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EXPLORING KNOWLEDGE, ATTITUDES AND PSYCHOSOCIAL EXPERIENCES OF HEALTH CARE WORKERS REGARDING COVID-19 IN BUFALO CITY MUNICIPALITY

BY

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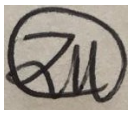
SUPERVISOR: DR. D. MURRAY

DATE: MARCH 2020

DECLARATION

I, Zintle Notununu, hereby declare that the research study **'EXPLORING KNOWLEDGE, ATTITUDE AND PSYCHOSOCIAL EXPERIENCES OF HEALTH CARE WORKERS REGARDING COVID-19 IN BUFFALLO CITY MUNICIPALITY'** in submission for the degree of Master of Public Health at the University of Fort Hare is my own work and all the external sources used or quoted in this study have been acknowledged by a complete reference list.

Zintle Notununu 

Signature

Date signed 03/02/2022

CERTIFICATION

This mini-dissertation entitled **'EXPLORING KNOWLEDGE, ATTITUDE AND PSYCHOSOCIAL EXPERIENCES OF HEALTH CARE WORKERS REGARDING COVID-19 IN BUFFALO CITY MUNICIPALITY'** meets the guidelines outlining the award of the postgraduate degree of **MASTER OF PUBLIC HEALTH** at the University of Fort Hare and is approved for contribution to scientific knowledge and literacy presentation.

SUPERVISOR: Dr Daphne Murray

SIGNATURE: …

DATE …7th February 2021……

DEDICATION

This thesis is dedicated to my late mother, Noweek-end Notununu, who gave me endless love and encouraged me to study. Without thinking of your words, I would not have done this.

This is also dedicated to my maternal grandmother, Nombeko Winfred Mqovula, and my guardian, Nonjongo Vatyana, who made sure that I went to school after my mother's death and blessed me with their prayers in order to complete this research.

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ABSTRACT

The purpose of this study was to explore and describe the knowledge, attitude and psychosocial experiences of health care workers regarding Covid-19 in Buffalo City Municipality. Covid-19 is a disease that attacks the respiratory system and functions. It is a highly infectious disease with a lengthy 5-6 sometimes even 14-day incubation period. It is very serious condition and has killed a lot of people including the Health Care Workers

A qualitative descriptive explorative contextual design was employed in this research study. The design was relevant for this study to explore and describe the knowledge, attitude, and psychosocial experiences of health workers regarding Covid-19 in Buffalo City Municipality. The non-probability sampling method was used and a convenient sampling technique was used to select the participants. Professional nurses who met the criteria and who were on duty on the day of data collection were included in the study. The researcher interviewed 15 professional nurses and stopped as the data was saturated. A semi-structured Interview guide was used as an instrument to collect data containing open-ended questions. The researcher maintained ethical principles throughout the study. Concepts of trustworthiness of the study were applied throughout the research. Tech's eight steps approach was used to guide the data analysis process.

The findings of this study indicate that health care workers have a high level of knowledge about Covid-19. They know what Covid-19 is, how it started, its signs and symptoms, how to protect themselves from it and its complications. Negative attitudes, fears were noticed from the HCWs and thus the need for psychological support was identified. Feelings of neglect and lack of motivation were also identified.

Psychological support for health care workers must be provided to prevent staff burnout. Personal Protective Equipment used in the hospital premises must be left and washed in the hospital laundry to prevent the spread of infection to the families of the HCWs. It was indicated that there are health care workers who experienced chronic illnesses after being diagnosed with Covid-19. These chronic illnesses include diabetes and high blood pressure. It was brought to light that myths circulating on the social media about Covid-19 vaccines are delaying the end of Covid-19 epidemic by putting the health care workers at risk of being infected with it as they will be expected to treat patients diagnosed with Covid-19; therefore, government should develop a

policy that will limit people from spreading things that they are not true and cannot prove.

In conclusion, community awareness and forced vaccination are recommended to end the Covid-19 virus. Monitory incentives should be provided to motivate health care workers. Their overtime that they have worked during Covid-19 must be paid. The Department of Health and hospital managers must make sure that working conditions are improved. This includes the availability of machines to test for Covid-19. More research needs to be done to find out why some people who were diagnosed with Covid-19 end up having chronic illnesses that they never had previously.

Key words: Knowledge, Attitude, Psychosocial, Health Care Workers and Covid-19

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CHAPTER 1: INTRODUCTION AND BACKGROUND

1.1 INTRODUCTION

The existence and livelihood of Earth's population is currently under threat from the latest epidemic, caused by the coronavirus disease. The present day outbreak of coronavirus, commonly known as Covid-19 (Coronavirus Disease, 2019), has cases first reported in December 2019. Reports track the outbreak back to the Hubei Province, the City of Wuhan, and an emerging business hub in central China. The Covid-19 virus disease spread drastically, making little work of geographical boundaries, statistics reporting that the pandemic was doubling in size every 7.4 days. The global statistics on the spread of the pandemic drew an alarming image, reporting that by the third of April 2020 cases globally had reached one million, spreading over six continents resulting in 53 deaths globally, (Ogolodom,2020). According to CDC update, (30 January 2022) the Covid-19 cases grew up to 375 million resulting to 5.66 million deaths globally (CDC, 2022).

The origin of the name Covid-19 stems from the World Health Organization (WHO), who tagged the disease "Novel Coronavirus-infection pneumonia 2019". The year "2019" was mentioned as a tag to mark the year of the discovery of this virus. The WHO officially then renamed the clinical condition from coronavirus disease-19 to the shorted Covid-19 on 11 February 2020. The WHO only declared the coronavirus a public health emergency of international concern on 30 January 2020, and then followed by classifying it as a pandemic on 11 March 2020 (WHO, 2020).

Covid-19 is reported to be responsible for bilateral pneumonia which is believed to have originated in the flourishing sea food market of the emerging business hub in Wuhan, China. Transmission of the virus amongst humans occurs through droplets inhalation transmission, through sneezing and coughing as well as contact transmission. This includes feco-oral, nasal and eye mucus membrane contacts, (Sandra, 2020). Evidence shows that among asymptomatic patient's transmission of the virus can occur during the incubation period. Studies conducted estimated the incubation period to be 5.2 days, which allowed travellers to move through and from China without symptoms allowing for the global spread of the disease. Symptoms presented by Covid-19 patients include PNA inflammation of the lungs, clinically termed as pneumonia. Patients show signs of fatigue and respiratory distress, the

most prevalent of symptoms being a dry cough and a fever as reported from almost 90% of infected subjects. A journal published by Oxford Academic claims forty percent of these patients experienced fatigue and 18.6 suffered from dyspnea, while diarrhea and nasal congestion nausea were seldom reported (Walton, Murray & Christian, 2020).

Reports stressed that the disease progressed faster amongst the elderly patients, notably those 70 years of age and above, leaving them with a median time of 11.5 days between early symptoms to death, while giving patients under 70 and average of 20 days. The Centers for Disease Control and Prevention (CDC) reported that Covid-19 infections cause a mild disease, with mild pneumonia and sometimes without pneumonia in an observed eighty percent of patients. Most of these patients recover spontaneously. The statistics reveal that the virus is moderate in fourteen percent of infected patients and causes severe illness in six percent of infected patients. Severe cases were perceived among the elderly and those living with chronic conditions, namely, cardiovascular disease and diabetes hypertension. A study published by "Our World of Data" reported that only one to two percent of Covid-19 patients are children (Roser, Ritchie, Ortiz-Ospina & Hassell, 2020).

Public health protocols to control the spread of the virus were recommended by the WHO and their enforcement began to trickle down into every country. Most of the protocols recommended related to social distancing, hand washing and the "locking down" of cities to each country (Shanafelt, Ripp &Trockel, 2020).

The National Institute for Communicable Diseases of South Africa first reported Covid-19 in the city of Durban; it then spread to other provinces of the country, (NICD, 2020). The South African government promptly then enforced the recommended protocols and measures to contain the spread. The country implemented rules on social distancing and placed a ban on public gatherings such as religious gatherings, evening entertainment events and sport gatherings. The South African government continuously stressed the need for personal hygiene such as hand washing, and the use of hand sanitizer and it enforced a mask mandate. The government passed rules that limited the number of passengers in public vehicles and then it followed by enforcing a state of emergency, which led to the locking down of public places and cities. However, the economic state of the citizens dictated the level of compliance as

a resounding number of citizens were driven into poverty or were met with a scary reality of being at the brink of it.

Health care workers such as medical doctors, nurses and paramedics became the first line of defense against what was quickly become a war for survival. Being key players in the response to the pandemic, they became exposed soldiers as their daily work programs meant they would be prone to the exposure of the virus. As more infected patients walked into medical intuitions or were brought in by ambulance, the number of infected cases increased. Due to professional obligation, these medical staff had to perform the duties they had sworn to perform, even if it meant going to what was quickly declared the most dangerous places to work in (Gupta &Sahoo, 2020)

Medical staff members were now tasked with protecting their health while treating patients, as every trained pair of hands became needed. Research delineates that the level of knowledge about the Covid-19 virus, directly affects our perception of susceptibility to the disease. This means that educating people about the virus was and is important because lack of this knowledge would only lead to an increase of infected cases (Gupta et al, 2021).

According to the study that was done by (Olum, Chekwech, Wekha, Nassoz & Bongomin 2020) about Knowledge, attitude and practices of health care workers regarding Covid-19 at Makerere university of teaching Hospitals in Uganda, the results revealed that health care workers had sufficient knowledge about Covid-19 and they received this knowledge about the disease from CDC and WHO, as well as the study that was conducted in Turkey on psychological fatique , results also indicated that health care workers were well knowledgeable about Covid-19 (Morgul, Bener, Atak, Akyel, Aktaş, Bhugra, Ventriglio, & Jordan,2021)

Ejeh, Saidu, Owoicho, Maurice, Jauro, Madukaji, & Okon, (2020) conducted a study in Nigeria about knowledge, attitude and practices among health care workers towards Covid-19. The findings indicated that health care workers were knowledgeable about the disease, and they got some of the information from the internet and television; however, continuous in-service training was still required. Although a study that was conducted in Bangladesh by Tune, Islam, Islam, Tasnim & Admed (2022) of frontline workers, results shown that the FLWs did not receive any official training on COVID-19, including its prevention and management, in most instances. In addition, they had

no training in the use of personal protective equipment (PPE). Their common source of knowledge was also different websites or social media platforms. The FLWs were at risk while delivering services because patients were found to conceal their histories and not maintaining safety rules, including physical distancing. Poor supply of PPE was declared, fear of getting infected, risk to family members and ostracisation by the neighbours to be quite common. This situation eventually led to the development of mental stress and anxiety; however, they tried to cope with this terrible condition and attended to the call of human kind.

According to the study by (Morgul et al, (2021) about Covid-19 pandemic and psychological fatigue at Turkey, health care workers had fatigue as a psychological outcome, which was due to fear and anxiety of the pandemic. The study conducted by Abdel, Wahed, Hefzy, Ahmed, & Hamed, (2020) indicated also that HCW were afraid of being infected, as they were scared that they could transmit the virus to their family members, as it was a highly transmittable disease. (Zahng, Zhou, Tang, Wang, Nie, Zhang, & You, 2020) results also shown that most health care workers were scared of being infected by Covid-19 in the workplace. The Covid-19 had psychological impact on front line workers in which nurses are at high risk of adverse mental health effects because they were worried about their families, scared of being infected and unavailability of PPE (De Kock, Latham, Leslie, Grindle, Munoz, Ellis, Polson, & O'Malley,2021).

Findings also revealed from the study that was conducted by Morgul, et al, (2021) in Turkey that health care workers had positive attitude because Covid-19 was finally manageable by the use of PPEs. The findings of the study that was conducted by (Tan, Kanneganti, Lim, Tan, Chua, Tan, Sia, Denning,Goh, Purkayastha, & Kinross, 2020) also showed the positive attitude that was displayed towards Covid-19 by health care workers because there were protective clothing however, they also revealed that Covid-19 has impacted negatively in their lives. Although the study that was conducted by Bhagavathula, Aldhaleei, Rahmani, Mahabadi, & Bandari, (2020) indicated that HCW had inadequate knowledge about Covid-19. Huynh, Nguyen, & Pham, (2020) revealed deficiency in information and negative attitude towards Covid-19.

Research proves that without the accurate knowledge about the disease will lead to its prevalence, therefore making information and education on the infection process

and precautions necessary in curing behavioral patterns that put health care workers at risk is very important (Achi & Eke. 2020).

1.2 PROBLEM STATEMENT

Covid-19 has posed a high mortality rate on South Africans (WHO, 2020). There are new infections of Covid-19 on daily basis. As of 30 January 2021, South Africa had recorded a total number of three, 6 million Covid-19 cases, of which 339,854 are from the province of the Eastern Cape. Furthermore, South Africa reported a total number of 95,022 deaths and of those deaths, 16,163 are from the Eastern Cape (STATS SA, 2020). Health care workers are the first and last line of defense in the struggle to fight against the pandemic. Globally, health care workers' infection comprises an average of 10% of all reported cases.

As of November 2020, the United States Center for Disease Control and Prevention (CDC) reported a sum of 216,049 coronavirus infections among health care workers since the pandemic began. Health care workers' death due to Covid-19 escalated from 574 in August 2020 to 799 in November 2020 (USCDCP, 2020). The World Health Organization Regional Office for Africa reported that over 10 000 health care workers in Africa were infected with Covid-19.

Based on the study that was conducted in Nigeria about knowledge, attitude and practices among health care workers towards the Covid -19 outbreak. The findings for this study showed HCWs in Nigeria had excellent knowledge and possessed a positive attitude and good practice towards Covid-19. However, there were areas where poor knowledge, negative attitudes and unacceptable practices were observed. Continuous training of HCWs on Covid-19 infection control and prevention was recommended. The results of this study also revealed that, although health care workers have good knowledge about Covid-19, there were unacceptable practices that they mentioned. Those practices include not protecting themselves during tea and lunch times. This study also revealed that health care workers were not properly trained on how to wear and how to discard PPE (Ejeh et al. (2020).

Minister Zweli Mkhize (Minister of Health in South Africa) revealed that, as of August 2020, a total of 63,360 health care workers were reported as having been infected with Covid-19 in South Africa and 4600 died from Covid-19 related deaths (HASA, 2020). The majority of these cases (78%) were from the public sector. This clearly indicated

the need to intensify efforts to control the spread of Covid-19 amongst health care workers. This can be achieved by first identifying the areas in which they are at risk, such as areas and times when they come into contact with infected patients and times when they meet infected spaces and instruments or machinery. They can also respond appropriately to reduce these risks, such as wearing clean clothes and regularly changing Personal Protective Equipment (PPEs) (Wagner & Weinberger. 2020).

On 6 February 2021, the Eastern Cape Province was reported to have the country's third highest number of confirmed Covid-19 cases of health care workers, sitting at 2569, and had 1200 registered deaths of health care workers (www.Bussnesslive.co.za). As Covid-19 was a new infection, some health care workers were not knowledgeable about it. A number of health care workers died due to Covid-19, which caused them to develop negative attitude towards it. Covid-19 has caused anxiety, stress, depression among health care workers who are caring for the patient with Covid-19 (Ahmed, Ramadan, Refay & Khashbah, 2021).

According to the study conducted by Temsah, Al-Sohime, Alamro, Al-Eyadhy, Al-Hasan, Jamal, Al-Maglouth, Aljamaan, Amri, Barry & Al-Subaie, (2020) results indicate that pandemics and epidemics infections such as Covid-19 bring high level of anxiety and stress on health care workers who are caring for infected patients, they were worried that they can transmit it to their families. Inadequate supply of PPE, fear of getting infected, risk to family members is the situation that led to develop mental stress and anxiety (Hoernke, Djellouli, Andrews, Lewis-Jackson, Manby, Martin, Vanderslott, & Vindrola-Padros, 2021).Since the spread of Covid-19 worldwide and because it was a new pandemic where people including health care workers were losing their lives on a daily basis, the rapid spread of infection irrespective of the knowledge health care workers had and psychosocial effects of this disease on HCWs. Therefore, the researcher was concerned about the high number of deaths among the health care workers in the Eastern Cape and found it necessary to explore the knowledge, attitudes and psychosocial experiences of health care workers in Buffalo City Municipality regarding Covid-19. No study was conducted regarding exploring Knowledge, Attitude and Psychosocial Experiences of health care workers regarding Covid-19 in Buffalo City Municipality.

1.3 PURPOSE OF THE STUDY

To explore and describe the knowledge, attitude and psychosocial experiences of healthcare workers regarding Covid-19 in Buffalo City Municipality.

1.4 OBJECTIVES

- To explore the knowledge of health care workers regarding Covid-19 in the Buffalo City Municipality.
- To explore the attitudes of health care workers regarding Covid-19 in the Buffalo City Municipality.
- To describe the psychosocial experiences of health care workers (HCWs) in the Buffalo City Municipality.

1.5 RESEARCH QUESTIONS

- What is the knowledge of HCWs regarding Covid-19?
- What are the health care workers' attitudes regarding Covid-19?
- What are the psychosocial experiences of health care workers regarding Covid-19?

1.6 THE SIGNIFICANCE OF THE STUDY

Information from this study may provide the Department of Health with a better understanding of the experiences of the health care workers during Covid-19. The much-needed knowledge, attitudes and psychosocial experiences of health care workers about Covid-19 will contribute positively towards empowerment of health care workers. Furthermore, the results of this study have the potential to influence current policies on the management and care of covid-19. Nurses being the largest workforce in the health systems, the generated information could be included in the curriculum in nursing education and incorporated into training and workshops for health care workers.

1.7 DELIMITATION OF THE STUDY

The study focused on the knowledge, attitudes and psychosocial experiences of health care workers regarding Covid-19 in Buffalo City facilities.

1.8 DEFINITION OF TERMS

Health care worker

Health care workers are all persons working in the health care setting who are directly or indirectly exposed to patients or infectious material (American Council on Science and Health, (Juberg, Kleiman & Kwon, 1997)

In this study, health care workers will represent the participants from Buffalo City who participated in the study. They were professional nurses working in Covid-19 wards at selected facilities at Cecilia Makhiwane Hospital.

Attitude

This refers to a settled way of thinking of feeling about something (Palani et al. 2013). In this study, it refers to health care workers' feelings about Covid-19.

Psychosocial

The impact and influence of beliefs, habits, influx of information and education on people's perceptions together with their behavioural stance on these constructs what is known as the psychosocial, (Martikainen, Bertley & Lehelma, 2013). In this study psychosocial will refer to the professional nurses or health care workers who actually bear the brunt, as they have to assist and they themselves are impacted by the Covid-19 pandemic, which could further lead to stress related symptoms at Buffalo City.

Covid-19

A disease attacks the respiratory system and functions. It is a highly infectious disease with a lengthy 5-6 sometimes even 14-day incubation period (Fauci, Lane & Redfield, 2020).

1.9 RESEARCH METHODOLOGY AND DESIGN

A qualitative descriptive approach was selected for this study in order to describe and explore the level of knowledge, attitude and psychosocial experiences of health care workers regarding Covid-19.

1.9.1 Research Design

A qualitative descriptive explorative contextual design was employed in this research study. This design was relevant to explore and describe the knowledge attitude, and psychosocial experiences of health workers regarding Covid-19 in Buffalo City Municipality.The design will be elaborated on in chapter 3.

1.10 RESEARCH SETTING

This refers to the precise location where the data or information was collected (Brink, Walt & Rensberg, 2016) The study took place in one hospital of Buffalo City Municipality (Cecilia Makiwane Hospital). This will be discussed in chapter 3.

1.11 POPULATION

The term 'population' refers to the collective number of people or subjects of interest that specifically meet the criteria required by the researcher to conduct and complete the study (De Vos, 2011). The population used in this study consisted of health care workers in BCM health care facility of Cecelia Makiwane Hospital.

1.11.1 TARGET POPULATION

The target population is the set of units about which the researcher aims to generalize (Wood & Haber, 2010). In a study the target population was professional nurses working in Covid-19 wards in the BCM selected facility at Cecelia Makiwane Hospital from March 2020 to March 2021.

