowed a visitor to come in was when the person was critical and that's a matter of time we allowed that but there was no other visiting time we really did come into a lot of conflict with family because some of them couldn't understand why is it but once we explained to them and we had to say to them listen this that we had to convert our whole hospital actually to be honest because we have a lot of material furniture and things like as you see the lounge suite so all of that was moved every bit was moved the coffeeshop basically was no seating we followed whatever level the president said if he said level 5 no seating in the coffee shop we actually followed those things as well we sealed off the whole hospital where we have got little comfort rooms where the patients can

sit and go out and sit with the relatives we closed off that area we put in in the elevators the elevators were marked say only 3 people allowed in the lift we made that 1.5 markings where you had to stand so far away from everybody the whole hospital was demarcated the elevator which carried the bodies were redirected because we have got the front elevators and we have the back elevators so if there was any COVID death that had to go down to the holding bay to wait for the mortuary attendant we actually redirected them to one specific elevator whereby the body left our cleaning team had to clean after everybody if they brought in a COVID that lift was stopped it was cleaned it was everything had to be done before we opened it out to the public again so there were lots of other little things we had to do we had to convert for example our maternity we converted we had a corvid positive delivery room we had a PUI area and a green so within our maternity we had to divide the ward up to say that this is a green delivery room red one and a PUI unit pediatrics was exactly the same because we don't have an exceptionally big but we demarcated the area we knew this section in the front is for our clean we have isolation rooms for our positive children and PUIs So basically the colors were red green and orange but there was lots of changes we put the ……notice on admission clerk we have got those in the units we have those as well so anyone that came in were put this so there was this barrier between you and the person you were actually talking to even the cars nobody was allowed to come in if you didn't have a mask the gate we gave out information pamphlets to the public to anybody who came in if any staff member was tested and the temperature was anything like 37.5 38 they had to sit one side and then the security doing the screening would call me we took the person in if they weren't feeling well they were immediately screened something else that we did do we opened up a screening section at the back of the hospital which was like a drive through because we have Ampath and Lancet here so because we have those 2 laboratories on our premises we then made a drive through which you came you parked in your car security phoned the laboratory they came out under cover did you're your swab was taken then the lab people came they did swab and they left when it came to the staff lounge there was actually a major issue because although we got this very big canteen for our staff the staff kind of like didn't really go there so we packed away most of the chairs and we demarcated even the seating area so in each unit it was strictly 1 or 2 at time for tea breaks so that as also limited to the number of people allowed as well

**The following questions employed the Reflexive monitoring aspect of the theoretical framework:**

***Researcher:*** *What benefits/ valuable insights are you able to share from your experiences with implementing the response guidelines?*

**Participant:** For me personally I think what we have gained id that it just shows the trend of how nursing has changed over the years how infection control has changed over the years we mustn't be tunnel vision we have to be wide awake to say hey you know what something new the good part was that there were no resistance the staff were easy accepting the changes its for your benefit and what I really want to say is all I can really really say at my age it was an eye opener learning experience which you

can never explain to anybody and definitely from the feedback that I received from the nursing staff is that sister you did a remarkable job sister you don't know what it felt like just to come and ask me how are you today is there anything you needing have you been and my concern as well was I focused on the staff because if the staff said to me sister you know what I'm actually not feeling well I have whatever immediately …….and you said to them go and have yourself tested and then we followed policies that came there was a lot of administrative work that went with it because it was notifying the department of health of all positive staff positive patients positive deaths so there was a lot of that as well so besides running in the ward the office actually there is no time as IPC there no time to sit in the office even on a daily basis but with corvid we were actually more in the ward than being in the office and I think from the perspective of the patients we only got positive feedback we really did because initially we were not going to be a COVID hospital when we had the meetings with the department of health and this is going back to the beginning of all this we were then told we won't be because we had oncology patients so our first patient that came in may I was able to transfer out to another hospital but as of June when I needed more beds I was told I'm sorry there's no more beds ……. but where we were one up if that we prepared ourselves dividing the ward splitting up the wards we were ready because we anticipated I said this is not going to happen were we going to end up running our hospital everybody our patients to other hospitals and then even when the next the second and the third wave we were receiving patients from afar as Johannesburg Newcastle you name it we were receiving the patients from there and it was difficult to deal with there were difficult issues we had to deal with family yea
…….. I'm coming from Johannesburg and why you not allowing me then we had to dress them up if it was somebody that was terminal dress them up full kit and then allow them say to them 5 minted only 10 minutes only but we did not allow more than 2 people to go in it was either a wife or a mother or a father sister whatever but this is something I think when you walk this road we actually realise and we always say how intelligent viruses are just when you actually think you have got it under control it rises its head again this is where we are heading to now but I personally as an infection control person it was really it hit us but I think emotionally it wasn't physically tiredness but it was emotionally you were actually drained but you couldn't go out and show your emotional drainage to your staff you had to keep it and be there for the people needed you couldn't like go in and say you know well……

***Researcher:*** *Describe any challenges or barriers that you might have encountered during the planning or implementation of the response guidelines?*

