The experiences of women in accessing maternal health care services during Covid-19: a case study of Mmabatho, North-West

MZ Mohulatsi

orcid.org/0000-0002-5476-4757

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Supervisor: Prof TC Garutsa

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Student number: 25351265

Declaration of Authorship

I**, Makgake Ziphorah Mohulatsi,** declare that the content of this dissertation is solely my work and has never been submitted to any other university for any degree.

Signature: …… **Date:** …….

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Dedication

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Abstract

Access to maternal healthcare has been a challenge for women historically, particularly those residing in marginal rural communities in Africa. Scholars have shown that the challenge of access and utilisation of maternal healthcare services was further compounded by additional factors such as the outbreak of the Coronavirus disease of 2019 (Covid-19) pandemic. Measures put in place during the pandemic such as lockdowns, stay at home orders and curfews resulted in women failing to access maternal health care services and protracted delays in receiving care at health centres due to shortages of health care workers.

Regarding expectant mothers a number of scholars have argued that there was an increase of complications during pregnancy and childbirth as more resources were diverted to the Covid-19 pandemic. However, there is a dearth of knowledge with respect to experiences and health seeking behaviours of women during pregnancy, childbirth and new-born care during the Covid-19 pandemic. To this end, this study aimed to examine the experiences of women accessing maternal health care services during the Covid-19 pandemic outbreak. Andersen's behavioural model and Bourdieu's theory of social practice were used to interpret and understand the experiences of women accessing maternal health care during the Covid-19 pandemic. The study used the qualitative research method, and this was done using the in-depth interview method. The study was undertaken in Mmabatho Unit 9 and in Montshioa unit 1 clinics which are major service providers of maternal health care services within Mmabatho, North-West. Thirty women in their reproductive years who were aged between 20-55 years old both from the lower- and middle-income classes participated in the study. Non-probability methods such as purposive and snowball sampling techniques were utilised in selecting participants for the study.

Findings from this study revealed that the experiences of women in accessing and providing maternal healthcare services play a vital role in guiding healthcare practices. It also found both negative and positive experiences in accessing maternal health care services. For instance,

cases of nervousness were reported because some women reported having been anxious because of different reasons other than possibly being infected with the Covid-19 virus. Most women expressed concerns regarding the impact of reduced contact on access and quality of maternal health care services. On the other hand, the findings from the study indicated that the pandemic gave them the opportunity to spend more time with their families which also resulted in an upsurge of intimate partner violence during the same period. The government implemented various programs to cater for expectant mothers during the Covid-19 pandemic. The study recommends adequate funding to ensure continuity of maternal health care in terms of prevention of infection, adequate supplies, and control of Personal Protective Equipment. The study also recommend that the government ensure that health centers use mobile health including but not limited to, m-health services and telemedicine so as to ensure the continuity of service provision during pandemics or crisis periods where in-person visits are difficult.

Keywords: *Coronavirus, women, maternal health care, access, equality.*

List of Abbreviations

AIDS	Acquired Immunodeficiency Syndrome
BP	Blood Pressure
CDC	Centre for Disease Control and Prevention
Covid-19	Corona Virus Disease of 2019
HIV	Human Immunodeficiency Virus
MDGs	Millennium Development Goals
NCCEMD	National Committee on Confidential Enquiries into Maternal Deaths
PMTCT	Prevention of Mother to Child Transmission
SDGs	Sustainable Development Goals
SADHS	South African Demographic Health Survey
UN	United Nations
USA	United States of America
WHO	World Health Organization

Contents

List of figures

List of tables

CHAPTER ONE

GENERAL INTRODUCTION

1.1. Introduction and Background

Disease outbreaks that occur on a global scale cause a rapid increase in morbidity and mortality over different geographical areas. This in turn leads to immense social, political, and economic disruptions (Estifanos *et al.,* 2021; Huber *et al.,* 2014; World Health Organization, 2014). The likelihood of disease outbreaks has increased as compared to the previous century According to World Health Organization (WHO) (WHO, 2022), as of 4 May 2022, the Covid-19 confirmed cases were approximately 511 965 711 with 6 420 619 Covid-19 related deaths globally while in South Africa the confirmed cases have increased to 3 798 413 resulting in 100 370 deaths and close to 96,7 percent recovery rate from approximately 196 372 confirmed cases resulting in 4 811 deaths within the North-West province (North West Department of Health, 2022; SABC News, 2022). Some of the global disease outbreaks that have occurred in the past include the Ebola virus which occurred in West Africa in 2014 and claimed nearly 11300 lives of people with 8% of doctors, nurses and midwives losing their lives as frontline workers. The Ebola virus did not only claim lives of people in Guinea, Sierra Leone and Libya, it also affected the governing of health care facilities. Health care facilities closed scaled down operations due to the fear of contracting the virus and as a result of this, 31% of pregnant women failing to access maternal health care services. Another disease outbreak was the Zika virus which occurred in Brazil in 2015 which was associated with severe complications during pregnancy (Estifanos *et al.,* 2021; Henwood *et al.,* 2017; Rice *et al.,* 2018; Zorrilla *et al.,* 2017).

Disease outbreaks in general produce different gender vulnerabilities as women are often disproportionately and negatively affected by pandemics or epidemics. Most studies have indicated women being particularly vulnerable to the conditions that disease outbreaks create (Baker-Austin *et al.*, 2010; Moyakhe; 2014; Mogashoa & Pelser, 2014). Although many interventions and policies incorporate gendered lens in coming up with mitigations and responses to disease outbreaks, it is usually done as an afterthought. Put differently, this gendered analysis in most cases does not comprehensively recognize the different experiences in different demographic groups representing the most vulnerable section of society (Baker-Austin *et al.,* 2010; Moyakhe; 2014; Mogashoa & Pelser, 2014).

Antenatal, childbirth and postnatal care during disease outbreaks are of importance as they contribute to reducing and preventing complications during and after pregnancy. Quality, relevant and safe care is therefore essential in ensuring that both the mother and the child are safe from harm so as to reduce the incidence of maternal morbidity and mortality (Ashish *et al.,* 2020; Barden-O'Fallon *et al.,* 2015; Gizelis *et al.,* 2017). As emphasized by Ashish *et al.,* (2020) & Barden-O'Fallon *et al.,* (2015), during disease outbreaks many countries prioritise maternal healthcare. This has been proven through global statistics which show that maternal mortality has significantly dropped by almost 38% in 2017 compared to the previous years (Gizelis *et al.,* 2017; Henwood *et al.,* 2017; Pant *et al.,* 2020).

The Coronavirus (Covid-19) pandemic exerted increased pressure on the health care systems of most countries globally, with pregnant women encountering the most adverse situations. The Covid-19 pandemic and resultant measures that were put in place such as lockdowns adversely affected the provision of services of maternal healthcare such as include antenatal, postnatal, and new born care (Chitungo *et al.,* 2022; Dzinamarira *et al.,* 2022). Pregnant women faced

challenges in accessing transport to health care facilities and lack of healthcare as health workers were focusing more on the management of patients of Covid-19 compared to other medical conditions (Ashish *et al.,* 2020; Pant *et al.,* 2020). In 2017 over 295,000 deaths occurred globally related to pregnancy and delivery complications as a result of a significant decline in the utilisation of services of maternal healthcare. In assessing why there are often insufficient maternal healthcare services, Pant *et al.,* (2020) developed the three-delay model which include factors such as delays in accessing maternal health care services, delay in reaching different healthcare facilities and delay in decision making to seek health care services. According to the results of the study, the three-delay model was used to assess the impact that the delays identified during the study had on the decrease in the use of maternal healthcare services (Beni & Maurizio, 2020; Pant *et al.,* 2020; United Nations, 2020; Woodley, 2020;). The empirical evidence of the study indicates that the Covid-19 pandemic has thoroughly highlighted the importance of proactive preparedness in health across the world daily, not just reactive responses during disease outbreaks. Additionally, special attention must be shifted to new born babies and women accessing services of maternal healthcare during the pandemic as they have heightened risk of contracting the virus (Pant *et al.,* 2020). In South Africa, quality delivery of healthcare is an obligation of the government as stated on section 24 of the South African constitution of 1996. Chapter four, section 24 of the constitution clearly state that every South African citizen has the right to quality healthcare (Africa, 2020; Baker-Austin *et al.,* 2010; Maphumulo & Bhengu, 2019; Mogashoa & Pelser, 2014; Moyakhe; 2014).