1.12 SAMPLING

Refers to the process used in selecting the sample, a certain number of individuals or subjects from a population. The aim of sampling is to attract and collect information about an occurrence in a way that captures and depicts the interest of the population (Brink, et al, 2016). A non-probability sampling method was used in this study and a convenience sampling technique was utilized to select participants. Convenient sampling technique was the ideal technique, because the participants were present at the time and place where the research was conducted. Interviews stopped when saturation took place. This method required that the researcher select participants who knew the most about the phenomena, and who were able to express and explain clearly, as much as they could about the occurrences (Burns & Grove, 2011).

- Inclusion criteria

Professional nurses working in BCM facility at Cecilia Makiwane Hospital who have worked in Covid-19 wards from March 2020 to March 2021.

- Exclusion criteria

Professional nurses who were on leave were excluded from the study.

1.13 DATA COLLECTION

Data collection consists of the methodical steps that set the borders for the study in the collection of information or data, which is appropriate for the purpose of the research or the particular objectives and questions through unstructured or semi-structured interviews (Creswell, 2014). Semi-structured individual interviews were conducted for 45-60 minutes. An interview schedule was developed and consisted of open-ended questions in order to describe and explore the level of expertise, behaviors and psychosocial experiences of health workers about Covid-19.

Confidentiality and anonymity were ensured throughout the research study. The researcher explained the purpose of the study as well as explaining that the research was voluntary. Volunteers who were willing to participate in the study were obligated to sign an informed consent. Permission to use a recorder was requested from the participants. Interviews were conducted in a well-ventilated quiet location or space, where no disturbances were experienced. Participants were able to withdraw from the interviews if the need arose.

1.14 DATA ANALYSIS

Tesch's eight steps approach was used to guide the data analysis process (as stated by Creswell, 2014:198):

- Get a sense of the whole. Read all the transcripts and examine handwritten data carefully.
- Choose one interview and examine it once more. Ask, "What is this about?" Write the findings in the margin of the document.
- Compile a list all the topics. Compare and group similar topics together and arrange them in major topics, unique topics and leftovers.

- Abbreviate these topics as codes and write the codes next to the appropriate segments of the text.
- Check if fresh themes have developed.
- Alphabetize the codes to ensure that no duplication occurs.
- Convert topics into descriptive categories. Use clustering of similar topics try to reduce categories.
- Recode existing data if necessary.

1.15 TRUSTWORTHINESS OF THE STUDY

The principle of trustworthiness, especially in a qualitative study, resonates from its ability to display credibility, its ability to portray dependability, its ability to express transferability and its ability to maintain confirmability (Grove et al. 2015). A reputable study will maintain a constant display of all these concepts/principles.

1.15.1 CREDIBILITY

The concept of credibility alludes to the high level of confidence in the truth presented by the data and the information it depicts. An investigation has to be carried out to ensure that the findings express credibility (Brink, Walt & Rensburg. (2015). this will be explained in detail in chapter 3.

1.15.2 DEPENDABILITY

Dependability is to provide proof that if the study was repeated it should produce similar results, especially if the same participants were used (Brink et al. 2015). This will be explained in detail in chapter 3

1.15.3 TRANSFERABILITY

The test of transferability asks whether the findings of the study can be applied in another context, or to other participants (Brink, Walt & Rensburg, 2015). Researchers do not aim to generalise their findings but rather to obtain information that can also be useful in other setting. This will also be explained in detail in chapter 3

1.15.4 CONFIRMABILITY

Confirmability can be described as a necessary component of trustworthiness in a study conducted by a qualitative researcher. It is the act of accurately displaying a

correlation between data and the information it represents, moreover displaying that the interpretation arrived at is not powered by the researcher's imagination (Brink et.al, 2015). See chapter 3 for more details.

1.16 ETHICAL CONSIDERATIONS

Ethical consideration is a collection of principles and values that should be followed while researching human affairs (Bhasin et al., 2020). Researchers are guided by ethics and obligated to perform their research responsibly using ethical methods.

There are three elementary ethical principles applicable to any research of humans. These are principles of respect, justice and beneficence. These three are used to guide research in the process of undertaking the study (Brink et al., 2016).

Principle of respect for persons

The principal carries three ideas. Firstly, individuals are autonomous; they are fully allowed a right to determine their participation without fearing penalty nor prejudicial treatment. This right gives way to the ability to join a study and withdraw from the study at any time (Brink et al., 2016).

Principle of beneficence

This principle refers to the obligation accepted to act for the benefit of the participants, to respect and uphold their rights, ensuring that no harm falls on the participants (Brink et al., 2016).

The researcher needs to ensure that the participant cannot and may not be harmed by the research problem. If so, the research problem may have to be restructured or abandoned. Prior to initiating the study, due diligence on the originality of the information the study aims to prove must be done. The review also needs to confirm that there is no anticipated direct harm that may fall on the participants (Brink et al., 2016).

Principle of justice

The principle of justice alludes to the rights entrusted to the participant of fair selection and treatment. Researchers are required to select with fairness from the population in which the study takes place (Brink et al., 2016).

1.16.1 INFORMED CONSENT

Informed consent guarantees that voluntary participation is adhered to while protecting participants from any harm (Babbie & Mouton 2016). The researcher must set out, verbally and in writing, clear information about the participants' involvement in the proposed research. The researcher must also draw up a written consent form that will include the title of the project to be investigated. Also included will be an introduction to all activities that will be a part of the research, inviting the participant to participate in the study. Consent form must include the researcher's title and position for the enhancement of the credibility of the study and the purpose of the project. Confirmation of confidentiality is included in the consent form. In this case, the verbal discussion and informed consent were made available in English and Xhosa.

Covid-19 prevention: Participants was screened for Covid-19 before the start of the interviews. The researcher wore a mask and made sure that the participants also wore their masks. Participants were sanitised with alcohol based hand sanitizer to diminish the spread of Covid-19. Participants who had signs of Covid-19 were not allowed in the venue. Social distancing was maintained during the interviews.

1.16.2 VOLUNTARY PARTICIPATION

Voluntary participation is the process whereby participants are participating willingly or voluntarily (Gautier, 2012)

Participants were informed that they would only participate voluntarily to this study; no candidate will be forced to participate. Before interviews take place, the process was explained to all candidates and then those that were willing to participate were given consent forms to sign.

1.16.3 ANONYMITY

Anonymity provides a legally binding proactive blanket to a research participant, guaranteeing that the information collected from them will be kept anonymous (Brink et al.2016). The term 'anonymity' means nameless. The process of upholding anonymity obligates the researcher to uphold the act of keeping the participants' identity confidential. Preferably, the appropriate level of anonymity will be reached once the researcher also finds it difficult to link the participant with their data (Brink, et al., 2016).

1.16.4 CONFIDENTIALITY

Achieved confidentiality refers to the researcher successfully performing the responsibility of preventing any linking of the data gathered during the study (Brink et al.2016). The researcher must inform the participant if ever there is the need to share or publish the information for the benefit of other researchers. They are obligated to uphold the level of confidentiality while assuring the participant that their identity is protected.

1.16.5 PRIVACY

Privacy is where by the participants' information is not shared without his/her knowledge (Brink et al., 2016). The right to privacy was respected by the researcher, as mandated by ethics guided by the level of comfortability expressed by the participant in sharing their private information (Brink et al. 2016). This will be explained in detail in chapter 3.

1.17 DISSEMINATION OF RESEARCH

This thesis will be presented in conferences and will be published in accredited journals. The completed dissertation will be presented to the University of Fort Hare in a CD form. It will also be presented to the Buffalo City Department of Health.

1.18 CHAPTER SUMMARY

This chapter has provided an overview of the study, a statement of the problem, the purpose of the study, the research question and research objectives, the significance of the study, the definition of terms, and has given a brief outline of the research design and methodology. These will be explained further in chapter 3, while chapter 2 covers the literature review.

CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

The researcher's intention in the previous chapter was to provide the background to the study, the problem statement, the purpose and objectives of the study. The objective of this chapter is to explore the knowledge and attitude of health care workers regarding Covid-19 and to explore the psychosocial experiences of health care workers in the Buffalo City Municipality by undertaking a comprehensive literature review. Literature review is a concise summary of the findings or claims that have been established in prior research efforts on a topic. Literature review is a window into the conclusion derived from the accuracy and completeness of the knowledge provided. It provides a supported opinion on what right and on what is wrong, or rather, what is undetermined and what can be added to the existing literature (Knopf, 2016).

A literature search firstly relies on the careful reading of books, journals and reports. After identifying a few keywords that help to define the limitations of the chosen area of research, one can search electronic databases of published literature for previously published work in the field.

2.2 KNOWLEDGE

Mbachu ,Azubuike, Mbachu, Ndukwu, Ezeuko, Udigwe, Nnamani, Umeh, Ezeagwuna, Onah, & Eze, (2020) conducted a study in the south-eastern Nigerian state about the knowledge, attitude, practices, and impact of Covid-19 among health care workers in a south-eastern Nigerian state. The results of the study show that health care workers have knowledge and good practices about Covid-19 and because of the knowledge they use PPE properly; however, they were scared of death due to the disease. A poor attitude towards Covid-19 was noted but it was merely due to the shortage of PPEs. In this study, health care workers have a high level of knowledge about the Covid-19. They know how it started, how to protect themselves from it and they know the complications arising from Covid-19. The results indicate that HCW are scared of Covid-19 but there was nothing that they can do.

Ogolodom, Mbaba, Alazigha, Erondu, Egbe, Golden, Ugwuanyi, Achi, & Eke, (2020) conducted a study; results indicated that most heath care workers were regarded to be infected by covid-19 when they were at work. This study supports the findings of

Ogolodom et al, (2020) as health care workers were found to be infected in the work environment since they were working with known Covid-19 positive patients.

Tadesse, Gebrewahd, & Demoz, (2020) conducted a study in Northern Ethiopia about knowledge and attitude practices and psychological responses towards Covid-19 among nurses during the Covid-19 outbreak in Northern Ethiopia. The results for this study show that nurses have good knowledge about the Covid-19, and they have good infection control practices. The study also revealed that the participants have a good attitude towards Covid-19; however, their psychological response toward the pandemic was disturbed. In this study, results were similar to that of Tadesse et al. (2020) where participants had good knowledge about Covid-19.

Huynh et al. (2020) conducted a study in Ho Chi Minh City about knowledge and attitude towards Covid-19 among health care workers at two district hospitals. The findings showed that HCWs had a high level of knowledge and a positive attitude towards the Covid-19 outbreak. This study also agrees with the study conducted by Huynh et al. (2020), indicating that health care workers had a high level of knowledge of covid 19.

2.3 ATTITUDE

Gebremeskel, Kiros, Gesesew, & Ward, (2021) conducted a study, findings showed that health care workers have a positive attitude, and this is due to the exposure to social media, which is their source of information. In this study, the findings contradict that of Gebremeskel et al. (2021) results, which shows that HCWs displayed negative attitudes about Covid-19.

Limbu, Piryani, & Sunny. (2020) conducted a study in Nepal about health care workers' knowledge, attitude and practices during the Covid-19 pandemic response in a tertiary care hospital of Nepal. The results showed that health care workers have knowledge about Covid-19 and their knowledge correlates with good clinical practice but their attitude is negative. In this study, the findings are similar with that of Limbu et al. (2020). The results indicated that HCWs had a negative attitude about Covid-19 because many families have lost their lives and their colleagues died on a daily basis.

Shi, Wang, Yang, Wang, Wang, Hashimoto, Zhang, & Liu. (2020) conducted a study about knowledge and attitude of medical staff in a Chinese psychiatric hospital

regarding Covid-19. The results indicated that the medical staff of the psychiatric hospital had a positive attitude and were willing to care for psychiatric patients suffering from infection with the Covid-19 virus. The findings for this study differ from that of Shi et al. (2020) which indicates a negative attitude towards health care workers and they are not interested to even go to work.

Kassie ,Adane, Tilahun, Kassahun, Ayele, & Belew. (2020) conducted the study and the findings for this study indicate that some HCWs have a positive attitude about the virus.

Farah, Nour, Obsiye, Aden, Ali, Hussein, Budul, Omer, & Getnet. (2020) conducted a study in Eastern Ethiopia about the knowledge, attitude and practices towards covid-19 among health care workers in public health facilities. Results indicated that health care workers have sufficient knowledge about Covid-19 but their attitude towards the disease was negative. The results for this study are similar to that of Farah et al. (2020), indicating that health care workers have a negative attitude about Covid-19.

2.4 PSYCHOSOCIAL EXPERIENCES

Gupta et al. (2020) conducted a study about the pandemic and mental health of the front-line healthcare workers and the results showed that the mental health problems such as depression, anxiety and stress among health care workers are very high during the Covid-19 pandemic and they are caused by lack of proper PPEs, lack of support from the management and the stress related to their job. In this study, the findings are similar to that of Gupta et al. (2020) which indicates that HCWs were stressed about Covid-19 because they were unable to visit their relatives because they did not want to contaminate them with the virus. They were also concerned about the shortage of PPE and lack of support from the management; however, the support that was highlighted by participants was financial support and psychosocial support, which made them demotivated.

Alwani, Majeed, Hirwani, Rauf, Saad, Shah, & Hamirani. (2020) conducted a study in Pakistan about knowledge practices, attitude and anxiety of Pakistan nurses towards covid-19. The results indicate that the majority of Pakistan nurses experience anxiety that is due to unavailability of PPEs to protect them from the disease. In this study, the findings indicate that HCWs were anxious especially when one of their colleague's

tests positive for Covid-19 and the unavailability of PPEs during a very deadly disease was very stressful.

Temsah, Al-Sohime, Alamro, Al-Eyadhy, Al-Hasan, Jamal, Al-Maglouth, Aljamaan, Al Amri, Barry, & Al-Subaie. (2020) conducted a study in South Arabia about psychological impact of Covid-19 pandemic on health care workers in Saud Arabia. The results showed that health care workers are vulnerable to high levels of stress and depression and they have fear of getting the infection and transmitting it to their families.

Trumello, Bramanti, Ballarotto, Candelori, Cerniglia, Cimino, Crudele, Lombardi, Pignataro, Viceconti, & Babore. (2020) conducted a study in Italy about the psychological adjustment of health care workers in Italy during the covid-19 pandemic. The findings for this study show that HCWs who are working with Covid -19 patients are at high risk of stress, burn out, depression and low compassionate satisfaction. The findings of this study agree with Trumello et al. (2020). HCWs have stress burnout caused by shortage of staff due to quarantine and isolation of Covid-19 positive HCWs.

García-Fernández, Romero-Ferreiro, López-Roldán, Padilla, Calero-Sierra, Monzó-García, Pérez-Martín, & Rodriguez-Jimenez. (2022) conducted a study in Spain about mental health impact of Covid-19 on the Spanish health care workers and the findings showed that Covid-19 has a great impact on the mental health of HCWs and nurses and physician trainees are the most vulnerable. Adequate information and availability of protective measures are associated with emotional wellbeing. In this study, results indicated that Covid-19 had a negative impact on them and caused sadness as the HCWs were dying trying to save lives.

Blekas, Voitsidis, Athanasiadou, Parlapani, Chatzigeorgiou, Skoupra, Syngelakis, Holeva, & Diakogiannis. (2020) conducted a study in Greek about Covid-19 posttraumatic symptoms in Greek heath care professionals. The study revealed that working in health care facilities comes with a moderate psychological burden. In the study findings revealed that HCW were, feeling emotionally drained, arising from the feeling of strain and burden by work due to shortage of staff due to isolation/quarantine.

Nguyen et al. (2021) conducted a study in Vietnam about the psychological stress risk factors, concerns and mental health support among health care workers in Vietnam during the coronavirus disease. The study showed that HCWs working in the Covid-19 task force team experienced worse well-being compared to before the Covid-19 outbreak. In addition, having chronic diseases were independent predictors for having psychological stress outcomes. Most HCWs were concerned about their fear of being exposed to Covid-19 and taking the infection home. Findings also suggested the demand for psychological support, in which most of HCWs wished to have a website provided with psychological knowledge.

Alrubaiee, Al-Qalah, & Al-Aawar, (2020) conducted a study in Yemen about knowledge attitude anxiety and preventative behaviours towards Covid-19 among health care workers. The findings have shown that most health care workers had acquired an adequate level of knowledge about the outbreak of the virus. Concerning the respondents' level of anxiety, the results indicated that nearly half of the respondents had a high level of fear and anxiety regarding the Covid-19 outbreak. Similar results were found in this study where results showed that HCWs suffered from anxiety knowing that they could die any time.

Zaki, Sidiq, Qasim, Aranas, Hakamy, Ruwais, Alanezi, Al Saudi, Alshahrani, Al-Thomali, & Manzar. (2020) conducted a study about stress and psychological consequences of Covid-19 on health care workers in Northern Area Armed Forces Hospital-Kingdom Hospital. The findings indicated that health care workers are at increased risk of developing psychological and mental health issues during the Covid-19 crisis. Findings also suggest that clinical depression was prevalent among health care workers who reported no history of psychiatric disorders prior to the Covid-19. The findings for this study revealed that CHWs had anxiety and were depressed and scared of catching Covid-19.

Vindrola-Padros, Andrews, Dowrick, Djellouli, Fillmore, Gonzalez, Javadi, Lewis-Jackson, Manby, Mitchinson, & Symmons. (2020) conducted a study in UK about the perceptions and experience of health care workers during the Covid-19 pandemic. The results for this study showed that limited personal protective equipment (PPE) created anxiety, distress towards HCWs, and had a tangible impact on the workforce. When PPE was available, incorrect size and overheating complicated routine work.

Lack of training for redeployed staff and the failure to consider the skills of redeployed staff for new areas were identified as problems. In this, study results revealed that PPEs were not enough and did not accommodate the different hairstyles of the health care workers that exposed them to Covid-19.

Jin et al. (2020) conducted a study about perceived infection transmission routes, infection control practices, psychosocial changes and management of covid-19 infected health care workers in a tertiary acute care hospital in Wuhan. The results showed that most staff experienced psychological stress or emotional changes during their isolation period after diagnosis. Protective equipment should be upgraded in hospitals at the onset of a new disease, especially for staff conducting procedures involving close contact and caring for high-risk patients. The findings for this study indicated that Covid-19 brought stress, fear and unhappiness because it changed their lives.

Conti, Fontanesi, Lanzara, Rosa, & Porcelli. (2020) conducted a study about the psychological impact of the covid-19 pandemic on health care workers in Italy; the results showed that Italian HCW experienced a high level of psychological distress. The results for this study indicate that HCWs were isolated during the pandemic. They were scared to go to social gatherings because of the fact that they are nurses and they are perceived as carriers of Covid-19.

2.5 CHAPTER SUMMARY

This chapter has provided the literature review to gain insight from the findings of other researchers on the topic under study. It further discussed more literature as it refers to knowledge, attitude and psychosocial experiences of healthcare workers regarding Covid-19 in South Africa, Africa and internationally. The literature review was based on the objectives of the study.

CHAPTER 3: RESEARCH METHODOLOGY AND DESIGN

3.1 INTRODUCTION

Research methodology is a systemic analysis of methods used in a field of study (Igwenagu, 2018). A detailed view of how the study was done is stated in this chapter. This chapter explains every detail associated with research methods and design, the population of the study, sampling techniques and the sampling size, research instrument, data collection methods and data analysis, and measures to ensure validity, reliability and trustworthiness. Finally, ethical considerations for the study are also described in this chapter. A qualitative descriptive approach was used to describe and explore the knowledge, attitudes and psychosocial experiences of health care workers regarding Covid-19.

3.2 RESEARCH DESIGN

Research design refers to a comprehensive intention for collecting data in a research study (Brink et al., 2016). It is a calculated framework that is used as a bridge linking research questions and the execution or implementation of the research (Durrheim, 2011). In this study, the researcher used a qualitative descriptive explorative and contextual design method to explore and describe the knowledge, attitudes and psychosocial experiences of health care workers regarding Covid-19 in Buffalo City Municipality.

