EXPLORING EMPLOYEES' LIVED EXPERIENCES OF CONTRACTING COVID-19 IN SELECTED TONGAAT PRIMARY HEALTH CARE SERVICES IN 2020

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DECLARATION

I, Rosemary Van Heerden, declare that:

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DEDICATION

I dedicate this research to my parents, Mr Oswald, and the late Sonja Joyce Green, who always showed their appreciation and support for my success and for instilling a firm culture of discipline in me through their teachings about the value of arduous work and education that assists in propelling the attainment of one's dreams.

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ABSTRACT

Aim: To explore the Tongaat Primary Health Care Services employees' lived experiences of acquiring COVID-19 in 2020 and to understand how it shaped their concerns and perceptions.

Background: In 2019, the COVID-19 pandemic was declared, which rapidly spread globally, infecting health care employees too. In 2020, the Tongaat Primary Health Care Services' employees began testing positive for the disease and since no known studies of the phenomenon existed then, there was a need to explore the employees' lived experiences to understand the extent of the disease's impact. Therefore, this study aimed to broaden the researched knowledge on the phenomenon and to identify the necessary occupational health and safety strategies to safeguard employees and clients

Methodology: A qualitative study was adopted, with an interpretivist paradigm and a subjective epistemology. Therefore, data was collected through semi-structured interviews. A purposive heterogeneous sampling technique was adopted, and 15 employees who acquired COVID-19 in 2020, were sampled from the selected Tongaat Primary Health Care Services.

Findings: The study found that employees working in health care settings were prone to occupational hazards and expected compensation for acquiring COVID-19. The study revealed that employees felt undervalued when management prioritised their labour rather than their safety and the need for a conducive, and supportive work environment. Furthermore, the health care employees experienced fear of dying from COVID-19 and stigmatisation.

Conclusion: This study confirmed that employees working in health care settings during a pandemic are vulnerable to an infectious disease like COVID-19 which is accompanied with stigma and are reliant on effective occupational health and safety and workplace protection. Support from management, colleagues, and family during and after employees acquire an infectious disease is important to boost employee morale and instil a sense of being valued as an employee. Furthermore, the study highlighted the need for an effective compensation system that provides financial settlement to cater for costs and the impact the disease had on their lives.

Key Words: Lived Experiences, COVID-19, Primary Health Care Services

ACRONYMS AND ABBREVIATIONS

Anova	Analysis of Variance
BCEA	Basic Conditions of Employment Act No. 75 of 1997
BREC	Biomedical Research Ethics Committee
COIDA	Compensation for Occupational Injuries and Diseases Act No. 130 of 1993
CHC	Community Health Centre
COVID	Coronavirus Disease
EVD	Ebola Virus Disease
IPC	Infection Prevention and Control
KZNPDoH	KwaZulu-Natal Provincial Department of Health
MOU	Maternity Obstetric Unit
NICD	South Africa's National Institute of Communicable Diseases
NHRD	National Health Research Database
PEPFAR	US President's Emergency Plan for AIDS Relief
PHC	Primary Health Care
PPE	Personal Protective Equipment
RNA	Ribonucleic Acid
SARS	Severe Acute Respiratory Syndrome
SARS-CoV2	Severe Acute Respiratory Syndrome Coronavirus Two
USA	United States of America
WHO	World Health Organisation

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CHAPTER ONE

INTRODUCTION AND BACKGROUND

1.1 INTRODUCTION

This study focused on the lived experiences of the Tongaat Primary Health Care Services' employees who contracted the Coronavirus disease (COVID-19) in 2020. Research suggests that workplace related transmission of infection contributes to the overall burden of disease during outbreaks, and also affects employees and their families in varying ways.(1) Health care employees in general and frontline health care employees in particular, who work in health care facilities during outbreaks, epidemics, or pandemics remain at high risk of contracting the diseases implicated.(2) Therefore, for employees and employers in health care settings, it is important to understand the associated risks for disease transmission, the measures to prevent and reduce disease transmission, and the ways to protect the health and well-being of employees during periods where infectious diseases like COVID-19 are prevalent. Failure to do so may result in many health care employees getting infected, falling ill, becoming debilitated and, at times, rendering them incapable of working effectively due to the associated adverse effects that lead to poor health outcomes.(3)

There is also the ever-present risk that infected employees may die of the disease.(4) In such situations, health care organisations risk permanently losing employees with the requisite skills and knowledge of service delivery.(5) Furthermore, employees' families risk losing breadwinners, and employees constantly live with the ever-present fear of being infected themselves and succumbing to the disease.(1, 6)

It is, therefore, crucial that employees and employers in health care organisations offering primary health care services have adequate information at their disposal on the disease. This will provide them with knowledge and a better understanding of the disease, its modes of transmission, preventative measures, legal protection that is available for workers, and the possible effects of the disease on the health workforce.(7) This information will assist in guiding managers in their efforts to address the effects of COVID-19 infections amongst employees. Studies of this nature assist in providing relevant information in this regard.

1.2 BACKGROUND

In 2019, countries all over the world became aware of COVID-19, which evolved very quickly into a global pandemic.(8) This pandemic brought with it unparalleled effects on health care systems globally, especially since no vaccine was available during this time to afford protection to people.(9, 10) China reported the first case of the disease in the world in December 2019.(11)

By April 2020, the disease had spread rapidly globally amongst the health workforce.(12) During this period, concerns were raised globally that health care employees were at risk of being infected and that when they got infected, they would be at risk of a more severe outcome, even death which was the most extreme negative outcome.(13)

Projections were made forecasting workplace acquired COVID-19 infections reaching 173 per million annually. These projections were deemed to be high in comparison to other deadly and less infectious epidemics like Ebola, which stood at 17 to 57 per million in Sierra Leone and Liberia.(14) These projections considered that China alone reported a 0.6% loss of the health care workforce due to COVID-19 in 2019. During the same period, countries like Italy recorded a 14% death rate of its employees due to Covid, while Spain recorded a 20% death rate amongst its infected employees.(15) England, Scotland, and Wales recorded 8 666 workers infected with the disease and 125 Covid-related deaths.(16) For employees, the greatest risk of contracting the disease is that an infected employee or patient may not exhibit symptoms, which in turn delays the diagnosis of the disease.(17) Therefore, health care settings remain a source of the transmission of the virus.(18) This places employees who work in health care settings at a high risk of contracting the disease through human contact.(19) During the year 2019, the World Health Organisation (WHO) pronounced that globally, health care employees accounted for approximately one in seven cases of COVID-19.(20)

On the fifth day of March 2020, South Africa recorded its first laboratory-confirmed case of COVID-19, which was followed by the rapid spread of the disease in the country.(21) By the sixth of May 2020, South Africa had reported 611 health care employees who had tested positive for COVID-19, which formed 19% of the national average. Nurses formed 53% of those infected with the virus.(22) By July 2020, South

Africa had recorded 493 183 COVID-19 positive cases, with 76 706 cases being recorded in KwaZulu-Natal.(22) Limitation in data that has been collected, is that there is no official statistics that further breaks down the KwaZulu-Natal COVID-19 statistics in terms of the prevalence of Covid-19 amongst health care employees at district and facility level. The statistics were never disaggregated and stratified into various health employee categories showing the extent to which health employees were affected during this time.

The Tongaat area is located in the eThekwini Municipality, which forms part of the KwaZulu-Natal province.(23) The Tongaat Community Health Centre is one of the five community health centres managed by the eThekwini District Health Services, and it supports three mobile clinics. According to the KwaZulu-Natal COVID-19 Report to the Portfolio Committee for Health dated 19 August 2020, Tongaat's Community Health Services recorded employees testing positive, which influenced work stoppages due to employees' grievances regarding workplace health and safety issues.

COVID-19 is estimated to be ten times more lethal than the H1N1 flu pandemic of 2009 due to the rapid transmission of the disease between humans.(24) Therefore, due consideration should be afforded to strategies aimed at improving health care through workplace infection prevention and control programmes, employee health and wellness programmes, and the promotion of a well-structured worker compensation system.(25) COVID-19 has introduced an additional element of danger in the workplace globally, especially in the health care setting.(26)

The negative health outcomes have attracted a keen focus on efforts to protect employees working in health care settings, thus the need to explore further and conduct studies on the phenomenon. In response to the emerging risk, some governments around the world have introduced or amended relevant policies to cater for the compensation needs of employees in health care.(27)

Understanding the effects of being infected with COVID-19, its effects on health care employees, and their lived experiences from their own perspective is crucial when addressing occupational health and safety, infection prevention and control, and employee wellness. Furthermore, understanding employees' experiences as told by them provides an opportunity for employees to have their voices heard through the

capturing and interpretation of their experiences in studies of this kind.(28) This approach is crucial, especially as COVID-19 reached pandemic levels and remains a contemporary focus area in the public health arena.

The importance of understanding the phenomenon of employees acquiring COVID-19 in the workplace is that it assists in supporting employees adequately by investing in improved occupational health and safety in the work environment.(29) Furthermore, such efforts assist health management in planning appropriate employee health strategies to address the effects on the health care workforce.(30)

This study intended to explore the experiences of health care employees who acquired COVID-19 during the pandemic in the Tongaat Community Health Centre and mobile clinics during the year 2020.

At the time of this study, no known studies of this nature had been undertaken in the target population. Thus, studies of this nature are vital since employees in primary health care facilities like the above-mentioned, face a higher risk of acquiring the disease, since, in South Africa, primary health care services are the first level of care.(31) A substantial portion of employees in the health sector work in primary health care facilities.(32) These employees are deployed in clinics and community health centres to render health care.(32, 33) Subsequently, asymptomatic people, those with COVID-19 symptoms, and the contacts of positive cases will most probably be seen first in the primary health care facilities in South Africa, since most South Africans are uninsured so they tend to seek health care at the first level of care.(31) This places employees at primary health care facilities at a higher risk of being infected with COVID-19.(3)

1.3 PHENOMENON TO BE INVESTIGATED

The phenomenon to be explored was the employees' experiences of acquiring COVID-19 in selected Tongaat Primary Health Care facilities during the pandemic in 2020.

1.4 PERSPECTIVES

In this study, the experiences of health care employees who acquired COVID-19 at the workplace were explored from their own perspectives. The study focused on the occupational risks, the related effects on employees, the effects on service delivery, and the role of preventative strategies during a pandemic. Due to the nature of the

study being qualitative, it focussed on gathering data about employees contracting COVID-19 from an individual perspective.

1.5 PROBLEM STATEMENT

Health care employees are often at a higher risk of contracting infections because they are exposed to infectious agents in their line of duty.(27) Diseases like COVID-19 are transmitted rapidly from human-to-human through droplet infection and close contact, which places health care personnel at risk.(34) During 2020, not much was known about COVID-19, its pathogenicity and effective treatment, and people suspected of being infected with COVID-19, and their contacts, sought health care at health care facilities. This placed health care employees under pressure.(35) Studies have shown that being a health care employees on the front line of a pandemic can have significant implications on their health, since it places them at risk of psychological distress and moral injury, and can cause changes in team dynamics.(36)

Currently, according to internal health risk assessments, a certain proportion of the primary health care facilities are experiencing challenges in complying with building regulations and standards prescriptive for adequate and safe ventilation. This poses a higher risk of contracting workplace acquired infection to employees who work in those buildings. Inadequate supply of personal protective equipment has the potential of further placing the employees at risk of being infected at work.(37)

Because COVID-19 is a new disease and systems and policies vary globally, the undertaking of research on the lived experiences of health care employees infected with COVID-19 is crucial. Currently, COVID-19 related studies have focused on the disease's prevalence, its clinical characteristics, diagnosis and treatment, its related psychological problems among health care employees , and the need for psychological care. However, only a few qualitative studies have been published on the lived experiences of employees infected with COVID-19.(38)

Some research exists that aimed to explore the experiences of various categories of health care employees regarding COVID-19 in South Africa, such as the research by Payne (2020), Kelly et al. (2020), Cook et al. (2021), Feroz et al. (2021), Gittings et al. (2021) and Nguse (2021). Whilst these studies provide valuable insights into the experiences of health care employees on the COVID-19 pandemic, they may not reflect the primary health care service context because the resource availability and

health care employees systems and support arrangements in the various levels of health care in South Africa may vary.

In South Africa, especially in KwaZulu-Natal, the outbreak of COVID-19 has led to several health care employees becoming infected with the virus.(39) According to the South African district health system, primary health care services are often the first health point of entry for people within a public health care system and approximately 80% of the population depends on PHC services.(40) Thus during the pandemic, many people seeking health care during this period depended on PHC services, placing health care employees in the PHC settings at risk.(39) By the 20th of February 2021, reports revealed that in 2020 in KwaZulu-Natal, approximately 15 829 health care employees were infected with COVID-19 in the public sector, with 335 dying of COVID-19.(41)

Given the evidence at hand of employees testing COVID-19 positive, data on the lived experiences of employees who were diagnosed with the disease at the Tongaat Primary Health Care services has not been explored before. Thus, this study aimed to explore the lived experience of employees who acquired COVID-19 at the Tongaat Primary Health Care services during the pandemic in 2020. This study also aimed to understand how the experiences of testing positive for COVID-19 shaped their concerns and perceptions in a primary health care service environment.

1.6 AIM OF THE STUDY

The study aimed to explore the lived experiences of employees who acquired COVID-19 in selected Tongaat Primary Health Care services during the pandemic in 2020.

1.7 SPECIFIC RESEARCH OBJECTIVES

1. Investigate what employees infected with COVID-19 viewed as a balancing act between managing the rising infections among staff and ensuring the continuity of health services in their facilities
2. To unearth the concerns of employees regarding the rendering of health care services in the context of contracting COVID-19 at selected Tongaat Primary Health Care services in 2020.

1.8 RESEARCH QUESTIONS

What are employees' lived experiences after contracting COVID-19 in selected Tongaat Primary Health Care services in 2020?

1. How do employees of the selected Tongaat Primary Health Care services describe their lived experiences after contracting COVID-19 in the workplace?
2. What are the employees of selected Tongaat Primary Health Care services' concerns with rendering health care services at their workplace after-acquiring COVID-19?
    2.1. What are the underlying causes of their concerns with regards to acquiring COVID-19 at their workplace?
    2.2. How can these concerns be addressed?
3. How do employees of the selected Tongaat Primary Health Care facilities perceive the working environment in the context of COVID-19?

1.9 RATIONALE/SIGNIFICANCE OF THE STUDY

During the 2019 COVID-19 pandemic, most studies that focussed on occupational exposure among health care employees concentrated on hospital acquired infections, rather than on those acquired in primary health care facilities.(42) This reality places primary health care facility employees at higher risk of contracting COVID, yet little research has been undertaken in this regard at this point.(42) During the 2020 pandemic, the KwaZulu-Natal Provincial Department of Health developed occupational health and safety and infection prevention and control policies, guidelines, and protocols to improve workers' protection from the disease. Despite the existence of these policies, guidelines, and protocols, reports available at the Tongaat Community Health Centre reveal that 73 workers from various departments were infected with COVID-19 in 2020. Despite this phenomenon, no known research could be found by the researcher that explores and understands the experiences of workers contracting COVID-19 in the Tongaat Community Health services.

Studies of this nature will assist in providing a better understanding of the effects of COVID-19 on employees working in primary health care facilities during a pandemic. Furthermore, it will assist in identifying any perceived system failures that contributed to the vulnerability of workers to the disease and the related effects on service delivery.

The knowledge gained will be utilised to guide policy advancements needed to improve the health outcomes of workers infected with COVID-19, including the prevention of transmission in the workplace and the effects on service delivery. Furthermore, health facility managers will gain an understanding of the need for supporting workers who get infected with a virus like the Coronavirus.

1.10 DEFINITION OF TERMS

The following terms have been defined and clarified for the purposes of this study. This will enhance the common understanding of the concepts.

Anxiety is the body's natural warning system that signifies imminent danger and the corrective action to be taken.(43)

COVID-19 is a new disease caused by a virus called Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2). This virus is associated with the family of viruses linked to severe acute respiratory syndrome (SARS) and other types of common influenza. Coronaviruses are enveloped positive-sense RNA viruses that range between 60 to 140nm in diameter. The virus has a spike-like projection on its exterior, giving it a crown-like appearance when it is viewed under an electron microscope; therefore, the name 'Coronavirus'.(44)

Donning and doffing: Donning is a structured procedure to wear personal protective equipment safely, and doffing is the safe removal thereof.(45)

Frontline health care workers refers to employees working more than one shift weekly and having exposure to a person with COVID-19. This group of workers includes doctors, nurses, allied health professionals like physiotherapists, radiographers, and dental therapists, as well as others working in the emergency departments, intensive care units, infectious diseases units, and respiratory and other wards where patients with suspected COVID-19 are housed.(46)

Bioburden refers to the number of microorganisms present on a surface before disinfection or sterilisation.(47)

Cleaning is a process of reducing the bioburden by the physical removal of organic matter, involving washing (with soap and cold water) and scrubbing (mechanical action).(47)

Disinfection eliminates a substantial number of, or all microorganisms, except their spores. It is further classified into high-, intermediate-, and low-level disinfection.(47)

Fear can be defined as "*a basic, intense emotion aroused by the detection of imminent threat, involving an immediate alarm reaction that mobilizes the organism by triggering a set of physiological changes"*.(48)

Super spreader "*refers to a propensity to infect a larger than average number of people*".(47).

Lockdown *"is a set of measures aimed at reducing transmission of COVID-19 that are mandatory, applied indiscriminately to a general population and involve some restrictions on the established pattern of social and economic life…*"(49)

1.11 SUMMARY OF CHAPTERS

Chapter 1 captured the purpose, objectives, and significance of the study, the problem statement, and the background to the study, since it aimed to make a case for the significance of the problem being studied.

In Chapter 2, the literature reviewed is captured, thus positioning the study in the context of previous studies relating to the topic. Furthermore, it presents a critical synthesis of the empirical literature according to relevant themes, thus justifying how the study addressed gaps or problems in the literature.

Chapter 3 expounds the research design and methodology chosen for the study and describes the research setting, the sample, the data collection approach, and the methods of analysing the data.

Chapter 4 incorporates the presentation of the data, its analysis, and the interpretation of the findings, which underpin chapter 5.

Chapter 5 captures the conclusion of the dissertation through the summarising of the findings of the study in line with the set objectives. It encompasses a reflexive account of the study's findings and limitations. It also captures suggestions and recommendations for the purpose of addressing policy needs aimed at improving the health outcomes for employees infected with COVID-19. It states the preventative measures needed, and the support that employees working in health care settings require during a pandemic like that of COVID-19.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

In the first chapter, the researcher introduced and captured the background to the problem being investigated in this study. This chapter encompasses a report on the related literature that was reviewed on the topic. The chapter begins with a discussion on the purpose of the literature review in this study. A brief description of the context of the research problem is encapsulated, which includes literature on historical aspects, infection prevention and control strategies, employees' workplace rights to a safe environment, and the fear of COVID-19.