**Participant:** Yes I think that to me was the biggest because emotionally you feel drained physical you overcome that because we all had our own way of dealing with things I had my own way of dealing with things because what I would do I would get off from work and I would go and walk I would just go and do something or we meet for example the managers e meet at 12 o clock at our handover and that is where we kind of like vent and say listen I'm kind of like feeling like this now……..and then sometimes t wasn't always easy because some of the doctors were difficult doctors were difficult as

well I mean as much as not all of them, but you got the odd doctor that maybe they not only doing our hospital they doing ,lots of other hospitals and they themselves were tired they were burnt out we had to support each other support the doctors how you feeling today so it was a matter of everybody supporting everybody

***Researcher:*** *Explain your actions to overcome these challenges or barriers*.

**Participant:** The good part and I can give you one experience in particular was that our marketing lady she was excellent she was very supportive with us she and I worked very closely together whenever there was an issue the family would come and you know how people are I come from Johannesburg but they are actually from here what we tried to do we would sit down and talk but what I found and I want to be honest the people we had the issues we were maybe nurses who had relatives here but then we tried to say to them okay contact a colleague ask the colleague how your mom is doing for whatever the case may be but where we actually did myself and….. we went down and we actually sat down and we spoke and there were a few occasions where we kind of like it was a matter of saying okay I'm going to take you in but we going to stand at a distance and wave to your mom and we found that that did work because they kept on saying can I just see her face because remember when we she goes from here sister she is going to be double bagged and the funeral parlor the mortuaries are not going to open the bag so there was this issue so what we were then doing I'm going to take you but I'm going to let you stand from a distance then I would go……

I would say to the nurse listen so and so son or whatever is going to come in as I said we dressed them bagged them but there were issues whereby you can't actually let them go in because maybe the person is in a 2 bedder and then the issue comes from the other opposite client that well why did she have somebody and I didn't so what we kind of like did if the person was at the door we take this person in as far as the nurses station all dressed up and everything and then one of my nurses or I would go in and say okay I'm going to bring your daughter in and you are going to wave at her and that's how we did it what we also got was we have that tab …….so that was another thing that helped quite a bit was that this virtual communication……. and that is where a lot of the patients were able to communicate with their families and things like that because enow it was actually you could see them you know and if they were if they didn't have their own telephones we would actually set them up let us dial your family we have got your family on the line speak to them and what was also good was our staff whoever looked after the patient at a certain time would ask them to please phone the families make a call …… really we definitely got more positive feedback we tried as far as possible to do even if we we didn't break the rule but we stretched it and we bent it a little bit

***Researcher****: What suggestions and strategies would you recommend for future guideline control, management and implementation?*

**Participant:** What I would suggest is that even going forward now the fact that now they are saying the 4th wave is coming I believe we must not drop our guard we need to continue with what we are doing we need to make sure that we do our social distancing whatever implemented while we are still in this because now with us going into the 4th wave I believe that there should be no panic….. it may be a different variant but at the end of the day you still need to take the same precautions as you did because what I'm finding sometimes and as I've been saying to the staff this morning don't drop your guard now you seeing you not getting positives in the hospital now you becoming a bit laxed so no don't drop your guard continue what you are doing everybody that comes into hospital enters the PUI is a suspected patient he can become positive you own colleagues as well so you have to be careful continue what we taught you from the beginning and that's the way forward……. that we have to go yes we are suggesting they go for their vaccine especially now that the 4th wave has come and the boosters everybody was excited to go for Johnson and Johnson because it was a one off but now there's the booster so the question mark now is sister why must we have a booster when we were told it was a once off so I'm saying to them I can't give you that answer however it has come from people that have done the studies research in this field and they know why you must have a booster so I took it upon myself I told them I'm 62 I'm the first one in this hospital that went and had a booster so my purpose in life is to lead by example if I for example and it's good that you say that ……..and I had an interesting case and being a Muslim that I am I follow my Muslim religion but when I came ……..I sat down I said to her this is who I am this is the role that I play in this hospital and this is what I have to do I have to lead by example because if I'm telling everybody …….and I'm not doing it it's the same like hand sanitizing if I go into the wards I don't sanitize you can't tell the nurses to do it if I go in there full of fear I'm going to put the fear in the staff so yea I know that we did have a few colleagues that were positive and things like that there it did make them scared as I said in the beginning but we have just been very fortunate we had no deaths amongst our nursing staff .

**Appendix 6: Certificate from the Professional Editor**

## EDITING / PROOFREADING CERTIFICATE

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This is to certify that the above manuscript has been proofread and edited for English language grammar, punctuation, spelling, writing style, clarity, sentence structure and layout. The document is formatted according to the institutions requirements and guidelines. The logical presentation of ideas and the structure of the paper were also checked during the editing process. Neither the research content nor the author's intentions were altered in any way during the editing process.

I am a freelance editor specialising in proofreading and editing academic documents. All amendments were tracked with the Microsoft Word "Track Changes "feature and the document was returned to the author. The author has the option of accepting or rejecting each change individually. The author remains responsible for the correct application of the changes in the text and references.

I wish the authors all the best.

_____ 13 May 2022

**DR NELLIE NARANJEE** **DATE**

**Appendix 7: Turnitin Report**