3.2.1 QUALITATIVE RESEARCH

Qualitative research is the non-numerical research that is usually descriptive or theoretical in essence in which the data collected is in word formation or sentences (Kabir, 2016). Qualitative research is the established task which detects the viewer in the world and it contains the correct explanatory, tangible practices that make the world seen (Creswell, 2016). In this study, the qualitative approach was used and achieved through interviews and this method was chosen by the researcher to explore the knowledge, attitudes and psychosocial experiences of health care workers regarding Covid-19 in Buffalo City Municipality.

3.2.2 DESCRIPTIVE DESIGN

Descriptive design involves the exact descriptive summary of the information of the data that is categorized accordingly (Lambert, 2012). Descriptive design is the design that narrates effectively and precisely the reality and features of a particular population

or area of interest (Duloc, 2016). In this study, a descriptive study was used in order to provide an accurate and precise description of the knowledge, attitudes and psychosocial experiences of health care workers regarding Covid-19 in Buffalo City Municipality.

3.2.3 EXPLORATIVE DESIGN

It is defined as a research used to investigate a problem that is not clearly defined and it is applied when there is not much information available in the topic area and the researcher aims to gather some insights about the problem (Grey, 2021). Explorative design is the design that is conducted about a research problem when there are few or no earlier studies to refer to or rely upon to predict an outcome (Collis, 2013). In this study, the researcher used an explorative design to gather some insight about the problem.

3.2.4 CONTEXTUAL DESIGN

Contextual design is defined as the study design that is applied when user's tasks are involving other people or process that needs to be observed to fully understand users' needs or goals (Dell'Era, 2014). The researcher applied a contextual design to collect data in the field. In this study, data was collected at the Cecilia Makiwane Hospital of Buffalo City Municipality.

3.3 RESEARCH SETTING

Research setting is the specific place where the data is collected (Brink et al., 2016). It is the physical, social and cultural site in which the researcher conducts the study (Lisa, 2010). This study was conducted in the Eastern Cape Province, South Africa. The province consists of eight districts namely: Buffalo City Metropolitan Municipality, Sarah Baartman District Municipality, Amatole District Municipality, Chris Hani District municipality, Joe Gqabi District Municipality, OR Tambo District Municipality, Alfred Ndzo District Municipality, and Nelson Mandela Bay Metropolitan Municipality of which one of these districts, Buffalo City, was used in this study. Buffalo City is a Metropolitan Municipality situated on the east coast of the Eastern Cape Province in South Africa. The majority of the population speaks Xhosa. It is divided into three sub-areas namely: East London, Bhisho and Mdantsane of which one of these sub-areas of Buffalo City was used for this study (Mdantsane). Mdantsane is a South African urban township situated in Buffalo City, 15km away from East London and 37km away from Bhisho in

Buffalo City Metropolitan Municipality, Eastern Cape Province. It is the second largest township in the Eastern Cape, and it is divided into 18 units. Mdantsane has a total population of 154,835 of which 99% of them are blacks (Census, 2011). There are 18 clinics including one CHC mobile clinic. Mdantsane has two public hospitals namely: Nkqubela that is a TB hospital and Cecilia Makiwane Hospital that was used in this study. Cecilia Makiwane Hospital (CMH) is a large provincial government funded hospital situated in Mdantsane Township. A tertiary teaching hospital forms part of the East London hospital complex. In this study, data was collected at Cecilia Makiwane Hospital in three wards that were dealing with Covid-19 from March 2020 to March 2021, namely: ICU, Medical and Casualty units.

3.4 POPULATION

This refers to the collective number of people or subjects of interest that specifically meet the criteria required by the researcher to conduct and complete the study (De Vos, 2011). Brink et al. (2016) explain population as a complete set of persons or objects that have similar qualities that the researcher needs. In this study, the population observed were health care workers in a BCM health facility (Cecilia Makiwane Hospital).

3.4.1 TARGET POPULATION

Target population is the group of individuals with whom the intervention intends to conduct research and draw conclusions from (Louise, 2018). The target population is the set of units about which the researcher aims to generalise (Wood & Haber, 2011). In this study, the target population was professional nurses who were working at Cecilia Makiwane Hospital in Covid 19 wards from March 2020 to March 2021.

Inclusion criteria

Professional nurses working at Cecilia Makiwane Hospital who have worked in Covid-19 wards from March 2020 to March 2021 were included.

Exclusion criteria

Professional nurses who were on leave were excluded.

3.4.2 SAMPLE AND SAMPLING

Sampling refers to the process of selecting the sample, a certain number of individuals or subjects from a population. The aim of sampling is to attract and collect information about an occurrence in a way that captures or depicts the interest of the population (Brink, Walt & Rensberg, 2016). Non-probability sampling is a sampling process in which samples are selected from elements or members of the population through a non-random method (Brink et al., 2016).

Convenient sampling is a non-probability sampling procedure that involves the selection of the most readily available people or objects for the study (Brink et al., 2016). In this study, a non-probability sampling method was used and a convenient sampling technique was used to select the participants. Professional nurses who met the criteria and who were on duty on the day of data collection were included in the study. The researcher interviewed 15 professional nurses and stopped as the data was saturated. The participants were five professional nurses from ICU, four professional nurses from medical ward, and six professional nurses from casualty.

3.4.3 RESEARCH INSTRUMENT

Research instruments are tools designed to obtain data on a topic of interest from the research subjects (Taherdoorst, 2016). In this study, a semi-structured interview guide was used as an instrument to collect data containing open-ended questions. Follow up questions were then asked based on the participants' responses that allowed the researcher to probe the interesting points. The aim of this was to capture the richness of the knowledge, attitude sand psychosocial experiences of health care workers regarding Covid-19.

3.5 RECRUITEMENT

Recruitment is the initial interaction between the researcher and the considered participants (Berger, Begun & Otto-Salaj, 2018). The researcher wrote a letter to the CEO of CMH Hospital to request permission to do the research in the hospital. The approval letter from the ethics committee of the university of Fort Hare, the approval from the Eastern Cape department of health, the proposal, letter requesting permission to conduct research study was submitted to the CMH hospital research team, where the purpose and the objectives of the research were explained in detail and the inclusion criteria. After permission letter was granted, the researcher arranged

a meeting with deputy director nursing with all the approvals the researcher has received including the proposal and the interview guide. The deputy director nursing informed the operational managers of the wards (ICU, Casualty and Medical ward) in which data was collected. The operational managers from ICU, Casualty and medical ward acted as gatekeepers by informing their staff (Professional Nurses) about this study in their meetings. The researcher left the contact details so that those that are willing to participate can contact the researcher. Participants contacted the researcher and arranged time for the interview. The researcher was provided with the room that was well ventilated so that the researcher could conduct interviews. The purpose of the study was explained to the potential participants. The researcher explained to the participants that it is voluntary, and they can withdraw from the interviews at any time. The participants signed consent forms before the start of the interview. The researcher conducted a convenient sampling technique to recruit the participants.

3.6 DATA COLLECTION

Data collection is the process of investigating and calculating information on variables of interest in an established fashion that allows one to answer research questions, examine hypotheses and assess the outcomes (Kibir, 2019). Brink et al. (2016) define data collection as the collection of pieces or facts during the research study. The researcher visited Cecelia Makiwane Hospital with all the relevant documents of approval to conduct the study. The purpose and the objectives of the research were presented, and a venue was requested that was conducive that the researcher could use for the interviews. Permission was granted by the CMH research team.

3.6.1 DATA COLLECTION METHOD

In this study, the researcher used semi-structured individual face-to-face interviews to collect data. All participants interviewed met the inclusion criteria for this research as described in chapter 3, namely that all participants had to be professional nurses working at the Buffalo City Municipality at Cecelia Makiwane Hospital who have worked in Covid-19 wards from March 2020 to March 2021. A semi-structured interview is the verbal interchange where one person, the interviewer, attempts to elicit information from another person by asking questions (Longhurst, 2011). The method assisted the researcher to clarify some concepts and to cogitate on the meaning of some statements about the knowledge, attitudes and psychosocial experiences of health care workers regarding Covid-19. In this study, the researcher aimed at

gathering rich, deep descriptions of the research participants' knowledge, attitude and psychosocial experiences of heath care workers regarding covid-19 from their perspective. The researcher asked for a private room that was convenient to conduct the interviews in CMH hospital so that privacy could be maintained. The semi-structured individual interviews were beneficial since the participants became comfortable enough to describe their knowledge, attitudes and psychosocial experiences regarding Covid-19 in BCM without fear that someone overheard their opinions that they were expressing. The participants were very comfortable to give relevant information that enabled the researcher to understand the phenomenon without fear of wasting time during the interview sessions. The participants were comfortable because the interviews were in their work environment. Data was collected in both English and Xhosa, as some of the participants were comfortable to be interviewed in their home language. Data collection took about five weeks starting from 09 October to 14 November 2021.

3.6.2 INTERVIEW PROCESS

In this study, the researcher ensured that all ethical principles were adhered to before undertaking the data collection process. The researcher explained the purpose of the study to the participants and scheduled time that was convenient for the participants. The participants were given consent forms to read and sign and the consent was explained in both English and Xhosa before the interviews. Participants who were willing to participate in the study signed consent forms voluntary. The interview schedule was developed with open-ended questions to guide the researcher. Semi-structured individual interviews were conducted, and they took a maximum of 45-60 minutes each. Each one-on-one interview was conducted in a quiet separate office that was allocated by unit managers to the researcher to avoid disturbances and the office was in the units where the participants were working for convenience. The interviews were recorded using a voice recorder and were kept strictly confidential. Permission to record the information was requested from the participants. All covid-19 protocols were adhered to throughout the interviews. The information recorded was transcribed verbatim. The interviewer was also the researcher for the study. Every participant was informed that this was voluntarily, and they could withdraw at any time. No participant showed any emotions that needed management or intervention. Data saturation is when no new information acquired from the data analysis or when there

are no new themes emerging (Saunders, Sim, Kingstone, Baker, Waterfield, Bartlam, Burroughs & Jinks, 2018.) In this study, the data saturated gradually from the twelfth participant, but the researcher continued until no new information or new theme emerged.

The total number of participants interviewed were 15. The researcher stopped the interviews when the data was saturated. The participants were thanked for their time and for sharing their stories with the researcher. To confirm that no responses were missed, field notes were taken during the process of data collection by the researcher. Confidentiality was maintained throughout the interviews. The information and identities of all participants contained in this research study were dealt with in the strictest of confidence. Anonymity was maintained by using codes and not names. The interview session assisted the researcher to understand the experience of the participants as they were asked to explain their knowledge and describe their attitudes and psychosocial experiences regarding Covid-19 in BCM.

These were the questions asked:

1. Please tell me about your knowledge regarding Covid-19?

2. What are the possible causes of the high infection rate of Covid-19 among health care workers?

3. How do you describe your attitudes towards Covid-19?)

4. What are the psychosocial problems that are faced by professional nurses regarding the Covid-19 pandemic?

Exit question

5. Please tell me if you have anything more you want to tell me about Covid-19?

3.7 DATA ANALYSIS

Data analysis is the process that entails categorising, ordering, manipulating and summarising the data, and prescribing it into meaningful terms. Tech's eight steps approach was used to guide the data analysis process as stated by Creswell (2014). In this, study the researcher:

1. Read all the transcripts and examined hand written data carefully to get the sense of the whole.
2. Chose one interview, examined it once more, asked what it was about, and wrote the findings on the margin of the document.
3. Compiled a list of all topics. Compared and grouped similar topics together and arranged them in major topics, unique topics and leftovers.
4. Abbreviated those topics as codes and wrote the codes next to the appropriate segments of the text.
5. Checked if fresh themes had developed.
6. Alphabetised the codes to ensure that no duplicates occurred.
7. Converted topics into descriptive categories. Used clustering of similar topics and tried to reduce categories.
8. Recoded existing data.

3.8 TRUSTWORTHINESS OF THE STUDY

The principle of trustworthiness, especially that of a qualitative study, lies with and resonates from its ability to display credibility, its ability to portray dependability, its ability to ensure transferability and its ability to maintain confirmability (Grove et al., 2015)

3.8.1 CREDIBILITY

The concept of credibility alludes to the high-level confidence in the truth presented by the data and the information it depicts (Brink, Walter & Rensburg, 2015).

In this study, the researcher established credibility from prolonged engagement in the field. Through a process of member, checking the researcher checked the credibility of the findings and interpretations with participants. The researcher was intensively involved in the study and became the research instrument. The participants narrated their knowledge and their experiences towards Covid-19. The researcher ensured consistency and leading questions were avoided. The researcher asked for clarity whenever there were matters that were not clearly understood.

3.8.2 DEPENDABILITY

Dependability is to provide proof that if the study was to be repeated it should produce the same results, especially if the same participants were to be used (Brink et al., 2015). The researcher ensured dependability for the study by carefully documenting

each step and activity in order to conduct each interview by following the same process. The same semi-structured interview guide was used for all 15 participants. The researcher guaranteed its dependability by cautiously recording each step and activity to conduct each interview by following the same process. The researcher for all conducted interviews used the same interview guide and audio recordings were verified.

3.8.3 TRANSFERABILITY

The test of transferability asks if the findings of the study can be applied in another context or with other participants (Brink et al., 2015). In this study the research design, setting of the study, target population and sampling procedure were clearly explained to allow the study to be replicated by the researchers in the future and to come up with similar conclusions. The clear explanation of the study and the explicit description of the methods that were used was expected to aid transferability especially to the same population.

3.8.4 CONFIRMABILITY

Confirmability is described as the necessary component of trustworthiness in a qualitative study (Brink et al., 2016). In this, study the following enhanced confirmability: careful planning of the research process, design, sampling, and data collection, recording of participants during the interviews, transcribing the raw data from the voice recorder and analysing the raw data and findings through contextualisation. In this study an independent coder analysed the transcripts, reviewed the raw data and recorded information as well as written field notes.

3.9 ETHICAL CONSIDERATIONS

Ethical clearance was obtained by the researcher from the research ethical committee at the University of Fort Hare and the ethics clearance reference number is #2021=09=01=Notununu2 (see Annexure A). An approval letter was obtained from the Eastern Cape Department of Health Research Committee. A permission letter to conduct the study at CMH was provided by CMH research team. Permission was also given to the researcher by the deputy director of nursing who informed and made an appointment for the researcher with the operational managers of the affected wards. Operational managers of the wards (ICU, Medical and Casualty), after understanding what the research was all about and the questions the professional nurses were going

to be asked, informed their staff about the research. Consent to do the interviews was also granted by the participants.

3.9.1 PRINCIPLES OF RESPECT FOR PERSONS

The principle of respect for a person is the process whereby a person has a right to decide whether to participate in the study, without the risk of penalty or prejudicial treatment (Brink et al., 2016). In this study, participants were informed that they voluntarily participated in the study, and they were not penalised for refusal to participate. They were also informed of their right to withdraw from participating in the study at any time. 15 participants participated voluntarily and the purpose of the study was clarified to the participants.

3.9.2 PRINCIPLE OF BENEFICENCE

The principle of beneficence refers to the obligation accepted to act for the benefit of the participants to respect and uphold their rights, ensuring that no harm falls on the participants (Brink et al., 2016). In this study, the researcher made sure that harming the participants was avoided. The researcher monitored physical, verbal responses and signs of distress. During the study, no signs of distress were noted from the participants. The research was conducted in such a manner that participants were not harmed.

3.9.3 PRINCIPLE OF JUSTICE

The principle of justice is the fair selection of participants by the researcher from the population in which the study took place (Brink et al., 2016). In this study, the researcher made sure that the participants were fairly selected for the study.

3.9.4 INFORMED CONSENT

Informed consent is the assurance that voluntary participation is adhered to while protecting the participants from any harm (Babbie & Mouton, 2016). Informed consent refers to the participants' agreement to participate in the research after receiving adequate information and having full knowledge of the study before the study begins (Brink et al., 2016). Informed consent is regarded as a contract between the participant and the researcher and it requires the information disclosure, understanding, voluntariness and consent (Mangset, 2015). The researcher drew up the written consent form that included the title of the research study to investigate the knowledge,

attitudes and psychosocial experiences of health care workers regarding Covid-19 in Buffalo City Municipality and the purpose of the study and the confirmation of confidentiality were highlighted in the consent form. Verbal discussion of the informed consent was done in both Xhosa and English. The consent form was written in English, it was explained to the participants verbally, and the participants signed the consent forms before the interviews to indicate their permission to participate in the study voluntarily.

The participants were screened before the start of the interview. Both the participant and the interviewer were wearing masks. Sanitizer was available to be used by both the interviewer and the participants. Social distance was maintained during the interview. Not any participant showed signs of Covid-19.

3.9.5 VOLUNTARY PARTICIPATION

Participants were informed that they should participate voluntarily in the study. No participants were forced and those who were willing to participate were given consent forms to sign.

3.9.6 ANONYMITY

Brink et al. (2016) define anonymity as the process whereby the identity of the research participant is not known even by the researcher. Anonymity is the provision of a legally binding proactive blanket to a research participant, pledging that the information collected from them will be kept anonymous (Brink et al., 2016).

In this study, the participants were informed that the information collected would be kept anonymous. The researcher removed the names of the participants including any significant aspect of identity when transcribing the data so that the researcher would not know the identity of the participants. The participants were coded. The consent forms that consist of the participants' details were locked in a cabinet and only the researcher was able to see them. The names and identities of the participants were substituted with codes.

3.9.7 CONFIDENTIALITY

Brink et al. (2016) describe confidentiality as the process whereby the identity of the participant is known only by the researcher and it refers to the researcher's responsibility to prevent all data gathered during the study from being linked to the individual participants or made available to any other person.

In this study, the researcher informed the participants that no data would be linked to them and the data collected by recordings and transcribed would be kept in a safe in the University of Fort Hare. Participants were also informed that their names and identities would not be revealed when the study was being transcribed, analysed, reported and published. Data in the form of notes that were taken in the field, voice recordings and transcription are kept in a secured place where only the researcher has access.

3.9.9 PRIVACY

Privacy is the state in which one is not observed or disturbed by other people (Woogara, 2011). Right to privacy refers to the researchers being bound not to tell any person about the details of the study (Brink et al. 2016).

In a study the interviews were conducted in a quiet room, doors were closed and there was a notice that was written 'Do not disturb interview in progresses on the door to avoid any disturbances. Data transcribing was done at home in the researcher's private room using earphones to avoid the possibility of the recording being heard by other people.

3.10 CHAPTER SUMMARY

The chapter addressed the methods used in a qualitative study to explore the knowledge, attitudes and psychosocial experiences of health care workers regarding Covid-19 in Buffalo City Metropolitan Municipality. A qualitative descriptive, explorative and contextual study design was used to conduct this study. A convenience sampling technique was used to recruit the participants for this study. Data was collected through individual interviews and the interviews were recorded with the permission of the participants.

CHAPTER 4: DATA ANALYSIS AND FINDINGS

4.1 INTRODUCTION

The previous chapter explained in detail the methodology and design. In the current chapter, the researcher discussed data collection and the analysis process as well as the characteristics of the participants and the identified themes that address the research questions. The themes discovered are going to be discussed one by one thoroughly with clarification of the applicable identified sub-themes. Each theme and sub-theme discussed is going to be supported by applicable quotations from the participants who took part in the data collection process. Furthermore, the researcher used literature control to support the themes and sub-themes of the study. All the finding divulged serve to respond to the following research questions for the study:

- What is the knowledge of health care workers regarding Covid-19?
- What are the health care workers' attitudes regarding Covid-19?
- What are the psychosocial experiences of health care workers regarding Covid-19?

4.2 DEMOGRAPHIC PROFILES OF THE PARTICIPANTS

15 professional nurses participated in the study. These participants were from Cecilia Makiwane Hospital in three wards (ICU, Medical ward and Casualty ward) that were dealing with Covid-19. Their ages rages from 31 to 59 years old. Their experience as professional nurses ranges from three years to 25 years and all the participants have worked in the Covid-19 ward for more than 12 months. The participants were 3 males and 12 females.