2.2 PURPOSE OF A LITERATURE REVIEW

A literature review is vital in that it places research findings and the current study being undertaken in context through critical evaluation of a subject. When undertaking research, it is vital to understand the landscape into which the researcher is venturing. In so doing, the researcher is empowered to contribute valuable knowledge to the field of study. Therefore, researchers must acquire the requisite skills to collect, sort, appraise and summarise published data into a narrative that is informative yet impartial. This is critical for researchers who undertake literature reviews so that they utilise the various pieces of information extracted from research papers, articles, reference databases and public data sets appropriately to enrich the study.(50, 51)

According to Neuman, "*Scientific research is not an activity of isolated hermits who ignore others' findings. Rather it is a collective effort of many researchers who share their results with one another and who pursue knowledge as a community*".(51) The researcher adopted Neuman's notion of scientific research and used the findings of the relevant studies on COVID-19 conducted amongst employees in health care settings. This allowed the researcher to expand on the existing knowledge base of the research problem under investigation. All articles and related literatures were acknowledged. Contemporary literature was sourced, however, because the phenomenon being studied was fairly new and thus not as extensively researched, older literature that was deemed relevant was included and played a crucial role in providing valuable information for this study.

The objectives of this literature review were to identify (52) and critically analyze any studies that have been conducted on the topic, and bring to the surface any gaps, contradictions, and public health concerns that existed in current knowledge on the topic being studied.(53) Furthermore, it highlighted the information necessary to develop relevant policies that address workplace acquired COVID-19 conditions, its effect on workers, and the reasons for them. It also highlighted any needs for further research in the area.

A narrative literature review was undertaken where the body of knowledge from the relevant studies, documents, and articles was analysed critically through systematic identification of the relevant literature containing pertinent information on the research problem.(54) The knowledge filtered from the relevant literature was subsequently analysed to place the topic within a framework. This provided a broad but concrete background knowledge base on what was known and what still needed to be discovered on the phenomenon being studied, which linked to the rationale and significance of the study.(55) The literature review of the primary data sources was conducted using Google Scholar, SCIELO, and other relevant search engines like the WHO COVID-19 databases that contain global literature that was updated daily using bibliography databases, hand searches and expert referred articles. The researcher focused on the history of COVID-19 in the workplace;(56) the occupational health risks of COVID-19 infection;(57) workplace rights to health;(58, 59) fears of COVID-19 infection; and workplace COVID-18 infection prevention strategies. The keywords used to search included corona virus (100 results); impact of COVID-19 on health care employees (37 results); sick leave due to COVID-19 (13 results); occupational risks of COVID-19 (15 results); and fear of COVID-19 (43 results).

2.3 THE CONTEXT OF CURRENT RESEARCH ON EMPLOYEES TESTING COVID-19 POSITIVE

The health system depends on health services employees being available and capable of delivering services to people needing health care. During the pandemic, many health services employees could not execute their duties effectively because they were infected with COVID-19. Thus, a concerted focus is needed to give attention to the challenges that these employees will face during a similar pandemic. Health policymakers should consider the factors that contribute to or stifle effective

preparedness to be better equipped to deal effectively with future outbreaks and pandemics.(60)

Evidence of a study of health care employees infections in Italy, China, the United States, Spain, and France supported the notion that workers in health care settings were increasingly being infected with the novel infection.(61) Some countries recorded 15% to 20% of the total infected population being identified as health care employees.(62) A prospective study from the COVID Symptom Study smartphone-based application (63) conducted in the United Kingdom from March 2020 to April 2020 demonstrated that frontline health care employees had a suggestively increased risk of COVID-19 infection when compared to the general population.(64)

Following the global declaration of the COVID-19 pandemic in 2019, South Africa reported its first laboratory-tested case in March 2020.(65) This was followed by large numbers of people being infected with the disease at an alarming rate.(65)

Many people in South Africa, who were suspected of being COVID-19 positive, sought health care at clinics.(66) Inevitably, people with undiagnosed conditions like COVID-19 will seek health care service at this level, thus placing the employees in the primary health care facilities at risk of acquiring the disease.(33) The need for the protection of primary health care facility employees from acquiring infectious diseases is therefore crucial, particularly during a pandemic.

In South Africa, the legal protection of employees is encompassed in the Occupational Health and Safety Act No. 85 of 1993 and other related prescripts.(67) The related regulations and incorporated standards in the country are intended to guide employers and employees during a pandemic.

In South Africa, employers are compelled to undertake risk assessments, identify vulnerable employees, and apply workplace protective measures, according to section 3(1)(a)(ii) of the gazetted directive on COVID-19, released by the Minister of Employment and Labour.(67) Furthermore, employers are required to address employees' concerns and keep them informed by raising awareness of the dangers of the virus, the modes of transmission, and preventative strategies.(68)

Financial protection is provided for employees in South Africa, through section 22 of the Basic Conditions of Employment Act No. 75 of 1997, which allows for the

compensation of employees who contract a disease like COVID-19 at work.(69) Health and safety regulations direct the employer to make provision for a work environment that is safe and without risks to the health of workers. The regulations also require that the employer takes reasonable steps to remove or mitigate potential or evident hazards in the workplace.(70)

Rates of sick leave showed an increase in 2019, following the COVID-19 pandemic, where in Spain a 116% increase in sick leave due to respiratory conditions was recorded.(71) Sick leave rates have been described as a multifaceted indicator of the employed population's well-being. Furthermore, it is also regarded as a predictor for health outcomes and mortality. Some people infected with COVID-19 require longer periods of sick leave due to the persistence of symptoms or the development of new symptoms (72, 73). In primary health care facilities, employees who tested positive or were a close contact with a COVID-19 positive case were placed in quarantine, isolation, or on sick leave. This period of ill health formed part of the sick leave arrangements as per the centres' policy on sick leave in 2020.

This study sought to understand the concerns of employees regarding the rendering of health care services in the context of COVID-19 at selected Tongaat Primary Health Care services in 2020. This understanding has implications for effectively developing and implementing relevant policies and programmes that will support employees during a pandemic.

2.4 HISTORY OF COVID-19 IN THE WORKPLACE

In 2019, in the city of Wuhan, Central China, a newly discovered disease (COVID-19) emerged which rapidly spread globally. This rapid spread resulted in lots of people being infected by the disease worldwide, with a sharp increase in reported COVID-19 related deaths in various countries.(74) The global outbreak was declared a pandemic by the WHO (75) on the 11th of March 2020.(16, 17) Throughout the world, the strategies adopted to curb the spread of the disease included the adoption of lockdown restrictions, travel bans, social distancing, screening and testing, health and hygiene practices, and the prescribed use of face masks in public places. At the end of March 2020, there were 724 000 COVID-19 related deaths reported globally, which increased further so that by October 2020, more than 1 000 000 people infected with the disease

had reportedly died.(76, 77) A worrying trend began to emerge where the reported number of cases increased by 100% every 3 to 4 days in some countries.(15, 78)

During this period, employers faced a challenge in that there was a rise in the number of employees testing positive for COVID-19. A case in point was Ontario, Canada, where there was a sudden rise in the number of COVID-19 cases reported, (79) resulting in 199 community outbreaks being recorded, with 1 245 cases in total by March 2020. An analysis of the outbreak revealed that 68% were workplace outbreaks, and 31% were household cases. Manufacturing, agriculture, forestry, fishing, hunting, transportation, and warehousing formed 80% of the cases.(80) During this period, the burden of disease increased by 56% in Ontario Canada.(81). Health services employees were also infected in Canada and by September 2020, there were 7 050 health care employees infected with COVID-19 in Ontario, Canada.(82) Many employers throughout the world faced the dilemma of keeping their organisations operational while protecting their employees from the disease at work.(16) In England, Wales, and Scotland between April and August of 2020, the occupational categories affected differed in relation to those in Canada in that the number of employees in the caring, leisure, services, processing, plant and machine operations, skilled trades, sales, customer service, administrative and secretarial occupations reported to be infected was 8 666, with 125 deaths being recorded.(16) This increased the number of infected people seeking health services in health care facilities, which in turn increased the risk of health services employees getting infected.(77)

In China, health care employee infection rates were three times higher than those of the general population, with 4% of the infections amongst the total infections being amongst health care employees.(82)

The WHO released statistics from 37 countries that recorded high numbers of deaths in September 2020, and Africa recorded 1 172 342 cases with 25 481 deaths; the United States of America (USA) recorded 16 233 110 cases with 546 864 deaths; South East Asia recorded 6 720 771 cases with 110 711 deaths; Europe reported 5 662 875 cases with 234 681 deaths; the Eastern Mediterranean reported 2 340 215 cases with 60 345 deaths; and the Western Pacific recorded 600 891 cases with 13 129 deaths, against a global cumulative of 32 730 945 cases and 991 224 deaths.(83) The challenge raised during this period was that most countries were not reporting statistics

due to various challenges linked to test availability, processing rates, data collection, and reporting capabilities.(83) Thus, the WHO was not able to publish the real-time statistics of the countries with such challenges on its public website.

In Africa, South Africa remained in the spotlight due to the high incidence of COVID-19 and its related mortality. By June 2020 the South African National Institute of Communicable Diseases (NICD) recorded 73 533 confirmed cases, (84) with 1 568 deaths recorded.(56, 85) By July there were 611 450 confirmed cases and 13 226 deaths, which continued to rise and by September 2020, the number of deaths recorded stood at 16 376 in the country (6, 86, 87) against 1 172 342 cases and 25 481 deaths in Africa as a whole.

The Anova Health Institute (Anova) which is the United States' President's Emergency Plan for AIDS Relief (PEPFAR) Support Partner for five districts in South Africa which include Johannesburg, Cape Town, Sedibeng, Capricorn, and Mopani, undertook a study in September 2020.(88) The institute operates in the government's primary health care facilities and employs approximately 4 000 workers that are deployed in these primary health care facilities. The findings of the study undertaken in the primary health care facilities where they operated revealed that by September 2020, 14% (562/4 000) of the employees were infected with COVID-19 during the study period.(88, 89)

The number of health care employees who tested positive in South Africa continued to rise steadily, in that by the sixth of May 2020, a total of six hundred and eleven health care employees in the country had tested positive for COVID-19. This constituted 19% of the national average, with 53% of the infected health care employees being nurses.(22) These negative health outcomes attracted a keen focus on efforts to protect employees working in health care settings in the country.(27)

The increase in the number of health care employees testing positive for COVID-19 (90) placed additional pressure on essential health services that were compelled to keep health facilities operational while employees were being infected at a rapid pace.(91) During this period, health facility managers focused on preventing workplace transmissions and protecting employees in the workplace as far as reasonably possible.(92) Thus, from an infection prevention and control and an occupational health and safety perspective,(93) intense focus should be placed on the occupational

risks of infection and the preventative measures needed to afford employees the protection they need at work.

2.5 OCCUPATIONAL RISK OF INFECTION

Health care facilities face the occupational risk of their employees being exposed to pathogenic factors during a pandemic. In 2019, this risk materialised in China when the lethal novel virus identified as SARS-CoV-2 was found. This virus causes the disease COVID-19. It spread to many countries and affected health organisations in many ways.(16, 94) The South African health system became overwhelmed during the COVID-19 pandemic amid existing challenges of a lack of funding, and inequitable distribution of the health facilities and health care employees.(87) In Bangladesh, health care facilities faced the challenge of shortages of doctors, which was exacerbated by doctors dying of COVID-19.(95)

The incidence of contracting influenza in workplaces that provide health care is common amongst health care employees, based on documented health care systems reviews.(96) However, studies also revealed that sources of infection amongst employees in health care facilities are multifactorial and include infection at home, during commuting, when attending large social gatherings, and at the workplace, when there is non-adherence to the WHO's guidelines on personal protective equipment (PPE) and workplace hygiene standards.(97) In most countries, the protection of employees from the occupational risk of disease is safeguarded by law and this was more evident during the COVID-19 period.(85) In South Africa Occupational health laws recognise the constitutional requirement of substantive equality, together with its role in realisation of employee rights provided in the labour laws.(77)

However, most health care organisations faced challenges beyond their control, with some organisations being met with pressures that tested their organisational culture and their ability to survive or reach a possible point of collapse.(98) At the beginning of the pandemic, there was a sudden heightened need for prescribed PPE, which resulted in many countries sourcing large stocks of critical medical supplies that inadvertently resulted in shortages in many other countries.(1) Infection control and hygiene practice guidelines were reviewed and became more stringent, for example the fact that the surfaces of tables, chairs and equipment in clinics had to be wiped with a bleach solution between every patient episode, as well as regular hand sanitising

and handwashing.(99, 100) This stimulated the need for training on the guidelines. However, in the first few months, health care facilities faced the challenge of an inadequate supply of PPE, coupled with inadequate training and the inability to meet the need to test suspected cases.(1) Research has demonstrated that during this period, many people contracted the disease due to some associated system failures of ineffective epidemic control, inadequate health care system infrastructure, and sociocultural determinants.(101, 102)

Surveys have shown that in health care settings, the intensive care units and COVID-19 testing sections were regarded as the areas with the highest risk of infection, according to a study in Scotland.(1) Findings of studies conducted in Scotland pointed to an observation where, although the intensive care units were high-risk areas, the rate of infection there was lower than in the general sections. This phenomenon was directly linked to the availability of prescribed PPE and the correct use thereof by employees in the sections since they were aware of the evident risk.(1)

In 2009, an uncontrolled study in Glasgow found that 23.2% of 518 health care employees seroconverted. In the same year, the USA reported 12 cases of workplace-acquired influenza. However, it must be stated that none of these workers had worn full PPE.(46) This demonstrates the protection that correct PPE offers in protecting employees from infectious diseases.

In the Royal Hospital in Muskat, Oman a cross-sectional observational study was conducted between the 7th and 20th of June 2020 to ascertain the characteristics of the health care employees infected with COVID-19.(97) The study revealed that nurses were more at risk of being infected, as 38% of them were infected, while 36% of administrative and general staff including those undertaking housekeeping, engineering, laundry, and catering were infected. On the other hand, 13% of the doctors and 13% of the allied health professionals like paramedics were infected.

Following the discovery of COVID-19 in China, studies to explore the experiences of workers during the pandemic were undertaken in many countries, with a keen focus placed on clinical staff.(99) A previous study conducted in 2009 in Victoria showed that to some degree, frontline health care employees displayed a higher rate of seropositivity than non-clinical staff.(46) However, infection prevention and control (IPC) practices of maintaining a clean and hygienic work environment were constantly

highlighted as a critical arm in the effective response to curb the workplace transmission of disease. It is primarily non-clinical staff that undertake these functions in clinical settings where patients with COVID-19 receive health care, so they can become COVID-19 positive following direct and indirect contact with infected persons in this setting. This notion was confirmed by a study undertaken in Saint Joseph Saint Luc hospital in Lyon, Auvergne-Rhône-Alpes, France, from the first of March to the thirtieth of April 2020, where 3.2% of the non-clinical staff tested positive for COVID-19, thus there is a need to include non-clinical workers in studies of this nature.(103)

Although infection prevention and control compliance is crucial in minimising the spread of infectious diseases like COVID-19, some countries like Ghana do not keep records on the compliance with infection prevention and control measures.(104). The observance of guidelines is important in preventing the spread of disease and the observations made from a survey of the 37 countries pointed out that there is a general lack of effective PPE.(104). Furthermore, gaps in protocols governing the donning and doffing of PPE increase the risk of infection amongst health care employees. It must be pointed out that the lack of safe and effective drugs and vaccinations remain a critical area of concern globally.(105)

In general, pandemics and outbreaks of infectious diseases like Ebola virus disease (EVD) and SARS elicit negative health outcomes amongst employees working in health care settings.(106) The risk of contracting the infectious disease increases health care employees' vulnerability to the physical and psychological effects of the condition.(97) Protecting health care employees from COVID-19 is recommended globally, since frontline workers face an increased risk of being infected with COVID.(107, 108) Thus, there is a need to explore the experiences of employees in primary health care facilities who were infected with the virus, using a qualitative study approach.(106) When health facility managers understand the occupational risks of infection, and they can identify the areas where the risk is high and where system failures exist, they will understand the need to shift business systems to improve and protect their employees' health.(109) With a clearer understanding, health managers are better equipped to identify the correct strategies needed to prevent the spread of infection amongst their employees.

2.6 WORKPLACE INFECTION PREVENTION AND CONTROL STRATEGIES

Owing to the work undertaken by health care employees, the risk of infection is high, especially during outbreaks and pandemics. Studies have confirmed that the novel SARS-CoV-2 is a respiratory pathogen and causes COVID-19. The mode of transmission is related to exposure to droplets and aerosols, mainly in crowded or confined places. Furthermore, there are groups of people who do not display symptoms and it has been discovered that some cases go undetected because they remain asymptomatic, In China, for example, 40% to 45% of the SARS-CoV-2 infections have been found in asymptomatic people.(110, 111)

Health care facilities remain settings that commonly attract extensive and rapid spread of infections (i.e., they are super spreader settings) due to transmission between patients and employees and vice versa.(112) Super spreaders may result in the infection of large numbers of people, however it must be noted that there is uncertainty in understanding the role that super spreaders play in transmission and the rapid escalation of infections.(47) Biological, behavioural, environmental, and individual variables also play various roles in infectivity and may attract an unjustifiable apportioning of moral blame to the alleged super spreaders.(22) Furthermore, super spreaders have the potential of detracting from scientifically based investigations of the intermixture of the COVID-19 transmission factors in that, if received by communities as having a negative connotation, this might influence potential participants to refuse to participate in critical research. Additionally, the alleged super spreaders of COVID-19 are not always able self-identify and act timeously to mitigate the risk to others since in some people the virus is detected one to three days before the onset of symptoms.(47, 113)

From earlier discussions, it is evident that support of employees is vital during a pandemic since the health system is reliant on the health workforce to deliver services. Since the early days of the pandemic,(114) health facilities that were initially novices in implementing the critical activities needed in providing health care during this critical time, have regarded employees as a crucial arm in sustaining the health services.(19, 86) With the rate at which the infection initially spread in communities, risks of exposure amongst employees in health care settings remain an area of concern.