The Department of Health (2017), assert that the private healthcare sector consists of 80% health care workers serving 16% of the population while the rest of the public healthcare sector is left understaffed. Pretorius & Klopper (2014) also noted that healthcare facilities in urban communities are designed to cater only for a certain number of people and therefore, cannot cater for more than the required number because it might lead to overcrowding and as a result negatively impact

the quality in the delivery of healthcare services (Pretorius & Klopper, 2014; Kamndaya *et al.,* 2014; Naidoo, 2012; Department of Health, 2017; ECONEX, 2013).

This scenario leads to insufficient services due to the strained budget. A large number of South Africans cannot access health care services inclusive of maternal healthcare and if women cannot access proper services or no services at all, the insufficiency of healthcare services results in complications during and after pregnancy and also resulting in high mortality rate. (Department of Health, 2017; Kamal-Yanni, 2015; Huber *et al.,* 2018).

Based on the background discussed above the next section presents the problem of the study.

1.2 Problem statement

Antenatal, childbirth and postnatal care are very important phases in every childbearing woman's life and health. The quality, relevant and safe maternal healthcare is essential in making sure that both the mother and the child are safe from harm and possibly prevent maternal mortality and maternal morbidity. Most countries have prioritised maternal health care and it has become evident in the global statistics as maternal mortality has significantly dropped by almost 38% in 2017 compared to the previous years. This has been the principal target of the Sustainable Development Goals 3, which is the improvement and advancement of maternal and child health care (WHO, 2019). This makes it important to provide an overview, briefly displaying the importance of access to maternal healthcare by highlighting the consequences of poor maternal healthcare services and how the Covid-19 pandemic has negatively impacted access to maternal health services. The potential socio-economic repercussions of poor maternal healthcare services are quite palpable, and they can be expressed on children, mothers, families and households as well as on communities and society. On the part of the children, findings from Kusiako *et al.,* (2000) and Vogel *et al.,* (2014) revealed that poor maternal healthcare led to an increased mortality rate for children. This was evident in the study of Moucheraud *et al.,* (2015), who found

a high level of neonatal mortality due to maternal mortality. It was further discovered that 81% of children whose mothers died during delivery also died; because they are 46 times more likely to die after the first month of birth compared to children whose mothers survive the consequences of poor maternal healthcare. Knight & Yamin (2015) reported similar findings in South Africa noting an increased rate of maternal death due to inefficient and poor maternal healthcare services. It was also found that the surviving children lose the opportunities for education in addition to being vulnerable to social and sexual risks. For the older ones, they had the difficulty in transitioning to maturity. Despite the provided foster care grant by the South African Government to cushion the effect of this, most families do not have access to the funds largely because of policy barriers and the problem of fathers who remain with their children.

The Covid 19 pandemic has not only created a world of uncertainties, insecurities, and fear of possibly being exposed and contracting the virus but has also affected different groups of people in different communities. Different groups in society have been indirectly and directly affected by the Covid-19 pandemic, unlike other disease outbreaks from the past, (Ashish *et al.,* 2020; Derankus *et al.,* 2020; Pant *et al.,* 2020). Expectant mothers accessing maternal healthcare services had heightened exposure to the virus as they were supposed to travel to different healthcare facilities to access health care during pregnancy and after child delivery (Golay *et al.,* 2020; Chawla *et al.,* 2020; Orjingene *et al.,* 2020). In a study conducted by Goyal *et al.,* (2021) in India over 32 women tested positive for Covid-19 and 25 of 32 women were classified as Covid-19 positive pregnancies. The Ministry of Health and Family Welfare of India further declared pregnant women across the world a Covid-19 high-risk group (Goyal *et al.,* 2020 & Chawla *et al.,* 2020). The Center for Disease Control and Prevention (CDC) also reported that approximately 148 327 pregnant United States of America (USA) women had SARS-CoV-2, the virus that cause Covid-19 and out of the estimated number, 241 women died of Covid-19. Despite 121 973 women

with knowledge on available hospitals, only 20,6% were hospitalized with Covid-19 related complications between January 2020 and November 2021 (Walter, 2021).

Orjingene *et al.,* (2020) conducted a study on the effects of global disease outbreaks on maternal health care in the Global South and found that outbreaks have directly and indirectly affected the maternal and child health care sectors severely. Research shows that most women had severe anxiety due to the fear of transmitting Covid-19 to their babies (Durankus & Aksu, 2020). Even though the World Health Organization (WHO) is of the viewpoint that children and women have recorded fewer cases of deaths resulting from Covid-19 (WHO, 2020), different maternal services routines inclusive of campaigns and outreach sessions were suspended due to the preventive measures that were put forth by the government. The absence of routine care can result in severe complications which could have been prevented (Durankus & Aksu, 2020; Goyal *et al.,* 2020; Orjingene *et al.,* 2020; WHO, 2020).

Furthermore, access to maternal healthcare services has been a challenge due to the growing inequalities that are prevalent within the general population that contribute to the unequal access of healthcare services. This is further exacerbated by how maternal health care is disproportional and inequitable excluding most women from lower socio-economic classes (Lawther *et al.,* 2003). This scenario is characteristic of the South African healthcare systems across a range of healthcare services. With an increase in disease outbreaks, xenophobia and ethnic conflicts, wars and violent crimes accessing maternal health care becomes more difficult, thus the need to understand the experiences of women in accessing maternal health care (WHO, 2020).

Studies have been done on accessing and using maternal healthcare services during previous disease pandemics (Morse *et al.,* 2016; Olawale *et al.,* 2019; Orjingene *et al.,* 2020). Other studies have been done on how global disease outbreaks like Zika virus, HN1 Flu and Ebola affected maternal health care systems (Delamou *et al.,* 2017; Gizelis *et al.,* 2016; Henwood *et al.,* 2017).

Studies have been conducted on global disease outbreaks, in terms of barriers to access maternal healthcare and scarcity and provision of healthcare (Morse *et al.,* 2016; Olawale *et al.,* 2019; Orjingene *et al.,* 2020). However, there is a dearth of studies with respect to the experiences of women in accessing maternal healthcare during the Covid-19 pandemic. Regional or other contextual trends associated with the access of maternal health services during the Covid 19 pandemic including the voices of disproportionately affected sub populations remain neglected in scholarly works (Rodo *et al.,* 2022). Therefore, this study is intended to explore the experiences of Mmabatho, North West women seeking to access maternal healthcare during the Covid-19 pandemic outbreak, in the context of Mmabatho in the North West Province, South Africa. North West province will provide the necessary contextual trends of a semi-rural area that is often neglected in research. This provides justification for the need to hear the case of women in Mmabatho regarding their specific experiences of seeking to access maternal healthcare services during the Covid-19 pandemic.

1.3 Aim of the study

The aim of the study is to explore the experiences of women in Mmabatho, North West seeking to access maternal healthcare services during the initial outbreak of the Covid-19 pandemic.

1.3.1 Objectives of the study

The objectives of this study were to

1. To explore the experiences of Mmabatho, North West women seeking to access maternal healthcare services during the initial outbreak of the Covid-19 pandemic.
2. To describe how existing maternal healthcare interventions assist Mmabatho, North West women to access maternal healthcare services during pandemics.

3. To recommend practical interventions to assist Mmabatho, North West women to access maternal healthcare services during disease outbreaks.
4. To identify the suitable literature, theories and methodological approaches to investigate access to maternal healthcare services during disease outbreaks.

Based on the above objectives the research questions of this study are:

1.4 Research Questions

1. What are the experiences of Mmabatho, North West women seeking to access maternal healthcare services during the initial outbreak of the Covid-19 pandemic?
2. Are there any existing maternal healthcare interventions in place to assist Mmabatho, North West women in seeking to access maternal healthcare during the initial outbreak of the Covid-19 pandemic?
3. What practical interventions of maternal healthcare in Mmabatho, North West can be useful to assist women to access maternal healthcare during disease pandemics?
4. How can existing theoretical and methodological paradigms be employed in addressing access to maternal healthcare services in Mmabatho, North West during disease outbreaks? What is the suitable literature, theories and research approaches for investigating access to maternal healthcare services during disease outbreaks?

1.5 Rationale of the study

The results of this study contribute in identifying gaps in the provision of maternal health care services during crisis periods and providing evidence for best practices and the improvement of existing interventions and programmes designed to ensure the inclusive access of maternal

healthcare services. The empirical findings of the study fill the existing knowledge gap that exists with respect to the experiences of women in accessing services of maternal healthcare during the Covid 19 pandemic. Furthermore, getting an emic view of women will assist in designing comprehensive frameworks which deal with women from different contexts and socio-economic backgrounds. The experiences of women will assist in the modification of the existing maternal health interventions that are currently in place so as to ensure greater uptake of services and cost effective and sustainable roll out of maternal health services that are constantly available even during crisis periods. The empirical findings of the study are also aimed at improving interventions for maternal healthcare services so as to ensure that there is equal access to maternal healthcare, and in the case where equal access is unattainable, at least access to proper maternal healthcare services.