Table 4.1: Demographic profile of the participants

Participants	Designation	Years of experience as a PN	Years worked in the Covid-19 ward	Ethnicity	Age	Gender
01	Professional nurse(PN)	3 Years	17 months	African	31 years	Female
02	PN	5 Years	17 months	African	50 years	Female
03	PN	28 years	17 months	African	54 years	Female
04	PN	2 years	18 months	African	35 years	Female
05	PN	7years 6/12	18 months	African	32 years	Female
06	PN	8 years	18 months	African	40 years	Male
07	PN	11 years	18 months	African	35 years	Male
08	PN	17 years	18 months	African	59 years	Female
09	PN	6 years	12 months	African	31 years	Male
10	PN	14 years	17 months	African	43 years	Female
11	PN	20 years	17 months	African	45 years	Female
12	PN	25 years	18 months	African	51 years	Female
13	PN	5 years	18 months	African	36 years	Female
14	PN	6 years	18 months	African	38 years	Female
15	PN	3 years	18 months	African	31 years	Female

4.3 INTERVIEWS

The researcher conducted semi-structured individual interviews with 15 voluntary participants. The 15 participants interviewed all met the inclusion criteria for the research as narrated in chapter 3, namely: the participants must be professional nurses working at Cecilia Makiwane Hospital and must have worked in the Covid-19 wards from March 2020 to March 2021. The researcher used a tape recorder to transcribe the data from the 15 participants who voluntarily participated in the study. The data collection ceased when the researcher reached the saturation of information about exploring knowledge, attitudes and psychosocial experiences of health care workers regarding Covid-19. The researcher performed data analysis according to Tesch's approach.

4.4 PRESENTATION OF RESULTS

Table 4.2 themes and sub-themes

No	THEME	SUB-THEME
1	Knowledge about Covid-19	1.1. World-wide found Virus: - 1.2. Protective measures to combat it 1.3. Its impact on sufferers 1.4. Logistics to deal with deceased people and funeral parlour attendant 1.5.Possible complications
2	Attitude towards Covid-19	2.1. Stressful 2.2. Hateful attitude 2.3 Scarring 2.4.Demotivating attitude :- Government 's failure to beef up remunerations
3	Possible reasons for high rate of spread of infection	3.1. Shortage of PPEs
4	Psychosocial experience	4.1. Suffer social isolation / marginalised: 4.2. labelling and stigmatization 4.3.Emotionally taxing and draining
5	Unique findings	5.1. Gotten used to it: - no longer scared of it 5.2.Have not experienced shortage of PPEs
6	Suggestions	6.1. Intensify testing 6.2. provide monitory incentives for HCWs sacrificing and high risk taking 6.3 improve working conditions of HCWs 6.4 Implement realistic guidelines 6.5 Improve/boost the immune system

4.4.1 THEME 1: KNOWLEDGE ABOUT COVID-19

All health care workers knew what Covid-19 was, where it all started. They described Covid-19 as a disease that was new to them and then through education and social media, they have to understand it and how to deal with the patients infected with it. They knew the Covid-19 signs and symptoms and they knew how to manage it. Health care workers know the mode of entry and the preventative measures to prevent the spread of the virus. Participants that participated in the study revealed that Covid-19 was highly fatal and worse so with people with comorbidities. Sun, Wang, Han, Gao, Zhu, & Zhang. (2020) revealed that Covid-19 is spreading quickly causing pressure and challenges to nursing staff. According to Malli, Raptis, Papathanasiou, Fradelos, Daniil, Rachiotis, & Gourgoulianis, (2020), health care workers have a lot of knowledge about the covid-19 pandemic.

Sub-theme 1.1 World-wide found virus

Almost all the health care workers highlighted that Covid-19 is a pandemic, it is a global disease. Most of the participants stated that this virus started in China then spread all over the world. Not all people are immune to it because it is a new virus. Some health care workers highlighted that no one is safe with this virus; everybody gets it irrespective of age, race or gender. You get the virus irrespective of the country that you are in. Most of health care workers that participated in the study revealed that Covid-19 is a contagious and deadly condition. Almost all health care workers highlighted that Covid-19 is a very infectious disease. It is an airborne disease that is transmitted via contact or surface that has the virus. Health care workers estimated that about 98% of staff members were infected with Covid-19. They know how it infects people and how to protect themselves from getting it. WHO also announced Covid-19 disease epidemic was a public health emergency (WHO, 2020).

These are the comments from the participants

'*Covid-19 is an infectious disease that started in 2019' (*participant 2).

'Most of the times Covid-19 is fatal' (participant 8).

'Covid-19 is the disease that affects the lungs; it is very infectious' (participant 9).

'Covid-19 is a new infection that affects the lungs; it is very infectious' (participant 4)

Covid-19 could be deadly for some people (Session et al.,2020). Countries were affected globally by Covid-19 then WHO declared it a deadly disease (Salvi & Patanka, 2020).Covid-19 is a contagious infection caused by SARS-Cov-2 virus (WHO,2020)

Covid-19 is a disease that is able to spread from one person to another and it has killed a lot of people world-wide resulting in government initiating lock down to try and minimise the spread.

Participants were also aware of the signs and symptoms of Covid-19:

'Its symptoms are flue like symptoms, some people do not show symptoms, but they test positive for covid-19' (participant 2).

'Covid-19 is a virus that affects mostly the lungs causing difficulty in breathing, lower abdominal pains' (participant 6).

'The current Covid-19 has different symptoms such as high blood sugar' (participant 8).

Ciotti et al. (2020) stated that this disease originated from China and then spread worldwide via contacts with each other. Tadesse et al. (2020) conducted a study in Northern Ethiopia and revealed that Covid-19 is an infectious respiratory illness caused by novel corona virus first identified in Wuhan, China in December 2019.

According to the participants, Covid-19 signs are flue like symptoms, difficulty in breathing, lower abdominal pains and difficulty in breathing.

Elderly people as well as those that have underlying chronic medical conditions are at risk of developing serious illness. Anyone can get sick and die irrespective of age with Covid-19. This virus can spread from a contaminated person's nose and mouth to another person in small liquids drops whenever they sneeze, talk or breathe. It is referred to as a pandemic as it is a global spread of the disease. It is clear that most of the professional nurses had knowledge of the disease.

Sub-theme 1.2 Protective measures to combat it

All health care workers knew how Covid-19 is transmitted from one person to another and they knew how to protect themselves from getting it; however, they highlighted the shortage of PPE to protect themselves from Covid-19.

Comments from the participants

'*You must wear a mask and wash hands regular with soap water or sanitize. Keep social distance when talking to other people' (participant 1).*

*'Protection of yourself from this virus is by washing of hands regularly, wear gloves, cap, boots, sanitize' (*participants 2)

'We prevent infection by washing our hands, wearing masks, wearing PPEs and by isolating infected patients' (participant 11)

'We prevent it by washing of hands with soup water, sanitise every now and then, wearing of masks, wearing of PPE when interacting with patients' (participants10).

'D*o proper wash of hands, keep the distant from one another, wear proper PPE (N95 mask, cap, glove boots and gown and shield)' (*participants 3).

*'To protect yourself from it, you do not go near the patient without PPE; we no longer do four hourly visits. To protect yourself from it you do the washing of hands with soup water, sanitizing keeping distance, wearing of mask and proper PPE' (*participant 4).

*'Keep distance, wear face masks every time, sanitize. At home before I enter, I wash my feet/shoes with water and soap while I am outside the house. Then I enter, wash and wear clean clothes in the house before going to children' (*participant 7).

Participants also mentioned the mode of entry for this virus:

'Mode of entry are eyes and nose. Transmitted via contact, it stays in the surface and is also airborne' (participant 6).

According to Centre for Disease Control and Prevention, utilisation of medical masks by health care workers was recommended during patient care in high-risk situations (CDC,2020). Balachandar, Kaavya, Vivekanandhan, Ajithkumar, Arul, Singaravelu, Kumar & Devi. (2020) indicated that to reduce the transmission of Covid-19; it may be advantageous to use Personal Protective Equipment.

Based on the responses of the participants most of them had knowledge regarding how to protect themselves. The preventative measures to combat the Covid-19 virus especially in health facilities include avoiding touching, cleaning of the surfaces

regularly with disinfectants, frequently cleaning of your hands with soap and water or an alcohol-based hand rub and wearing a well-fitting 3-layer mask and ventilation are also important.

Sub-theme 1.3 its impact on sufferers

Participants revealed that Covid-19 has a huge impact especially on those who suffered and revealed that there are protocols that are in place to deal with patients. Qasim et al. (2020) in the study that was conducted in Pakistan revealed that the Covid-19 pandemic has caused a global health emergency and has great influence on the health care workers, mostly on their mental health.

'Others are asymptomatic that is why we have a policy that says every patient that enters the ICU must be screened and swabbed to test for Covid-19 even if she or he has no symptoms, and that person must be isolated until the results are back and prove that the client is negative on Covid-19' (participant 1).

*'We were also given a gown that we have to wear when dealing with Covid-19' (*participant 2).

Based on the responses of the participants, there were policies that were established to prevent contamination of HCWs by the Covid-19 Virus. Those policies include screening and testing of all clients whether he/she has symptoms or not, and the wearing of PPE to protect themselves from getting the virus. Participants also revealed that there are protocols regarding self-protection.

'To protect yourself from it, you do not go near the patient without PPE; we no longer do four hourly visit' (participant 4).

'*To protect yourself from Covid-19 Avoid crowded places, social distance, wear mask, sanitize before you touch and after touching anything' (*participants 6).

'*We wear scrubs and wear PPE on when we are attending the patient' (*participant 9).

Judging from the participants' responses, protocols regarding self-protection include not going too near the patients without wearing PPE, reducing four hourly visits, avoiding crowded places and practicing social distancing.

Participants revealed that there are protocols that are used in the hospital to protect other people. These protocols include the fact that health care workers should wash before they leave the hospital.

'*We were told to wash when we leave the hospital' (participant 2).*

'*By following government regulations (keep distance, wear face masks every time, sanitize. At home before I enter, I wash my feet/shoes with water soup that are outside the house. Then I enter, wash and wear clean clothes in the house before going to children' (*participant 7).

Participants highlighted that there are hospital logistics about prevention of high rates of infection.

'*We have a policy that says every patient that enters the ICU must be screened and swabbed to test for Covid-19 even if he/she has no symptoms, and that person must be isolated until the results are back and prove that the client is negative on Covid-19' (participant 2).*

Participants' highlighted Covid-19 complications they have experienced:

'The patient is restless and is about to collapse (participant 4).

'Severe shortness of breath, headache high temperature' (participant 3).

'There are so many people that died after being infected by Covid-19' (participant 6).

'I know that it affects respiration and leads to complications such as shortness of breath which simply means the struggle to breath' (participant 12).

Ata, Iqbal, Choudry, Muthanna, Younas, Tabar, Fadah, Sharma, Elazzazy, Hamad, & Omer, (2021) revealed that complications of Covid-19 are respiratory failure, cardiac injury, myocarditis, cardiogenic shock.

Based on the responses given by the participants, Covid-19 complications include restlessness, severe shortness of breath, severe headaches and death.

Sub-theme 1.4 logistics to deal with deceased people and funeral parlour attendants

Participants believed that funeral parlour attendants were not trained enough to deal with Covid-19 corpses and they were putting the HCWs at risk of contracting the virus**.** Patients will die and the undertakers will take a long time to fetch the body. Corpses will stay in the ward for more than six hours.

This is a comment from one of the participants:

'Especially during the early days of Covid-19, a patient will die but the funeral parlour will take a very long time to come and fetch the body. They were not given proper training. Misunderstanding between funeral parlour and the hospital, whereby the corpse will stay for more than six hours because the funeral parlour and hospital are debating with hospital saying the corpse must be taken from hospital to the funeral parlour and the funeral parlour saying the corpse must be taken from the ward to the CMH mortuary' (participant 2).

Prior to receiving a deceased person with Covid-19, funeral directors should evaluate their own infection prevention and control policies and procedures and certify that employees know these practices. This may incorporate equipping them with knowledge in hand hygiene and how to put on and take off PPE (Zavattaro et al., 2020).

The funeral parlour attendants are not acting according to guidelines, corpses are not taken on time and there are misunderstandings between funeral parlours and the hospital mortuary that leads to delay in the collection of corpses in the wards leading to the spread of Covid-19 among health care workers.

Sub -theme 1.5 possible complications

Participants revealed that after they were diagnosed with Covid-19, they developed chronic diseases they have never had before.

These are some of the comments from the participants

'*After I got infected with Covid-19, I remained with Diabetes and High blood pressure conditions which I think are the after effects of Covid-19, of which I didn't have these conditions before Covid-19 diagnoses' (participant 4).*

'Since I was infected by Covid-19, I don't think I fully recovered because I still experience shortness of breath at times however it might be psychological or real, I don't know. At times shortness of breath comes at night on my sleep. My chest is not clear ever since I was diagnosed with Covid-19' (participant 8).

'Ever since I was diagnosed with Covid-19 I have chronic backache that I never had before. I hate Covid-19' (participant 9).

'HCWs died because of Covid-19. Some have chronic illnesses like diabetes hypertension and cardiac because of it' (participant 2).

'I was also affected by Covid -19 and that made me be someone that is always sad. I was physically week after being affected by Covid-19. I went to see a doctor but that did not help' (participant 2).

Dasgupta, Kalhan, & Kalra, (2020) revealed that abnormal glucose metabolism has been reported in 60% of people that were diagnosed with Covid-19. Sarvazad, Cahngaripour, Roozbahani, & Izadi, (2020) revealed that hyperglycaemia and electrolyte imbalance happen in people with Covid-19. Zhou et al. (2020) indicated that chronic comorbidities such as obesity, hypertension, respiratory disease, kidney diseases as well as diabetes can result in serious or deadly results of Covid-19 with obesity being the most common and respiratory disease being the most threatening.

Some participants who are diagnosed with Covid-19 end up having chronic diseases like diabetes, high blood pressure and people do not fully recover from Covid-19 and there are symptoms that do not subside like headaches, backache and shortness of breath.

4.4.2 THEME 2: ATTITUDE TOWARDS COVID-19

Participants indicated that they have developed negative attitudes towards Covid-19 because most of their colleagues have passed on and it made their lives difficult. They are no longer interested in going to work because of this disease. Participants revealed that they are stressed by the fact that they have to take home gowns they were wearing in the ward in order to wash them. There are participants who stated that they are scared of Covid-19. Participants indicated their hateful attitude towards the virus and how demotivated they are towards Government's failure to beef up their salaries.

Farah et al. (2020) indicated that health care workers have sufficient knowledge about Covid-19 but their attitude towards the disease was negative.

Sub-theme 2.1 stressful

Participants felt stressed by the Covid-19 virus, as they knew that it was possible for them to infect their families at home with a virus that is so dangerous, whereby so many people have lost their lives.

Comments from the participants

*'I am unhappy as it changed our lives. We are unable to visit our families, as we are afraid of infecting them with Covid-19. Work is no longer enjoyable' (*participant 2).

*'We have to take the gowns home that we have used and wash them ourselves and that is very stressful to take something that you know that it has got Covid-19 to your home where there are children' (*participant 6).

*'This brings stress and fear because you might spread the same virus that killed many patients in front of you to your kids and family' (*participant 14).

*'I was anxious especially when my colleague tested positive for Covid-19. It was very frustrating' (*participant 5).

The research supports the findings of the study that was done by Temsah et al. (2020) who revealed that health care workers are vulnerable to elevated stress and depression and they have fear of being infected and transmitting the virus to their families. Trumello et al. (2020) revealed that health care workers who are working with Covid -19 patients are likely to have stress burn out and depression.

Based on the responses of the participants, health care workers are stressed and unhappy, as they are unable to visit their families to avoid transmitting the virus to them. They do not enjoy work anymore.

Sub-theme 2.2 scaring

Participants revealed that they are scared of Covid-19 because, unlike other diseases, many people have lost their lives because of it.

These are some of the comments from the participants

*'I am afraid that I will infect my children with it' (*participant 1).

*'It changed my life. I am always afraid, scared, even if someone calls me I always have palpitations' (*participant 2).

*'I am not interested to go to work. I have fear and feeling that I am not doing anything, as people are dying every day' (*participant 6).

*"I had a fear that I will infect my new born baby because I was sleeping with the child in one bed, and my wife is also a nurse" (*participant 7).

*'At first, I feared Covid-19, then in July 2020 I was diagnosed then I experienced the symptoms, I got very cautious of it, then as time went by, I got ignorant about it' (*participant 8).

'As health care workers we had to work on ourselves psychologically so as to be able to assist the clients' (participant 10).

'I am scared but there is nothing I can do (participant 14).

'In the beginning I was also scared; I have little kids and wife. I feared about them being infected. However, I later started viewing it like other diseases' (participant 15).

Covid-19 period has been traumatic for the majority of those health care workers worldwide (Mbiba, Kunonga, Matsvai & Manatse, 2020),

Covid-19 is a very scary disease especially when you have to treat known Covid-19 positive patients and then go back to your children knowing very well that you might be contaminated with it.

Sub-theme 2.3 hateful attitude

Some participants stated that they hate Covid-19 because it killed their colleagues.

Participant's responses:

'I hate Covid-19; it has changed our lives. There are so many diseases but this one is the worst. Covid-19 killed our families, loved ones and colleagues so badly' (participant 9).

*'People hate to see their loved ones dying like flies' (*participant 3*).*

Covid-19 is considered as the cause of a dangerous illness that threatens the lives of those affected (Thobaity, Abdullelah & Alshammari, & (2020)

Covid-19 is a disease that nobody can tolerate, and no one is safe and everyone has the hateful attitude towards it. It is worse and it changes health care workers' lives.

Sub-theme 2.4 demotivating attitude: government's failure to beef up remunerations

In this sub-theme, some participants indicated that they feel demotivated by the way; our government handled the Covid-19 healthcare workers' issues. They feel the government did not meet their expectations whereas health care workers showed dedication to the country.

*'Our government is failing us. Sometimes we are not receiving the needed motivation. We continue putting our lives in danger while we are not receiving the appropriate recommended equipment' (*participant 15*).*

*'Disappointment as we are not appreciated by the government/recognized by government' (*participants 1).

'All government employees were sent to stay at home during the start of Covid-19 and HCWs were the only people that were on the forefront of Covid-19. People were dying every day including HCWs. There was no thank you from the government we had to toy in order to get what is due to us. We were not given even increment this year whereas we were the very people that were in the forefront for Covid-19. Instead of appreciating the HCWs with money government gave it to people that are not working, increasing the old age grant, but what about the HCWs. Government was supposed to motivate HCW' (participant 1).

*'Covid-19 has led me not to be a caring person. It made me numb, I have nothing left. I still care for my patients but once someone dies; I do not feel pain anymore' (*participant 11).

*'Covid-19 left us with bruises, and we were promised that everyone who tested positive for Covid-19 will be given money but it did not happen. We filled the forms, but nothing was done so those things are not motivating to health care workers' (*participants 5*).*

'As much as we were mostly infected in the hospital as health care workers, government has forgotten about us. We were not given any monitory motivation as it was done in other department such as taxi industry and entertainment industry' (participant 8)

'*Government has done nothing to motivate health care workers during Covid-19'* (participant 9)

*'I felt like the government was neglecting us on this one. I wish government can acknowledge HCWs as we did our best in fighting for covid-19 while other government employees were sent home to protect themselves from Covid-19' (*participant 10).

*'I am a little angry towards government because I don't see them doing anything for us HCWs except clapping hands. They are not helping us deal with the financial, emotional and psychological strain this has left us with' (*participant 15).

Hasnain, (2020) agrees that health care workers are in the forefront to combat Covid-19. Increase Health Care Workers compensation is another system government can use to show support to heroic individuals who are in the frontline of the pandemic. Staff motivation and retention may be improved by carefully managing risk allowances or compensation (Chersich, Gray, Fairlie, Eichbaum, Mayhew, Allwood, English, Scorgie, Luchters, Simpson, & Haghighi, 2020).

Government failed health care workers during Covid-19 as they were not provided with financial, emotional and psychological support and government neglected health care workers and government deprived HCW not only increment but also monitory compensation. However, improvement of salaries, benefits, working conditions, supervision, management, education and training opportunities are very crucial for retention and motivation of health care workers.