This is because 27 360 employees were reported to have been infected and there were 240 deaths in South Africa by August 2020. By September 2020 in South Africa there were 611 450 confirmed cases and 13 226 deaths. During this period, the disease was considered the highest infectious disease threat to health care employees, therefore there was the need to adopt the universal prevention measures.(9, 11)

It is undeniable that universal prevention measures in the health facilities remain critical to preventing infections amongst employees, patients, and the general population. These measures include the enforcement of physical distancing, the wearing of prescribed types of masks depending on the area of operation, and strict hand hygiene, especially amid the general lack of approved treatments and vaccines, globally.(115, 116)

2.6.1 Disinfection and Cleaning

It is important to understand the differences between disinfection and cleaning since both are vital in the prevention of transmission of infection between people and provide protection to employees who work in the health care sector. It has been recommended that after cleaning, proper disinfection of surfaces must be undertaken during the COVID-19 pandemic. However global shortages of disposable equipment like PPE, N95 masks, and surgical three ply masks during the early stages of the pandemic (84) rendered health care employees vulnerable to the transmission of infection while caring for patients and working in health care environments that are prone to infectious diseases.(47)

During the early stages of the pandemic, the rapid spread of the disease amongst people alarmed the world, especially since no known therapy was readily available during this time. Recommendations were made globally to adhere to frequent handwashing with soap and disinfection utilising prescribed alcohol-based sanitisers.(115) Therefore, during this time, disinfectants were utilised extensively to abate the possibility of contracting COVID-19 among both patients and health care employees.(76) However, notwithstanding the potential benefits of these germicidal products against COVID-19, side effects of the use of hand sanitisers that were alcohol based led to reported cases of skin becoming dry and at times getting infected.(100) Due to these side effects, studies recommend a keen focus on precautionary measures to protect the people from the possible risks associated with disinfectants.(115)

Furthermore, the need exists for the increased frequency of disinfection and cleaning of surfaces and equipment, to abate the transmission of the disease and to offer the first line of defence against occupationally acquired infections.(117) These increased activities have to be undertaken by cleaners.(88) However, it is vital to point out that literature on the link between the increased frequency of cleaning of surfaces and the prevention of infection is limited currently. Interventional studies related to this aspect of IPC are rare and the factors relating to the quality of the cleaning products, methods of cleaning, level of training of the cleaning staff, motivation levels, and remuneration linked to the increased workload of cleaners play a crucial role in environmental hygiene.(101)

It has been shown that the Coronavirus can remain viable on surfaces for approximately eight hours to many days,(118) dependent on the type of surface, through infected droplets settling on these surfaces and/or a person with infected hands touching it.(15) Thus, decontamination of surfaces through cleaning, disinfection, and safe disposal of waste remains important in health care settings. In the health facilities, the surfaces and equipment mostly identified as requiring repeated decontamination include walls, floors, washbasins, taps, ablution facility equipment, light switches, computers, desks, door handles and wheelchairs.(20) Alcohol-based solutions, hypo-chloride, and bleach are popularly utilised to clean surfaces.(21) The process of maintaining a clean and hygienic environment involves cleaning which assists to remove pathogens, thus effectively reducing their viral loads on contaminated surfaces. Furthermore, the cleaning staff clean these surfaces manually, by brushing, scrubbing, wiping, and washing to remove organic matter. The non-clinical employees undertake all these cleaning and disinfection activities. Consequently, the cleaning staff carry the responsibility of protecting themselves, their fellow colleagues, and the public from getting infected in health care facilities through infected surfaces. (22)

These recommendations are relevant to health care facilities like the Tongaat Community Health Care Centre in that there has been an increase in the frequency of the use of disinfectants in such settings. One of the strategies employed to counteract the topical effects of disinfectants is the use of gloves as part of PPE.

The reliance on PPE is regarded as the last line of defence against this Coronavirus.(6) Challenges in PPE availability place the lives of employees at risk, especially those

who work in high-risk areas where aerosol-generating procedures are undertaken, and where infectious unsuspecting asymptomatic people receive health care.(5) Literature documenting infection rates amongst clinical staff is available in many countries including South Africa, where higher rates of infection amongst clinical staff are evident.(102, 119) However, little to no dedicated studies were found to have been undertaken to ascertain the effect of COVID-19 on non-clinical staff who work in health care facilities where they are expected to maintain a clean and hygienic environment.(102)

Findings of a study in a London teaching hospital in 2020 indicated the importance of not only testing and prioritising clinical staff's needs for COVID-19 but also taking care of the needs of support staff and providing them with the same requisite support needed as employees who also work in the clinical space.(23)

The support of staff in this context also includes the review of the work environment and the feasibility of allowing employees to work from home, approving of sick leave when employees are ill, compensation for employees who get infected with the disease at work, and ensuring a safe and healthy environment as far as reasonably possible.(27) In South Africa, the legal framework provides for the needs of the employer and the employees.(120) Thus, it is vital to understand the rights that employees have in the work environment during a pandemic.

2.7 EMPLOYEES' RIGHTS TO A SAFE WORK ENVIRONMENT

The introduction of compensation, particularly for COVID-19 related workplace infections, was done due to the imminent harm and the hazards that the disease has on the health of workers. Some authors argue that health care employees should form part of a no-harm compensation scheme and receive mandatory hazard pay, like that which is routinely afforded to military workers.(14) It is argued that during the pandemic, health care employees are facing unavoidable harm, risks, and burdens from the infectious disease in their line of duty of providing an essential public service. This is in the same manner that military staff face the enemy in their line of duty and suffer harm and risks.(14) The United Kingdom has adopted a robust response to the need for compensation in that a no-fault compensation arrangement has been introduced that compensates the surviving families of key workers who die from COVID-19. Despite this arrangement, there are dissenting views on the monetary value afforded

to families of the deceased key workers since it is below the amount received by surviving families of military workers.(14) Thus, in the United Kingdom, there is a call for the amount paid out to families to equate to amounts paid to families of military workers who die in the line of duty.(14)

In China, a government policy has been put in place to provide for the compensation of employees who become infected with COVID-19 and those who have lost their lives,(121) through monetary payments coupled with additional tax-free remuneration for their efforts in fighting the spread of the disease.(15)

In Denmark, COVID-19 acquired in the workplace is regarded as an occupational disease. All employees who acquire COVID-19 infection in their line of duty are reported to the Health Services Executive, where processes are implemented to ensure that each of these employees gets the prescribed compensation.(122) However, there have been concerns that not all cases have been reported to the Health Services Executive, which affects the statistical accuracy of the numbers of cases.(122)

In March 2020, the South African government began taking care of the needs of workers acquiring COVID-19 at work by catering for compensation through a government notice by the Compensation Commissioner titled, 'Compensation for Occupationally Acquired Novel Corona Virus Disease (COVID-19)'. This falls under the ambit of the Compensation for Occupational Injuries and Diseases Act No. 130 of 1993 (COIDA).(123) Workers claiming this benefit have to meet the stipulated criteria of occupational acquisition of the disease, including but not limited to exposure in the workplace or due to confirmed work-related travel. Any physical impairment of an employee due to their work-acquired infection must be reported within the three month period post-diagnosis and the Commissioner will determine any physical disability and the compensation thereof.(123) In addition, all accepted cases of occupationally acquired COVID-19 infection receive reasonable payment for their medical expenses for a stipulated 30-day period. In cases where workers have lost their lives due to their workplace acquired infections, the compensation fund has paid for their burial expenses and paid their widows and dependents a pension.(14)

Infection prevention and control measures remain key in protecting the health of workers in health care facilities through the reduction of the risk of transmission of the disease, hence the need for PPE to protect these employees at work.(124) Despite PPE

being regarded as a crucial measure to prevent transmission and protect health care employees, a few studies have demonstrated that some workers regard the use of PPE as one of the biggest physical and psychological challenges they have experienced.(124, 125) This is seen as a challenge because it involves creating a physical barrier that requires constant donning and doffing of the equipment. The discomfort of wearing masks and respirators for long hours and the challenges of communicating with patients and colleagues while wearing a mask has been reported by health care employees as an added psychological burden.(7, 126)

The reported initial shortage of PPE placed an additional burden on health care employees who had to constantly adjust the available PPE to provide maximum protection in the health care setting.(125) The non-availability of suitable PPE prescribed by the WHO more importantly exacerbated the risk of exposure, transmission, and possible workplace acquired infection amongst the health care employees during this time.(125) Basic PPE is vital to protect health care employees from contracting the virus and becoming carriers of the disease, especially for employees (including cleaners) that interact with patients and in surgical procedure rooms.(127) Given this, some advocacy groups made calls for health care employees to refuse rendering patient care in the absence of adequate PPE, (126, 127) Daily screening of health care employees has been adopted as an additional measure to detect workers with symptoms of the disease and isolate them before further contact with staff and patients while these workers await testing for COVID-19.(128)

Based on the discussion above, it is evident that employees in the clinical and non-clinical realm of health care have experienced first-hand the effects of the burden placed on health care facilities and the burden it places on fellow employees during a pandemic.(129) Efforts to protect health care employees from COVID-19 remain a global priority,(88) as studies support the notion that frontline health care employees are more at risk of contracting COVID-19 than the general public.(130) Thus, workers providing services in health care settings during a health crisis are viewed as change agents by some, since they provide much-needed skills and labour that contribute to the efforts in protecting the lives of the general population from rapidly spreading diseases like COVID-19.(106)

2.8 FEAR RELATED TO COVID-19

Fear of becoming infected with COVID-19 remains a significant factor of the intricate set of emotional reactions fuelled by the COVID-19 pandemic.(48) Studies have shown that the fear of infection triggered by a novel virus (COVID-19) during a pandemic differs, from that of the fear of contracting non-infectious, degenerative conditions.(131) The fear linked to infectious conditions is deeply rooted in a person's emotional brain since it encompasses a psychological adaptation (132) that has progressed through the years to abate the exposures encountered in reaction to a varied collection of common pathogens throughout the evolutionary history of the human species. On the contrary, fear related to non-infectious conditions is largely cognitive in nature and is triggered by cultural based responses, since the risk factors and life habits of the modern world influence the rate and intensity of their aetiology and pathogenesis.(131)

Furthermore, the fear of death is a stressful situation to face in a pandemic. In the United States of America, the findings of a study of 256 adult participants found that the fear of COVID-19 has close links with depressive symptoms, generalised anxiety, emotional distress such as suicidal tendencies, abuse of habit-forming drugs, and an extreme sense of despondency.(131)

During this pandemic, workers in general and employees in health care in particular, have experienced the anxiety of being infected and possibly dying after being infected with COVID-19.(133) The fear of COVID-19 infection has the potential of placing at risk employees' psychological well-being and occupational productivity, because it exposes health care employees, their clients, and their close family members to extraordinary risk levels.(134)

Females are at a higher risk of experiencing higher levels of fear of contracting COVID-19.(73, 135) This supposition is supported by studies conducted in the general population, where it has been discovered that the intensity of fear is higher amongst females.(131) It is therefore vital that managers in the health sector adopt strategies that address infectious diseases in the workplace for employees in general and females in particular, since the health sector employs more females than males.

Studies have shown that the older a person is, the greater their fear of being infected, which may be linked to the explanation that older workers are aware that they are more at risk of severe COVID-19 symptoms.(131)

Coping mechanisms play a significant role in the levels of fear experienced in that people with secure attachments tend to assess a stressful event in a less threatening way and will convince themselves of their ability to cope effectively with the fear they encounter. On the other hand, people without secure attachments react differently in that they believe that the threat they are exposed to is extreme and that their coping ability is insufficient to deal with their fear effectively.(131)

The fear of stigma related to COVID-19 infection has been found in studies amongst nurses and health care employees, and it has been shown that during diseases outbreaks, fear is a mental health outcome amongst people.(136) Thus, there is a need to invest in improving the work environment to reduce the level of fear among employees working in health care settings. Interventions proposed to address the stigma associated with disease include stigma reduction interventions aimed at ensuring personal and family support for employees living with family members that have chronic diseases, since research has demonstrated the association between the increased risk of worse COVID-19 outcomes and some prevalent chronic diseases.(134) Supporting employees living with family members that have chronic diseases is vital, because studies have also shown that there is a significant association that exists between employees that live with ill family members developing COVID-19 fears.(134)

The need to understand the psychological implications of COVID-19 disease outbreaks is critical in the health care system. It is, however, reported that this aspect is at times neglected in health sectors, despite mental health effects being reportedly higher during epidemics. Employees in health facilities that have constant interaction with people infected with COVID-19 may develop fear ascribed to their constant interaction with people suspected of being infected, those infected who become extremely ill, and those who eventually die of the condition. They become fully aware of the disease progression and the risk of dying or becoming debilitated due to the complications of COVID-19 infection.(134)

In 2020, the number of COVID-19 cases increased exponentially in South Africa, which resulted in the government declaring a state of disaster in March 2020, coupled with the adoption of alert levels ranging between one and five to mitigate the COVID-19 transmission rate in the country.(137) During this period reports suggest that employers and employees were faced with challenges relating to insufficient numbers of employees to cope with the volumes of people needing care, inadequate PPE, enormously demanding workloads from the rising number of infections, and the lack of adequate and appropriate treatments to save lives. This caused a psychological burden directly related to working during the COVID-19 outbreak.(138) This situation has led to increased anxiety levels, fear, stress, and short-term and long-term burnout syndrome which require resources to assist employees to cope with them.(139, 140)

2.8.1 Stigma

Stigma can be defined as a characteristic that is intensely discrediting and reduces the bearer of it from a completely normal and typical person to a tainted, discounted human being.(141) People who experience stigma often find it difficult to deal with the diminished self-esteem, isolation, and discrimination, self-blame and guilt that it brings upon them.(142) The WHO's Director-General, Dr Tedros Adhanom Ghebreyesus, has been quoted as saying that, "*stigma, to be honest, is more dangerous than the [corona] virus itself"*.(141)

In a qualitative study conducted between April and June 2020 at a referral hospital in Malaysia, amongst patients who tested positive and family who cared for the patients, a portion of participants who were infected with COVID-19 reported social stigma fuelled by fear and limited understanding by the public of COVID-19.(143) The notion of stigma influencing non-disclosure is supported by a study conducted in China, where some participants preferred not to disclose to some groups,(144) fearing stigma and discrimination, hence a desire to protect their family members, and fearing exposure and loss of their privacy, psychological distress, and social isolation.(144) Nonetheless, some participants who were infected with the disease and experienced stigma willingly opted to share their experiences since they believed that it could assist in increasing public awareness and address the increasing rate of social stigma.(143)

It is vital that stigma is addressed and curtailed. It has been reported that one of the categories of people most exposed to discrimination and stigma is infected health care

employees.(77,145) The increased stigma directed toward people infected with COVID-19 is followed by the increased risk of psychopathology linked to symptoms of depression and related stress disorders, including sleep disorders.(146) People who have been quarantined have also reported problems experienced on their return to work.(146) This trend has serious implications for the well-being of workers because the experience of stigma and any form of discrimination in the workplace has the potential of leading to the loss of productivity and loss of income for employees.(147) Studies have revealed that stigma can also be inflicted by family members, peers, and co-workers against those who are infected with the disease.(143)

Employees who return to work after quarantine, isolation and/or recovery from COVID-19 may struggle to reintegrate and remain productive due to stigma, which in turn increases their risk of burnout, psychological and emotional exhaustion, and anxiety.(148). A study conducted in China on COVID-19-related stigma profiles and risk factors found that 16% of people who resided in Hubei, which was identified as the COVID-19 epicentre, reported being stigmatised during the peak of the COVID-19 outbreak.(149) Findings of the research confirmed that participants were left feeling ashamed and worthy of the shunning and blame being cast upon them, primarily due to the location of their residence.

In studies conducted in Vietnam, 18% of the health care employees reported feeling it unsafe to work in health care facilities after they had to quarantine following contact with infected people. Of these health care employees, 10% felt blameworthy by their own relatives and friends and 34% of them avoided all contact with neighbours and people in the community due to feeling stigmatised.(141)

Attitudes and beliefs about illness are shaped by personal knowledge about a disease, interactions with people suffering from the disease, stories in the media, and some cultural stereotypes since understandings and interpretations of a disease vary from culture-to-culture.(150)

Consequently, it is vital that studies of this nature be undertaken to better understand the fears and other mental and psychological outcomes prevalent among employees working in the health sector. Furthermore, understanding the coping mechanisms needed is crucial, since it did not attract the necessary attention during the early phases of the pandemic which fall within the period of this study.

CHAPTER THREE

METHODOLOGY

3.1 INTRODUCTION

This study concentrated on the accounts of lived experiences of employees who tested positive for COVID-19 in the year 2020, thus the aim of this chapter is to present how the data gathering process was completed. Therefore, this chapter focuses on the research methodology adopted in this study, focusing on the design of the study, the setting of the study, the study population, sampling of the participants, data collection, data analysis and the ethical considerations.

3.2 TYPE OF RESEARCH

This was a qualitative study that adopted an interpretivist paradigm, where epistemology is subjective. The interpretations in this study were tied to the researcher's worldview and background. This study approach adopted the view that the researcher was inextricably part of the social reality being researched, and was therefore not ‘detached’ from the phenomenon under study.(151) The adoption of an interpretivist methodology linked with the aim of the study, which was to understand how employees' subjective lived experiences of contracting COVID-19 at work shaped their concerns, perceptions, and lives in general.(152) To do this the phenomenon under study was understood through the eyes of the participants rather than those of the researcher.(151) This approach allowed the researcher to gain access to employees’ thought processes to understand what or how the employees were thinking about the phenomenon. Therefore, all efforts were made to understand the views of the employees participating in the study and not the viewpoints of the researcher, since interpretivism uses a subjective way of interpreting data.(153)

The phenomenologists' view of life is that an everyday phenomenon is present but hidden within a person and may be masked by forgetfulness.(154) Studies of this nature involve the study of a person’s perceptions and emotional responses. Participants who experienced the phenomenon were interviewed and allowed to relate their experiences through semi-structured interviews. Probing was utilised to tap deeply into the participants' thoughts. The selection of the participants was purposive, thus ensuring that they had rich and deep knowledge of the phenomenon being studied

that would enable the revealing of the rich meanings they attached to their experiences.(155)

The researcher adopted an empathetic approach to understanding how each individual interpreted their own feelings since human life can only be understood from within.(154) By adopting this approach, participants were allowed to speak broadly and with dynamism about their experiences, thus bringing to the fore the meanings of their experiences from their own perspectives.

Interpretivists, in general, tend to value what people say and thus pay attention to what participants say in a study setting. Patterns, themes, and trends emerge from the person's point of view, which assists in understanding their real-life situations as they experienced the phenomenon being studied.(153)

3.3 STUDY DESIGN

The phenomenology research design was adopted for this study to interpret the meanings and essence found, concerning the phenomenon of employees working in primary health care services acquiring COVID-19. This approach was best suited for this type of study since a phenomenological approach concentrates on people's own sense of the phenomenon under study. In-depth face-to-face interviews were undertaken, which are "*an effective method for data collection when the researcher collects qualitative, open-ended data to explore participants' thoughts, feelings and beliefs about a particular topic and to delve deeply into personal and sometimes sensitive issues*".(156) This method was used to collect data from the participants who experienced the phenomenon, through their storytelling. According to Benner, phenomenological studies aim to arrive at an understanding of human perceptions through understanding the features of a phenomenon that is common to all people who experienced it without it being tainted by the researcher, thus the use of story-telling (154).