1.6 Operational definition of Terms

I. Maternal healthcare refers to the overall wellbeing of women during the phase of pregnancy, childbirth and after child birth (Olande *et al.,* 2020). In this study, maternal healthcare refers to the wellbeing of expectant women before and during the stage of giving birth.

II. Experience: experience refers to the knowledge and skills that one acquires through a certain period of time, and it includes events that have occurred influencing an individual's thoughts and behaviour. This particular knowledge is usually shaped by the members of the society (Oxford Advanced Learning Dictionary, 2010). In this study, experience refers to the occurrence of events which are aimed at influencing the outcomes of the wellbeing of pregnant women and new mothers.

III. Access: This study adopts the definition of access from Ribot & Peluso (2003), who define access as "the ability to benefit from things —including material objects, persons, institutions, and symbols" (Ribot & Peluso, 2003:153). This definition takes into consideration the fact that society

consists of different structures who hold different levels of power, and this power determines who has access to resources, services, or symbols, and who does not.

IV. Disease outbreak: In this context, a disease outbreak refers to a sudden and unexpected occurrence of a disease intending to cause pain, distress, dysfunctions in different societal institutions, social problems or in worst case scenarios, deaths. Disease outbreaks can affect a small portion of the population or even millions of people globally. Outbreaks are inclusive of epidemics and pandemics which affect multiple countries across the world (Delamou *et al.,* 2017; Human Rights Watch, 2020; *Morse et al.,* 2016; Orjingene *et al.,* 2020;).

1.7 The impact of Covid-19 pandemic on access to maternal health care services: An overview

Since the announcement of the first case of Covid-19 in December 2019, models of maternal healthcare have been revised and enforced in order to suggest alternatives to assist in delivering quality assistance and personal protection worldwide. Studies (Mantagnoli *et al.,* 2021; Murphy, *et al.,* 2020; Reale *et al.,* 2020) have shown that healthcare systems have been compromised. The health of women as well as their children are the most affected as they face the highest rate of deaths. The Ebola outbreak which occurred in West Africa in 2014 also affected many health care systems in African countries. It has been noted by Wanyana *et al.,* (2021), that there was a significant decline in the operation of maternal healthcare services, vaccinations and other maternal healthcare related services. The results of the study conducted by Wanyana *et al.,* (2021), also revealed that the decline in the utilisation of maternal healthcare services did not recover after the outbreak until several strategies were put into place (Mantagnoli *et al.,* 2021; Murphy *et al.,* 2020; Reale *et al.,* 2020).

Globally, the Covid-19 pandemic has had immense repercussions on the access and delivery of the healthcare system, and this cuts across age, gender, location, disability status, marital status, sexual orientation, class, ethnic background, nationalities and most especially, pregnant women, before, during and after delivery (Rocca-Ihenacho and Alonso, 2020). This is expressed at the point where people were hindered from moving around in search of health care services due to the implementation of social distancing regulations and restrictions that were put in place to limit the vertical and horizontal transmission of Covid-19. Apart from this, the Covid 19 pandemic has taken a toll on the importation and exportation of essential commodities among nations due to border closures, hence, a shortage in necessary commodities to serve the healthcare system (Kumar, 2020). This scenario has had an indirect and direct impact on expectant women, their new born and on young children.

This has shown that maternal healthcare persists to be a challenge in low-income countries in sub–Saharan Africa (Otieno, Owenga and Onguru, 2020; Strong, 2018). Despite the free services of maternal health available in some health facilities in South Africa, some regions and communities have recorded high maternal and perinatal deaths due to the fact that some labouring women were not able to get access to emergency transport and health facilities (United Nations Population Fund, 2020). This was instrumental to the restrictions in movement, and the fear of law enforcement agents during the Covid-19 pandemic.

In a similar dimension, Karkee and Morgan (2020) documented that the fear of some women of, contracting the Covid-19 virus has also hindered them from seeking and accessing ante-natal and postnatal care. This is coupled with the minimization of in-person contact with patients in South Africa, including the diversion of resources (man & materials) to deal with Covid-19 cases. These have increasingly reduced and challenged the adequate provision of maternal care during this critical period.

Findings from Buffington *et al.,* (2021), reveal that the fear of low immunity for pregnant women hindered women from visiting health facilities in order to avoid contracting Covid -19. However, some mothers who were expectant, showed some confidence in seeking traditional midwives in their locality; hence, would not take their children for post-natal assessment and care. This was as a result of fear of contracting Covid-19, leading to missed vaccinations and important examination of their babies by medical professionals.

Different measures have been put forth by governments across the world including South Africa to combat the spread of Covid-19. Some of the measures that have been put into place include no patients' exposure to affected or vulnerable settings where people can easily get infected as well as less in-person visitations and hospital admissions. In addition, the government of South Africa also allowed restricted access to health care services to people who were asymptomatic. These government restrictions affected the access and utilisation of maternal health care services. The social distancing measures and controls on crowd gatherings also affected the in-person visitation and routine access of maternal healthcare services, especially antenatal care in different health care facilities. On the other hand, healthcare facilities have prioritized high risk pregnancies. Alternative strategies have been adopted for women of low-risk pregnancies and some of the strategies identified by Wanyana *et al.,* (2021), include drive through consultations, virtual follow-up sessions consisting of antenatal class which can be transferred easily through different social media platforms (Azziz *et al.,* 2020; Wanyana et al, 2021).

Figure 1.7.1: An illustration of how antenatal classes dropped drastically as well as discontinued in some parts of the world including South Africa during the period of National lockdown for women who gave birth before October 2020

(Source: Sinha *et al.,* 2022)

As presented in figure 6.2 above, the attendance of antenatal classes during the Covid-19 pandemic drastically dropped and at some point, discontinuation took place, which negatively affected access to maternal health services by some women. Before the Covid-19 pandemic, health facilities witnessed 100 percent usage (as of October 2019) from women seeking maternal healthcare services. However, amid the Covid-19 pandemic, health care visitation reduced, most especially after the lockdown which started from April 2020 (as shown in the graph above); hence,

discontinued their access, and this was instrumental to the fact that they were fearful of the major outcome, which was being exposed to Covid-19.

The above provides a reasonable basis for the importance of exploring the lived experiences of women seeking to access services of maternal healthcare during the Covid-19 pandemic. A more in-depth survey of relevant literature is covered in Chapter two and three below.

1.8 Theoretical framework

The section provides a summary of the theoretical framework that anchors this study which is the Andersen's expanded behavioural model, which is extended by Bourdieu's theory of social practice. Andersen's expanded Behavioural model and Bourdieu's theory of social practice are used in a complementary approach to provide in-depth insights in the area of maternal health care during disease outbreaks. Whilst on one hand the Behavioural model seeks to explain and predict the provision of healthcare services and the use of such services in relation to people's traits, Bourdieu's theory of social practice attempts to provide the relationship that exists between women accessing maternal healthcare and social structures and how it impacts on their experiences in this case, the experiences of women in accessing maternal healthcare services. This framework views people's behaviour in association with how they seek healthcare as people's rational choices in turn providing inadequate focus to the impact of social context in people's actions. According to Bourdieu (1977), health care is a choice, and every individual has a logical explanation as to why they seek healthcare services. In this study, the behavioural model aimed at assisting the researcher to understand the experiences of women accessing maternal healthcare in accordance with their social surroundings and how their social surroundings in turn affect access and use of maternal health care services (Bourdieu, 1977; UN, 2008; Williams, 1995).

1.9 Research methodology

This section focuses on the following: the research design used, the size of the population of the study, sampling technique, data collection instruments and the data analysis technique.

1.9.1 Study design

The study utilised the qualitative interpretive approach arch method, using the in-depth interview method. The study was informed by the phenomenological approach which deals with in-depth description of people's experiences. Phenomenology enables researchers to examine the qualities of people's experiences through in-depth interviews. Phenomenology focuses more on the content of people's conscious experiences such as perceptions, judgements as well as emotions. It also focuses on embodied beings, highlighting that people experience meaning through their physical bodies as well. Phenomenology may not be the best choice when one wants to generalise the findings of the study, however, the best choice to explore the experience means of a particular demographic group (Connelly, 2010; Grossoehme, 2014).