4.4.3 THEME 3 POSSIBLE REASONS FOR THE HIGH SPREAD OF COVID-19 INFECTIONS

All participants revealed that there was a significant high rate of spread of infection among health care workers due to shortage of PPE. Another reason for the high rate of spread is because HCWs were exposed to patients with Covid-19 on a daily basis and this makes them at risk of contracting the virus.

Sub-theme 3.1 shortage of PPE

Participants revealed during the interviews that there was a shortage of PPEs in the hospital that they believe resulted in the high rate of infection within health care workers.

*'PPE that was given to us was not user friendly and was incomplete. The PPE did not accommodate deferent hairstyles of the health care workers causing them to be exposed to Covid-19. Shortage of PPE such as N95 masks exposed us' (*Participant *1).*

*'Shortage of PPE because we were using more due to patient with hypoglycaemia that require hourly visit' (*participants 7).

'*PPE was not enough, they were out of stock sometimes e.g. N95 and you are unable to see the patient without wearing N9'* (participant 4).

*'Unavailability of PPE, sometimes shortage of it whereby you have wear one thing and not discard' (*participant 6).

Ranney et al., (2020) revealed that U.S.A. hospitals were reporting shortages of key equipment for patients and that equipment includes ventilators and PPEs. Mehrotra, Malani, & Yadav, (2020) in his study revealed that since the beginning of the Covid-19 pandemic, health care systems all over the US have had significant shortages of PPE. This is inconveniencing their potential to maintain health care profession safety while serving or nursing increasing numbers of patients.

Based on the responses of the participants, the PPE that was given to health care workers was not enough to protect them. PPE that was sometimes not available included surgical masks. It also shows that PPE was not complete.

Participants also revealed that high and consistent exposure to known infected cases contributed to high infection rates amongst health care workers.

*About 98 % of staff was infected with Covid-19 because at first they will show symptoms of Covid-19 but test negative for Covid-19 then when you do it after 3 or 4 days they will test positive for Covid-19, so these people were not isolated and we were not wearing the proper PPE because of the negative results (*participant 1)

'The reason why there is a high rate of infection amongst us is because we are exposed to clients with confirmed Covid -19' (participants 3)

*'I think it is because we are always exposed to the disease' (*participant 12).

*'I think the measures are not 100% effective, because this a new thing and we not used to it. I think we still in the process of researching on how to protect ourselves 100%. We are also very exposed and sometimes you cannot tell who is infected. Contact amongst each other may add to the spread' (*participant 15). *'Influx of patients and sharing of the kitchen and the change rooms contributed on the high rate of infections among HCW. If one professional nurse is infected it is easy to infect others because of the things we are sharing' (*participant 1).

According to the study that was done by Sabetian et al. (2021) HCWs are amongst the highest category that has a possibility of contracting the virus due to insufficient PPE, shortage of staff and long working hours. Nguyen et al. (2020) revealed that there is an expansion of risk of Covid-19 infections amid front line HCWs, particularly with individuals who are in contact with Covid-19 patients who had inadequate PPE. Stead, Adeniyi, Singata-Madliki, Abrahams, Batting, Jelliman, & Parrish, (2021) agreed that HCWs are prone to contagious droplets and aerosols placing them at highest risk of infection. Regardless of infection prevention and control procedures in health facilities, HCW are still getting Covid-19 at an increased rate.

Health care workers are being infected because they are the frontline workers and they are exposed to patients with confirmed cases of Covid-19. They are exposed to patients who are critically ill because of the virus and that puts them at an increased risk of being infected by Covid-19. The influx of patients in the hospital are also a contributing factor towards the high rate of infection amongst health care workers. To protect health care workers from getting Covid-19, health care facilities must make

sure that PPE is always available and they follow Centre for Disease Control and Prevention (CDC) procedures and the country's PPE guidelines.

Some participants highlighted that the increased numbers of admissions could be the contributing factor in the high infection rate of health care workers.

*'There is a high number of patients admitted and they are very sick where by when you are dealing with one patient you will be called to attend another patient that is about to die right now so you have to stop and run to the one that is critically ill and by that time there is no time to change the PPE and wear a new one' (*participant 1).

'When a client comes with the injury like, she/he is stabbed and has no signs of Covid-19 s/he is an emergency and sometimes they do not wear masks. The community beat some of these people up, we rush to them and there is no time to wear PPE. After testing them, you find out that they are positive but asymptomatic, that is how we are being infected with Covid-19 as HCWs' (participant 9).

'Dealing with back to back patients that have Covid-19 may increase infection rate' (participant 14).

A study that was conducted by Poletti, Tirani, Cereda, Guzzetta, Trentini, Marziano, Toso, Piatti, Piccarreta, Melegaro, & Andreassi, (2021) agreed that health care professionals are at risk of getting infected with Covid-19 virus because of prolonged contact with individuals who were infected with Covid-19 and the highest was found in HCW who were working in emergency departments and hospital wards due to inadequate supply of PPE and inappropriate protocols whilst caring for patients.

Based on the comments of the participants', the high rate of admission versus shortage of staff contribute to the high rate of Covid-19 infection.

Some believed that the improper way of donning PPEs is one of the things that has contributed to the high rate of infections.

'We were promised training of how to wear protective clothing (donning-putting PPE) *and (doffing*-taking off PPE*)'* (participant 2).

Ahmad, (2020) revealed that avoiding contamination of PPEs during donning and doffing is very critical and needs improvisation. Donning and doffing of PPE must involve compliance to protocols and Covid-19 particularly.

Before caring for a patient diagnosed or suspected of Covid-19, health care workers must get extensive education that will show them when to wear PPE and what is PPE is, how to don (put on) and how to doff (take off), limitations of PPE, and proper care, maintenance and disposal of PPE however training on how to wear the PPEs was a challenge (CDC,2020).

Participants highlighted that they were not trained on how to use the PPE and how to dispose it after use. They also revealed that sometimes because of the ignorance on their side they do not wear masks when they are interacting during lunch times in the kitchen.

'*Ignorance to nurses during tea or lunch time where you have to remove your mask before and during eating at Staff tea break rooms'* (participant 6).

*'Influx of patients and sharing of the kitchen and the change rooms contributed on the high rate of infections among HCW' (*participant 1).

'*We as medical workers might spread it amongst ourselves when we sit during tea breaks, we don't wear PPE's and are vulnerable because we don't know who has it and who does not' (*participant 14).

Stead et al. (2021) agreed that ignorance on HCW during teatime where health care workers will not be wearing their masks also contributed to the increased rate of Covid-19 infections amongst HCWs. Honda & Iwata, (2016) revealed that adherence to appropriate use of PPEs is a challenge due to inadequate training on its usage and tolerability of PPE in the work place.

Participants, ignorance during tea breaks and when they are chatting with one another can lead to transmission of Covid-19.

Few participants stated that when the incubator disconnects they do not think about wearing proper PPE but to run and save lives.

'*In very rare situation, a patient's incubator might disconnect, and their life might be at risk, and you have a short space of time to react to save that person's life so, the only protection you might be able get on time are your gloves' (*participant 14).

*'Sometimes you do not have time to fully shield yourself because some patients are suffering from anxiety that leads to them trying to get off the beds and by doing so they remove their incubators and put their lives in more in risk. In these cases, you have to respond to saving their lives' (*participant 14).

Honda & Lwata (2016) revealed that training of HCWs on how to use PPE is very important to reduce the high rate of infection among HCWs.

Some health care workers are infected during emergency responses where they have to act very fast to save the lives of the patients with no or limited time to wear PPE.

4.4.4 THEME 4: PSYCHOSOCIAL EXPERIENCES

Participants revealed that Covid-19 affected them psychologically and socially especially the part where they will be isolated from their families. Saladino, Algeri & Auriemma, (2020) conducted a study and the results revealed that health care workers are at remarkable risk of psychological and social impact due to the Covid-19 pandemic.

Sub-theme 4.1. Suffer social isolation / marginalised

Participants revealed that they feel isolated from their families as well as from the communities. They are not even comfortable to go to social gatherings because they are professional nurses.

'*Fear to go to social gathering because I am a nurse and I feel like I am caring this virus everywhere' (*participant 1).

*'I am not comfortable to go to gatherings because I am a nurse and people will think I have Covid-19' (*participant 2).

Taylor, Landry, Rachor, Paluszek, & Asmundson, (2020) conducted a study that suggests that many communities have exaggerated estimates that HCWs are carriers of Covid-19.

Health care workers terrify the community, and they avoid them in public spaces, as they imagine them as Covid-19 carriers. Health care workers were isolated during the pandemic, and they were not comfortable to be amongst other people because they think people will judge them.

Sub-theme 4.2 Labelling and stigmatisation

Participants indicated that they were judged in the community because they are health care workers and they worked with confirmed Covid-19 cases.

*'We were chased out of our places that we were renting because of the belief that we will bring Covid-19' (*participant 1).

'Community was very judgmental towards HCWs' (participant 2).

*'In the community people see my home as home full of Covid-19 because I am a nurse' (*participant 3).

Many health care workers in the new epidemics encounter distinguished stigmatisation, isolation and mistrust in their own communities (Chersich et al., 2020)

Based on the responses of the participants, health care workers are stigmatised and discriminated against in the community.

Sub-theme 4.3. Emotionally taxing and draining

Participants highlighted that due to Covid-19 participants were affected emotionally. Family and friends were getting sick and dying every day. Others revealed that they were emotionally drained due to the shortage of staff in the hospital and by the fact that when they are infected by Covid-19, they had to leave their children to go into quarantine to avoid infecting their children.

*'Feeling of guilt when there is someone close to me gets sick because I always think that person got Covid-19 disease from me. Strain or Burden by work because when one staff member is in on quarantine, she/he leaves a shortage in his or her team' (*participant 1).

*'Disbelief from the family when telling them that their loved one has passed away is emotionally taxing and draining' (*participant 12).

According to the study done by Wang et al. (2021), the emotional exhaustion of health care workers was related to the time pressure they perceived.

Based on the responses of the participants, health care workers are drained emotionally as they are losing patients on a daily basis.

Participants highlighted that they were feeling frustrated by this new disease especially when there was shortage of PPEs in the health facilities. They were also frustrated when thinking they could die anytime.

*'I feel frustrated to think that you can die any time, or your family members will be killed by Covid-19' (*participant 1).

*'We were frustrated especially when there was a shortage of PPE like gloves' (*participant 7).

*'I was anxious especially when my colleague tested positive for Covid-19. It was very frustrating' (*participant 5).

Lapum, Nguyen, Fredericks & McShane, (2021) revealed that nurses experienced frustration because of unfair positions.

Based on the responses of the participants, the unavailability of PPE during a deadly disease was a very stressful situation among health care workers.

Some participants revealed that they were sad at times because of the Covid-19 virus.

***'I** think it has had a bad impact on me, it has led to much sadness because I saw some of my colleagues sacrifice their lives to save those of their patients and die from such decisions' (participant 15).*

Lapum et al. (2020) revealed that nurses experience feelings of helplessness and sadness especially when dealing with deteriorating patients.

Health care workers are feeling sad due to Covid-19 and therefore the management should make sure that after the end of each shift there must be a debriefing so that everyone can share their stressors, concerns and their issues. This may assist as teams may learn from each other.

4.4.5 THEME 5 UNIQUE FINDINGS

There were unique findings that were revealed by the participants. There were findings that the researcher heard for the first time. The unique finding that were revealed by a few participants were the fact that they are no longer scared of the virus and they never experienced any shortage of PPE within the hospital.

Sub-theme 5.1 Gotten used to it - no longer scared of it

One of the participants revealed that they are no longer scared of Covid-19 as they are now used to it.

'I could say it is because 'we are used to the pandemic; we are no longer scared as a result we developed bad habits around protecting ourselves' (participant 8).

Mohsin, Agwan, Shaikh, Alsuwaydani, & AlSuwaydani, (2021) believe that health care workers despite having knowledge about Covid-19 are in a state of being without fear and anxiety.

Participant, are no longer scared of Covid-19 and sometimes are not protecting themselves from it.

Sub-theme 5.2 have not experienced shortage of PPE

Two out of fifteen participants revealed that she/he never experienced any shortages of PPE.

'*We are failing because we have all the PPEs just that we are not wearing it' (participant 8).*

'Personally, I have never experienced a shortage in PPEs. There might have been a 5% of staff members who have never had Covid-19, but we have never had a shortage of PPEs. This is why I believe there must be another way in which Covid-19 is spreading. We cannot blame the lack of PPEs for the spread of Covid-19' (participant 12).

According to the study that was done by Stead et al. (2021), health care workers were up skilled on the use of PPE, and they confirmed that PPEs were accessible for health care workers.

PPEs were available but HCWs were being infected with Covid-19 because they are not wearing it consistently and currently.

4.4.6 THEME 6: SUGGESTIONS

There were suggestions that were put by the participants at the end of the interviews. These suggestions were intensifying testing of Covid-19, provision of monitory incentives for health care workers; improve working conditions for health care workers, implementation of realistic guidelines and improving or boosting of the immune system to protect yourself from Covid-19.

Sub-theme 6.1 Intensify testing

Participants indicated that educating the community about Covid-19 and increasing the testing rate would be good for the community.

*'Firstly, I think we need to increase testing of Covid-19; we also need to increase the education of our people' (*participant 15).

*'Strengthen community awareness to the communities about the Covid-19 vaccine' (*participant 7).

A study that was done by Kucharski, Klepac, Conlan, Kissler, Tang, Fry, Gog, Edmunds, Emery, Medley, & Munday, (2020) revealed that strategies that combine isolation of symptomatic cases with tracing and testing of contacts and quarantine of their contacts reduced the transmission rate. Roy et al. (2020) revealed that absence of awareness about Covid-19 often brings about an unconcerned attitude, which may adversely affect readiness to meet these challenges.

Screening and testing of people for Covid-19 as well as strengthening of community awareness campaigns can reduce the transmission rate because when the person knows that he/she has Covid-19 he/she will quarantine/isolate to avoid spreading the virus.

Participants revealed that strengthening of vaccination awareness campaigns, forced vaccination policy as well as dealing with people spreading myths about the Covid-19 could help reduce the spread of Covid-19.

'*Strengthen the vaccination awareness to our people because it works'* (participant 9).

'*Everyone has rights, but I think if everyone was forced to vaccinate then there will be no new cases'* (participants 11).

*'There are lots of myths around vaccination hence we have to strengthen wider health education' (*participants 8).

Moghadas et al. (2021) revealed that vaccination could have a substantial impact on mitigating Covid-19 outbreaks even with limited protection against infection. Mason et al. (2021) in the study that they conducted agree that vaccines are effective at reducing Covid-19 hospitalisation and infections.

Increase awareness of Covid-19 may reduce resistance caused by myths that are circulating around the social media and prevent the Covid-19 virus and then the number of admissions will be less and the number of HCWs infected with Covid-19 will be reduced. In addition, the development of a forced vaccination policy may reduce the number of hospital admissions. If people who are spreading the myth on the social medial can be dealt with, the number of people reluctant to take the Covid-19 vaccine can be reduced.

Sub-theme 6.2 Provide monitory incentive for CHWs sacrificing and high risk taking

Participants indicated that they expected that Government would give nurses monitory incentives just to motivate HCWs as they were risking their lives to protect the country.

*'Motivation in the form of money, we cannot be fighting to receive the money due to us for work done over time. Teachers are paid extra for work that falls outside the scope of their work for example for going to mark papers. This should be treated the same, as we are going the extra mile' (*participant 15).

Lateef, (2020) revealed that keeping health care workers motivated during a crisis is very important. He also revealed that HCWs' motivations are not to be taken for granted because already there is a shortage of HCWs in many countries.

Monitory incentives can motivate health care workers. HCW should be encouraged and recognised for the work they are doing during Covid-19. They are critical in the fight against Covid-19; therefore, increasing their compensation is one way that government could show support and appreciation to them, as they are brave enough to be at the forefront of the pandemic. Monitory incentives for health care workers in

South Africa would act as a motivation and a retention strategy of health care workers as they are already underpaid. Almost all health care workers worked overtime during Covid-19 because of shortage of staff due to quarantine/isolation; therefore, HCW must be paid their overtime money without any glitches.

Participants highlighted that there are myths that are going around the social media and they think that government should do something to stop people from spreading myths.

'*Government should deal directly with people that are sending false information or myths around Covid-19 vaccine. Something should be done; there should be consequences in people sending false information' (*participant 8).

*'I wish people can stop sending myths about covid-19' (*participant 2).

Social media play a huge role in propagating myths and conspiracy theories (Padayachee & Bangalee, 2021). Myths impede vaccination uptake, and it negatively affects the prevention of Covid-19 (Funtonye et al., 2021).

Myths are very disturbing especially about vaccination where the government needs to protect people but people are refusing to be protected because of the myth. Government should develop a policy to deal with people who are spreading myths on the social media platforms as the myths are misleading people and delaying the curve of the Covid-19 virus.

Sub-theme 6.3. Improve working conditions of HCW

Participants highlighted that they want Government to improve working conditions for health care workers by not only providing PPE but also by providing PPE that is in good condition.

'*I think government should pay attention to how they can improve the wellbeing of HCW. Health care workers are frontline workers, but they need to provide the benefits that prove that these people are risking their lives' (*participant 15).

'*I wish government can improve working conditions for health care workers, resources must be made available such as forging machines that belong to the hospital' (*participant 2).

Participants suggested that PPE should be washed in the hospital laundry and not taken home as it is dangerous for their families.

*'HCWs must not take home the gowns that were used in the ward to their home' (*participant 2).

During these challenging times the well-being of the HCW remains critical and important. They must never be overlooked and their duty to care must never be taken for granted (Lateef, (2020)).

Improved working conditions and enough PPE that is in good condition can also motivate health care workers during Covid-19. They will see that they are taken care of and they are loved and protected by government.

Participants highlighted the need for the provision of appropriate working equipment.

*'The machine to test for Covid-19 must be available in CHM because now we are sending specimens to Frere which delays the turnaround time for Covid-19 results' (*participant 2).

*'Enough PPE that is of good standard, HCWs must not take home the gowns that were used in the ward to their home' (*participant 2).

Participants suggested that the used PPE must be left in hospitals.

'*Availability of PPEs, scrubs must be left at the hospital and be washed at laundry to minimize spreading the vaccines to our families' (*participant 6).

*'I would want to ensure that PPE and sanitizers are always available, because there are times where there aren't any' (*participant 14).

Health care workers must use proper PPE when exposed to a patient with suspected Covid-19 (De Perio et al., 2020). Health care workers are being increasingly exposed to the virus and thus are required to strictly adhere to the protocols and use the WHO recommended PPE (Sivasankaran et al., 2020).

Adequate PPE for health care workers is something that government should provide to show support and care, and recognition of health care workers. Health care workers

should not beg for PPEs; they must be always available. It is their right to be protected in the work place.

Sub-theme 6.4 implement realist guidelines

Participants specified that they think government should apply realistic guidelines that suit each department and highlighted things that should be done by those in power.

'*Government should be realistic when strengthening the use of guidelines as the departments are not the same' (*participant 6).

In dealing with Covid-19, different countries and governments have adopted different strategies to communicate guidelines and requirements of the public (Porat, Nyrup, Calvo, Paudyal, & Ford, 2020). Government to help reduce the spread of Covid-19 should strengthen Covid-19 guidelines.

There were participants who suggested that limiting or total avoidance of patient's visitors in the hospital could help to reduce the spread of infection.

*'I would also stop the visitors from coming to the hospital because this only worsen the rate of the spread. I would also limit the number of patients in a ward to allow for proper attention to those in a ward' (*participant 14).

The use of visitor restrictions policies does not apply only to patients and their family (Virani, Puls, Mitsos, Longstaff, Goldman, & Lantos, 2020). Visitor restriction suggests that this policy may directly affect the post-operative experience of patients in several ways, as patients lacking visitors were more likely to be dissatisfied with their overall hospital experience (Ryan et al., 2020).

Restriction of visitors from the hospital and limited number of patients in the ward reduces the spread of Covid-19 infection.