As stated above, no known study has been undertaken before in the Tongaat Community Health Centre's primary health care services, to explore employees' experiences of contracting COVID-19 in 2020. The understanding of the employees' lived experiences of contracting COVID-19 was thus a novel phenomenon since little was known about it.(155) Reflexivity was employed to ensure impartiality in the analysis of the data and in the interpretation of the participants' lived experiences.(157)

3.4 STUDY SETTING

The study was conducted in the Tongaat Primary Health Care services in the eThekwini District in the Province of KwaZulu-Natal, South Africa. A total population of approximately 3 800 000 people resided in eThekwini, with approximately 42 553 people residing in Tongaat.(158) The district is divided into North, South Central, Lower South and West service areas. Government led health services are provided in partnership with the KwaZulu-Natal Provincial Department of Health and the eThekwini Municipality (159) through a service level agreement. Primary health care (PHC) was adopted as a basic mechanism to promote and provide health care to the population of South Africa and was formally introduced in the country in 1994. PHC is delivered through the District Health System, with the South African government being the main service provider.(160)

The eThekwini District Primary Health Care services platform consists of 104 PHC facilities. There are 98 PHC clinics and the eThekwini Municipality operates 59 of them while the Provincial Department of Health operates the other 39. There are six Community Health Care Centres (CHC), where 24-hour PHC services and emergency care are provided. Tongaat's CHC forms part of the six CHCs where patients requiring observation and the maternity obstetric unit's (MOU) services can be managed for up to forty-eight hours. The Tongaat CHC manages the Tongaat Primary Health Care services, including three mobile clinic services.(161)

3.5 SAMPLING STRATEGY

Since not very much was known about the experiences of the employees who had contracted COVID-19 in Tongaat's Primary Health Care services, a qualitative research approach was adopted to enhance the inquiry. The primary emphasis in qualitative methods is placed on saturation, where the researcher obtains a comprehensive understanding through ongoing sampling until no new substantive information is acquired. The technique adopted in this study was purposive heterogeneous sampling or maximum variation sampling which is adopted extensively in qualitative research.(162)

Heterogenous sampling aims to include as much insight, views, and opinions as possible and does not aim to represent these views or opinions proportionally. This sampling method aims to maximise diversity as it relates to the research question.(162)

The heterogeneous sampling technique was suitable for this study since this study aimed to identify and select information-rich participants for the most effective use of limited resources.(162) The participants in this study were defined as those who were knowledgeable about the phenomenon of interest (163) and had lived the experience of the phenomenon.

The researcher engaged the managers of the Tongaat Primary Health Care services since these managers were knowledgeable about the employees who had been infected with COVID-19 and those who would be willing to participate in the study. The engagements included discussions on this point. Participants were selected from the facility list that captured employees' COVID-19 positive status against their employee number. The employees were made aware of the study by management through word of mouth. The managers advised them on how to participate voluntarily. Employees that were interested in participating contacted the researcher telephonically. The researcher scheduled appointments with participants detailing time and venue for interviews. The researcher was able to access the database and was able to confirm the employees COVID-19 results using the participants staff numbers.

3.6 TARGET POPULATION

The target population in a study is the total group of individuals from which a sample may be drawn. In pursuing academic knowledge on a phenomenon, a researcher gathers data from participants who belong to the research population.(164) In this study, the target population was the employees of the Tongaat Community Health Centre, including those from the three mobile clinics, who had contracted COVID-19 in 2020. The participants' willingness to participate in the study, their availability, and their ability to relate their lived experiences and opinions on the phenomenon of contracting COVID-19 influenced the selection of the participants (165) in this study.

Because it was impractical and unfeasible to study all of the employees who had tested positive for COVID-19 in 2020 in the Tongaat Community Health Centre and the three mobile clinics, a maximum of fifteen participants formed part of the sample population. In this facility 73 workers from various departments were infected with COVID-19 in 2020. Data on employees who tested positive in 2020 in the facility is depicted in Appendix K. The data depicts 38 employees from nursing, 19 from the administration and systems, 5 from the dental, 4 from the pharmacy, 3 from human

resources and 2 from community-based services section acquiring COVID-19 in 2020. This sample size was regarded as adequate, taking into account that this was a qualitative inquiry where samples tend to be small since the aim of this type of inquiry is to explore a particular phenomenon.(164) A small sample provides in-depth data for analysis, rather than surface-level data obtained for analysis from large surveys with many participants.

Saturation is the most widely adopted principle to determine the sample size and the evaluation of its sufficiency. This notion is supported by authors Guest, Bunce, and Johnson who analysed 60 interviews and found that saturation of themes was reached by the 12th interview.(166) Considering that this study aimed to recruit between eight and fifteen participants, the range was based on the duration of the study, which was projected to take up to sixteen months and the resources needed to be allocated, thus the sample specification was flexible. Additionally, the methodology adopted in this study was phenomenology, which is always associated with small samples, thus choosing a few participants who had all experienced the phenomenon being studied aligned with the principles of selecting participants in qualitative research.(167)

3.6.1 Inclusion and Exclusion Criteria

The inclusion criteria adopted included:

I. Those employed by the Tongaat Community Health Centre, including the three mobile clinics managed by the Community Health Centre, and who were infected with COVID-19 between the 5th of March 2020 and the 31st of December 2020.
II. Those who were infected with COVID-19 and did not die from the disease.

The exclusion criteria adopted were:

I. Those employees who were not employed by the Tongaat Community Health Centre or the three mobile clinics but who were deployed by other agents to provide health services in the Tongaat Community Health Centre or the three mobile clinics, since those employees' occupational health reports were managed by their employers and not by the Tongaat Community Health Centre and the three mobile clinics' occupational health reporting system.
II. Those who tested positive for COVID-19 and died during the period of the study.

III. The employees that were not positive for COVID-19 during the study period.

3.7 DATA COLLECTION

This inquiry was undertaken without departing from an obvious conceptual framework. The technique adopted to collect the data involved the use of one-on-one in-depth interviews, coupled with the strategy of identifying patterns from the data collected to assist in developing a general framework about the topic.

3.7.1 Data Collection Techniques

Data collection was undertaken using an interview guide and face-to-face interviews. During the interview process, the researcher commenced with questions captured in the interview guide and encouraged the participants to talk freely about the topic, using probing and asking follow-up questions. This process allowed the researcher to explore some questions further.(168) Qualitative studies afford the researcher the opportunity to access the opinions and feelings of the research participants, which links with the aim of this study to understand the experiences of the participants.(169) During the interviews, stringent compliance with the applicable South African COVID-19 social distancing regulations and prescribed infection prevention and control guidelines was observed.

In studies of this nature, the expression and comprehension of language are central for interviews, since they characterise the data and the process of communication by which the data is generated equally.(170) Currently, awareness for research to include participants that are not fluent in the language that is dominant in research is mounting.(171) English was adopted as the output language in this study because it is the increasingly popular output language among social and health researchers.(172) Data collection was undertaken using two languages, namely, isiZulu which is the home language of some participants and English, which is not only the output language but also the language of the rest of the participants. In this study, the researcher was bilingual and possessed mother-tongue fluency in both the languages used in the study. This facilitated cross-cultural communication, which had a positive effect on the cognitive abilities of the participants.(173) This approach assisted in minimising the risk of misinterpretation and the loss of participants' intended meanings, (174) because the original words, phrases and concepts were securely embedded in the context. Any

problems with interpretation and accuracy in meaning were addressed by the researcher conducting the interviews in the participant's local language. (82)

Qualitative research is acquiescent to cross-language designs when a language barrier is present between participants and the researcher.(223) This study differed in that it adopted a phenomenological approach, which was not amenable to a cross-language design.(175) In studies of this nature, the process of translation involves the original use and structure of the participant's language, and it gets altered during the process.(176) Over and above the alteration, changes may occur in the text during translation and the fundamental nature of the phenomenon must be captured sufficiently during translation.(177,178) Therefore, studies that adopt a phenomenological approach can only occur in the language of the participants, and in phenomenological studies, the involvement of interpreters or translators is not necessary because the core of language is inherently a translation of the participants' experiences.(175)

Phenomenological studies require an intense, precise focus on how participants use language to describe their experiences.(178, 179) Language in itself is a part of the identity of the person experiencing the phenomenon.(175) The process of translation of data tends to disrupt the process-flow from inception to dissemination, and studying the participants' use of language to describe their experiences of the phenomenon involves translating the participants' data.(180)

Data collected in this study had the potential of being sensitive, and management of such data was vital to provide protection and confidentiality for every participant.(181) As such, including translators that were outside of the research team could pose further complications in the research process.(175) Due to the nature of this study, the researcher understood the meaning of each participant's experiences through their use of language.(181)

The interviews conducted were used to explore the views, beliefs, and experiences of the participants who contracted COVID-19 in 2020.(182) The researcher secured interview dates, times and venues by agreement with the participants, thus ensuring that the quality of the responses was preserved. Furthermore, it assisted in avoiding interruptions that could affect the recording or distract the participant/and or the researcher.(169, 183)

During the interviews the researcher extracted the data that was to be used to enable the development of a deeper understanding of the meanings that the participants ascribed to their subjective experiences of contracting COVID-19, which included probing questions about their positive Covid-19 results.(156). The researcher was afforded access to the facilities databases where employee staff numbers were used to confirm the results. This was further confirmed by each participant during probing into their experience and included, the ways in which they found out that they were diagnosed as being COVID-19 positive.

The researcher utilised the interview guide where broad questions were asked, thus stimulating discussions that allowed for conversations and storytelling that was interactive. The researcher undertook follow-up interviews to extract as much information from participants as possible and to ensure that saturation was reached.(184) This approach afforded participants the freedom to speak extensively about their experiences, which in turn provided the researcher an opportunity to gain in-depth insight into the participants' experiences.(53)

During the one-on-one interviews a record was made of all that was said, done and observed.(185) Audio recordings were made of each interview, and field notes were maintained by the researcher. The field notes assisted in capturing the impressions, comments on behaviours, nonverbal cues and the contexts that may not have been captured sufficiently by the audio recordings.(186) The researcher captured the field notes concurrently with the audio recordings. The researcher made use of a reflexive diary to create transparency so that she could self-reflect critically during the creation of the record of her actions during the research journey.(187) The reflexive diary is crucial in studies of this nature in that the researcher brings to the surface their own experiences, opinions, thoughts, and feelings while acknowledging their part in the research process.(188)

The audio recordings were transcribed verbatim after obtaining informed consent from all participants.(185) The field notes were used to provide an important context when interpreting the audio taped data and served as a reminder of the situational factors of importance during the data analysis.(181)

3.7.2 Topics to be Explored

The topics to be explored in the study included the history of workplace acquired COVID-19, risks of infection amongst health care employees, workplace infection prevention strategies, employees' rights to a safe work environment, and the fear of COVID-19 infection.

3.8 DATA MANAGEMENT AND STORAGE

This study adopted a qualitative approach where the data collected included field notes, audio-visual recordings, transcripts, and analyses. The researcher understood the importance of managing the data collected since it represented the phenomenon under study. The richness of the study was ensured through systematic categorisation and filing of the data to ensure that it could be retrieved and duplicated whenever needed, all while maintaining strict security of the data.(189)

Since this was a qualitative study, the management of the data remained a crucial factor in ensuring the rigour and truthfulness of the data. It also assisted in providing protection for the research participants because of the potential of subjectivity that is intrinsic in this type of research.(190) This study provided for deep reflection of the representation of the phenomenon from the participants' perspectives, through use of the recorded conversations that were transcribed verbatim and interpreted. In so doing the researcher, in essence, converted data that reflected human interaction into written reports. In the management of the data, aspects of ease of retrieval while ensuring the provision of confidentiality to the participant remained a pivotal point.(53) The data collected was handed to the University (Research Supervisor) for safekeeping for the entire prescribed period, to protect the participants' identities and control access to the data. The researcher also informed the participants that other researchers interested in the subject could, from time-to-time, request access to the information, but that this would be controlled strictly by the University's policies.

3.9 DATA ANALYSIS

Since this was a qualitative study, the data analysis undertaken involved the process of systematic searching and organising of the interview transcripts in order to better understand the phenomenon being studied.(191) The knowledge generated was grounded on human experience, and based on the use of words. The researcher was

the instrument for analysing the transcripts, making judgements about the coding, selecting the themes, and contextualising the data.(192) A thematic analysis was therefore undertaken to identify, analyse, organise, describe, and report the themes found within the data collected, and this assisted in examining the perspectives of the different research participants.(193)

The researcher adopted a traditional approach in analysing the data, whereby all of the data was captured on an excel spreadsheet using thematic networks.(191) Immediately following the recording of the interviews, the researcher listened to the recordings repeatedly. This was followed by the writing of verbatim transcriptions, followed by the researcher reading and rereading the transcripts to identify differences and similarities in the search for the meanings and patterns that emerged.(194, 195) During this process, important sections were identified from the texts and coding was undertaken; labels were attached to the indexing which linked to pattens and the explicit themes that emerged. Throughout the process of coding, reflexivity was undertaken to ensure that the researcher constantly examined the thoughts and ideas that evolved as the engagement with the data delved deeper.(192, 196)

After the data was coded, the relevant data was identified, sorted, and organised inductively into relevant themes in order to understand the phenomenon being investigated.(192) Any code identified that did not fit anywhere was captured in the "mixed" theme section which was revisited as the analysis unfolded.(192)

On completing the allocation of codes to themes, further review took place ensuring coherence in the patterns that emerged. The themes were then re-examined to ascertain whether they accurately reflected the meanings that manifested in the collective data set. Where similar themes were identified, they were merged, and others split into other themes. Each theme was analysed in detail and named, to assist in understanding the story being told. Once all the themes were sorted, the researcher was able to visualise how the themes fitted into the thread of the story, linking to the data and the research questions.(192)

After final analysis of the themes, the write-up ensued, which included some participant's direct quotes that elucidated the richness of the data.(197) In interpreting the themes, the significance of the patterns, their broader meanings and their implications were highlighted, and their link to the topic emerged.(192)

In studies of this nature, the establishment of credibility, dependability, transferability and confirmability is vital to demonstrate trustworthiness.(198)

3.9.1 Measures to Ensure Trustworthiness

To ensure credibility, through the establishment of confidence that the results from the perspective of the participants are true, credible, and believable, a researcher must demonstrate that they have had sufficient and varied engagement with each setting. In this study, the researcher spent up to 45 minutes at the participants' workplaces during the initial face-to-face interviews, and follow-up interviews were undertaken with the participants away from their workplaces by means of telephonic interviews. Furthermore, the researcher's authority was established because she possessed the required knowledge and research skills to perform the role of researcher.(199)

In order to ensure dependability, that ensured that the findings of the study would be repeatable if the inquiry was repeated with the same cohort of participants and in the same context, detailed drafts of the study protocol were prepared throughout the study and a detailed record of the data collection process was kept as an audit trail.(199, 200) Furthermore, during data analysis coding was adopted where the information was attached to the themes that emerged, thus ensuring dependability.(201)

Conformability was ensured through the reflexivity that was adopted by the researcher, through the identification, acknowledgment, and control of any preconceived ideas, perspectives, and opinions about the experiences of workers who had acquired COVID-19.(155, 202) The researcher kept an up-to-date reflexive diary where notes were taken on areas of interest or observations made during the interviews, thus enabling effective analysis in order to ensure confidence that the results could be confirmed.(199)

Purposive sampling was adopted and the researcher made direct quotations of what the participants verbalised, which added an element of transferability to this study.(53) The adoption of data saturation occurred, where participants were interviewed until data saturation was reached and in so doing, the researcher ensured that the results of this study could be applied to other settings or contexts.(199)

Furthermore, the researcher conducted an extensive literature review using Google Scholar, The Lancet, SCIELO, and other relevant search engines to enhance the quality of the study.

Since the researcher adopted a dual role of translator and interpreter, issues of subjectivity when analysing the data could arise and its effect on the dependability of the findings of the study (175) was acknowledged as a limitation. Nevertheless, the researcher's engagement when translating the data potentially enhanced the intimacy of the understanding of the individual experiences and their underlying meanings. This enriched the findings of the study constructed by the researcher and the understanding of the researched phenomenon.(175)

3.10 ETHICAL CONSIDERATIONS

Vital components of modern research are the ethical and legal issues related to the participants and the researcher, since being the source of data is the main role of human subjects in research.(203)

The ethical measures adopted in this study included autonomy, justice, beneficence and nonmaleficence.

Autonomy is a person's ability to think, decide and act based on a freely made decision.(204) In this study all participants participated willingly and everybody participating provided informed consent before engaging in the study. Participants were informed of the recording of their interviews and permission to record was obtained in advance.

It is common practice for ethics committees which review research protocols to insist that potential research participants reserve the unconditional or absolute 'right' of withdrawal at any time without having to give a reason for doing so,(205) which was the case in this study. In compliance with this requirement, the option to opt-out at any stage with no obligation or fear was written onto the informed consent form and the researcher verbally confirmed this point before the interviews began.

In respecting the participants' autonomy, respect for them and their experiences remained paramount. An interview has the potential of rendering a participant vulnerable to a researcher's implicit agenda, so the researcher must strike a balance between listening to what the participant says as they tell their story and the aims of

the research. The reflexive approach was adopted to strike this balance and ensure the participants' autonomy.

Justice concepts are explained in terms of what is deserved by each individual, and what each individual is entitled to, without partiality and with the aim of delivering equitable treatment.(204) In offering the participants a fair distribution of benefits and burdens, any financial and in-kind benefits were made known to them when obtaining their informed consent. The participants were compensated for their time and for the cost of their data and airtime during the research. The benefits were declared to the relevant Ethical Committees.(203)

The researcher also made full disclosure about the aim of this study to the participants and their expected roles in the study. This included an explanation of the process and purpose of the study. The aim of the disclosure was to assure each participant that each one of them could make an individual informed decision about whether or not to participate, before actually participating in the study. Another aim of the disclosure was to maximise the co-operation of the respondents, while dispelling any false expectations or information that they may have harboured regarding the study.

In this study, participants were drawn from various job levels, ages, races, and genders and all of them were treated with dignity and respect regardless of their rank, title, and qualifications.

Beneficence and nonmaleficence encompass an obligation to provide benefits for the participants and to balance such benefits against risks.(204) In this study no personal identification was appended or recorded. Instead, transcripts and recording identifications were marked and identified according to alphabetical and numerical combinations allocated, thus ensuring confidentiality. All records of true identities were kept in a lockable and thus secure cupboard controlled by the researcher, since the supervisor/s needed access to the data for purposes of supervision. Furthermore, the participants were made aware of their right to express themselves at any time, if any aspect of the interview made them uncomfortable. They were informed of their right to opt out of the study at any time without prejudice. In this study, none of the participants opted out of the study.

Approval was received from the KwaZulu-Natal Health Research Committee (NHRD ref.no. KZ_202203_019). A gatekeeper's letter was sought from the Tongaat

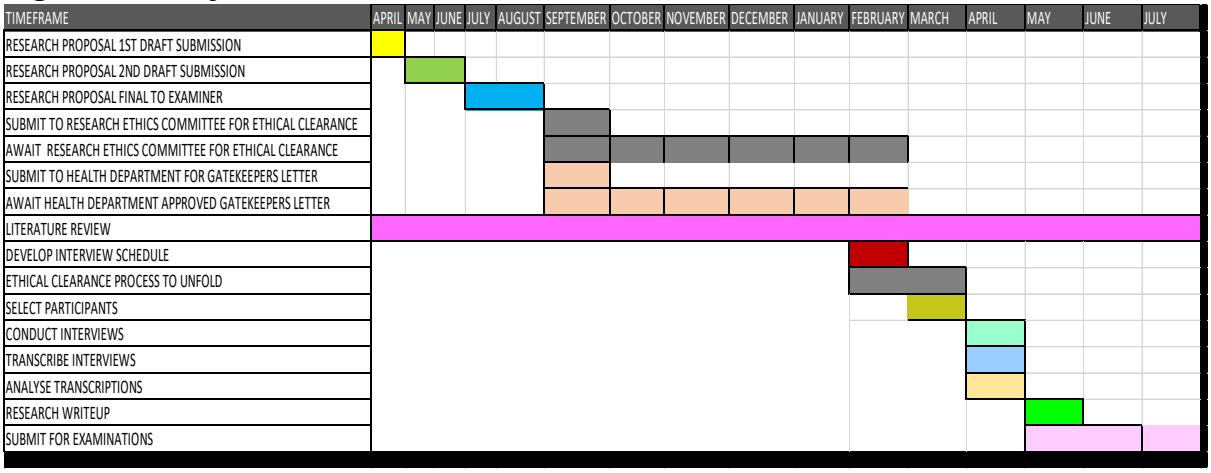
Community Health Centre, and only after approval was given did the researcher continue with the research.