The justification for the choice of this was informed by Flocco *et al.,* (2020), who assert that phenomenology allows in-depth description of feelings and experiences. According to Tanwir *et al*., (2021), a phenomenological approach is useful in healthcare on the basis that not only does it produce in-depth description of people's experiences but also produce unbiased interpretation of the data collected. Khan (2015) & Mohajan (2018) argued that a qualitative research method entails the collection of subjective data from respondents, and this was based on their personal experiences about the objectives and goals of the study. In addition, qualitative research design investigates individual occurrences in the belief that serious certainties about reality are grounded in people's experiences which have already occurred; however, the main aim was to understand perceptions and experiences to which it gives rise. So, in this case in order for the researcher to understand the in-depth experiences of women accessing maternal health and getting insight into

issues of maternal health by women, this study utilised the qualitative research design (Collins & Hussey, 2003; Polit & Beck 2012). Furthermore, the data that was collected was cross-sectional, that is, the data gathered was done at a specific time; hence, changes in trends over time were not considered (Hua & David, 2008; Lindenmayer *et al.,* 2011).

1.9.2 Study area and population

The study was undertaken in Mmabatho Unit 9 and Montshioa unit 1 clinics because there was insufficient literature concerning the effects of Covid -19 pandemic disease on maternal healthcare in the North West province. There was also a gap in terms of the experiences of women accessing maternal healthcare services during Covid-19 in the North West province particularly in Montshioa and unit 9 clinics as areas of study identified. Montshioa and Unit 9 clinics are the major service providers of maternal healthcare services within Mmabatho, North-West.

The sample consisted of 30 participants (expectant mothers and healthcare workers). The researcher selected 15 participants from each clinic. 20 women accessing maternal healthcare services; 10 from each clinic and 10 healthcare providers from 2 clinics, 5 from each clinic.

The study population consisted of:

1. Women accessing maternal healthcare services
2. Healthcare workers

The study included all women in their reproductive years 20-55 from the lower and working class, working and unemployed, with formal education and without education who gave birth from 5 March 2020 to date. Women who gave birth before 5 March 2020 and the announcement of the National lockdown were not included in the study. The justification for this population was because women receiving maternal healthcare services would be able to provide the researcher with the

in-depth experiences in accessing essential maternal healthcare services during the Covid -19 pandemic that are needed before and during giving birth. Healthcare workers also assisted the researcher to understand the importance of maternal healthcare services rendered to women before and during pregnancy as their experience in rendering maternal healthcare services. This group also assisted the researcher to gain the views of healthcare workers on issues related to the use of maternal healthcare services.

1.9.3 Sampling technique and sampling frame

The non-probability techniques such as snowball and purposive sampling techniques were used. Purposive sampling only focused on characteristics of the population that were aimed at providing answers to research questions and snowball sampling was not only time efficient but also enabled the researcher to identify additional participants who were acquaintances of the first identified participant(s). The researcher therefore purposely selected health care workers specializing in midwifery because they specialize in maternal healthcare services, and they were able to yield the necessary information regarding the problem under study. Purposive sampling also enabled the researcher to comprehend and fathom the phenomena under study in more detail and in order to recruit more participants snowball sampling technique was utilised (Lavrakas, 2008; Polit & Beck 2012).

1.9.4 Data collection procedure

In a bid to get an in-depth understanding of this research, the researcher ensured this research was qualitative in nature. The advantage of using qualitative research is that it provides researchers with descriptive and non-numerical findings of the study without generalisations compared to quantitative research (McCusker & Gunaydin, 2014; Rajasekar *et al.,* 2006; Schulze, 2003). Quantitative research does not take into consideration individual perceptions as it puts more emphasis on statistical information. Therefore, since a detailed input from respondents

selected to participate in this study was needed, the use of qualitative research was ideal. The acquisition of significant data in this study was required as it would enhance the ability of the researcher to lay comparisons between the results of the research, literature review and the theoretical framework. The aim of the researcher was satisfied adequately through the implementation of interviews. Therefore, in-depth interviews were employed as the primary data collection method. According to Yin (2003), interview is a technique used in getting insights on reasons for a particular behaviour. Yin (2003) further suggests that there are advantages of the use of interviews in a study. These advantages are:

- The researcher could probe and get deep thick descriptions on the phenomenon under investigation.
- The researcher has the ability to examine the respondent's behaviour
- The technique can be used as a guiding tool for other techniques yet to be adopted.

This study used online platforms and telephone interviews due to the Covid-19 pandemic regulations, furthermore the research approach was useful in ensuring that both the researcher and participants were not at risk of being exposed to Covid-19.

1.9.5 Data analysis

Qualitative data analysis converts data into findings thus, refers to reducing raw data into the most relevant area (Des Vos, 2005). This study used Braun and Clarke's 6 steps of thematic analysis to bring meaning and order to the mass of data collected; familiarizing with data, initial codes generation, searching for themes, themes review, defining and naming of themes as well as report writing. Data was analysed to gain insight into the experiences of participants as obtained from the interviews conducted (Des Vos, 2005). Data was also analysed and presented into themes. In the course of analysing data gathered, theories identified in the study were incorporated to further enrich the discussion and enable the achievement of the identified objectives.

1.9.6 Study limitations and justification

Research encountered several constraints in execution, specifically related to time and the sample itself. The sample size in qualitative research design is usually relatively small and does not provide a representativity of the utilisation of maternal health in the North West province. The sample therefore provided an indication of the issues and situation with regards to maternal health care services within the primary healthcare sector and a bigger sample would probably enhance the reliability and generalisability of the research. The research tool which was utilised: the interview guide for women accessing maternal healthcare services in Mmabatho. The procedure of sharing the tool with the supervisors was done to safeguard content validity which is generally applied in the progress of interview guides. Content validity was used to guarantee how good the tool signified all the apparatuses of the variables to be measured. To ensure validity and trustworthiness, interviews were conducted with informants accessing maternal healthcare services. Research encountered challenges related to telephonic interviews, for new mothers it was difficult to take part in the interview while taking care of the child at the same time and for social media platforms the challenge was in terms of connectivity. The researcher organised alternative times to interview the mothers and it was specifically when the babies were sleeping as requested by the mothers. In terms of the connectivity challenge, the mothers also organized to notify the researcher when they reached alternative places where there was stable internet connection. The interviews proceeded after the researcher was notified.

1.9.7 Ethical considerations

This study was subjected to certain ethical issues. The researcher obtained approval from the North West University ethics committee (**N W U - 0 0 6 7 3 - 2 1 - A 7**) as well as North West Department of Health before commencing with the study. Informed consent was also obtained from all the participants of the study. The participants were informed about the contents of the

study as well as the reasons in advance while being reassured that their answers will be treated with confidentiality and solely be used for the academic purposes of this study. Participants were also assured that taking part in the study is voluntary and can withdraw from taking part in the study anytime. The researcher assigned fictitious names to participants before the interviews started. Address interviewing within Covid-19. Social distancing of the researcher and participants, wearing masks and hand sanitising all the participants prior to conducting the interview. Sitting arrangements in a well-ventilated area to avoid the spread of Covid -19 and for the safety of the participants. Only the fictitious names were used in the research process and not the participant's real name, in order to protect the identity of the participant.

1.10 Structure of the study

This section provides the structure of the dissertation.

Chapter one introduces the study. It begins with a brief background of Covid-19 and its impact on various aspects of society with specific focus on maternal healthcare. After providing the background, problem statement, aim, research questions, objectives, and significance of the study are presented. The chapter closes with a summary of the theoretical framework and methodology of the study, followed by an outline of the structure of the dissertation.

Chapter two provides a contextualization of maternal healthcare in South Africa. This discussion is provided in order to deepen and highlight the structural aspects in South Africa from the past to present times. This provides a foundation for the discussion in Chapter three.

Chapter three is an in-depth discussion of literature. It explores the experiences of women in accessing maternal healthcare during disease outbreaks globally and in South Africa in detail.

Chapter four provides an overview of the theoretical framework utilised in the study in detail. The chapter also includes discussions on the development of theories, critiques as well as their relevance in this study.

Chapter five: This chapter provides an overview of the research methodology which includes the research design, methods of data collection and analysis and ethical considerations of the study.

Chapter six: This chapter presented, discussed and analysed the dominant themes derived from the study. In this chapter, the findings are analysed using the analysis method provided in the methodology chapter.

Chapter seven: provides conclusions of the whole study in relation to its theoretical objectives and empirical objectives and also summarizes the whole study with recommendations for the organization as well as for future research.