Sub-theme 6.5 improve /boost the immune system

Participants revealed that there are certain remedies that they recommend to improve the immune system such as steaming and drinking home remedies.

*'I suggest that people should do the suggested methods of improving their immune system and improve their breathing such as steaming and drinking home remedies' (*participant 14).

People with low immunity are more prone to this world pandemic. To help or boost immunity the plant-based foods play a vital role by promoting beneficial bacteria in the body (Arshad, Khan, Sadiq, Khalid, Hussain, Yasmeen, Asghar, & Rehana, (2020). Singh, Kumar, & Kumar, (2021) agrees that in this pandemic, precautions and boosting immunity are the best choices to get away from covid-19 infections.

Health care workers should improve their immune systems by drinking home remedies in order to get rid of Covid-19.

4.5 CHAPTER SUMMARY

This chapter presented six themes and twenty sub-themes that were extracted from the findings of the research study. Knowledge, attitudes and psychosocial experiences of health care workers regarding covid-19 were highlighted in these themes and sub-themes. The findings that were identified by the themes and sub-themes during data analysis process were supported by literature control.

CHAPTER 5: CONCLUSION, RECOMMENDATIONS AND LIMITATIONS

5.1 INTRODUCTION

In the previous chapter, the researcher discussed the data that was analysed using literature control. This chapter presents the conclusions obtained from the data analysis with the results of the study having been discussed as well. The researcher will also present recommendations about: knowledge of health care workers regarding Covid-19, attitude of health care workers regarding Covid-19 and psychosocial experiences of health care workers in Buffalo City Municipality. This chapter will also discuss the limitations of the research study.

5.2 THE PURPOSE AND OBJECTIVES OF THE STUDY

The purpose of the study was to explore and describe the knowledge, attitudes and psychosocial experiences of health care workers regarding Covid-19 in Buffalo City Municipality. The researcher adhered to the following objectives:

- To explore the knowledge of health care workers regarding Covid-19 in the Buffalo City Municipality.
- To explore the attitude of health care workers regarding Covid-19 in Buffalo City Municipality
- To explore the psychosocial experiences of health care workers in Buffalo City Municipality.

5.3 THEMES GENERATED FROM THE INTERVIEWS RELATED TO THE KNOWLEDGE, ATTITUDES AND PSYCHOSOCIAL EXPERIENCES OF HEALTH CARE WORKERS REGARDING COVID-19 IN BUFFALO CITY

The study described the knowledge, attitudes and psychosocial experiences of health care workers regarding Covid-19.

5.3.1 Theme 1: Knowledge about Covid-19

All participants knew what Covid-19 was and where it all started. They knew the Covid-19 signs and symptoms and they had knowledge of how to manage Covid-19. Health care workers were aware of the mode of entry and the preventative measures to curve the spread of the virus. Participants who participated in the study revealed that Covid-19 was fatal and worse with people with comorbidities.

Participants indicated that this virus could spread from an infected person's nose or mouth to another person in small liquid particles when they sneeze, speak or breathe. Participants understood that it was referred to as a pandemic as it is a global spread of the disease and they were very much aware of the signs and symptoms of Covid-19. It is clear that most of the professional nurses have knowledge of Covid-19 disease. Malli et al. (2020) who indicated in his study that health care workers have a lot of knowledge about the Covid-19 pandemic supported the notion.

Participants knew the protective measures that are used to prevent Covid-19 and they knew how to protect themselves from Covid-19, but also highlighted the shortage of PPE to protect them. Participants revealed that to protect yourself from the disease you must wear a mask (N95 wear a well-fitting 3-layer mask), wash your hands regularly alcohol-based hand wash and wear a face shield, sanitise, keep social distance, wear gloves and boots and shorten your time next to the patient. Balachandar et al. (2020) agrees that to reduce the transmission of Covid-19, it may be advantageous to use personal protective equipment. The participants also highlighted that the preventative measures to combat the covid-19 virus especially in health facilities include cleaning of the surfaces regularly with disinfectants and ventilation is important. Others highlighted that when they go home from work they wash hands and feet with soup water before they enter in their houses to prevent transmitting it to their families.

Participants also revealed that Covid-19 has a psychological impact on HCW. Qasim et al. (2020) agree that the Covid-19 pandemic has created a global health emergency and has a huge impact on the health care workers, especially on their mental health. Participants indicated that there were policies that were developed to prevent the spread of Covid-19 virus and to protect other people. Those policies include screening and testing of all clients whether he/she has symptoms or not, and the fact that health care workers should wash before they leave the hospital. Participants also revealed the Covid-19 complications include restlessness, severe shortness of breath, severe headaches and death. Ata et al. (2019) agree that complications of Covid-19 are respiratory failure, cardiac injury, myocarditis, cardiogenic shock. Participants also raised a concern about funeral parlour attendants who were not doing things according to guidelines putting health care workers at risk of Covid-19. Misunderstanding or miscommunication between hospital mortuary and funeral parlour delays for the

collection of the corpses and thus spreading the infection. Health care workers also indicated that ever since they were diagnosed with Covid-19 they have chronic diseases such as diabetes, high blood pressure, chronic headaches and backache.

5.3.2 Theme 2: Attitude towards covid-19

Participants specified that they were stressed and unhappy, as they were unable to visit their families to avoid transmitting the virus to them. Trumello et al. (2020) indicated that health care workers that were working with Covid-19 patients were at high risk of stress, burn out, depression and low compassionate satisfaction. Participants also indicated that they were scared of Covid-19 especially when you have to treat known Covid-19 positive patients. Participants commented that they developed a hateful attitude toward Covid-19 as it killed their colleagues, families and loved ones. Participants indicated that they were demotivated by failure of government to provide health care workers with psychological support and monitory compensation to motivate them as they were risking their lives saving other people's lives. Hasnain (2020) agrees that health care workers were on the forefront to fight against Covid-19. Increasing their compensation is one way that Government could demonstrate their support for the brave individuals who were at the forefront of the pandemic.

5.3.3 Theme 3: Possible Reasons for High Spread of Covid-19 Infection

Participants revealed that shortage of PPE was the reason there was a high rate of infection among health care workers including masks. They also revealed that sometime the PPE would be available but not accommodative in some different hairstyles of health care workers. Mehrotra et al. (2020) stated that since the start of the covid-19 pandemic, health care systems across the US have reported substantial personal protective equipment shortage, compromising their ability to keep health care professionals safe while treating increasing numbers of patients. According to the study that was done by Sabetian et al. (2021), health care workers are amongst the highest groups at risk of infection due to insufficient PPE.

Participants commented that health care workers were infected with Covid-19 because they were consistently exposed to known Covid-19 positive patients. Stead et al. (2021) agree that HCW were exposed to infectious droplets and aerosols putting them at increased risk of infection. Some participants indicated that putting PPE on and taking off PPE (donning and doffing) is also a contributing factor because they

were not properly trained on how to do it. Before caring for the patient with confirmed or suspected Covid-19, health care workers must receive comprehensive training on when and what PPE is necessary, how to don it (put on) and how to doff it (take off), limitations of PPE, and proper care, maintenance and disposal of PPE (CDC, 2020).

5.3.4 Theme 4: Psychosocial Experiences

Participants specified that they suffered from social isolation and they were not comfortable to go to social gatherings, they felt like they were carrying Covid-19 everywhere they go and they indicated that people would think they would contaminate them with Covid-19. Taylor et al. (2020) conducted a study that suggests that many communities have exaggerated estimates that HCWs are carriers of Covid-19, fear and avoidance of HCWs was widespread, and was an under-recognised problem during the Covid-19 pandemic.

Participants highlighted that they were being labelled, judged and stigmatised in the community. Some were even chased out of the rooms they were renting. Chersich et al. (2020) agree that many health care workers in the recent epidemics experienced considerable stigmatisation, loneliness and even loss of trust within their own communities.

Participants also stated that it was emotionally taxing and draining especially when the families were in disbelief when you had to tell them that their loved one had passed on. The burden caused by shortage of staff due to quarantine, isolation and sometimes death has been a traumatic experience. According to the study done by Wang et al. (2021), the emotional exhaustion of health care workers was affected not only by direct stressors but also by complications related to psychological issues.

Health care workers revealed that they were feeling frustrated and anxious when one of their colleagues tested positive and when you think that they could die at any time because of Covid-19. Lapum, Nguyen, Fredericks and McShane (2021) conducted a study that revealed that nurses experienced frustration and anger that involved feeling upset because of unfair situations. They also indicated that they were feeling sad when they experienced the death of their colleagues who sacrificed their lives and died saving lives.

5.3.5 Theme 5: Gotten Used to It - No Longer Scared of It

Only one participant revealed that she is no longer scared of the Covid-19. As a result, she developed a tendency of being careless about wearing PPEs. This contradicted with the study conducted by Mohsin et al. (2021) who found that health care workers, despite having knowledge about Covid-19, are in a state of fear and anxiety.

Only one participant did not experience the shortage of PPE with the belief that there might be another way Covid-19 is being transmitted except blaming the PPE shortage. According to the study that was done by Stead et al. (2021) community, health care workers were trained on the use of PPEs and they confirmed that PPEs were available for use.

5.3.6 Theme 6: Suggestions

Participants suggested that screening, testing and, community awareness about Covid-19 should be strengthened. Roy et al. (2020) revealed that lack of awareness about covid-19 often leads to an unconcerned attitude, which may adversely affect the preparedness to meet these challenges.

Participants suggested that awareness campaigns about the Covid-19 should also be strengthened and government should develop a forced vaccination policy because they believe that Covid-19 vaccine is the only thing that can end Covid-19. Moghadas et al. (2021) agree that vaccination can have a substantial impact on mitigating Covid-19 outbreaks even with limited protection against infection. Mason et al. (2021) also agree that vaccines are effective at reducing Covid-19 hospitalisation and infections.

Participants suggested that government should provide monitory incentives to motivate and retain health care workers who are risking their lives to save lives. Lateef (2020) revealed that keeping health care workers motivated during the crisis is very important and also revealed that HCWs' motivations are not to be taken for granted because already there is a shortage of HCWs in many countries.

Participants suggested that government should develop a policy and deal with people who are spreading myths about the Covid-19 because some people do not want to vaccinate because they believe those myths are true. Funtonye et al. (2021) agree that myths impede vaccination uptake and it negatively affects the prevention of Covid-19.

Participants suggested that government should improve working conditions for health care workers including availability of resources/working equipment as well as availability of proper PPE as this can act as a form of motivation. De Perio et al. (2020) agree that health care workers must use proper PPE when exposed to a patient with suspected Covid-19.

Participants suggested that limiting or total avoidance of patient visitors in the hospital could help to reduce the spread of infection. They also encouraged the use of immune boosters to prevent Covid-19. Singh et al. (2021) agrees that in this pandemic, precautions and boosting immunity are the best choices to get away from covid-19 infections.

5.4 LIMITATIONS OF THE STUDY

The following limitations were noted during the study process:

The study was focusing only on exploring knowledge, attitudes and psychosocial experiences of health care workers regarding Covid-19 in Buffalo City Municipality and the study was limited only to Cecilia Makiwane Hospital in the Eastern Cape. Therefore, the study cannot be generalised.

5.5 RECOMMENDATIONS

The findings of the study enlightened knowledge, attitudes and psychosocial experiences of health care workers regarding Covid-19 in Buffalo City Municipality. It is recommended that the manager and the Eastern Cape Department of Health take these recommendations into consideration.

5.5.1 Recommendations from the Participants

- Scrubs for HCWs must be washed in the hospital laundry to avoid exposing the families of health care workers to Covid-19 contaminated clothes.
- PPE must be procured timeously and must be monitored to prevent shortages.
- Community awareness and forced vaccination are recommended to end the Covid-19 virus.
- Development of policy that will prevent spreading of myth in the social media
- Motivation and retention of already underpaid health care workers with monitory incentives.

- Improved working conditions including the availability of Covid-19 testing machines that are in good condition.
- Adequate PPE and formal training on how to wear it is recommended.
- Total avoidance of visitors in the hospital must be strengthened to prevent the spread of Covid-19.

5.5.2 Recommendation from the Researcher

- Covid-19 positive health care workers must be compensated as injury on duty.
- Danger allowance for all health care workers working with Covid-19 patients.
- Psychosocial support/debriefing on a weekly basis for all HCWs working in the Covid-19 wards.
- Moral support and financial support by the Department of Health to all children of health care workers who died because of Covid-19.
- Provision of shelters for all HCWs working with Covid-19 patients as they were chased out of the places they were renting and to prevent spreading Covid-19 to their families.

5.5.3 Recommendations for Further Research

- More research needs to be done to find out why some of the participants who were diagnosed with Covid-19 end up having chronic illnesses such as diabetes, high blood pressure that they never had previously.

5.6 CHAPTER SUMMARY

The researcher's conclusion is that the objectives identified at the beginning of this chapter were achieved. The experiences of research participants that were grouped into six themes were used to describe the knowledge, attitudes and psychosocial experiences of health care workers regarding Covid-19. The results from this study will help the Department of Health to identify their gaps, to understand the challenges experienced by health care workers during Covid-19 and to see to the needs of health care workers, hear their cry and come up with the strategies to mitigate those challenges. In conclusion, this qualitative study aimed to explore and describe knowledge, attitude and psychosocial experiences of health care workers regarding Covid-19 in Buffalo City Municipality. In this study, health care workers were knowledgeable about Covid-19. They knew the signs and symptoms of Covid-19, how to prevent them and its complications.

HCW have negative attitude towards Covid-19 because it killed their family member and colleagues. It is a very stressful and scary disease, HCW are demotivated by the failure of government to beef up remuneration for HCW who risked their lives to help people with Covid-19. Covid-19 is emotionally taxing and has psychosocial impact towards HCWs. They experienced stigmatisation and social isolation from the community; hence, support for HCW is imperative from the department of health.

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ANNEXURE A: UNIVERSITY OF FORT HARE ETHICAL CLEARANCE

University of Fort Hare
Together in Excellence

HEALTH RESEARCH ETHICS COMMITTEE

P.O Box 1054
East London 5200
Tel: +27 (0) 43 704 7368
E-mail: dgoon@ufh.ac.za

ETHICAL CLEARANCE CERTIFICATE
REC-100118-054

Certificate Reference Number:	**Ref #2021=09=01=NotununuZ**
Project title:	Knowledge, attitude and psychosocial experiences of health care workers regarding COVID-19
Nature of Project:	Masters of Public Health
Principal Researcher:	Notununu Z
Student Number:	201928113
Supervisor:	Dr D Murray

On behalf of the University of Fort Hare Health Research Ethics Committee (HREC), I hereby give ethical approval in respect of the undertakings contained in the above-mentioned project and research instruments(s). Should any other instruments be used, these require separate authorization. The Researcher may therefore commence with the research as from the date of this certificate, using the reference number indicated above.

Please note that the HREC must be informed immediately of

- Any material change in the conditions or undertakings mentioned in the document
- Any material breaches of ethical undertakings or events that impact upon the ethical conduct of the research

The Principal Researcher must report to the HREC in the prescribed format, where applicable, annually, and at the end of the project, in respect of ethical compliance.

The HREC retains the right to

- Withdraw or amend this Ethical Clearance Certificate if
  - Any unethical principles or practices are revealed or suspected
  - relevant information has been withheld or misrepresented
  - regulatory changes of whatsoever nature so require
  - the conditions contained in the Certificate have not been adhered to
- Request access to any information or data at any time during the course or after completion of the project.

University of Fort Hare
Together in Excellence

HEALTH RESEARCH ETHICS COMMITTEE

P.O Box 1054
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- In addition to the need to comply with the highest level of ethical conduct principal investigators must report back annually as an evaluation and monitoring mechanism on the progress being made by the research. Such a report must be sent to HREC monitoring@ufh.ac.za.

The Ethics Committee wishes you well in your research endeavours.

Yours sincerely

Professor DT Goon
Chairperson: HREC
6th September 2021

ANNEXURE B: EC DEPARTMENT OF HEALTH ETHICAL CLEARANCE

Province of the
EASTERN CAPE
HEALTH

Enquiries: Yvonne Gixela Tel no: 079 074 0859

Email: Yvonne.Gixela@echealth.gov.za / ygixela@gmail.com

Date: 16 September 2021

Knowledge, attitude and psychosocial experiences of health care workers regarding COVID-19. (EC_202109_009)

Dear Ms. Z. Notununu

The department would like to inform you that your application for the abovementioned research topic has been approved based on the following conditions:

1. During your study, you will follow the submitted protocol with ethical approval and can only deviate from it after having a written approval from the Department of Health in writing.

2. You are advised to ensure, observe and respect the rights and culture of your research participants and maintain confidentiality of their identities and shall remove or not collect any information which can be used to link the participants.

3. The Department of Health expects you to provide a progress update on your study every 3 months (from date you received this letter) in writing.

4. At the end of your study, you will be expected to send a full written report with your findings and implementable recommendations to the Eastern Cape Health Research Committee secretariat. You may also be invited to the department to come and present your research findings with your implementable recommendations.

5. Your results on the Eastern Cape will not be presented anywhere unless you have shared them with the Department of Health as indicated above.

Your compliance in this regard will be highly appreciated.

SECRETARIAT: EASTERN CAPE HEALTH RESEARCH COMMITTE

2030 NDP

TOGETHER, MOVING THE HEALTH SYSTEM FORWARD

ANNEXURE C: APPROVAL LETTER FROM CMH HOSPITAL

Province of the
EASTERN CAPE
HEALTH

Office of Senior Manager Medical Services • Cecilia Makiwane Hospital
Private Bag X 9047 • East London •5200 •South Africa
Tel: 043 708 2132 E-mail: bongiwe.yose-xas@echealth.gov.za: website: www.ecdoh.gov.za

23 September 2021

RE: KNOWLEDGE, ATTITUDE AND PSYCHOSOCIAL EXPERIENCES OF HEALTH CARE WORKERS REGARDING COVID-19. (EC_202109_009)

Dear Ms Z. Notununu

Permission is hereby granted for you to conduct the above mentioned research study at Cecilia Makiwane Hospital subject to the following:

1. Complying with the provision of the permission letter dated 16 September 2021.
2. Complying with your Research Methodology Plan as approved by the relevant ethics committees.
3. Introducing yourself to the relevant management division of the hospital and providing the necessary documentation showing permission and approval of research study to be conducted at the hospital.
4. Ensuring minimal disturbance to the day to day operations of the relevant department of the hospital.
5. Observe the confidentiality of information and participants.

Your compliance in this regard will be highly appreciated and wishing you all the best in your research study.

Dr B.A Yose-Xasa
Senior Manager Medical Services

23/09/2021
Date

ANNEXURE D: LETTER OF CONFIRMATION FROM INDEPENDENT CODER

TO: Student: **Zintle Notununu**

From: AN Mbatha

Address: No: 65 Mc Pherson Street

Ginsberg, King William's Town

5601

Cell: 0837491478/ 076 991 3637.

E-mail Address: adeliciambatha@gmail.com

CERTIFICATE OF CO-CODED WORK: FOR MASTERS STUDENT: Zintle Notununu

This is to certify that I co-coded the work that was sent to me by the student's supervisor

I wish to indicate that I have expertise in doing this kind of work

I have done it to several students' Masters Studies due to my background knowledge of the different designs within qualitative research approach.

I have been used by the Nursing Science Department of University of Fort Hare to perform this kind of work and I have always done it satisfactorily and successfully.

When I do it I always consider the following:

- The title of the study
- Problem statement
- The set objectives
- The questions asked
- The design and methods employed in data collection and analysis
- The specific principles of data collection and analysis followed under each specific design used.

For the work of this particular student I went through all the interviews. I then analysed the data by picking up all relevant "meaning units" from data and wrote these on a separate pages of paper. This was followed by delineating the relevant

Themes and Sub-themes. Sub-sub-themes were then provided under each relevant sub-theme. In analysing data I took into consideration the provided objectives and questions asked during interviews, since there was no list of pre-planned questions provided.

Comments are often given to Student and supervisors.