Ethics approval was sought and received from the University of KwaZulu-Natal's Research Committee and the KwaZulu-Natal Health Research Committee (ref. no. BREC/00003777/2022).

3.11 WORK PLAN

It was estimated that the research would take 16 months to complete, and a work plan was drawn up to plot the timeframes of the major milestones to be reached. The major milestones of this work plan are depicted in the figure below.

Figure 3.1: Project Milestones



Source: Author (2022)

3.12 BUDGET

Funds needed totalled R12 500. The funds were allocated as follows:

1. Purchase of an audio recorder R3 000
2. Language editing fee R7 000
3. Reimbursements for the cost of data for communication during the study R1 500
4. Snacks and refreshments R1 000

This chapter encapsulated the research methodology adopted by the researcher towards achieving the objectives of this study. It also captured the data collection method, the population investigated for the purposes of this study, and the instrument used to collect the data. A qualitative approach was adopted in this study and the study

population was limited to the employees of the Tongaat Community Health Centre facilities that were infected with COVID-19 in 2020.

The chapter that ensues encompasses a discussion of the analysis of the data collected in this study.

CHAPTER FOUR

FINDINGS OF THE STUDY

4.1 INTRODUCTION

The main purpose of the study was to explore the lived experiences of contracting COVID-19 among employees in selected Tongaat Primary Health Care services during the early stages of the pandemic in 2020, to unearth their views and concerns (206) about rendering services during this period.

The findings of this study arrived at by means of a qualitative approach are presented in this chapter. The qualitative data depicting the socio-demographic characteristics of the participants in this study will be depicted first.(135) Thereafter, the major themes that emerged will be presented. Data collection in this study was undertaken through in-depth interviews using an interview guide that was open-ended (Appendices A and B). The PHC facilities' employees shared their lived experiences of contracting COVID-19 during the study period. Patterns were identified from the data that was collected to assist in developing a general framework about the topic. The data that emerged was grouped into themes.

4.2 SOCIO-DEMOGRAPHIC CHARACTERISTICS OF PARTICIPANTS

In this study, 15 health care employees with varying designations were interviewed from the selected Tongaat Primary Health Care services. There were 13 female participants, and 2 male participants. Of the 15 participants 7 were married, and their ages ranged between 34 to 49 years of age. There were 11 African and 4 Indian participants. The participants' years of service in the Tongaat Primary Health Care services ranged between one and seventeen years. Table 4.1 depicts these characteristics.

Table 4.1: Socio-Demographic Characteristics of the Participants

Variable		**Number**	**%**
Gender	Female	13	86.7%
	Male	2	13.3%
Variable		**Number**	**%**
Marital Status	Married	8	53.3%
	Single	7	46.7%
Variable		**Number**	**%**
Age	34 to 40 years old	9	60%
	41 to 49 years old	6	40%
Variable		**Number**	**%**
Years of service	1 to 5 years	5	33%
	6 to 9 years	4	27%
	15 to 17 years	6	40%
Variable		**Number**	**%**
Race	African Female	10	66%
	African Male	1	7%
	Indian Female	3	20%
	Indian Male	1	7%
Variable		**Number**	**%**
Department	Administration Support	4	27%
	Dental	4	27%
	Management	1	7%
	Nursing	5	33%
	Pharmacy	1	7%

Source: Author (2022)

4.3 SUMMARY OF THE THEMES THAT EMERGED

The major themes that emerged in this study were: (i) Fear of death from contracting COVID-19; (ii) Managing and coping with the rising numbers of infection was an unpleasant experience; (iii) The period post-COVID was a challenging time; and (v) They needed compassionate care. A summary of the main themes and their sub-themes is presented in Table 4.2 below.

Table 4.2: Summary of the Emerging Themes and Sub-Themes from the Data

Themes	Sub-Themes	Excerpts
Fear of death from contracting COVID-19	Late communication of positive COVID-19 results	*… During that week as I was waiting for my results on Wednesday, which was a holiday, I remember. So, I was in touch with my other colleagues, and we were phoning and messaging each other, the others had already gotten the results that I was the only one that didn't get my results… I had to go and get a test done privately which I had to go and get a referral from a doctor and go to Lancet and do the test. And within the very same day, the result said, I was positive. Just imagine, because how many days after the initially test was taken, and it was the fourth day!*
	Feeling that death was near	*I thought that I was gonna die and leave my kids because there was no cure, and I was scared to go to hospital.*
	Traumatised, scared, and anxious	*Wow! It was like a shock, the thing that you actually see on the news was right in your doorstep, so I was like shocked, and I was a bit traumatised.*
	The self-isolation was terrifying	*To isolate for 14 days, that was the bad part…. I stayed in the room with the toilet and bathroom. It was terrible. It was bad you know, to be by yourself in one room, is not able to talk to anyone or see anyone outside of that. Boring, very boring.*
Managing and coping with the rising numbers of infection was an unpleasant experience	Full of uncertainty	*My greatest challenge was before I get back to normal because the routine and everything has changed for five months.*
	It taught me carefulness	*I train myself not to touch my face or to not take out my mask anytime…. I take out my shoes outside, you know I wouldn't wanna touch door handles and light switches, even at home. I had so bad OCD. If I touch anything I wash my hands and come back, it was very bad. It was like that for me for about a month though.*
	Inadequate human resources	*About 45 staff is off sick due to pandemic. If there's 45 people in a clinic that are not even here, then obviously all of us, we're gonna suffer. There was no relief. There was no additional staff to relieve you when people are sick.*
The period post-COVID-19 period was	Social stigmatisation	*People were running away from you, why you feel like offended as if everything went wrong with you. Your colleagues running away from you…. Sometimes I feel like leaving work*

Themes	Sub-Themes	Excerpts
a challenging time		*because my colleagues do not accept me at work.*
	Occupational hazard	*When actually we started having more cases, they actually started getting scared of me at home now because I'm working at the clinic.*
	Lack of compensation for workplace acquired COVID-19	*I felt like government was robbing us we were not compensated for contracting Covid and also nje, I do not trust this government anymore. I hate politics but nje ayi, when it comes to Department of Labour, they did not do any justice with us.*
They needed compassionate care	Support team	*My friends from work were very supportive. They were video calling me to find out how I am doing and asking me if I need anything like food, medication, whatever…. Family was also very supportive, sending something to eat. I think overall I had a very good support.*

FEAR OF DEATH FROM CONTRACTING COVID-19

In this study, fear of death from contracting COVID- 19 emerged as a major theme. Four sub-themes emerged from this theme: (i) Late communication of positive COVID-19 result; (ii) Feeling that death was near; (iii) Feeling traumatized, scared, and anxious; and (iv) The self-isolation was terrifying.

Late communication of positive COVID-19 results: It emerged from the data in this study that participants had nerve wrecking experiences including that of having to wait for days before receiving their COVID test results. Participants expressed that tension and anxiety occurred during this period while waiting to get the results of their test and it was not easy for them. As one participant put it this way:

> *… During that week as I was waiting for my results on Wednesday, which was a holiday, I remember. So, I was in touch with my other colleagues, and we were phoning and messaging each other. The others had already gotten the results that I was the only one that didn't get my results…. I had to go and get a test done privately, which I had to go and get a referral from a doctor and go to Lancet and do the test. And within the very same day, I was positive. Just imagine, because how many days after the initial test was taken, and it was the fourth day!* – (P05: 35-year-old female).

Feeling that death was near: Participants from this study indicated that they experienced persistent negative feelings such as depression, fear of death and even feeling that they were not going to make it because of the COVID-19 news reports and/or how they were feeling physically. Those individuals who contracted the disease experienced the fear of death. This experience thus threatened those individuals who contracted the disease with the fear of death. The extracts below reflect the evidence:

> *… You know, there was whole lot of confusion. I saw myself dead! I thought that I was gonna die and leave my kids because there was no cure, and I was scared to go to hospital….* - (P10: 36-year-old).

> *I remember I said, 'Oh God, I am going to die!' Because you know on the news, they will tell you how many deaths and you know, you started wondering, 'On which statistics am I going to fall?'* - (P06: 40-year-old dental therapist).

> *… It was stressing, I don't want to lie. I was always afraid because most people were dying after nine days….* - (P03: 42-year-old male).

Traumatised, scared, and anxious: The participants agreed that it was an incredibly stressful period, and it affected them psychologically and physiologically, to the extent that some employees became depressed. The quotes below reflect this:

> *Wow! It was like a shock! The thing that you actually see on the news was right on your doorstep, so I was like shocked, and I was a bit traumatised…. This thing is coming with a lot of disruptions in our country, so it shocked me, I don't want to lie* - (P07: 42-year-old male).

> *I tested positive as well and it was quite scary because when we got the results, me, and my other colleague, we went to the toilet, and we started crying and we held each other. I was thinking about my children* - (P11: 42-year female).

> *I was afraid, because even if I come back from work, I was taking out my clothes outside. Leaving everything outside, even shoes* - (P04: 37-year-old female).

The self-isolation was terrifying: In this study, participants mentioned that self-isolation was scary and a terrible experience for them. This was because they were not sure of the outcome, and they had to stay alone in a secluded room with their own

bathroom and toilet for days. They expressed that sometimes they would be positive, while on other days they would be sad, and this affected them.

> *To isolate for 14 days, that was the bad part. I stayed in the room with the toilet and bathroom, it was terrible. It was bad you know, to be by yourself in one room is not able to talk to anyone or see anyone outside of that. Boring, very boring* - (P08: 43-year-old female).

> *The isolation part was tough for me because I had to be the one to do everything on top of what I was feeling sick, so at some point I did suffer a depression a little bit whilst I was on quarantine* - (P01: 49-year-old female).

> *I was quarantined after I tested positive, and I was so afraid, to the extent that I became upset…* - (P02: 34-year-old female).

MANAGING AND COPING WITH THE RISING NUMBERS OF INFECTION RATES WAS AN UNPLEASANT EXPERIENCE

The theme of managing and coping with the rise in infection rates being an unpleasant experience was observed, and it was accompanied by the following sub-themes: (i) Full of uncertainty; (ii) It taught me carefulness; and (iii) Inadequate human resources.

Full of uncertainty: Data from this study reflected that the participants went through a painful, stressful, and anxious period while waiting to recover from COVID-19. This experience of waiting to recover caused them uncertainty. Participants expressed that it was challenging for them as they were unsure if they were going to be able to function effectively and efficiently post recovery.

> *My greatest challenge was before I get back to normal because the routine and everything has changed for five months* - (P02: 34-year-old female*).*

> *To be waiting to recover is not an easy task because it affects many aspects of someone's life. It comes with a lot of uncertainty; you are worried and anxious about your health, as well as the family and the like are not an easy thing* - (P13: 41-year-old female).

It taught me carefulness: Participants stated that it was good to develop obsessive-compulsive habits so as not to get sick and spread the disease. This thought was reported by 80 % of the participants that were interviewed.

I train myself not to touch my face or to not take out my mask anytime…. I take out my shoes outside. You know, I wouldn't wanna touch door handles and light switches, even at home. I had so bad obsessive-compulsive disorder. If I touch anything, I wash my hands and come back, it was very bad. It was like that for me for about a month though - (P09: 37-year-old female).

My family also tested positive after I tested positive in December last year. I mean we now are more cautious about every single thing… coming in close contact with people, we avoid going to functions and stuff - (P14: 35-year-old female).

Inadequate human resources: It emerged from the data that inadequate human resources were a challenging issue that caused stress for those who had contracted COVID-19 during the crisis. They were pressured to return to the workplace when they were trying to regain their strength.

About 45 staff is off sick due to pandemic. If there's 45 people in a clinic that are not even here, then obviously all of us suffer. There was no relief! There was no additional staff to relieve you when people are sick - (P12: 38-year-old female).

THE PERIOD POST-COVID WAS A CHALLENGING TIME

Another major theme that emerged from the data collected was that the post-COVID period was a challenging time for the participants. This theme had three sub-themes: (i) Social stigmatisation; (ii) Occupational hazard; and (iii) Lack of compensation.

Social stigmatisation: The majority of the participants narrated that they were not treated well by their colleagues post their COVID recovery. Even the management were perceived not to have treated them well. The participants expressed a feeling of shame, embarrassment, and rejection in the workplace.

People were running away, just from you. Why really? You feel like offended, as if everything went wrong with you. Your colleagues running away from you …. Sometimes I feel like leaving work because my colleagues do not accept me at work - (P15: 40-year-old female).

At some point I started having regrets about why I became a nurse because when I was growing up, my first choice was being a teacher. But when I finished school, those departments were closed for intakes, so I went into nursing, and I started to have regrets - (P06: 40-year-old female).

What I know is that anyone was afraid to talk to me, because even the supervisor was saying she is afraid of talking to me as I was sick and again lost my mother - (P01: 49-year-old female).

When we started having more cases, they actually started getting scared of me at home now because I'm working at the clinic - (P03: 42-year-old male).

Occupational hazard: The participants experienced work hazards, which was not palatable to them.

This disease damaged my lungs. Even now I still feel pain in the lungs – (P10:36-year-old female).

I really feel that I deserve something after being infected with such a disease and taking it to my family. My innocent family who are not health workers! I feel like I deserve justice and I really feel it was an injury on duty. I deserve something – (P04: 37-year-old female).

I was recently admitted for five days. They said my lungs were affected from Covid - (P09: 37-year-old female).

Lack of compensation for workplace acquired COVID-19: The participants unanimously agreed that they were not compensated for the experiences that they went through, even though they had acquired COVID-19 at work from patients and employees who had tested positive.

We are at the forefront. People who were working for this looting, the police, they got compensated. How come us, we were never compensated with anything? They just talk at the national TV, 'nurses are the forefront, they are fighting this Covid', but there is no compensation. There is nothing! It makes me so emotional at times - (P08: 43-year-old female).

It's unfair labour practice! The Human Recourses and Occupational Health says there is no compensation. I feel robbed from what I'm hearing! I feel

government need to compensate us… government owes us a lot! We need compensation! Most of my colleagues died and my dear loved ones died due to this Covid, so us as nurses we have to be compensated. That is my strongest belief! The first thing was that I got this from work, so it was not right for them to take my sick leave - (P01: 49-year-old female).

You know, it was an issue for me that they took days out from my sick leave and not IOD leave, knowing that this thing I never bought it from somewhere else. It was here at job place that I got it and became infected - (P09: 36-year-old female).

It's sometimes it's rough. With the patients… the patients come directly to us and some of them don't know they have Covid - (P10: 37-year-old female).

NEEDING COMPASSIONATE CARE

Needing compassionate care was a major theme identified, with their support team as the sub-theme that emerged from this theme in this study.

Support team: The findings from this study demonstrated that these participants only received good support and empathy from their close family members, other relatives, and few of their colleagues from work. Their managers were more interested in these employees coming back to work and were not mindful of whether or not they were still struggling with their health. The participants expressed that their manager/s and supervisor/s were not incredibly supportive during this stressful period, and they felt that support from them was essential at this time.

My friends from work were very supportive. They were video calling me to find out how I am doing and asking me if I need anything like food, medication whatever…. Family was also very supportive, sending something to eat. I think overall I had a very good support - (P13: 41-year-old female).

A whole of blaming, as if it was our fault that we tested positive! So, there was not much of a support, even from management…. Think they were overwhelmed because the disease was new, they didn't know what to do - (P04: 37-year-old female).

I was sick, but I didn't have much support. It even so depressing because instead of getting the support, they were actually checking on how are you so that you can come back to work. But it was really a concern to say, how are you? Are you getting better? It wasn't a concern over your health, it was a concern over their work - (P05).

It seems like you are only here just for work, they don't value you. I had Covid pneumonia, and I haven't been to work for five months last year. The only person that contacted me was matron - (P12).

4.4 CONCLUSION

This chapter presented an analysis of the findings from the data collected from the participants. The study captured the major themes and sub-themes that emerged from the analysis that was clarified by the data from the participants' lived experiences of contracting COVID-19 in selected Tongaat Primary Health Care services in 2020. The next chapter, which is Chapter Five, will present a discussion of the findings captured in Chapter Four, the conclusions, the limitations of the study, and provide recommendations.

CHAPTER FIVE

DISCUSSION OF THE FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

The main purpose of this study was to probe the lived experiences of employees who contracted COVID-19 during the COVID-19 pandemic in selected Tongaat Primary Health Care services in 2020. To reiterate the main objectives of this study: (i) To investigate what employees infected with COVID-19 viewed as a balancing act between managing the rising numbers of infections among staff and ensuring the continuity of health services in their facilities; (ii) To unearth the concerns of the employees regarding the rendering of health care services in the context of contracting COVID-19 at selected Tongaat Primary Health Care services in 2020.

This chapter focuses on discussions of the main findings of the study, which are supported by pertinent literature. It captures the limitations of the study, and the recommendations and conclusions.

5.2 SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE PARTICIPANTS

In this study, 15 health care employees were interviewed from selected Tongaat Primary Health Care services; there were 13 female participants and 2 male participants. This was indicative of the current trends in the health sector where there are more females than male employees.(207) A study of 104 countries supported the notion that women dominate the health and social work labour markets in that they form 70% of the workforce.(208) In Sierra Leone in 2016, females represented 62% of the entire health workforce, with female nurses comprising 90% of the total nurses in the country.(209) In South Africa, 54.4% of the social work sector are women.(207).

5.3 MAJOR THEMES

The themes that emerged from the data were: Theme One: Fear of death from contracting COVID-19; Theme Two: Managing and coping with the rising numbers of infection was an unpleasant experience; Theme Three: The period post-COVID-19 was a challenging time; and Theme Four: They needed compassionate care.