1.11. Conclusion

This chapter provided a brief description of the problem under study also outlined what the study intended to achieve through its objectives, the significance of the study to the body of knowledge in the North West Province and what the research questions the study intended to answer upon completion. Furthermore, it also provided an overview of methodological approaches to be used as well as the study's theoretical concerns. The following chapter will review the literature of the study inclusive of the historical background of maternal healthcare in South Africa. The conditions of maternal health care in South Africa during apartheid era as well as post-apartheid.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Access to maternal healthcare by working class women in a South African town is a key focus in this study. This access encompasses a number of social institutions including the government, family, and the economy. This made it important for this study to begin with a historical background of maternal health care in South Africa in order lay out an in-depth understanding of the different factors that impact working class women to access to maternal healthcare. To this end, this chapter discusses literature on maternal healthcare in South Africa. It will cover issues to do with primary healthcare in South Africa, accessibility and availability of effective primary healthcare, the prolonged effects of apartheid era on maternal healthcare, maternal healthcare in post-apartheid South Africa and lastly, the South African adequacy of continuum of care for maternal health.

2.2 Maternal health care within the South African context: A background

Over the last three decades, South Africa has been battling disease burden with colliding epidemics such as Human immunodeficiency virus/ acquired immunodeficiency syndrome (HIV/AIDS) and Tuberculosis. Furthermore, the health and well-being of citizens have been impacted by child and maternal mortality. During the first years after apartheid in the years 2000s, the emergence of HIV/AIDS epidemic resulted in massive disruptions in the health system of the country (Achoki *et al.,* 2022; Gray *et al.,* 2016; Wiysonge *et al.,* 2012).

Women can only be saved through the provision of safe and quality maternal healthcare services which led to maternal healthcare being declared a global crisis. Statistics South Africa (2022) assert that maternal healthcare in South Africa has shown signs of improvement as compared to the 7-year period before the South African Demographic Health Survey was conducted in 2017, where maternal mortality ratio was 119 pregnancy related deaths per live births. An improvement of a 2,46% decline as compared to 2016. This is supported by the findings of the study conducted on the contextualised implications of Coronavirus pandemic for young people and children living in eastern and South Africa by Govender *et al.,* (2020). Arguably, maternal healthcare has shown signs of improvement, together with maternal mortality prior to Covid-19. Previous studies have indicated that the challenges faced by the healthcare system in South Africa can be traced back to when the country was structured in terms of race and ethnicity during the apartheid era (Brown & Sprague, 2021; Maphumulo & Bhengu, 2019; Mueller, 2020; Wabiri *et al.,* 2016). StatsSA (2022) highlighted improvement on maternal healthcare in South Africa. Similarly, Padhye *et al.,* (2022) have also highlighted that numerous efforts have been put forth to improve the use and access to maternal healthcare services in South Africa. However, the efforts have not yielded desirable outcomes especially during the Covid-19 outbreak which reversed the gains towards global human health development goals that were previously achieved in the provision of maternal and neonatal mortality reduction (Adu *et al.,* 2022; Estifanos & Morris 2021). The emergent theme emanating from the previous studies is that there are also several factors affecting the utilisation and access to maternal healthcare services in South Africa. These include prolonged waiting time due to short staffed healthcare workers, poor hygiene as well as poor measures to control infections. However, the persistent factor according to the above-mentioned authors has been shortage of resources in medication and health equipment since 1994 (Brown & Sprague, 2021; Maphumulo & Bhengu, 2019; Mueller, 2020; Wabiri et al., 2016).

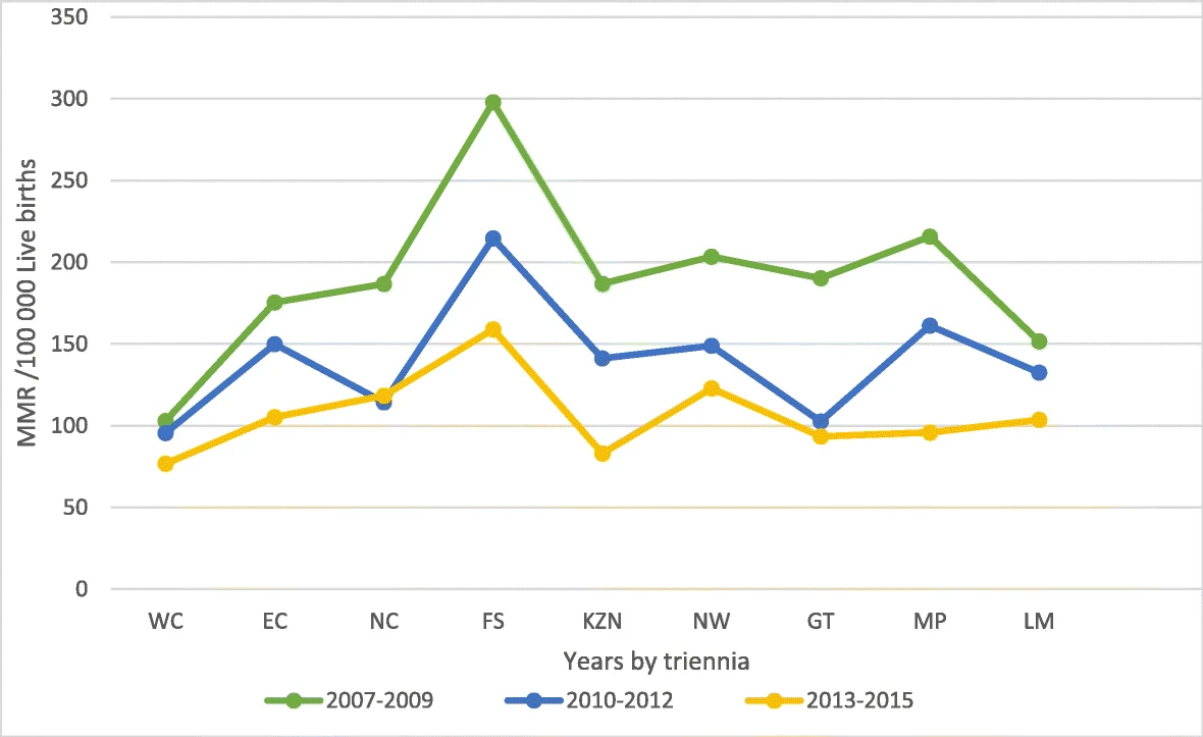
The most significant factors leading to a healthy and safe pregnancy as well as delivery or birth is the attendance of maternal and infant healthcare services during pregnancy until delivery (Bomela, 2020; Coleman *et al.,* 2020; WHO, 2016). Therefore, it is essential for women in their reproductive ages to have full access to such services. These services include accessing antenatal care services, availability of skilled healthcare workers, infant vaccinations and immunisation. Frequent antenatal care visits enable healthcare workers to identify health related problems during pregnancy. Women who attend antenatal care services are unlikely to experience perinatal morbidity and mortality and the World Health Organization (WHO), state that a minimum of four if not more antenatal care check-ups throughout pregnancy (Coleman *et al.,* 2020; World Health Organization, 2016). Coleman *et al.,* (2020) are of the viewpoint that in South Africa, antenatal care services are not being optimally used as they should. Additionally, women accessing services of maternal healthcare in South Africa have been experiencing poor healthcare treatment (Coleman *et al.,* 2020 & WHO, 2016).

Despite the efforts utilised to decrease the high level of maternal mortality in the country, South Africa has a high maternal mortality rate. The National Committee on Confidential Enquiries into Maternal Deaths (NCCEMD) have outlined maternal mortality per province. Limpopo province has been reported as the only province showing a decline in maternal mortality rate and infections not related to pregnancy and childbirth occupied the largest category of maternal mortality between the years 2002 and 2013 (NCCEMD, 2018). Bomela (2020), reported that even after the countless attempts the South African government to minimise maternal mortality rate, there are still socio-demographic factors which impact the high rates of maternal mortality. These include women's household income, level of education, social support as well as their marital status. The NCCEMD analysed and documented seven reports consisting of institutional maternal deaths excluding maternal deaths which occurred outside private owned health care facilities in South Africa since 1997. Amongst other issues, the reports also indicated that the root of the cause of

maternal mortality was the length and magnitude of the complications in childbearing. (Bomela, 2020; NCCEMD, 2018).

Furthermore, other factors include shortage of healthcare professionals and shortage of healthcare facilities. In most cases facilities are damaged, neglected or even unavailable. Dysfunctional emergency medical services and unreliable transport within and between provinces have also contributed to high maternal mortalities (Bomela, 2020). Moodley *et al.,* (2018), have reported that approximately 60% of maternal deaths could have been prevented in South Africa if it was not for poor quality in health care services (Bomela, 2020; Moodley *et al.,* 2018). Bomela (2020) is of the viewpoint that various interventions have been implemented to address and combat the high rate of maternal deaths. However, the implemented strategies have not yielded any positive results as expected. Although in 2017 there was a significant decline of 2,46% in maternal mortality rate in developing countries, the maternal mortality rate has increased with maternal age (WHO, 2017).