INDEPENDENT CO-CODER: AN Mbatha (Mrs)

Highest Qualification: Masters in Nursing Education (UKZN)

Signature: ..... Date: ...16th November 2021

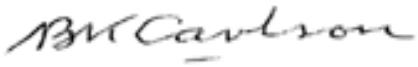
ANNEXURE E: LETTER CONFIRMING EDITING

8 Nahoon Valley Place
Nahoon Valley
East London
5241
30 January 2022

TO WHOM IT MAY CONCERN

I hereby confirm that I have proofread and edited the following dissertation using the Windows 'Tracking' system to reflect my comments and suggested corrections for the student to action:

Knowledge, attitudes and psychosocial experiences of health care workers regarding COVID-19 in Buffalo City Municipality by ZINTLE NOTUNUNU, a mini-dissertation submitted in fulfilment of the requirements for the degree of Master of Public Health at the University of Fort Hare.



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ANNEXURE: F INTERVIEW GUIDE

INTERVIEW GUIDE FOR THE RESEARCH STUDY

SECTION A: DEMOGRAPHIC DATA

Name of the institution	
Designation	
Years of experience as a Professional nurse	
How long did you work in the Covid-19 warm	
Ethnicity	
Age	
Gender	

SECTION B

INTERVIEW QUESTIONS

Questions
1. Please tell me about your knowledge regarding Covid-19?
2. What are the possible causes of high infection rate of Covid-19 among health care workers?
3. How do you describe your' attitudes towards Covid-19?
4. What are the psychosocial problems that are faced by professional nurses regarding Covid-19 pandemic?
5.Please tell me if you have anything more you want to tell me about Covid-19
Probing will depend on the responses of the participants factors

ANNEXURE G: INTERVIEWS

Knowledge attitude and psychosocial experiences of health care workers regarding Covid-19

OBJECTIVES

•To explore the knowledge of health care workers regarding Covid-19 in the Buffalo City Municipality.

•To explore the attitudes of health care workers regarding Covid-19 in the Buffalo City Municipality.

•To explore the psychosocial experiences of health care workers in the Buffalo City Municipality**.**

Participant 1

Interviewer: What is your knowledge about Covid-19?

Participant 1: Covid-19 is the virus that originated from China in 2019.It is an airborne disease, and it is transmitted via contact with a person or surface that has this virus. To prevent it you must wear a mask and wash hands regular with soap water or sanitize. Keep social distance when talking to other people.

Interviewer: What were/are the possible reasons for its transmission among heath care workers?

Participant 1: About 98% of staff were infected with Covid because at first they will show symptoms of Covid-19 but test negative for Covid-19 then when you do it after 3 or 4 days they will test positive for Covid-19, so these people were not isolated and we were not wearing the proper PPE because of the negative results. PPE that was given to us was not user friendly and was incomplete. The PPE did not accommodate different hairstyles of the health care workers causing them to be exposed to Covid-19. Shortage of PPE such as N95 masks exposed us. Ignorant on our side as health care workers especially on the second wave because we tried all that we can to protect ourselves on the first wave, but we were infected with Covid-19 and that discouraged us from protecting ourselves on the second wave because we knew that even if we can protect yourself, we still going to get it. We did everything according to the

guidelines but still we got infected. Influx of patients and sharing of the kitchen and the change rooms contributed on the high rate of infections among HCW. If one professional nurse is infected it's easy to infect others because of the things we are sharing.

Interviewer: Do you think HCW were getting it in the hospital only or outside the hospital?

Participant 1: No, I believe that we got it at work. It was not easy to get it outside.

Interviewer: What is your attitude towards Covid-19?

Participant 1: I feel frustrated to think that you can die any time, or your family members will be killed by Covid-19. I am afraid that I will infect my children with it.

Interviewer: What are the psychosocial problem that are faced by HCW regarding Covid 19?

We were chased out of our places that we were renting because of the belief that we will bring Covid-19. We had to leave our children to go to quarantine sites. Feeling of guilt when there is someone close to me get sick because I always think that person got Covid-19 disease from me. Fear to go to social gathering because I am a nurse and I feel like I am caring a virus everywhere I go. Strain or Budden by work because when one staff member is in on quarantine, she/he leaves a shortage in his or her team. Disappointment as we are not appreciated by the government/recognized by government. All government employees were sent to stay at home during the start of Covid-19 and HCWs were the only people that were on the forefront of Covid. People were dying everyday including HCWs. There was no thank you from the government we had to toy-toy in order to get what is due to us. We were not given even increment this year whereas we were the very people that were in the forefront for Covid-19. Instead of appreciating the HCWs with money government gave, it to people that are not working, increasing the old age grant, but what about the HCW. Government was supposed to motivate HCW.

Participant 2

Interviewer: What is your knowledge about Covid 19?

Participant 2: An infectious disease started in 2019. It affected staff members and their families, community and the world at large. Its symptoms are flue like symptoms, some people do not show symptoms but they test positive for covid-19. HCWs died because of Covid-19. Some have chronic illnesses like diabetes hypertension and cardiac because of it.

Interviewer: What are the signs of a person with Covid-19?

Participant 2: Cough, shortness of breath but others are asymptomatic that is why we have a policy that says every patient that enters the ICU must be screened and swabbed to test for covid-19 even if she or he has no symptoms, and that person must be isolated until the results are back and prove that the client is negative on Covid-19. Protection of yourself from this virus is by washing of hands regularly, wear gloves, cap, and boots, sanitize. Visitors are not allowed to visit for protection purposes.

Interviewer: what are the possible causes of high infection rate of Covid-19 among HCW?

Participant 2: Are the reasons that are beyond HCW especially during the early days of Covid-19 like Covid-19 policies. A patient will die but the funeral pallor will take a very long time to come and fetch the body. They were not given proper training. Misunderstanding between the funeral parlors and the hospital, whereby the cops will stay for more than 6 hours because the funeral pallor and the hospital are debating with the Hospital saying the cops must be taken from hospital to the funeral pallor and the funeral parlors are saying the cops must be taken from the ward to the CHM mutual. The nurse has to clean the equipment that was used to this person and has to clean the environment. Discard other things and clean with biocide and you are not supposed to admit in that ward hours. The general worker will clean the sink, windows and the floor of the word where there was a person who died of covid-19. The ward must be forged (using a certain machine to clean the room air but the institution did not have those machines that were supposed to be used for forging). The hospital was under pressure to admit the patients because there were so many patients that needed the ICU. Many patients needed oxygen to survive they needed beds to save lives so

to admit a patient in that bed was the spreading of infection, but we had to admit anyway. We were promised training of how to wear protective clothing (doffing and donning), but we did not get a formal training as we were shown a video. We were scared of Covid, as it is a life-threatening disease. We are scared of spreading the infection to our friends and family. PPE was/is not enough for health care workers.

Interviewer: do you think HCW were getting the infection in the hospital only or even outside of the hospital.

Participant 2: They can get it outside but there are more chances that they got it in the hospital where they were spending most of their time with Covid-19 positive patients.

Interviewer: can you describe your attitude towards Covid-19.

Participant 2: I am unhappy as it changed our lives. We are unable to visit our families, as we are afraid of infecting them with covid-19.

We were told to wash when we leave the hospital. We were also given gown that we have to be when dealing with Covid -19 patients. We have to take them home and wash them ourselves and that is very stressful to take something that you know that it has Covid to your home where there are children. They are supposed to be taken to laundry not to take them home. At first, we were discarding these clothes but now we are washing them because we do not want to be left with nothing to protect ourselves against Covid-19. Work is no longer enjoyable.

Interviewer: What are the psychosocial problems that are faced by HCW regarding covid-19.

Participant 2: It changed my life. I am always afraid, scared, even if someone calls me I always have palpitations. I was also affected by Covid -19 and that made me be someone that is always said. I was physically week after being affected by Covid. I went to see a Doctor but that did not help. Community was very judgmental towards HCWs.

Interviewer: what is your suggestion or strategies that can be done to improve management of Covid-19: I wish people could stop sending myths about covid-19. I wish people could vaccinate in numbers. I wish government could improve working conditions; resources must be made available like forging machines must belong to

the hospital. The machine to test for covid must be available in CHM because now we are sending specimens to Frere, which delays the turnaround time for covid results. Enough PPE that is of good standard, HCWs must not take home the gowns that were used in the ward to their home.

Participant 3

Interviewer: What is your knowledge about Covid?

Participant three. Covid-19 is the virus that is affecting people worldwide and it attacks the lung making a human being to be unable to breathe. To prevent it people should do proper wash of hands, keep the distant from one another, wear proper PPE (N95 mask, cap, glove boots and gown and shield), doffing and donning in the hospital.

Interviewer: What are the possible reason for high infection rate of Covid-19 among HCWs?

Participant 3: We are exposed in clients with confirmed Covid -19. In the first wave, we experienced a problem where people will show signs of Covid-19 but when you take the swab the results will come back negative, but the signs for Covid-19 are still there and then you take another swab after sometime and the results come back positive.

Interviewer: What is your attitude towards Covid-19

Participant 3: I have negative attitude towards the Covid. People are dying in our homes and our colleagues are dying every day.

Interviewer: what are the psychosocial problems

Participant 3: I feel isolated because I cannot even give my child a hug. It affected me psychologically, I feel like as a nurse I am carrying this virus everywhere I go. In the community, people see my home as home full of Covid-19 because I am a nurse. My husband is afraid of me; there is no love in the house. It is not nice especially in the first wave. I felt so bed and I was scared of dying.

Participant 4

Interviewer: what is your knowledge about Covid 19?

Participant 4: It is a new infection that affects the lungs, it is very infectious. To protect yourself from it, you do not go near the patient without PPE, we no longer do four hourly visit. Shortage of PPE because we were using more because of patient with hypoglycemia that require hourly visit.

Interviewer: what are the signs and symptoms of covid?

Participant 4: severe shortness of breath, Headache high temperature.

Interviewer: How to protect yourself from covid

Participant 4: washing of hands with soup water, sanitizing keeping distance, wearing of mask and proper PPE. After I was infected with Covid 19, I remained with Diabetes and High blood pressure conditions, which I think, are the after effects of Covid-19, of which I did not have these conditions before Covid-19 diagnoses

Interviewer: What are the reasons of high rate Covid-19 infection among HCWs?

Participant 4: PPE was not enough, they were out of stock sometimes, e.g. N95 and you are unable to see the patient without wearing N95. Shortage of PPE, panic/restless from the patients, Patients could not even cope with 40/60%of oxygen and the ICU beds were full (eight bed). Patients would just wake up in their beds to come to the nurses to request to be transferred to ICU by that time it is too late for a nurse to even wear the gloves as the patient is restless and is about to collapse. There was a company that came with a machine that is called Cpep it is very uncomfortable, but it was working to our clients now.

Participant 5

Interviewer: Describe your attitude towards Covid-19

Participant 5: I am used to Covid-19 now; I am no longer scared of it

Interviewer: Effects of Covid-19 to HCWs

Participant 5: during first wave, I could not sleep, I was afraid that I might be next, it was painful and I would always cry especial when I have to give the report to other nurses. I was afraid to take this Covid-19 home. I was anxious especially when my colleague tested positive for Covid-19. It was very frustrating.

Interviewer: Anything that you want to share that is related to covid-19

Respondent: Covid-19 left us with bruises, and we were promised that everyone who tested positive for Covid-19 will be given money but it did not happen. We filled the forms, but nothing was done so those things are not motivating to health care workers.

Participant 6

Interviewer: what is your knowledge about Covid-19?

Participant 6: Covid-19 is a virus that affect mostly the lungs causing difficulty in breathing, lower abdominal pains, mode of entry is eyes and nose. Transmitted via contact, it stays in the surface and is airborne.

Interviewer: what are the Signs of Covid-19?

Participant 6: Red eyes sore through, chest pains, difficulty in breathing body weakness and diarrhea**.**

Interviewer: How do you protect yourselves from Covid-19?

Participant 6: Avoid crowded places, social distance, wear mask, sanitize before you touch and after touching anything. Drink something hot take vitamin c as prescribed to boost your immune system

Interviewer: What are the possible reasons for high rate of infection of Covid-19 among HCWs?

Participant 6: Unavailability of PPE (sometimes) shortage whereby you have to wear one thing and not discard. Ignorance to nurses during tea or lunchtime where you have to remove your mask before and during eating. High number of patients admitted and they are very sick where by when you are dealing with one patient you will be called to attend another patient that is about to die right now so you have to stop and run to the one that is critically ill and by that time there is no time to change the PPE and wear a new one.

Interviewer: Can you describe your Attitude towards Covid-19:

Participant 6: I am not interested to go to work. I have a fear, and feeling that I am not doing anything as people are dying every day. There is a strain towards nurses as the number of patients admitted increases and the number of nurse's decrease due to quarantine and isolation**.**

Interviewer: what is the Impact of Covid-19 to your own health?

Participant 6: If you have been diagnosed with Covid-19, the symptoms do not end. I had chest pains then I was tested for Covid-19 and I was positive ever since then I still experience chest pains but when I go to the x-ray the Doctors do not see anything but the chest pains are there. I am always scared that the Covid-19 might have infected me again and the fear that I will infect my family as there are thing you cannot ignore at home such as touching pots.

Interviewer: what suggestions/strategies could be put in place to improve the management of Covid-19?

Participant 6: availability of PPEs, scrubs must be left at the hospital and be washed at laundry to minimize spreading the vaccines to our families. Government to be realistic when strengthen the use of guidelines, as the departments are not the same. Government has not done enough to motivate the HCW e.g. money was given to people that are not working but us were not given anything, no danger allowance. Other government employees were working from home except healthcare workers .so the little government that should do is to give HCWs money as the government is giving to people that are not working.

Participant 7

Interviewer: What is your knowledge about Covid-19?

Participant 7: Covid-19 is infection of that affects the lungs and causes inflammation of the lungs and be obstructed. There are pipes in the lungs called alveolus if they are swelling them cause the person not to be able to breathe.

Interviewer: What are the sign and symptoms of Covid-19?

Participant 7: Vomiting, hypoglycemia, fatigue, high temperature

Interviewer: How to protect yourself from being infected with Covid-19

Respondent: By following government regulations (keep distance, wear face masks every time, sanitize. At home before I enter, I wash my feet/shoes with water soup that are outside the house. Then I enter wash and wear clean clothes in the house before going to children.

Interviewer: what are the possible reasons for high rate of Covid19 infection among HCWs?

Participant 7: Government think that the PPE that they are giving us is enough whereas it is not as compare to other countries. In other countries, HCWs are given PPE that covers every part of the body. We were told to also wear the disposable plastic apron that is not protecting us at all. Even the scrubs that we are wearing are exposing the neck and other parts of the body, so when the patient cough, Covid-19 can go straight to your neck. We were given masks that were written not for medical use to use for medical conditions.

Interviewer: Do you think you were getting covid-19 only in the hospital

Participant 7: I got Covid-19 here because this is where I am dealing with confirmed cases of Covid-19. I am not using the public transport and when I get home, I do everything that is required to prevent Covid-19.

Interviewer: what is your attitude towards Covid-19

Participant 7: I was afraid of Covid-19 at first, but I am not any more especially now that many people are recovering and the vaccination of people for Covid-19. I had a

fear that I will infect my newborn baby because I was sleeping with the child in one bed, and my wife is a nurse.

Interviewer: what are the psychosocial problems experienced by HCWs regarding Covid-19?

Participant 7: We were stressed especially when there is a shortage of PPE like gloves.

Interviewer: what is the impact of Covid-19 to your own health?

Participant 7: we are used in seeing people that are sick and those that are dead. we are stressed as HCWs especially when losing our colleague. I was afraid that I am going to be the next to die.

Interviewer: Were there any professional person to help you deal with the psychosocial issues:

Participant 7: no and we were not thinking of going to the

Interviewer: What suggestion/strategies that could be put in place to improve the management of Covid-19

Participant 7: strengthening of wearing of masks in the community level. Government must make sure that HCWs do not short of PPEs in the hospitals. Strengthen community awareness to the communities about the Covid-19 vaccine.

Participant 8

Interviewer: can you please tell me your knowledge about covid 19

Participant 8: viral infection of the lungs, causing shortness of breath. The current one has different symptoms like high blood sugar. Most times covid 19 is fatal

Interviewer: what are the signs and symptoms of covid 19?

Participant 8: shortness of breath, low oxygen saturation, high temperature, cough. However, you must be tested.

Interviewer: how do you protect yourselves from getting infected by covid 19?

Participant 8: wearing of PPEs that is musk, gloves, apron, sanitizing of hands, face shields, gowns.

Interviewer: are you then wearing these PPEs?

Participant 8: at first, we used to wear full PPEs including face shields, gowns, gloves, caps and boots however we are no longer doing that practice. I could say it's because we are used to the pandemic, we are no longer scared as a result we developed bad habits around protecting ourselves.

Interviewer: why there is high infection rate among health care workers?

Participant 8: I think like I have mentioned at first we were very cautious but as time went we got used to living with the pandemic so one could care for clients without wearing full PPEs, so we are failing because we have all the PPEs just that we are not wearing it. Again, much as we have PPEs it is not 100% safe, one can be infected whilst wearing it (this is just my assumption).

Interviewer: do you think you are infected by Covid 19 at work only or outside the hospital?

Participant 8: I think both work and the community because much as we are wearing masks in the community, we are not washing hands often as we should. However, I could say we are mostly affected in the hospital because its where we are caring for confirmed Covid 19 clients.

Much as we were mostly affected in hospitals as health care workers the government has forgotten about us, we were not given any monetary motivation as it was done in other departments, taxi industry, sport man, entertainment to mention a few. However, the government totally forgot about frontliners. If I had other ways of leaving, I think myself and many others would have resigned and left department of health.

Interviewer: can you describe your attitude towards Covid 19?

Participant 8: at first, I feared Covid 19, then in July 2020, I was diagnosed then I experienced the symptoms, I got very cautious of it, then as time went by, I got ignorant about it.

Interviewer: What are the psychosocial problems that are faced by health care workers?

Participant 8: I am leaving nearby my grandmother; however, I have not been visiting her because I am scared to infect her, she might not survive the pandemic due to age. As health care workers, our fear is to infect our family members; covid 19 has isolated us a lot from our families and loved ones.

Interviewer: what is the impact of covid 19 to your own health?

Participant 8: since I was affected by covid, I do not think I fully recovered because I still experience shortness of breath at times, however it might be psychological or real, I do not know. At times shortness of breath comes at night on my sleep. My chest is not clear ever since.

Interviewer: What strategies can be done to improved covid 19 management?

Participant 8: Strengthen covid 19 awareness in our communities, especially covid vaccine. There are many myths around vaccination hence we have to strengthen wider health education.

Government should deal directly with people that are sending false information or myths around covid 19 vaccine. Something should be done; there should be consequences in people sending false information.

Participant nine

Interviewer: what is your knowledge about Covid-19

Respondent 5: Covid-19 is the disease that affect the lungs, it is very infectious it a disease from china.to protect yourself from getting the virus you have to sanitize, wash your hands wear mask.

Interviewer: what are the symptoms of Covid 19

Participant 9: sore throat, fever body weakness, body pain it affects people with commodities because they are immunocompromised. When we come to work, we screen every day and check the temperature. We have to sanitize every day. At work the wear PPE to protect ourselves from being infected.

Interviewer: what are the possible reasons of high rate of Covid-19 infection rate among HCWs?

Participant 9: when a client comes with the injury like, she/he is stabbed and has no signs of covid-19 s/he is an emergency and sometimes they do not wear masks. Some of these people were beaten up by the community, we rush to them and there is no time to wear PPE. After testing them, you find out that they are positive but asymptomatic, that is how we are being infected with Covid-19 as HCWs. High rate of infection is sometimes due to shortage of PPE we wear scrubs and wear PPE on when we are attending the patient.