5.3.1 Theme One: Fear of Death from Contracting COVID-19

One of the major themes identified was the fear of death as a result of contracting COVID-19. This finding was supported by studies conducted on anxiety related to COVID-19.(210)

Delays in the diagnosis of diseases are a threat to patients' safety.(211) Timely diagnosis and the shortening of the waiting period to receive and diagnose COVID-19 infection can potentially effectively reduce the risk of transmission. Participants in the current study reported having to wait for a long period before receiving their COVID-19 test results, which could have resulted in the further rapid spreading of the disease.(212) This was consistent with a study from Bangladesh where participants complained of delays of up to two weeks to receive their test results.(213) A US study reported a shorter turnaround period for test results of about two days.(214) Health care employees who have to wait for Covid test results are not available to render health care services and delays in accessing their results increase the time period that they are unable to work.(215) On the other hand, studies have shown that patients who receive their test results confirming a disease very quickly may be at risk of experiencing alarm and emotional distress. Provision of the necessary knowledge and comprehension of the ramifications of the results and the disease before the results are received is therefore encouraged,(216) even for health care employees. During the COVID-19 pandemic, health care employees, women, and nurses in particular who treated COVID-19 patients were found to be susceptible to developing unfavourable mental health outcomes such as anxiety, stress, insomnia and depression that required support and medical intervention.(105, 217)

The significance of death and dying of human beings was once again highlighted by the COVID-19 pandemic. Anxieties were stimulated by uncertainties about the virus itself; if and when a person could be infected and the inability to predict if a person infected would die of the disease.(218) The fears of death and dying alone while in isolation without their loved ones present and the lack of proper burial rites were among the worst feelings that those infected with COVID-19 reported having.(219) The participants highlighted their persistent negative feelings/fears that they were not going to survive their infections due to all the negative information in the media in terms of the very many deaths because of the pandemic. This was in line with an Indian and US study which revealed a higher level of fear of death from COVID-19 among

health care practitioners and the general public, especially those with certain personality types.(220, 221)

The human species is not designed to manage isolation for lengthy periods, since they are social beings, yet during the COVID-19 pandemic it became necessary and was prescribed to reduce the spread of the disease.(222) The participants in this study reported that the self-isolation was terrifying and depressing as a result of boredom and loneliness. This was consistent with a study from Ireland and Italy which reported that major depression and anxiety were associated with the COVID-19 experience among survivors and those infected.(223, 224) This was also consistent with a systematic review conducted where the frequency of clinically significant depression was found to be increased post-Covid infection. The level of distress experienced significantly impaired the daily functioning of the participants and depressive symptoms increased to 12%.(225)

The COVID-19 pandemic led to an increased level of unprecedented fear and anxiety experienced by people globally.(226) Participants from the present study indicated that the period of self-isolation and quarantine was very scary because of their fear of the unknown. Participants also reported that they communicated with each other and got to know of other employees whose test results were received confirming their COVID-19 diagnosis. Studies showed that people who were aware of others who tested positive were more likely to develop negative psychological impacts.(227) Similarly, an Australian study indicated that self-isolation during COVID-19 infection was reported to be associated with many negative experiences, such as a feeling of being in prison.(228)

5.3.2 Managing and coping with the rising infection rate was an unpleasant experience

The outbreak of the SARS-CoV-2 virus has been a unique historical event.(229) Throughout the world, employees and employers from different sectors suffered the effects of this virus outbreak in one form or the other, (230) but most especially the health care employees who got infected with the virus. While some people died of the disease, some recovered and lived to share their experiences.(230) The data from this study revealed that the majority of the participants reported a number of worrying experiences, one being the feeling of great uncertainty. One participant reported that

her spouse had lost his job due to Covid, rendering her the breadwinner, and when she tested positive, she did not know what would happen if she got too ill to work or if she died. Another participant reported that she had been stressed because some infected people had died nine days after becoming infected, while others had recovered, and she had been uncertain of her prognosis when feeling so ill while in isolation. One participant reported that being infected with Covid had filled her with uncertainty, worry and anxiety about its effects on her health and that of her family members. The disease had thus caused uncertainty for her about the well-being and future of herself and her family during her isolation period.

Similar experiences were reported in literature that supported the notion that uncertainty during pandemics was inevitable, because as the disease evolved new issues surfaced.(231) Elevated levels of uncertainty about the disease outcome increased proportionately to the severity of the individual's experience, the unpredictability of the outcome, and the news associated with the disease. The novelty of the disease was more than frightening to them, especially after they had recovered from their infection, as they were very aware that the virus had threatened their existence.(232)

Increased carefulness was another experience that was revealed in the narratives of the participants in this study, under the major theme of 'managing and coping with the rising infection rate was an unpleasant experience'. The majority of the participants expressed that the COVID-19 infection experience led to them changing their behaviours and accepting changes in their day-to-day lives.(121) Healthy lifestyle practices of frequent hand washing, wearing of gloves and masks, practicing physical distancing, avoiding physical contact, covering their mouth and nose while coughing, and avoiding contamination of their face with unwashed hands after touching handles or any surface was their new normal after recovery. This finding was consistent with a study conducted between the 14th to the 29th of April 2020 in Northern Ireland, on employees' experiences of testing positive for COVID-19 and the methods required to make responsive behaviour more effective.(233)

This study showed that the lack of health care employees due to illness resulted in high workloads for those remaining at work, which resulted in their exhaustion, emotional and physical stress, and a feeling of not being valued by management. Literature

supported this notion with a study conducted in 2019 amongst United States nurses, where 56% (n=1288) of them reported a work overload that was linked to their feelings of not being valued in their organisation.(234) A study conducted in various Iranian medical universities also supported this view as it was found that during the pandemic there was a shortage of specialised manpower, increased numbers of people suffering from psychological disorders and burnout, increased workloads, and reduced levels of job satisfaction amongst staff.(235) Another study amongst health care professionals in various hospitals and clinics in Bangladesh between May and August 2020 concurred with the findings of this study as it was found that employees worked 16–17 hour shifts per day in health facilities and experienced physical stress, emotional stress and excessive workloads.(236)

5.3.3 The Post-Covid Period was a Challenging Time

This theme had three sub-themes, namely social stigmatisation, a lack of compensation for their workplace acquired COVID-19 infection, and occupational hazards.

Stigmatisation during pandemics threatens the acceptable societal norms of social living because people tend to exclude distinctive others that they perceive to be likely sources of infection.(237)

The findings from this study indicated that the participants experienced social stigma where colleagues avoided them, even after recovery from COVID-19. In fact, various participants were emotional when they described their experiences because they could not understand why their own colleagues had deliberately reduced their social interactions with them. Furthermore, it was found that participants felt ashamed and rejected, which was embarrassing for them.

This study finding was supported by a study in India, where it was found that people at the forefront of the COVID-19 crisis reported being ostracised by their neighbours and people infected were being blamed for getting infected, causing fear, frustration and stress.(237) Another study in Egypt reported stigma against health professionals, where one third of the doctors who participated reported that some taxi drivers refused to provide services to them and neighbours refused to have them reside near them, which caused additional stress and burnout for them.(238)

A study of 60 health care employees in Italy found that stigma was inclined to persist beyond their quarantine and the containment of the pandemic, which increased their psychological and physical suffering and burnout.(239) Similar findings were reported in a study in Nepal, where high proportions of anxiety, insomnia and depression symptoms were reported during the early period of the pandemic.(240)

Therefore, building reliable health care services and trust, and showing empathy towards those affected with the disease are the ways forward to help people maintain their psychological and physical health while keeping others safe.(241)

The frontline workers' experiences of the COVID-19 outbreak's response often exposed them to higher risks of occupational hazards.(241). The WHO provided specific measures to protect the occupational health and safety of employees on duty, including their rights and responsibilities for health and safety at work in the context of COVID-19.(241) The majority of the participants in this study described their SARS-CoV-2 virus infection (165) as an occupational hazard. They believed that they had contracted the virus at their workplace, despite adhering to all the Covid regulations, which thus classified the virus and its disease as an occupational hazard. Furthermore, they believed that they were at high risk of contracting the disease, (242) since they worked amongst undiagnosed COVID-19 cases and colleagues who tested positive. This finding concurred with the report of the WHO on the experiences of COVID-19.(243)

Studies conducted in Eswatini, and Ethiopia also supported the findings of this study. The study conducted amongst 333 health care employees in selected health facilities in the Lubombo region of Eswatini found that health care employees exposed to a colleague with COVID-19 were at higher risk of acquiring the infection.(244) The findings of a study conducted at the Eka Kotebe treatment centre in Ethiopia confirmed that health care employees faced a higher risk of COVID-19 infection during the process of the provision of care for COVID-19 positive patients.

All participants in this study believed that compensation was necessary for having acquired COVID-19, because their jobs posed a risk to them. This notion was supported by literature that confirmed a higher risk of COVID-19 among professionals like ophthalmologists and dentists who worked proximally to patients. Furthermore, a

significant risk was posed to the health care employees in all health settings by patients with mild flu-like symptoms or the more uncommon symptoms of COVID-19.(124)

Employers are by law, under the Workers' Compensation Act, responsible for providing cash benefits in addition to medical benefits to workers who sustain an injury or become ill in the course of their employment.(132, 245) Previous research has indicated that the COVID-19 pandemic inspired the societal response of an outpouring of public appreciation for frontline workers, (246) in recognition of the challenging and extremely valued service performed by the health care employees during the COVID-19 pandemic.(247) From March 2020 in South Africa, if a worker was exposed to the SARS-CoV-2 virus in a high risk workplace or was assigned to a high risk region and developed COVID-19, it was to be regarded as an occupationally acquired disease.(69) Yet, in this study, participants stated that no compensation was received from the government nor from any institution despite all they had gone through, not just as frontline employees but also as survivors of the virus during the COVID-19 crisis. Participants in this study felt that they deserved to be compensated like others because they were also infected at their workplace. Studies support the view that people who get injured or acquire an illness or disease at work experience negative effects on their psychological well-being, whereby the status of their mental health is worse than in comparison to that of the general population.(248)

In this study, most participants reported experiencing disappointment, sadness, anger, and uncertainty after they had submitted a large number of documents for compensation for having acquired COVID-19, with no successful outcome. This finding was supported by a study in Quebec on the compensation process, where employees reported feeling powerless due to the lengthy claims processes, repeated submissions of excessive paperwork, and inadequate communication from the compensation body. Frustration with the compensation process on the part of applicants resulted in some family members being affected by the employees' frustrations at home.(249)

The participants decried the poor support given to them by the administrative staff of their institutions during their COVID-19 predicament. They indicated that their family members and relatives were more supportive of them during this period. This finding concurred with that of a Pakistani study, which also indicated that the lack of support

from the health authorities concerned was a critical factor associated with these health care employees' fears in the midst of this pandemic.(245)

5.4. LIMITATIONS OF THE STUDY

In reflecting on the findings of this study, the limitations had to be taken into consideration. The methodology used in this study was qualitative, and the researcher only used interviews to obtain data. This study aimed to interview health care employees during South Africa's COVID-19 adjusted alert level one period. During this period, the country was in the process of easing its lockdown levels and returning to normal activities, however, adherence to the prescribed national COVID-19 precautions and health guidelines was still expected when the interviews were conducted.(250) Since surges in infection rates could not be predicted accurately, South Africans remained prepared for an increase or decrease in alert levels if and when the need arose.(251) The researcher was cognisant of the alert levels and related preparedness linked to the nature of outbreak prevention, and therefore adopted one-on-one interviews that produced the individual feelings of the participants, instead of holding focus group discussions. Had focus groups been utilised to collect data, more comprehensive information would have been collected which would have included both the personal feelings of the participants as well as the group's feelings,(252) particularly since the participants had some commonality.

The next limitation was that the sample in this study was structured unevenly, in that the majority of the participants were from the Nursing Department (33%); followed by the Administration and Systems Support Department (27%) and the Dental Department (27%); the Management Department (7%); and the Pharmacy Department (7%). The researcher did not set out to compare the experiences between the employees from various departments; instead, the aim was to understand the experiences of employees of the primary health care service as a whole. Furthermore, the breakdown of the employees who tested positive for SARS-CoV-2 and thus experienced COVID-19 during the period under study tended to align with the composition of the sample, in that the highest percentage of employees who tested positive were the nurses (33%); followed by those working in the Dental Department (27%) and those in the Administration Department (27%); those in the Pharmacy (5%);

and those in the Management Department (3%). The composition of the sample was thus reasonable.

5.5 CONCLUSIONS OF THE STUDY

This study was undertaken to explore the lived experiences of employees who had contracted COVID-19 during the COVID-19 pandemic in the selected Tongaat Primary Health Care services in 2020. It further aimed to explore the concerns of the employees regarding the rendering of health care services in the context of acquiring COVID-19 disease at their selected Tongaat Primary Health Care facilities in 2020. The study's objectives and approach were informed by relevant literature and sources that indicated that their experiences were consistent with the history of COVID-19 in the workplace;(56) the occupational health risks of COVID-19 infection; and employees' rights to a safe environment. The research also emphasised the implications of the pandemic and infection with this pathogen for the employees and managers of the Tongaat Community Health Centre's Primary Health Care services.

In adopting a qualitative approach through the use of open-ended one-on-one interviews, the researcher was able to bring to the fore evidence from this study that revealed that the majority of the health care facilities' employees were females, as there were very few males. The findings from this study indicated that health care employees were prone to occupational hazards inclusive of stress. The study also revealed that employees did not feel valued in the organisation as their management concentrated more on them getting back to work rather than providing them with a safe, conducive, and supportive work environment, which is crucial during crisis periods like a pandemic. There existed an overwhelming fear of dying amongst the employees who had acquired COVID-19, which must be recognised and addressed. That employees experienced stigmatisation in the workplace during a pandemic like the COVID-19 one that was highly infectious was evident,(253) and the affected employees identified the need for support which was inadequate during that time.

5.6 RECOMMENDATIONS

Based on the findings of this study, the following is recommended:

I. There is a need for the public health sector to implement interventions aimed at reducing the social stigma directed towards those who have contracted

COVID-19. This can encourage disclosure of infections and help protect others from contracting the disease.

II. There exists a need to improve statical data gathering for health employees in the public health sector to provide accurate information on the prevalence and the extent to which employees in the health sector are affected by an infectious disease like COVID-19. The statistics collected at an aggregated level will assist in improving service delivery and will assist managers in the public health sector to develop effective action plans to respond to the needs of employees since they are at the coal face of service delivery during a pandemic. Furthermore, such statistics will assist in the development of inclusive strategies to combat challenges linked to COVID-19, like stigma and other issues.

III. The development of information and education pamphlets by health sector departments on COVID-19, and the strengthening of psychological support systems for public sector health employees (inclusive of health professionals and general workers), needs to be improved since it is crucial in improving employee health and wellness.

IV. The results of this study indicated that the participants perceived the risk of health care employees and their families getting COVID-19 infection as high. This, along with a lack of support from the health authorities concerned, was strongly associated with the fear among the health care employees.(132) The public health sector managers, officials and departments should address the risk of infection in the workplace and make sure that health care employees are cared for when they get infected.

V. The public health sector who is the employers, in consultation with the employees, worker representatives and the occupational health department, should work together to improve employee wellness in the workplace through the reviewing of policies, standard operating procedures and workplace arrangements that protect the health and welfare of employees.

VI. This study also demonstrated the need for management at the facility level to identify and understand the level of risk for potential occupational exposure that the various categories of employees in health care facilities face and find ways to mitigate this risk. This may require policy realignment, revision, and amendment by hospital, clinic, and administration managers.

VII. The public sector department of health and the department of employment and Labour at local, provincial, and national levels, should strengthen policy implementation in order to ensure timely distribution of compensation and benefits for affected employees.

VIII. To expand on this study, further research is recommended that focuses on the prevalence of COVID-19 in this health care facility, the district and or province in comparison to trends from other facilities, districts, and provinces. The research should also explore gender and demographics and include objective/s aimed at the development of strategies from the perspectives of the employees.

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APPENDICES

APPENDIX A: INTERVIEW GUIDE ENGLISH

1. TELL ME ABOUT YOURSELF?
2. PLEASE EXPLAIN THE JOB YOU DO?
3. EXPLAIN TO ME THE WORK YOU WERE UNDERTAKING IN 2020?
4. HOW DID YOU FEEL WHEN THE FIRST CASE OF COVID WAS ANNOUNCED IN ETHEKWINI?
5. CAN YOU TELL ME ABOUT YOUR OVERALL EXPERIENCE OF BEING INFECTED WITH COVID-19?
6. PLEASE REFLECT ON YOUR PERSONAL EXPERIENCE OF TESTING POSITIVE FOR COVID-19
   6.1. HOW HAS IT AFFECTED YOUR RESPONSIBILITIES OR RELATIONSHIPS AT HOME?
7. HOW HAS IT AFFECTED YOUR RESPONSIBILITIES OR RELATIONSHIPS AT WORK?
8. PLEASE EXPLAIN WHAT HAS BEEN YOUR GREATEST CHALLENGE?
9. GOING FORWARD HOW DO YOU THINK THIS EXPERIENCE HAS IMPACTED YOUR FUTURE, YOUR WORK, YOUR FAMILY?

APPENDIX B: INTERVIEW GUIDE ISIZULU

1. NGICELA OKWENGEZIWE NGAWE?
2. NGICELA UCHAZE NGOMSEBENZI OWENZAYO?
3. NGICACISISE NGOMSEBENZI OWENZA NGO-2020?
4. WAWUZIZWA KANJANI NGESIKHATHI KUMENYEZELWA ICALA LOKUQALA LE-COVID ETHEKWINI?
5. UNGANGITSHELA NGESIZWE SAKHO SONKE SOKUTHOLALISWA NGE-COVID-19?
6. SICELA UCABANGA NGESIZWE SAKHO SOKUHLOLA UNE-COVID-19.

6.1. KUZITHINTELE KANJANI IZIBOPHO NOMA UBUDLELWANE BAKHO EKHAYA?

7. KUYITHINTE KANJANI IZIBOPHO NOMA UBUDLELWANE BAKHO EMSEBENZINI?
8. NGICELA UCHAZE IYIPHI OKUBE YINKINGA ENKULU YAKHO?
9. UKUQHUBEKA PHAMBILI UCABANGA KANJANI LOKHU OKWENZEKILE KULIMANDLA KANJANI IKUSASA LAKHO, UMSEBENZI WAKHO, NOMNDENI WAKHO?

APPENDIX C: INFORMATION LEAFLET ENGLISH

Date:

Good day

My name is Rosemary Van Heerden from the School of Nursing and Public Health at the University of KwaZulu-Natal. I am a Master of Public Health Student, registered for the Research Project.

You are being invited to consider participating in a study that involves research on COVID-19. Because of how COVID-19 affected people across all sectors of society, I am conducting a research study on the experiences of employees who tested positive for COVID-19 during the COVID-19 pandemic in the Tongaat Primary Health Care facilities in 2020. This will assist me to understand your views and feelings about being infected with COVID-19 and the concerns and perceptions you had regarding the rendering of health care services during that period. Without a doubt, you also have a story to tell of how COVID-19 has affected various aspects of your life. So, I am interested in looking into "Exploring employees' lived experiences of contracting COVID-19 in selected Tongaat Primary Health Care facilities in 2020". The interview will take about 30 to 45 minutes.

The study will enroll 10 to 15 participants in total, from the Tongaat Primary Health Care facilities. It will involve a one-on-one interview conducted by myself and will be about 30 to 45 minutes per session. If you chose to enroll and remain in the study, the duration of your participation will be for one to two sessions.

There may be risks of an emotional nature that may arise, which may be associated with your participation in this interview. Should you feel uncomfortable answering certain questions, please let me know, so that I skip the question/s. Please be informed that for any emotional support needs that may arise, arrangements have been made with the Tongaat Community Health Centre Employee Assistance Programme to assist you in this regard. Such referrals will be made at your request.

The benefits associated with you participating in this interview include a small reimbursement for data costs incurred by you (if any) for purposes of this research. The researcher will also offer you a fruit and refreshments during interviews.

The scientific benefits hoped for from the study is for employees and employers in health care settings to get to understand the risks, the measures needed to prevent and or reduce infection transmission, and the ways to protect their health during periods where infectious diseases like the Coronavirus disease (COVID-19) is prevalent.

This study has been ethically reviewed and approved by the UKZN Biomedical Research Ethics Committee (approval number: BREC/00003777/2022).