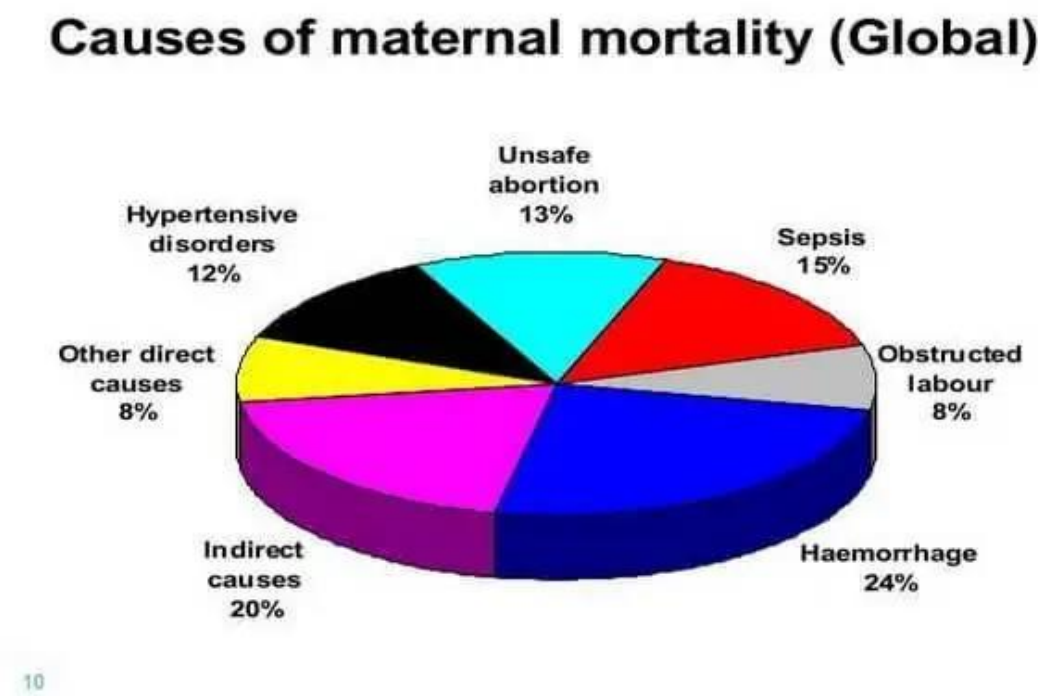
Figure 2.2*: South Africa's maternal mortality ratio per 100,000 live births by Province (2007-2015)*



Source: Bomela, (2020)

The above graph illustrates how the maternal mortality rate fluctuated from 2007 to 2015. Maternal mortality rate was lower in 2007-2009 as compared to 2013-2015. This is due to the relationship that exist between higher rate of births and higher chances of death. There more women give birth, the higher the chances of more deaths occurring. As emphasized by Bomela (2020) maternal mortality rate increases with age, the older women get, the higher the chances of contributing to the high rate of maternal mortality. The following figure also highlights the causes of maternal mortality globally.

Figure 2.2.1*:* The global causes of maternal mortality



Source: Mona, (2016).

From the above figure, haemorrhage remains the leading cause of maternal mortality, followed by indirect causes such as disease outbreaks in South Africa. A couple of pregnancies had complications which were life threatening and considered as high risk. Besides poor utilisation of maternal healthcare services, unsafe abortions, infections and haemorrhage have also been reported to be the contributing factors to maternal deaths. As it has been reported by Hassan & Basirka (2021), all the leading causes of maternal health deaths can be prevented and that can only be possible if women had access to quality maternal healthcare services (Hassan & Basirka, 2021; WHO, 2013; World Bank Report, 2013). The emergent theme emanating out of these reports is that disease outbreaks affect the political and socio-economic sectors. However, the previous studies did not take into consideration the effects of these disease outbreaks such as Covid-19 on women; they did not look at the gender effects of disease outbreaks on women specifically more on pregnant women and access to maternal health care.

In line with the above, the following section discusses Primary health care (PHC) in South Africa as well as how basic healthcare is provided through Primary Health Care.

2.3 Primary health care in South Africa

Basic health care is provided through primary healthcare in many countries around the world including South Africa. Primary healthcare is a mechanism that was adopted in April 1994 aimed at promoting healthcare to all South African citizens through the National Health Plan (NHP) which was aimed at improving the health conditions of all South African citizens (McKenzie *et al.,* 2017). However, even after the efforts to improve the status of the healthcare system as well as the experience in implementing Primary healthcare in South Africa, there are still gaps in the healthcare system in South Africa.

There is still insufficient access to healthcare services as compared to before and during the apartheid era (Department of Health, 2010; Dookie & Singh, 2012; Heunis et al, 2006; Schneider et al, 2008).There are countless gaps in Primary healthcare implementation in South Africa including amongst other things unequal distribution of resources and health care workers within different healthcare sectors, lack of leadership in health care facilities and lack of motivation in staff, hence there is still no positive impact across different healthcare sectors. For instance, it has been reported that in the Eastern Cape over 90% of women access maternal healthcare services but maternal mortality is still high. This might be attributable to lack of leadership which has been one of the contributing factors affecting the use of services of maternal healthcare (Lembani *et al.,* 2018).

South African constitution, Chapter two: the Bill of rights, Act no. 108 of 1996 sections 7 to 39 is known to have strong principles and firm human rights advocating for different citizens. However, when it comes to equal access to healthcare services it seems to be failing. For instance, during disease outbreaks there is no equal access between women accessing maternal healthcare

services and the infected patients of that particular disease. Priority and attention are shifted to combating the disease, forgetting that maternal healthcare services are also essential to the health of mothers and their children. The National health insurance does not cater for the vulnerable groups in society during disease outbreaks. Only 17 out of every 100 South Africa afford medical insurance which is essential for private healthcare. 45 million which is approximately 82 out of every South African are not covered as a result depend on public healthcare (Day & Zondi, 2019; Statistics South Africa, 2017). Despite the several intervention strategies that have been implemented to improve access and quality of maternal healthcare services in the country, the intervention strategies are not designed in accordance with the experiences of women accessing services of maternal healthcare. South Africa does not have a framework or policy which clearly stipulates alternative ways of accessing maternal healthcare services during disease outbreaks, hence the consequences of mediocre access to maternal healthcare services lead to lack of provision and use of maternal healthcare services during disease outbreaks. The gaps identified in ensuring that the framework designed to cater and improve access to maternal healthcare services produce better outcomes rely on the experiences as well as the grievances of women accessing maternal healthcare services. Hence, the study aims to explore the experiences of women in accessing maternal healthcare services during disease outbreaks.

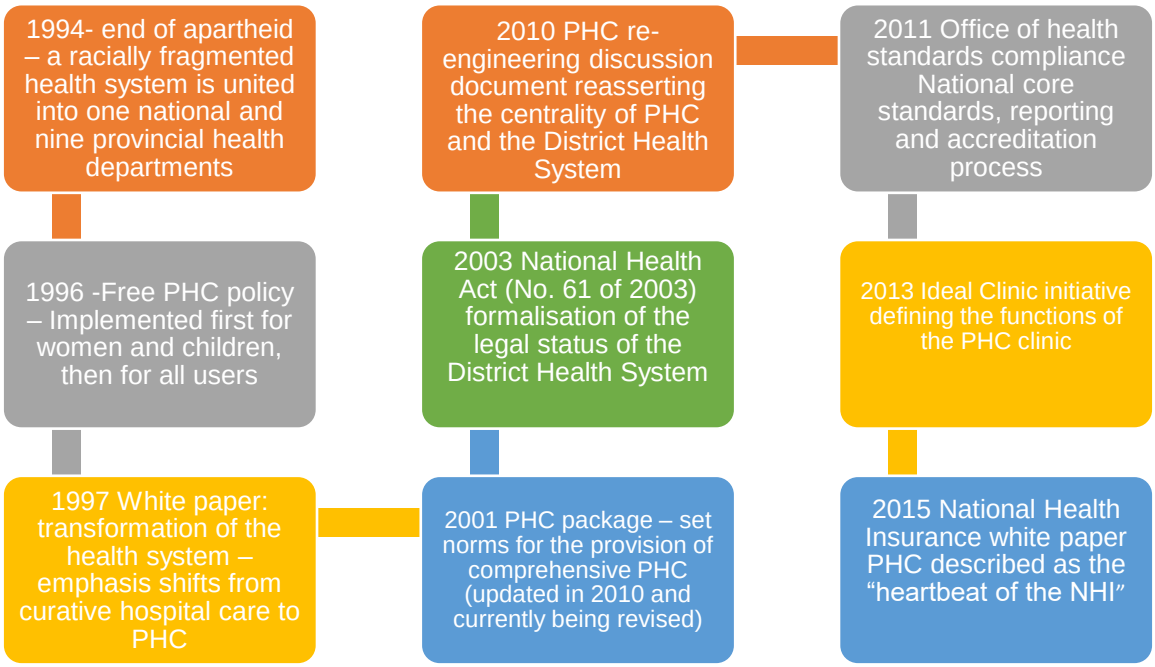
Maphumulo & Bhengu, (2019) assert that when it comes to services delivery especially in the public healthcare sector, the South African government is failing dismally. This was also indicated on the reports of healthcare outcomes in South Africa

Child mortality has increased instead of decreasing since the introduction of Millennium Development Goals in 1990. In 2009, South Africa reported over 69 deaths in total of under 5 years per 100 000 live births and the mortality rate is far worse than other countries such as Peru

with only 25 deaths per 100 000 live births, Nepal with 59 deaths and Egypt with 35 deaths per live births (Coovadia *et al.,* 2009).