Interviewer: can you describe your attitude toward Covid-19

Participant 9: I hate Covid-19; it has changed our lives. There are so many diseases but this one is the worst. It killed our families, the loved ones, and the colleagues so badly. Ever since I was diagnosed with Covid-19, I have chronic backache that I never had before. I hate covid-19

Interviewer: what are the psychosocial problems that are faced by HCWs about covid -19

Respondent: there is conflict in the workplace ever since the start of Covid-19. There is no unity between team leaders and the workers because if the team leader allocates an individual, that person will think the team leader wants him/her to get Covid-19, this becomes worse if she/he becomes infected with Covid-19. Government has done nothing to motivate health care workers during covid-19. I so wish government would give health care workers some monitory incentives. When I was diagnosed with Covid-19, I infected my child and my husband with it and it hurts especially my husband had diabetes and he recovered very late.

Interviewer: Do you think you were getting Covid-19 at work only

Respondent 9: yes, workplace is the main suspect since it is where we are dealing with people that are sick and were diagnosed with Covid-19.

Interviewer: what is the impact of Covid-19 to your own health?

Participant 9: demoralize because young beautiful people were dying in front of us and I was always thinking that I am next. I was stressed and it was not nice to even wake up and come to work. There were people that were organized by hospital for psychosocial support but it was only one months I so wish it can be a continuous thing.

Interviewer: What strategies/suggestions that could be done to improve the management of Covid-19.

Participant 9: Strengthen the vaccination awareness to our people because it works. Employment of more HCWs to reduce shortage and working under pressure

Participant 10

Interviewer: What do you know about Covid-19

Participant 10: it is a disease that spread that causes shortness of breath. It spread through coughing. It stays in the surfaces and clothing.

Interviewer: what are the symptoms of Covid-19?

Respondent: Shortness of breath, high blood sugar level, diarrhea and vomiting.

Interviewer: how can your prevention/minimizing the spread: washing of hands with soup water, sanitize every now and then, wearing of mask, wearing of PPE when interacting with patients. Wearing of PPE (disposable gloves, shoe covers, gowns, overalls, caps. Some patients come to hospital without mask especially when they come drunk and stabbed.

Interviewer: what is your Attitude towards Covid-19

Respondent 10: I have negative attitude and fear because of its consequences. As health care workers, we had to work on ourselves psychologically to be able to assist the clients

Interviewer: Do you think you were getting the Covid-19 only at work

Participant 10: Yes, because that is where we spent most of our times with people already diagnosed. Crowded wards resulted contributed to high level of cross infection.

Interviewer: Were there any social workers/psychologists to help you deal with the psychosocial issues

Participant 10: No, it was there in talks but not practical because even social workers were afraid of Covid -19 so they were not comfortable to sit with HCW. There were debriefing sessions as groups, which was a once off thing, there was no follow up. I felt like the government was neglecting us on this one. I wish government could acknowledge HCWs as we did our best in fighting for covid while other government employees were sent home to protect themselves from Covid-19.

Interviewer: What is the impact of Covid-19 to your own health?

Participant 10: As a nurse, you deal with death every day and you get hurt then move on. I have psychological trauma due to the death of my colleagues. I once had Covid-19 myself and was scared but was lucky because I am still alive.

Interviewer: What are the Strategies that could be used to improve Covid-19.

Participant 10: Continue with the innovation of employing HCWs to deal specifically with Covid-19 patients

HCWs that are more permanent must be added to fight Covid-19. PPE must be always available.

<u>Participant 11</u>

Interviewer: What is your knowledge about Covid19?

Participant 11: A disease spread through contact. The signs and symptoms include flue like symptoms, dry cough and shortness of breath, nausea and vomiting, fatigue and headaches. I believe it started in 2019.

Interviewer: How do you prevent Covid-19?

Participant 11: We prevent infection by washing our hands, wearing masks, wearing PPE's, by isolating infected patients.

Interviewer: What do you think are the possible causes of high rate of Covid-19 infection amongst health care workers?

Participant 11: I think proper hand washing is not done by HCWs. This might be because there is always something we need to do or a patient to be attended to so people just happen to take off their PPE's and not wash their hands properly. Other reasons might be that workers do not notify anyone when they have symptoms, leading to the spread because of the stigma around Covid-19.

Interviewer: Do you think that HCWs are infected with Covid 19 in the hospital only.

Participant 11: Yes, people do not care in our communities, especially in the taxis, they walk around without masks, but most of the time we spend time in hospital with confirmed Covid-19 patients.

Interviewer: can you describe your attitude towards covid?

Participant 11: Covid-19 has led me not to be a caring person. It made me numb, I have nothing left. I still care for my patients but once someone dies, I do not feel pain anymore.

Interviewer: Do you know any nurse who is your colleague who have died because of Covid?

Participant 11: Yes, I do, a lot.

Interviewer: How did that impact on your own health

Participant 11: It really affected me badly. Each wave broke me down. One minute you would be talking to a patient, the next they are dead. This was very scary for me, both my parents also got Covid-19 and every time I heard of someone's death, I would think of them.

Interviewer: How did your family cope with you working during Covid?

Participant 11: In the first wave, they were very worried and wanted me to take a break and come back to work after Covid-19. They never treated me as someone who was working with Covid-19 patients. They were supportive and loving.

Interviewer: what strategies/suggestions that could be done to improve the management of Covid-19.

Participant 11: Everyone has rights but I think if everyone was forced to vaccinate then there will be no new cases

Interviewer: Is there anything else you would like to add?

Respondent 11: I think we should not panic. Anxiety is not helpful. I think people should believe that they are curable as though they have a normal flue. Their mentality will contribute to their recovery.

Participant 12

Interviewer: what is your knowledge about Covid-19.

Participant 12: Covid-19 to my own knowledge is a disease that affect the lungs. I know that it is a disease that is airborne and it spreads through contact, which is why we strengthen the use of a sanitizer. I believe it is similar to TB; people who have it also experience coughing. It can spread through mouth droplets. This is why we wear masks such as N95 mask. Unlike TB, this disease does not stay in the air for as long because it has heavy particles, and the distance of three meters is sufficient in prevention of its spread. I know that it affects respiration and leads to complications such as shortness of breath, which simply means the struggle to breath. Some patients experience headaches, vomiting and diarrhea. That is what I understand about Covid-19.

Interviewer: What do you think are the possible causes of high rate of Covid-19 infection amongst health care workers?

Participant 12: I think it is because they are always exposed to the disease. Unlike teachers, who are sent home once there is an increase in Covid-19 cases, they cannot stay home and sit safely away from the disease. I believe exposure is the main reason.

Interviewer: Have you ever experienced a shortage of PPE in the hospital

Participant 12: Personally, I have never experienced a shortage in PPE's. There might have been a 5% of staff members who have never had Covid-19, but we have never had a shortage of PPE's. This is why I believe there must be another way in which Covid-19 is spreading. We cannot blame the lack of PPE's for the spread of Covid-19.

Interviewer: Can you describe your attitude towards Covid-19.

Participant 12: I feel bad, unlike all the other diseases we have faced, this one has psychologically affected us. The rate of deaths has been excessive and seeing people die which you have helped recover and maybe gotten to know them. Another challenge is telling families that their loved ones have passed away. Disbelief from the family when telling them that their loved one has passed away is emotionally taxing and draining. Death just seems to be everywhere and even when you leave your shift to go check on your loved ones, finding out that they are no more because of Covid-19 leaves you weak. I saw families die to the point where it is hard to call and notify another family member that their sibling or parent has passed away. It is a relief to hear about the drop in infection numbers, but the second wave really took a piece out of me because I was also admitted and besides that, I dealt with death day and night.

Everything was just covered in fear and death. I would hear families crying on the phone call, even before saying anything just because people saw the phone number and knew that bad news were coming. Covid-19 has brought scenes that I have never seen before. Taking the lives of people who looked healthy. It was hard to bring hope to those people because we, the staff, needed hope. In that way, psychologically it has punished and changed all of us. The number of deaths in the third wave was not as high as those of the second but dealing with death is very hard.

Participant: 13

Interviewer: What do you know about Covid-19?

Participant 13: when we talk about Covid-19, we talk of a virus that enters our bodies through openings, such as the mouth, ears, eyes and our nostrils. What allows for the spread of Covid-19 is contact and touching of each other and objects? Covid-19 also spread through the air hence we must wear masks. To prevent the spread, we have to wear masks, wash our hands or sanitize and maintain a distance to prevent the spread.

Interviewer: What are its symptoms of Covid-19

Participant 13: The symptoms vary and not everyone might get them all. They include a headache, tiredness, sore throat, a flue like feeling, a sore body and troubles breathing.

Interviewer: What do you think are the possible causes of high rate of Covid-19 infection amongst health care workers?

Participant 14: I think it is because they are the most exposed. Dealing with back-to-back patients that have Covid-19. Even with the protective clothing, some patients might cough on to you, the slightest gap might allow it to penetrate and infect the nurse. We as medical workers might spread it amongst ourselves when we sit during tea breaks, we don't wear PPE's and are vulnerable because we don't know who has it and who does not. In very rare situation, a patient's incubator might disconnect, and their life might be at risk, and you have a short space of time to react to save that person's life so, the only protection you might be to get in time are your gloves.

Interviewer: Do you take your PPE off when not attending to patients and then put it back on when returning to attend to patients?

Participant 14: sometimes you do not have time to fully shield yourself because some patients are suffering from anxiety that leads to them trying to get off the beds and by doing so they remove their incubators and put their lives in more in risk. In these cases, you have to respond to saving their lives.

Interviewer: Can you describe your attitude towards Covid-19?

Participant 14: I am scared but there is nothing I can do. We expertise anxiety because sometimes you might find a hole in your PPE or your mask might be too low or your glove might have an opening and you will remember a time when a patient sneezed or coughed on you. Sometimes when feeding a patient, they spit, and it may come on to you. This brings stress and fear because you might spread the same virus that killed many patients in front of you to your kids and family. The worst is finding out that you have Covid-19 while you are at home. This is because you have to self-isolate, and families cannot bear watching you suffer alone.

Interviewer: What suggestions or strategies that could be done to improve management of Covid-19

Participant 14: I would want to ensure that PPE and sanitizers are always available, because there are times where there are not any. I would also stop the visitors from coming to the hospital because this only worsen the rate of the spread. I would also limit the number of patients in a ward to allow for proper attention to those in a ward. I would ensure that people are also doing all the other suggested methods of improving their immune system and improving their breathing such as steaming and drinking home remedies.

Participant 15

Interviewer: What do you know about Covid-19

Participant 15: Covid is a disease that spreads and is called a respiratory infection that is air borne and can be spread through coughing and sneezing. This is the reason we wear masks, to prevent the spread. Other preventative measures include washing hands and sanitizing as well as social distancing.

Interviewer: What are the symptoms of Covid-19 that you are aware of?

Participant 15: The bodily temperature increases beyond 38 and 39 degrees Celsius. People experience shortness of breath, coughing, loss of the ability to taste and smell, and some experience sore throat.

Interviewer: How to protect yourself from being infected with Covid19?

Participant 15: We wash our hands in-between patients, we wear masks, constantly change your PPE, and sanitize.

Interviewer: What do you think are the possible causes of high infection amongst health care workers?

Participant 15: I think the measures are not 100% effective, because this a new thing and we not used to it. I think we still in the process if researching on how to protect ourselves 100%. We are also very exposed and sometimes you cannot tell who is infected. Contact amongst each other may add to the spread.

Interviewer: Do you ever experience shortage of PPE's?

Participant 15: Yes, sometimes we run short of PPE's. Our government is failing us. Sometimes we are not receiving the needed motivation. We continue putting our lives in danger while we are not receiving the appropriate recommended equipment.

Interviewer: What kind of motivation

Participant 15: The right support, educating people enough and helping health care workers or nurses with transport to work. Unlike doctors who are provided with accommodation, we are just expected to be on duty. We are struggling but nothing was done.

Interviewer: Do you think the HCWs that were infected with Covid 19, they got it in the hospital only?

Participant 15: I cannot say it is not possible to be infected outside the workplace because Covid-19 is everywhere.

Interviewer: What is your attitude towards Covid19?

Participant 15: In the beginning, I was also scared; I have little kids and wife. I feared about them being infected. However, I later started viewing it like other diseases. Knowing that we are still going to live with it, means that we must get used to it and learn the rules on how can we deal with it. Otherwise, there is not much we can do.

Interviewer: What impact do you think seeing your colleges and patients die because of Covid19, has had on you?

Participant 15: I think it has had a bad impact on me; it has led to much sadness because I saw some of my colleagues sacrifice their lives to save those of their patients and die from such decisions. It scares me because I think about that before making most of my decisions, even on my way to work. I am a little angry towards government because I do not see them do anything for us HCWs accept clapping hands. They are not helping us deal with the financial, emotional and psychological strain this has left us with.

Interviewer: What suggestions do you have on how we can improve the management of the response to Covid-19?

Participant 15: Firstly, I think we need to increase testing of Covid-19, we also need to increase the education of our people. I think government should pay attention to how they can improve the wellbeing of HCW. Health care workers are frontline workers, but they need to provide the benefits that prove that these people are risking their lives.

Interviewer: What else do you think government can help in proving?

Participant 15: Motivation in the form of money, we cannot be fighting to receive the money due to us for work done over time. Teacher are paid extra for work that falls outside the scope of their work for example for going to mark papers. This should be treated the same, as we are going the extra mile.

ANNEXURE H: LETTER FROM TECHNICAL EDITOR

24 Lutman Street

Richmond hill

Port Elizabeth

6070

16th September 2022

TO WHOM IT MAY CONCERN

I hereby confirm that I have done Technical Editing on the following mini dissertation

EXPLORING KNOWLEDGE, ATTITUDES AND PSYCHOSOCIAL EXPERIENCES OF HEALTH CARE WORKERS REGARDING COVID-19 IN BUFALO CITY MUNICIPALITY

BY ZINTLE NOTUNUNU - 201928113

I Fixed the fonts and font size, added spacing and Set-up Heading H1, H2, H3 and H4 styles. I ensured no headings started at the bottom of the pages. I also set up a Table of contents. Cleaned tables and fitting on page, I replaced the UFH logo in the document, fixed the Annexures. I have done these Edits for the student to produce a clean Professional copy.

Kind regards

MR TIM WILSON
CREATIVE CONSULTANT
CELL: 074 609 0064

WILSON
CREATIVE MEDIA
WHERE CREATIVES MEET

ANNEXURE I: CONSENT FORMS

University of Fort Hare
Together in Excellence

UFH FHREC Stamp

PARTICIPANT INFORMATION LEAFLET AND CONSENT FORM

TITLE OF THE RESEARCH PROJECT: Knowledge attitude and psychosocial experiences of health care workers regarding Covid-19

PRINCIPAL INVESTIGATOR: Zintle Notununu

ADDRESS: No 9 Francolin street, Francolin Place, Unit 32 Gonubie, East London

CONTACT NUMBER: (0680126149)

This study has been approved by the **University of Fort Hare Faculty of Health Sciences Research Ethics Committee (UFH HREC) (Ref No:…….)** and will be conducted according to the ethical guidelines and principles of the international Declaration of Helsinki and the ethical guidelines of the National Health Research Ethics Council. It might be necessary for the research ethics committee members or relevant authorities to inspect the research records.

What is this research study all about?

This study will be conducted at Cecilia Makhiwane Hospital on health care worker's knowledge attitudes and psychosocial experiences regarding Covid-19. The study will involve answering of open-ended questions that will be in the interview guide. The researcher will conduct individual interviews to Health Care Workers, which are all professional nurses that were working in the Covid-19 wards from March 2020 to March 2021. An audio recorder will be utilized with the permission of the participants. The interview will take 45 to 60 minutes and the data will be collected until saturated.

- *The objectives of this research are:*

  -To explore the knowledge of health care workers regarding Covid-19 in the Buffalo City Municipality.

  -To explore the attitudes of health care workers regarding Covid-19 in the Buffalo City Municipality.

  -To explore the psychosocial experiences of health care workers in the Buffalo City Municipality.

Why have you been invited to participate?

You are invited because you are a professional nurse working at Cecilia/Frere Hospital

You will be included if you were working in Covid-19 wards from March 2020 to March 2021.

Professional nurses who are on leave will be excluded from the study.

What will your responsibilities be?

- You will be expected to answer all the questions that are in the interview guide

Will you benefit from taking part in this research?

- **Direct benefits**-The much-needed knowledge, attitudes and psychosocial experiences of health care workers with regards to Covid-19 will contribute positively towards empowerment of health care workers
- **Indirect benefits:** Information from this study may provide the Department of Health with a better understanding of knowledge, attitudes and psychosocial experiences of the health care workers during covid-19.

The results of this study have the potential to influence current policies on the management and care of Covid-19 patients.

Nurses being the largest workforce in the health systems, the generated information could be included in the curriculum in nursing education and also be incorporated into training and workshops for health care workers**.**

Are there risks involved in your taking part in this research?

The high number of deaths due to Covid-19 could affect participants. They could be emotional or psychologically affected due to this pandemic. Arrangements could be made prior the interviews with a psychologist so that the participants could be referred for assistance and all Covid 19 protocols will be adhered to.

Who will have access to the data?

Data collected from interview audio tapes and transcription will be kept in a safe.

No unauthorized person will be allowed to gain permission to view or tamper with the study data.

Researchers and supervisors will have access to the data.

Confidentiality and privacy of participants will be ensured.

As soon as data has been transcribed it will be deleted from the recorders.

What will happen with the data/samples?

- *This is a once off collection of data, it will be analysed and communicated to the CEO's of the two selected Hospitals of Buffalo City Municipality (Cecilia and Frere Hospital) through reports and articles will be published in peer-reviewed journals.*
- *Data will be stored in the UFH locked cabinet and in the computer for 5 years*
- *Researchers and supervisors will have access to the data*
- *Data stored in a computer will be destroyed by means of shedding.*
- *Paper based data will be shredded using UFH shredder*.

Will I be paid to take part in this study and are there any costs involved?

No. you will not be paid, only avail yourself if you are willing to participate in the study

Who can you contact for additional information regarding the study?

The primary investigator Zintle Notununu can be contacted during office hours at (0680126149, or on his cellular phone at. Should you have any questions regarding the ethical aspects of the study, you can contact the supervisor Dr Daphne Murray on (0822240489) or email her at (dmurray at ufh.ac.za). You can also contact Acting Chairperson of the UFH HREC, Prof Leon van Niekerk, during office hours at leonvn@ufh.ac.za or tel. no: +27 (0) 40 602 2435.

How will you know about the findings?

- You will be invited to a feedback session that will take place in both hospitals and any alternative venue.
- The findings of the research will also be shared with the CEOs of the 2 selected hospitals through report.

Declaration by participant

By signing below, I agree to take part in a research study titled: **(***Knowledge, attitude and psychosocial experiences of health care workers regarding Covid-19 in Buffalo City Municipality.*

I declare that:

- I have read this information and consent form and it is written in a language with which I am fluent and comfortable.
- I have had a chance to ask questions to both the person obtaining consent, as well as the researcher and all my questions have been adequately answered.

- I understand that I will taking part in this study is voluntary and I have not been pressurised to take part.
- I may choose to withdraw from the study at any time and I will not be panelised
- I may be asked to leave the study before it has finished, if the researcher feels it is in my best interest, or if I do not follow the study plan as agreed.

Signed at (*place*) .....…..…… on (*date*) ……...……. 20....

Do you agree to provide patients' medical records as approved by the Head: Eastern Cape Health for this study? (Mark your answer with an X)

Yes, I consent	
No	

Declaration by person obtaining consent

I *(name)* …… declare that:

- I explained the information in this document to ……..
- I encouraged him/her to ask questions and took adequate time to answer them.
- I am satisfied that he/she adequately understands all aspects of the research, as discussed above
- I did/did not use an interpreter.

East London

Signed at (*place*) ..... on (*date*) ……..…… 20....

....

Signature of person obtaining consent **Signature of witness**

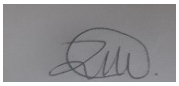
Declaration by researcher

I *(name)* …… Zintle Notununu …….…… declare that:

- I explained the information in this document to ……
- I encouraged him/her to ask questions and took adequate time to answer them.
- I am satisfied that he/she adequately understands all aspects of the research, as discussed above
- I did/did not use an interpreter.

East London

Signed at (*place*) ……..…… on (*date*) ……...……. 2021



…….. ……..

Signature of researcher **Signature of witness**