In the event of any problems or concerns/questions you may contact:

The researcher at (+27) 834512178 (cellular) or landline (+27) 031 311 3505 or email (201510560@stu.ukzn.ac.za),

Or my Supervisors, Mr Siyabonga Blessing Dlamini at: DlaminiS24@ukzn.ac.za; and Dr. Winnie Baphumlele Cele at; CeleW@ukzn.ac.za.

The University of KwaZulu-Natal, Department of Public Health Medicine on (+27) 31 260 4499 / 071 905 9171

Or the UKZN Biomedical Research Ethics Committee, contact details as follows:

BIOMEDICAL RESEARCH ETHICS ADMINISTRATION

Research Office, Westville Campus, Govan Mbeki Building, Private Bag X 54001, Durban, 4000, **KwaZulu-Natal, SOUTH AFRICA**

Telephone: (+27) 31 2602486 - Fax: (+27) 31 2604609

Email: BREC@ukzn.ac.za

Participation in this research is voluntary and you may withdraw participation at any point. There will be no negative consequences for you if you refuse to participate or wish to withdraw from the interview at any stage. If you decide to withdraw from this research, you may contact the researcher using any of the contact details provided above.

There are no costs that you will incur because of participation in the study. The incentives associated with you participating in this interview include a small reimbursement for data costs incurred by you for purposes of this research (maximum of R100). The researcher will also offer you a fruit and refreshments during interviews.

Steps will be taken to protect the confidentiality of the personal information you share. None of your personal identification information will be appended or recorded. Instead, transcripts and recordings will be marked and identified according to alphabetical coding allocated. Any records of your identity will be kept in a lockable secure cupboard with the researcher and the supervisor who will need access for purposes of supervision.

All the data collected will be handed to the University of KwaZulu-Natal for safekeeping for the entire prescribed period to protect your identity and control access to the data. If any other researchers, are interested in the subject I am researching and request access to the information, such access to the data will be strictly controlled by the University of KwaZulu-Natal in line with the set research ethics policy of the University.

The data collected will be stored at the University of KwaZulu-Natal for at least five years after publication.

APPENDIX D: INFORMATION LEAFLET isiZulu

IPHEPHA LOLWAZI

Usuku:

Sawubona

Igama lami nginguRosemary Van Heerden ovela eSikoleni Sobuhlengikazi kanye Nezempilo Yomphakathi eNyuvesi yaKwaZulu-Natali. Ngingumfundi Wezempilo Yomphakathi, obhalisele Iphrojekthi Yokucwaninga.

Uyamenywa ukuthi ucabangele ukubamba iqhaza ocwaningweni olubandakanya ucwaningo nge-COVID-19. Ngenxa yokuthi i-COVID-19 yabathinta kanjani abantu kuyo yonke imikhakha yomphakathi, ngenza ucwaningo. Lokhu kuzongisiza ukuba ngiqonde imibono nemizwa yakho mayelana nokutheleleka nge-COVID-19 kanye nokukhathazeka nemibono onayo mayelana nokuhlinzeka ngezinsizakalo zokunakekelwa kwezempilo ngaleso sikhathi. Ngaphandle kokungabaza, unendaba futhi ozoyixoxa ngokuthi i-COVID-19 izithinte kanjani izici ezahlukahlukene zempilo yakho. Ngakho-ke, nginentshisekelo yokubheka “Ukuhlola ulwazi lwabasebenzi abaphila ngalo lokuthola inkontileka ye-COVID-19 ezikhungweni ezikhethiwe Zonakekelo Lwezempilo Oluyisisekelo oThongathi ngo-2020.” Inhlolokhono izothatha imizuzu engama-30 kuye kwengama-45

Lolu cwaningo luzobhalisa ababambiqhaza abayi-10 kuya kwabayi-15 sebebonke, ezikhungweni Zonakekelo Lwezempilo Oluyisisekelo oThongathi. Izobandakanya inhlolokhono yomuntu oyedwa eqhutshwa yimina futhi izothatha imizuzu engama-30 kuye kwengama-45 iseshini ngayinye. Uma ukhethe ukubhalisa nokuhlala ocwaningweni, isikhathi sokubamba kwakho iqhaza kuzoba yiseshini engu-1 kuya kwezi-2.

Kungase kube nezingozi zemvelo yemizwa ezingase ziphakame, ezingase zihlotshaniswe nokubamba kwakho iqhaza kule nhlolokhono. Uma uzizwa ungakhululekile ukuphendula imibuzo ethile, ngicela ungazise, ukuze ngeqe umbuzo/imibuzo. Uyacelwa ukuthi waziswe ukuthi nganoma yiziphi izidingo zokwesekwa ngokomzwelo ezingase ziphakame, amalungiselelo enziwe ne-Tongaat

Community Health Centre Employee Assistance Programme ukukusiza mayelana nalokhu. Ukudluliselwa okunjalo kuzokwenziwa ngesicelo sakho.

Izinzuzo ezihlobene nokubamba kwakho iqhaza kule nhlolokhono zifaka imbuyiselo encane yezindleko zedatha ezitholwe nguwe (uma zikhona) ngezinjongo zalolu cwaningo. Umcwaningi uzophinde akunikeze isithelo kanye neziphuzo ngesikhathi senhlolokhono.

Izinzuzo zesayensi okulindelwe kusukela ocwaningweni ziwukuthi abasebenzi nabaqashi abasezindaweni zokunakekelwa kwezempilo, ukuze baqonde ubungozi, izinyathelo ezidingekayo zokuvimbela noma ukunciphisa ukudluliswa kokutheleleka, kanye nezindlela zokuvikela impilo yabo ngezikhathi lapho izifo ezithathelwanayo njenge Isifo seCoronavirus (COVID-19) sidlangile.

Lolu cwaningo lubuyekezwe ngokwezimiso zokuziphatha futhi lwagunyazwa yi-UKZN Biomedical Research Ethics Committee (inombolo yokugunyazwa): BREC/00003777/2022).

Uma kwenzeka kuba nezinkinga noma ukukhathazeka/imibuzo ungathinta:

Umcwaningi ku-(+27) 834512178 (amaselula) noma ucingo lwasendlini (+27) 031 311 3505

noma i-imeyili : 201510560@stu.ukzn.ac.za

Noma oSupervisor wami, uMnuz Siyabonga Blessing Dlamini ku:DlaminiS24@ukzn.ac.za; no Dokotela u Winnie Baphumlele Cele ku; CeleW@ukzn.ac.za

INyuvesi yaKwaZulu-Natali, uMnyango Wezempilo Yomphakathi ku-(+27) 31 260 4499 / 071 905 9171

Noma i-UKZN Biomedical Research Ethics Committee, imininingwane yokuxhumana kanje:

ULAWULO LWEZIMILO LWE-BIOMEDICAL

Ihhovisi locwaningo, i-Westville Campus, i-Govan Mbeki Building, Private Bag X 54001, Durban, 4000, KwaZulu-Natal, SOUTH AFRICA

Ucingo: (+27) 31 2602486 - Ifeksi: (+27) 31 2604609

I-imeyili: ngwenyap@ukzn.ac.za

Ukubamba iqhaza kulolu cwaningo kungokuzithandela futhi ungahoxisa ukubamba iqhaza nganoma yisiphi isikhathi. Ngeke kube nemiphumela emibi kuwe uma wenqaba ukubamba iqhaza noma ufisa ukuhoxa kwinhlolokhono nganoma yisiphi isigaba. Uma unquma ukuhoxa kulolu cwaningo, ungathintana nomcwaningi usebenzisa noma yimiphi imininingwane yokuxhumana enikezwe ngenhla.

Azikho izindleko ozozithola ngenxa yokubamba iqhaza ocwaningweni. Izinzuzo ezihambisana nawe ngokubamba iqhaza kwakho kule nhlolokhono zifaka imbuyiselo encane yezindleko zedatha ongene kuzo ngezinjongo zalolu cwaningo (Inani eliphakeme lika-R100). Umcwaningi uzophinde akunikeze isithelo kanye neziphuzo ngesikhathi senhlolokhono

Izinyathelo zizothathwa ukuze kuvikelwe ukugcinwa kuyimfihlo kolwazi lomuntu siqu owabelana ngalo. Akukho ukuhlonza kwakho okuzokwengezwa noma kurekhodwe. Esikhundleni salokho, okulotshiweyo nokurekhodwa kuzomakwa futhi kukhonjwe ngokuya ngama-alfabhethi abiwe. Noma yimaphi amarekhodi obunikazi bakho azogcinwa ekhabetheni elivikelekile elikhiyekayo nomcwaningi kanye nomphathi ozodinga ukufinyelela ngezinjongo zokugadwa.

Yonke imininingwane eqoqiwe izodluliselwa eNyuvesi yaKwaZulu-Natali ukuze igcinwe isikhathi esinqunyiwe ukuze kuvikelwe ubuwena nokulawula ukufinyelela kudatha. Uma kukhona abanye abacwaningi, abanentshisekelo esifundweni engisicwaningayo futhi becela ukufinyelela olwazini, lokho kufinyelela kudatha kuzolawulwa ngokuqinile yiNyuvesi yaKwaZulu-Natali ngokuhambisana nenqubomgomo emisiwe yezimiso zocwaningo yeNyuvesi.

Imininingwane eqoqwe izogcinwa eNyuvesi yaKwaZulu-Natal okungenani iminyaka emihlanu ngemuva kokushicilelwa.

APPENDIX E: DECLARATION OF CONSENT IN ENGLISH

I (name of participant) have been informed about the study entitled "Exploring employees' lived experiences of contracting COVID-19 in selected Tongaat Primary Health Care Services in 2020" by Rosemary Van Heerden.

I understand the purpose and procedures of the study. I have been given an opportunity to answer questions about the study and have had answers to my satisfaction.

I declare that my participation in this study is entirely voluntary and that I may withdraw at any time without affecting any treatment or care that I would usually be entitled to.

I have been informed about the medical treatment available if needed as a result of study-related processes.

If I have any further questions/concerns or queries related to the study, I understand that I may contact the researcher at (+27) 834512178 (cellular) or landline (+27) 031 311 3505 or email (201510560@stu.ukzn.ac.za).

If I have any questions or concerns about my rights as a study participant, or if I am concerned about an aspect of the study or the researchers then I may contact:

BIOMEDICAL RESEARCH ETHICS ADMINISTRATION

Research Office, Westville Campus, Govan Mbeki Building, Private Bag X 54001 Durban, 4000, KwaZulu-Natal, SOUTH AFRICA, Tel: (+27) 31 2602486 - Fax: (+27) 31 2604609.

Email: BREC@ukzn.ac.za

_____ _____

Signature of Participant **Date**

_____ _____

Signature of Researcher **Date**

APPENDIX F: DECLARATION OF CONSENT IN isiZulu

ISIMEMO SOKUVUMA NGESIZULU

Mina (Igama Lombambiqhaza) ngazisiwe mayelana nocwaningo olunesihloko esithi "Ukuhlola ulwazi lwabasebenzi lwaphila ngokuthola inkontileka ye-COVID-19 eziNsizakalo Zokunakekelwa Kwezempilo Eziyinhloko zakwa-Tongaat ngo-2020" nguRosemary Van Heerden. Ngiyayiqonda inhloso nezinqubo zocwaningo. Nginikezwe ithuba lokuphendula imibuzo mayelana nocwaningo futhi ngibe nezimpendulo ngokwaneliseka kwami.

Ngiyazisa ukuthi ukuhlanganyela kwami kulolu cwaningo kungokuzithandela futhi ngingahoxa noma nini ngaphandle kokuphazamisa noma yikuphi ukwelashwa noma ukunakekelwa engivame ukuba nelungelo lokukuthola. Ngazisiwe nganoma ikuphi ukwelashwa okutholakalayo okudingekayo ngenxa yezinqubo ezihlobene nokufunda.

Uma ngineminye imibuzo/ukukhathazeka noma imibuzo ehlobene nocwaningo, ngiyaqonda ukuthi ngingathintana nomcwaningi ku-(+27) 834512178 (amaselula) noma ucingo lwasendlini (+27) 031 311 3505 noma i-imeyili: 201510560@stu.ukzn.ac.za

Uma nginemibuzo noma izinkathazo mayelana namalungelo ami njengomhlanganyeli wocwaningo, noma uma ngikhathazekile ngendawo ethize yocwaningo noma abacwaningi ngingaxhumana:

ULAWULO LWEZIMILO LWE-BIOMEDICAL

Ihhovisi locwaningo, Ikhampasi yaseWestville, iGovan Mbeki Building, Private Bag X 54001, Durban, 4000, KwaZulu-Natal, SOUTH AFRICA, Ucingo: (+27) 31 2602486 - Ifeksi: (+27) 31 2604609. I-imeyili: ngwenyap@ukzn.ac.za

_____ _____

Isiginesha Yombambi qhaza **Usuku**

_____ _____

Isiginesha Yomcwaningi Usuku

APPENDIX G: ETHICS CERTIFICATES RESEARCHER

Zertifikat
Certificat
Certificado
Certificate

TRREE

Promouvoir les plus hauts standards éthiques dans la protection des participants à la recherche biomédicale
Promoting the highest ethical standards in the protection of biomedical research participants

Clinical Trials Centre
The University of Hong Kong

Certificat de formation - Training Certificate

Ce document atteste que - this document certifies that

ROSEMARY VAN HEERDEN

a complété avec succès - has successfully completed

Research Ethics Evaluation

du programme de formation TRREE en évaluation éthique de la recherche
of the TRREE training programme in research ethics evaluation

Release Date: 2021/03/13

CID : bFO4SCQKW4

Professeur Dominique Sprumont
Coordinateur TRREE Coordinator

FMH Continuing Education Program (5 Credits)
Programme de Formation continue (5 Crédits)

Foederatio Pharmaceutica Helvetiae FPH Programmes de formation continue Continuing Education Programme
Programmes de formation continue

Ce programme est soutenu par - This program is supported by :

European and Developing Countries Clinical Trials Partnership (EDCTP) (www.edctp.org) - Swiss National Science Foundation (www.snf.ch) - Canadian Institutes of Health Research (http://www.cihr-irsc.gc.ca/e/2891.html) - Swiss Academy of Medical Science (SAMS/ASSM/SAMW) (www.samw.ch) - Commission for Research Partnerships with Developing Countries (www.kfpe.ch)

[REV : 20170510]

Zertifikat
Certificat
Certificado
Certificate

TRREE

Promouvoir les plus hauts standards éthiques dans la protection des participants à la recherche biomédicale
Promoting the highest ethical standards in the protection of biomedical research participants

Clinical Trials Centre
The University of Hong Kong

Certificat de formation - Training Certificate

Ce document atteste que - this document certifies that

ROSEMARY VAN HEERDEN

a complété avec succès - has successfully completed

Introduction to Research Ethics

du programme de formation TRREE en évaluation éthique de la recherche
of the TRREE training programme in research ethics evaluation

Release Date: 2021/03/13

CID : abFr5fQwg6

Professeur Dominique Sprumont
Coordinateur TRREE Coordinator

FMH Continuing Education Program (5 Credits)
Programme de Formation continue (5 Crédits)

Foederatio Pharmaceutica Helvetiae FPH Programmes de formation continue Continuing Education Programme
Programmes de formation continue

Ce programme est soutenu par - This program is supported by :

European and Developing Countries Clinical Trials Partnership (EDCTP) (www.edctp.org) - Swiss National Science Foundation (www.snf.ch) - Canadian Institutes of Health Research (http://www.cihr-irsc.gc.ca/e/2891.html) - Swiss Academy of Medical Science (SAMS/ASSM/SAMW) (www.samw.ch) - Commission for Research Partnerships with Developing Countries (www.kfpe.ch)

[REV : 20170510]

Zertifikat
Certificat
Certificado
Certificate

Promouvoir les plus hauts standards éthiques dans la protection des participants à la recherche biomédicale
Promoting the highest ethical standards in the protection of biomedical research participants

Clinical Trials Centre
The University of Hong Kong

Certificat de formation - Training Certificate

Ce document atteste que - this document certifies that

ROSEMARY VAN HEERDEN

a complété avec succès - has successfully completed

Informed Consent

du programme de formation TRREE en évaluation éthique de la recherche
of the TRREE training programme in research ethics evaluation

Release Date: 2021/03/13

CID : gegAIYPpc9

Professeur Dominique Sprumont
Coordinateur TRREE Coordinator

FMH Continuing Education Program (5 Credits)
Programme de Formation continue (5 Crédits)

Foederatio Pharmaceutica Helvetiae FPH Programmes de formation continue
Continuing Education Programme
Programmes de formation continue

Ce programme est soutenu par - This program is supported by :

European and Developing Countries Clinical Trials Partnership (EDCTP) (www.edctp.org) - Swiss National Science Foundation (www.snf.ch) - Canadian Institutes of Health Research (http://www.cihr-irsc.gc.ca/e/2891.html) - Swiss Academy of Medical Science (SAMS/ASSM/SAMW) (www.samw.ch) - Commission for Research Partnerships with Developing Countries (www.kfpe.ch)

[REV : 20170310]

Zertifikat
Certificat
Certificado
Certificate

Promouvoir les plus hauts standards éthiques dans la protection des participants à la recherche biomédicale
Promoting the highest ethical standards in the protection of biomedical research participants

Clinical Trials Centre
The University of Hong Kong

Certificat de formation - Training Certificate

Ce document atteste que - this document certifies that

ROSEMARY VAN HEERDEN

a complété avec succès - has successfully completed

Good Clinical Practice (GCP-E6(R2) 2016)

du programme de formation TRREE en évaluation éthique de la recherche
of the TRREE training programme in research ethics evaluation

Release Date: 2021/03/17

UCID : nuQnt1rf4j

Professeur Dominique Sprumont
Coordinateur TRREE Coordinator

FMH Continuing Education Program (5 Credits)
Programme de Formation continue (5 Crédits)

Foederatio Pharmaceutica Helvetiae FPH Programmes de formation continue
Continuing Education Programme
Programmes de formation continue