The following figure shows the developments in Primary Health Care in South Africa since 1994

Figure 2.3 The developments in Primary Health Care implemented by the South African government since 1994



Source: Coovadia *et al.,* (2009).

The above diagram illustrates the implemented strategies by the South African government to better the service and delivery of health care since 1994, which some scholars assert has not yielded any positive outcomes (Maphumulo & Bhengu, 2019; McKenzie *et al.,* 2017). The South African Demographic Health Survey (SADHS) is of the viewpoint that approximately 5 women die due to pregnancy related complications every 2 months.

In contradiction to Maphumulo & Bhengu (2019), Statistics South Africa (2020) assert that maternal healthcare in South Africa has shown signs of improvement. Maternal mortality has significantly dropped at least in the last two consecutive decades. Amongst other factors, utilisation of maternal healthcare has increased between 1998 and 2016. Deliveries ranged from 83,4% to 96,1% between 1998 and 2016.

As alluded by Coovadia *et al.,* (2009), the challenges faced by the South African healthcare system can be outlined posterior to the apartheid era where the country was structured according to race. The following section discusses the prolonged effects of the apartheid era on the healthcare of South Africa inclusive of maternal health care.

2.4 Availability and accessibility of effective primary health care services

In South Africa the majority of the population receive maternal healthcare services through primary health care, consequently, the shortcomings of primary health care pose a threat to the access, utilisation and provision of maternal healthcare services. Despite the history of South Africa prior to democracy, there are also other barriers identified which impact the availability and accessibility of maternal healthcare. One of the many factors that have been identified is the inequalities that exist between the working class. Distance decay as it has been referred to in many African countries, is reported to be the major factor in the utilisation and provision of maternal healthcare services. Even when healthcare services are provided for free, time and costs of travel to reach healthcare facilities still pose a major barrier for vulnerable segments of different populations to access healthcare services because in most cases if not always, health care facilities are situated far-off from the majority of the citizens. In order to access healthcare services, majority of rural residents often have to travel long distances to reach healthcare centres and also wait in long queues before they can be aided by healthcare workers who are often reported rude and bad-mannered towards patients (McLaren *et al.,* 2014; Tsawe & Susuman,

2014). As opposed to the research of Tsawe & Sususman, (2014) and McLaren *et al*., (2014), researchers at the McGill University (2020) found that the lingering effects of apartheid era still harm the South African maternal healthcare sector. Furthermore, access to maternal healthcare services still portray elements of inequalities because the middle-class and working class do not receive the same kind of services because affordability also plays a major role in receiving maternal healthcare services.

2.4.1 Challenges associated with access and availability of maternal healthcare services

South Africa has been reported as having the highest income inequality of amongst other countries, as well as high levels of unemployment (41%) and poverty (34% as of April 2022) according to StatsSA (2022). High levels of employment and poverty are the biggest factors affecting the provision and utilisation of basic healthcare services in the country. In a study investigating the role of social determinants of health-on-health inequality in South Africa, Ataguba & McIntyre (2015) found out that good and quality healthcare services are the advantage of the privileged families that includes access to maternal healthcare services. Other sectors apart from health have substantial impact on the inequalities experienced within the healthcare sector. As stated by Ataguba & McIntyre (2015), that government should be more involved within areas aimed at helping redress the historic health inequalities in the country.

The healthcare sector has a significant role to play in guaranteeing that not only the country has an improved quality and affordable access to healthcare services but also to ensure that there are promotive and preventive measures in place in order to reduce disease burden during and after outbreaks. According to Fourie & Jayes (2021), it is difficult to access healthcare services during outbreaks and the situation worsens for women and affect how they access maternal healthcare services. The truth of the matter is that access to maternal healthcare services worsens to certain groups of women during disease outbreaks but certainly not for others. During pandemics access to healthcare worsens and it becomes more difficult if one member of the

family can get infected. If more attention can be shifted within the broad framework of social determinants of health, substantial improvements can be achieved in reducing health inequalities within different healthcare sectors and in turn might help South Africa to embark on the journey of sustainable development (Ataguba & McIntyre, 2015; Fourie & Jayes, 2021). The previous studies did not look at the experiences of women accessing maternal healthcare services. Previous studies also did not consider how the lived experiences of women accessing maternal healthcare services can hinder or facilitate access to maternal healthcare services. Furthermore, the use and provision of maternal healthcare does not only rely on the financial aspect, there is also a cultural and social aspect influencing access to maternal healthcare. Women's inability to afford certain services plays a significant role on the experiences of women accessing maternal healthcare services.

2.5 The prolonged effects of Apartheid era on maternal healthcare in South Africa

The challenges faced by the South African healthcare system can be traced back to the apartheid era where the country was structured along racial lines. Undoubtedly, the history of South Africa has had a noticeable effect on the country's healthcare policies as well as the health of its citizens. Prior to 1994 racial fragmentation of healthcare services and the deregulation of the healthcare sector proved to have been the two developments damaging health care systems. In the apartheid era only 12% of the healthcare budget covered 40% of the population. Furthermore, South Africa is considered a middle-income country as compared to other African countries but its healthcare is considered far worse than countries with lower incomes (Coovadia *et al.,* 2009; Lembani *et al.,* 2018; Maphumulo & Bhengu, 2019).

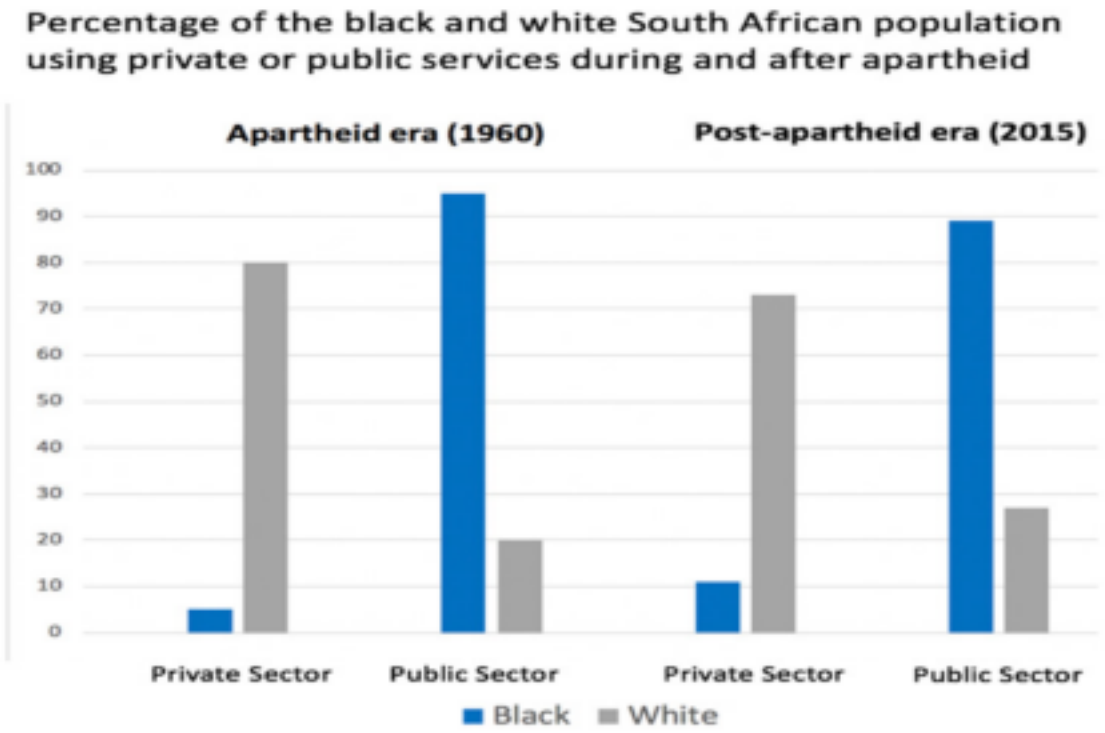
South Africa has experienced extreme inequalities in terms of the health status amongst different populations and the inequalities permeated across the country. In addition to the already existing different racial discriminatory policies, there was also forced removal of Black South Africans to