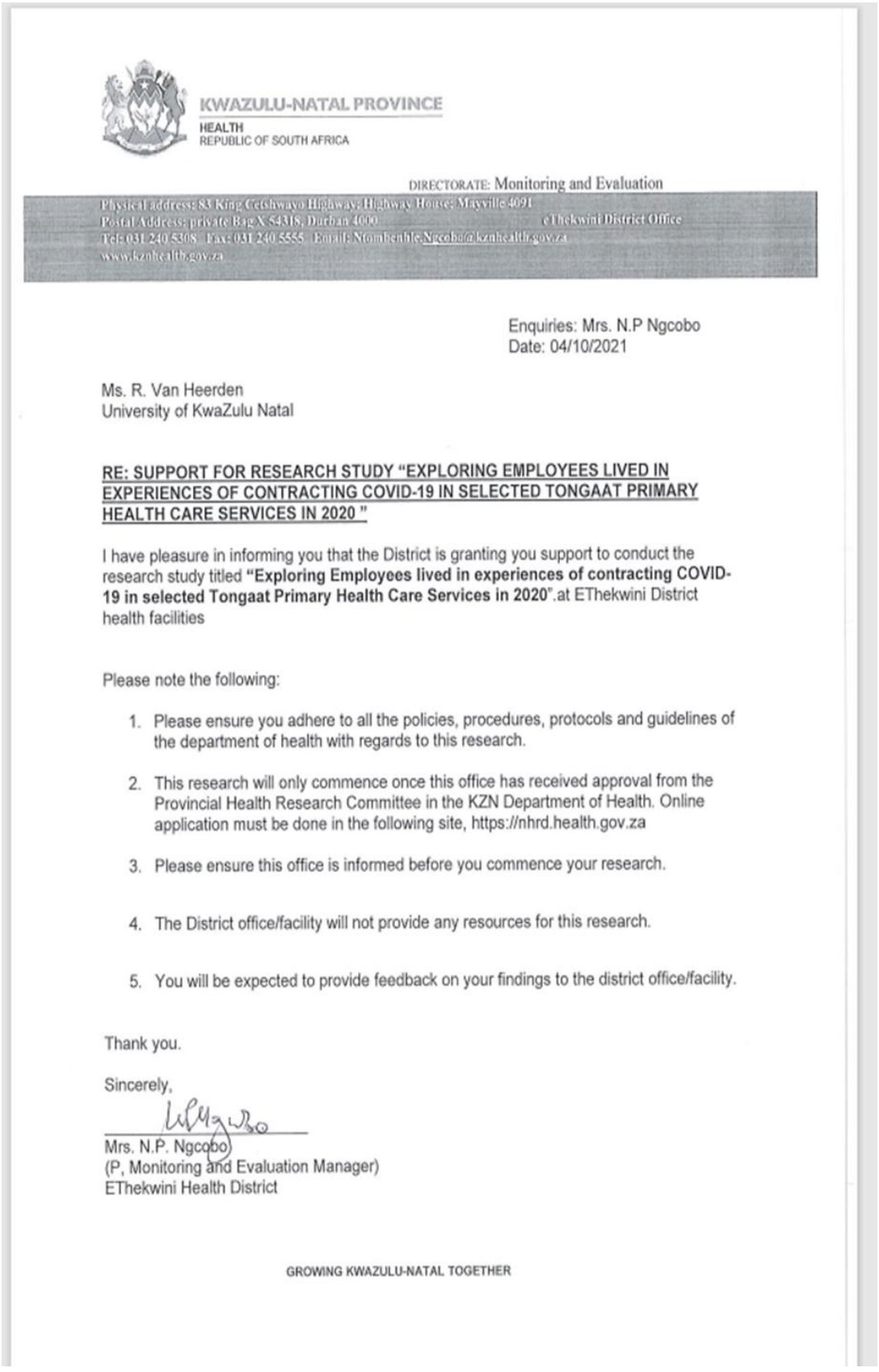
Ce programme est soutenu par - This program is supported by :

European and Developing Countries Clinical Trials Partnership (EDCTP) (www.edctp.org) - Swiss National Science Foundation (www.snf.ch) - Canadian Institutes of Health Research (http://www.cihr-irsc.gc.ca/e/2891.html) - Swiss Academy of Medical Science (SAMS/ASSM/SAMW) (www.samw.ch) - Commission for Research Partnerships with Developing Countries (www.kfpe.ch)

[REV : 20181124SL]

TRREE
Zertifikat
Certificat
Certificado
Certificate
Promouvoir les plus hauts standards éthiques dans la protection des participants à la recherche biomédicale
Promoting the highest ethical standards in the protection of biomedical research participants
Clinical Trials Centre
The University of Hong Kong
Certificat de formation - Training Certificate
Ce document atteste que - this document certifies that
ROSEMARY VAN HEERDEN
a complété avec succès - has successfully completed
South Africa
du programme de formation TRREE en évaluation éthique de la recherche
of the TRREE training programme in research ethics evaluation
Release Date: 2021/03/18
CID : sdaJYoVvu3
Professeur Dominique Sprumont
Coordinateur TRREE Coordinator
FMH
Continuing Education Program (5 Credits)
Programme de Formation continue (5 Crédits)
Foederatio Pharmaceutica Helvetiae
FPH
Programmes de formation continue
Continuing Education Programme
Programmes de formation continue
Ce programme est soutenu par - This program is supported by :
European and Developing Countries Clinical Trials Partnership (EDCTP) (www.edctp.org) - Swiss National Science Foundation (www.snf.ch) - Canadian Institutes of Health Research (http://www.cihr-irsc.gc.ca/e/2891.html) -
Swiss Academy of Medical Science (SAMS/ASSM/SAMW) (www.samw.ch) - Commission for Research Partnerships with Developing Countries (www.kfpe.ch)
[REV : 20170310]

APPENDIX H: LETTER OF SUPPORT FROM THE ETHEKWINI HEALTH DEPARTMENT OFFICE DISTRICT



KWAZULU-NATAL PROVINCE
HEALTH
REPUBLIC OF SOUTH AFRICA

DIRECTORATE: Monitoring and Evaluation

Physical address: 83 King Cetshwayo Highway: Highway House: Mayville 4091
Postal Address: private Bag X 54318, Durban 4000 eThekwini District Office
Tel: 031 240 5308 Fax: 031 240 5555 Email: Nomhenhle.Ngcobo@kznhealth.gov.za
www.kznhealth.gov.za

Enquiries: Mrs. N.P Ngcobo
Date: 04/10/2021

Ms. R. Van Heerden
University of KwaZulu Natal

RE: SUPPORT FOR RESEARCH STUDY "EXPLORING EMPLOYEES LIVED IN EXPERIENCES OF CONTRACTING COVID-19 IN SELECTED TONGAAT PRIMARY HEALTH CARE SERVICES IN 2020 "

I have pleasure in informing you that the District is granting you support to conduct the research study titled **"Exploring Employees lived in experiences of contracting COVID-19 in selected Tongaat Primary Health Care Services in 2020**".at EThekwini District health facilities

Please note the following:

1. Please ensure you adhere to all the policies, procedures, protocols and guidelines of the department of health with regards to this research.
2. This research will only commence once this office has received approval from the Provincial Health Research Committee in the KZN Department of Health. Online application must be done in the following site, https://nhrd.health.gov.za
3. Please ensure this office is informed before you commence your research.
4. The District office/facility will not provide any resources for this research.
5. You will be expected to provide feedback on your findings to the district office/facility.

Thank you.

Sincerely,

Mrs. N.P. Ngcobo
(P, Monitoring and Evaluation Manager)
EThekwini Health District

GROWING KWAZULU-NATAL TOGETHER

APPENDIX I: LANGUAGE EDITOR LETTER OF EDITING

Pauline Fogg
54 Grundel Road
Carrington Heights
Durban
4001
074 782 5234

15 September 2022

Letter of Editing

This report serves to state that the dissertation submitted by Rosemary Van Heerden titled 'Exploring Employees' Lived Experiences of Contracting COVID-19 in Selected Tongaat Primary Health Care Services in 2020' has been edited.

The dissertation was edited for errors in syntax, grammar, punctuation and the in-text referencing system used.

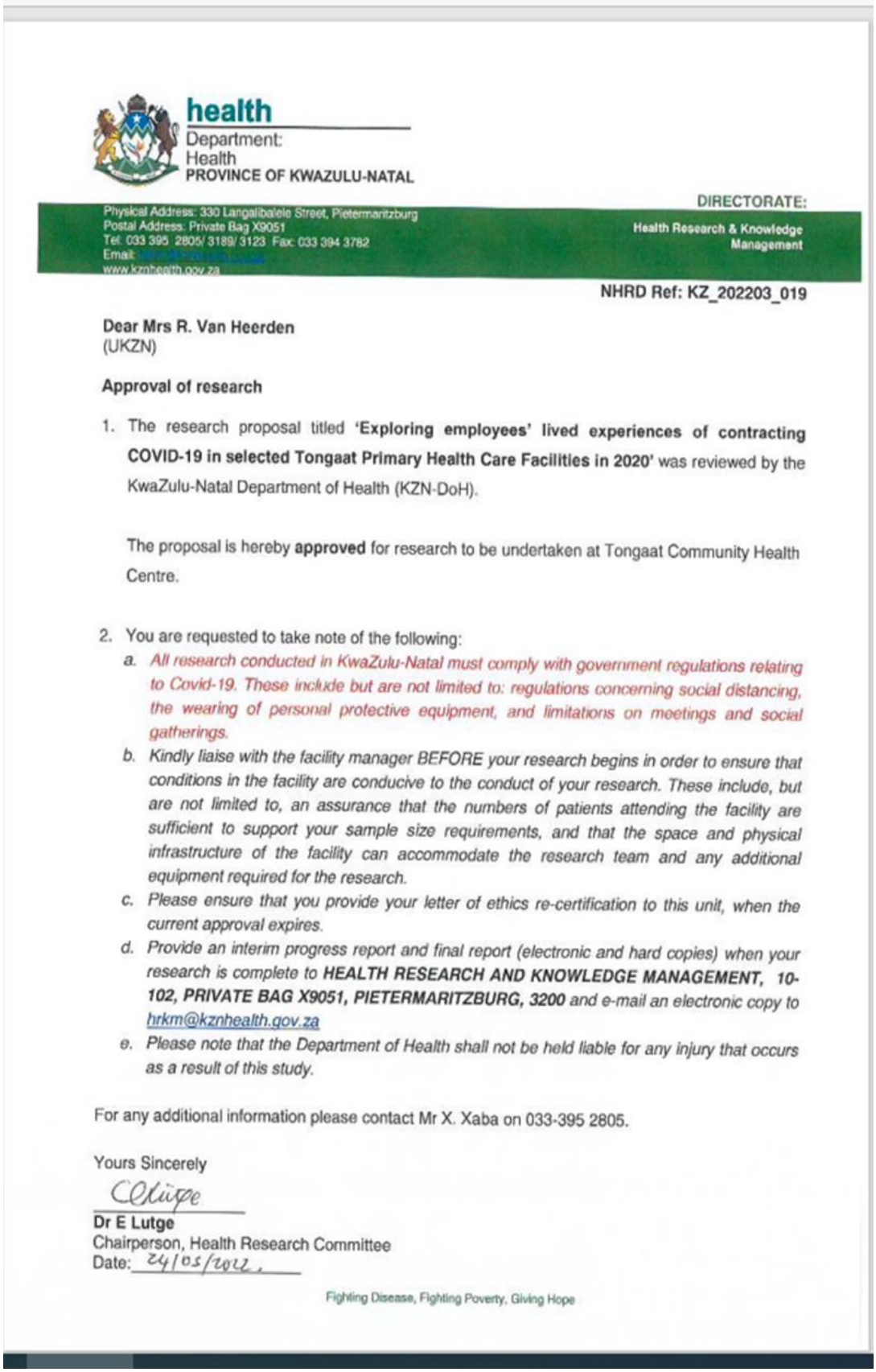
The edit will be regarded as complete once the necessary changes have been effected and all of the comments addressed.

Thank-you for your business.

PFogg

Pauline Fogg

APPENDIX J: NATIONAL HEALTH RESEARCH DATABASE APPROVAL



health
Department:
Health
PROVINCE OF KWAZULU-NATAL

Physical Address: 330 Langalibalele Street, Pietermaritzburg
Postal Address: Private Bag X9051
Tel: 033 395 2805/ 3189/ 3123 Fax: 033 394 3782
Email:
www.kznhealth.gov.za

DIRECTORATE:
Health Research & Knowledge Management

NHRD Ref: KZ_202203_019

Dear Mrs R. Van Heerden
(UKZN)

Approval of research

1. The research proposal titled **'Exploring employees' lived experiences of contracting COVID-19 in selected Tongaat Primary Health Care Facilities in 2020'** was reviewed by the KwaZulu-Natal Department of Health (KZN-DoH).

   The proposal is hereby **approved** for research to be undertaken at Tongaat Community Health Centre.

2. You are requested to take note of the following:
   a. *All research conducted in KwaZulu-Natal must comply with government regulations relating to Covid-19. These include but are not limited to: regulations concerning social distancing, the wearing of personal protective equipment, and limitations on meetings and social gatherings.*
   b. *Kindly liaise with the facility manager BEFORE your research begins in order to ensure that conditions in the facility are conducive to the conduct of your research. These include, but are not limited to, an assurance that the numbers of patients attending the facility are sufficient to support your sample size requirements, and that the space and physical infrastructure of the facility can accommodate the research team and any additional equipment required for the research.*
   c. *Please ensure that you provide your letter of ethics re-certification to this unit, when the current approval expires.*
   d. *Provide an interim progress report and final report (electronic and hard copies) when your research is complete to* ***HEALTH RESEARCH AND KNOWLEDGE MANAGEMENT, 10-102, PRIVATE BAG X9051, PIETERMARITZBURG, 3200*** *and e-mail an electronic copy to hrkm@kznhealth.gov.za*
   e. *Please note that the Department of Health shall not be held liable for any injury that occurs as a result of this study.*

For any additional information please contact Mr X. Xaba on 033-395 2805.

Yours Sincerely

Dr E Lutge
Chairperson, Health Research Committee
Date: 24/05/2022

Fighting Disease, Fighting Poverty, Giving Hope

APPENDIX K: BIOMEDICAL RESEARCH ETHICS COMMITTEE APPROVAL

UNIVERSITY OF KWAZULU-NATAL
INYUVESI YAKWAZULU-NATALI

03 April 2022

Mrs Rosemary Van Heerden (201510560)
School of Nurs & Public Health
Howard College

Dear Mrs Van Heerden,

Protocol reference number: BREC/00003777/2022
Project title: Exploring employees' lived experiences of contracting COVID-19 in selected Tongaat Primary Health Care Services in 2020
Degree: Masters

EXPEDITED APPLICATION: APPROVAL LETTER

A sub-committee of the Biomedical Research Ethics Committee has considered and noted your application.

The conditions have been met and the study is given full ethics approval and may begin as from 03 April 2022. Please ensure that any outstanding site permissions are obtained and forwarded to BREC for approval before commencing research at a site.

This approval is subject to national and UKZN lockdown regulations, see (http://research.ukzn.ac.za/Libraries/BREC/BREC_Amended_Lockdown_Level_1_Guidelines.sflb.ashx). Based on feedback from some sites, we urge PIs to show sensitivity and exercise appropriate consideration at sites where personnel and service users appear stressed or overloaded.

This approval is valid for one year from 03 April 2022. To ensure uninterrupted approval of this study beyond the approval expiry date, an application for recertification must be submitted to BREC on the appropriate BREC form 2-3 months before the expiry date.

Any amendments to this study, unless urgently required to ensure safety of participants, must be approved by BREC prior to implementation.

Your acceptance of this approval denotes your compliance with South African National Research Ethics Guidelines (2015), South African National Good Clinical Practice Guidelines (2020) (if applicable) and with UKZN BREC ethics requirements as contained in the UKZN BREC Terms of Reference and Standard Operating Procedures, all available at http://research.ukzn.ac.za/Research-Ethics/Biomedical-Research-Ethics.aspx.

BREC is registered with the South African National Health Research Ethics Council (REC-290408-009). BREC has US Office for Human Research Protections (OHRP) Federal-wide Assurance (FWA 678).

The sub-committee's decision will be noted by a full Committee at its next meeting taking place on 10 May 2022.

Yours sincerely,

Prof D Wassenaar
Chair: Biomedical Research Ethics Committee

Biomedical Research Ethics Committee
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Founding Campuses: Edgewood Howard College Medical School Pietermaritzburg Westville

INSPIRING GREATNESS

APPENDIX L: SUMMARY OF THE TONGAAT PRIMARY HEALTH CARE SERVICES' STAFF THAT TESTED POSITIVE FOR COVID-19 IN 2020

TONGAAT CHC SUMMARY OF TOTAL STAFF WHO TESTED POSITIVE MARCH TO DECEMBER 2020

NO.	GENDER	AG	DEPARTMENT
1	FEMALE	46	ADMINISTRATION & SYSTEMS SUPPORT
2	FEMALE	36	ADMINISTRATION & SYSTEMS SUPPORT
3	FEMALE	36	ADMINISTRATION & SYSTEMS SUPPORT
4	FEMALE	28	ADMINISTRATION & SYSTEMS SUPPORT
5	FEMALE	36	ADMINISTRATION & SYSTEMS SUPPORT
6	FEMALE	47	ADMINISTRATION & SYSTEMS SUPPORT
7	FEMALE	36	ADMINISTRATION & SYSTEMS SUPPORT
8	FEMALE	35	ADMINISTRATION & SYSTEMS SUPPORT
9	FEMALE	40	ADMINISTRATION & SYSTEMS SUPPORT
10	FEMALE	40	ADMINISTRATION & SYSTEMS SUPPORT
11	FEMALE	32	ADMINISTRATION & SYSTEMS SUPPORT
12	FEMALE	36	ADMINISTRATION & SYSTEMS SUPPORT
13	MALE	38	ADMINISTRATION & SYSTEMS SUPPORT
14	MALE	48	ADMINISTRATION & SYSTEMS SUPPORT
15	MALE	41	ADMINISTRATION & SYSTEMS SUPPORT
16	MALE	52	ADMINISTRATION & SYSTEMS SUPPORT
17	MALE	49	ADMINISTRATION & SYSTEMS SUPPORT
18	MALE	28	ADMINISTRATION & SYSTEMS SUPPORT
19	MALE	46	ADMINISTRATION & SYSTEMS SUPPORT
20	FEMALE	38	COMMUNITY BASED SUPPORT
21	MALE	50	COMMUNITY BASED SUPPORT
22	FEMALE	40	DENTAL
23	FEMALE	47	DENTAL
24	FEMALE	40	DENTAL
25	FEMALE	42	DENTAL
26	MALE	43	DENTAL
27	FEMALE	57	HUMAN RESOURCES
28	FEMALE	36	HUMAN RESOURCES
29	MALE	40	HUMAN RESOURCES
30	FEMALE	42	MANAGEMENT
31	FEMALE	42	MANAGEMENT
32	FEMALE	50	NURSING
33	FEMALE	45	NURSING
34	FEMALE	50	NURSING
35	FEMALE	50	NURSING
36	FEMALE	50	NURSING
37	FEMALE	26	NURSING
38	FEMALE	37	NURSING
39	FEMALE	25	NURSING
40	FEMALE	32	NURSING
41	FEMALE	45	NURSING
42	FEMALE	55	NURSING
43	FEMALE	30	NURSING
44	FEMALE	46	NURSING
45	FEMALE	30	NURSING
46	FEMALE	36	NURSING
47	FEMALE	47	NURSING
48	FEMALE	30	NURSING
49	FEMALE	30	NURSING
50	FEMALE	27	NURSING
51	FEMALE	46	NURSING
52	FEMALE	53	NURSING
53	FEMALE	24	NURSING
54	FEMALE	26	NURSING
55	FEMALE	30	NURSING
56	FEMALE	53	NURSING
57	FEMALE	47	NURSING
58	FEMALE	36	NURSING
59	FEMALE	36	NURSING
60	FEMALE	29	NURSING
61	FEMALE	45	NURSING
62	FEMALE	55	NURSING
63	FEMALE	49	NURSING
64	MALE	53	NURSING
65	MALE	36	NURSING
66	MALE	52	NURSING
67	MALE	31	NURSING
68	MALE	29	NURSING
69	MALE	42	NURSING
70	FEMALE	36	PHARMACY
71	FEMALE	26	PHARMACY
72	FEMALE	52	PHARMACY
73	FEMALE	46	PHARMACY