the Bantustans. Only white South Africans were allowed to live in major cities. Health policies favoured white South Africans and that also meant unequal distribution of health resources between the two populations (Coovadia *et al.,* 2009; McGill University, 2020). Under apartheid, laws and policies were implemented encouraging racial discrimination against Black South, thereby hindering Black South Africans access to healthcare services. Examples of these laws and policies ranged from the privatization of healthcare which created a significant gap between the racial groups. Only a few Black South Africans could afford the services from private healthcare institutions and the rest of the Black population relied on the public sector. This appears to have persisted through the Apartheid regime, into the new dispensation and alluded to by Long *et al.,* (2021), where during the Coronavirus pandemic, only a few black women could afford private healthcare services. 20% of women representing 1 in 5 women reported to have been in poor health as compared to 12% of white women. As emphasized by Long *et al.,* (2021), approximately 61% of women who cannot afford basic needs including medical bills are black women from low-income backgrounds (Long *et al.,*2021). Most women from Mmabatho accessing maternal healthcare services from local clinics are from low-income households (Pretorius, 2004).

The graph below illustrates how the private and public sectors were structured by ethnicity during apartheid between white and black South Africans (Coovadia *et al.,* 2009; Jivraj *et al.,* 2020).

Figure 2.5.1: *Public and private sectors by ethnic group*

The distribution of healthcare services according to ethic group



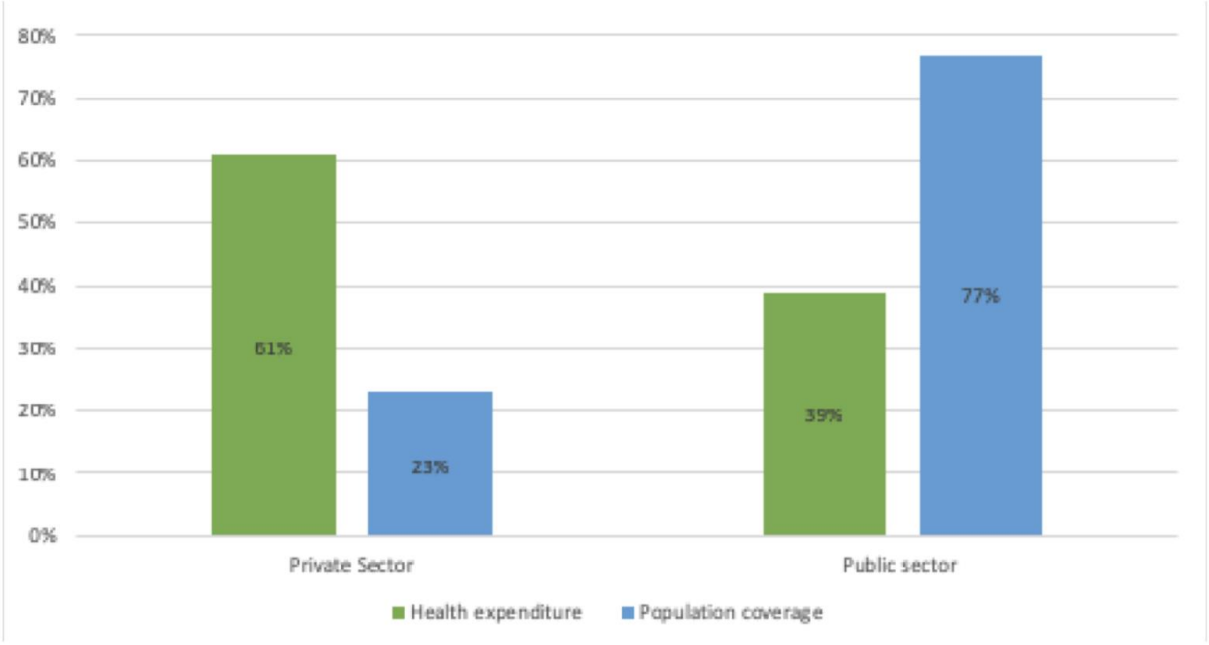
Source McGill University, (2020).

As highlighted by the graph above, approximately 95% of the black South Africans relied on the public sector. Affordability was not the only barrier hindering Black South African access to healthcare services, how unequally healthcare resources were distributed between the two populations also played a role. For instance, between 1992 and 1993, the total expenditure of the private sector was estimated to be 61% which catered for only 23% of the population (McGill University, 2020). The racial segregation which existed between racial groups meant that the public healthcare institutions were always overcrowded and understaffed due to the unequal distribution of resources. The Apartheid era also produced more white healthcare workers that had no interest in practicing in rural areas dominated by black people, the same rural areas that needed most doctors than major cities. The racial segregation and inequalities manifested a lower life expectancy of 55 years in the black communities as compared to the 70 years life expectancy of the white upper class. Furthermore, there was a high infant mortality of 20% in the black population compared to

the 2% in the white population, as illustrated by the graph below (Coovadia *et al.,* 2009; Jivraj *et al.,* 2020;). The population that the study is looking at is predominantly black as part of the group areas act, it is important in this study as it carries the legacy.

Figure 2.5.2: *Population coverage and health coverage between 1992 and 1993*

Health care in South Africa post- Apartheid era



Source: McGill University, (2020).

As highlighted by the graph above, the inequalities range from two different healthcare sectors. The health expenditure only covers 23% of the private sector while on the other hand covers an entire 77% of the public sector. This means the health expenditure cannot cover the entire population as some people cannot afford private healthcare and only rely on the government to cater basic needs, including healthcare services.

The following section discusses maternal healthcare in South Africa after 1994, post-apartheid era.

2.6 Maternal health care in South Africa post-apartheid era

As emphasized by Frost & Reich's access framework, maternal healthcare in South Africa can be assessed by considering if women have access to the services that are essential, whether the same women can afford the services or not as well as the availability of resources. Racial dimension of poverty still persists in post-apartheid South Africa. During apartheid there were policies such as the Native Act no. 21 of 1923 which restricted mobility as well as access to health care services within the black community, the policies created a segregated South Africa (*Silal et al.,* 2012; Silal *et al.,* 2014).

After black South Africans were forcefully moved to the Bantustans which covered approximately 13% of the South African land but catered for 72% of the entire population. The condition of healthcare services worsened. The historical inheritances such as geographical segregation led to high cost of transport for women accessing maternal healthcare services (McGill University, 2020). This posed a barrier to black women accessing maternal healthcare services (Silal *et al.,* 2012). Another issue reported by Silal *et al.,* (2012) is insufficient doctors especially in rural areas.

Access to maternal healthcare in South Africa still suffers the consequences of the apartheid era, inequalities in healthcare still persist even after more than two decades of democracy. Burger and Christian (2020), emphasise that access to maternal healthcare in South Africa still hinge on three dimensions inclusive of the availability, affordability as well as acceptability of services. These three dimensions are unequally distributed with various differences in socio-economic groups as well as geographic areas. Women in rural areas experience the greatest barriers including having to walk long distances to the nearest healthcare facilities, lowest levels of acceptability of services compared to urban residents. Affordability of maternal health care constraints are faced by approximately 23% and this percentage has been concentrated amongst

the poorest in society. 73% of the affordability constraints include travel costs to healthcare services. According to Harris *et al.,* (2011), travel costs are one of the key barriers in accessing maternal healthcare services in South Africa. Travel costs are catastrophic to the poorest members of the society just like during the apartheid era. Furthermore, according to the results of the study conducted on disparities in access to and routine of maternal healthcare services in South Africa by Silal *et al.,* (2012), women from the lower quartile of the socioeconomic barely afford costs incurred during their monthly visits especially travel costs and this distress their capability to access maternal healthcare services as they cannot reach healthcare facilities (Burger & Christian, 2020; Harris *et al.,* 2011; Silal *et al.,* 2012).

On the other hand, availability of services of maternal healthcare due to long distance to the near health care facility has been reported as a barrier. According to the results of the study conducted on access to healthcare in post-apartheid South Africa by Burger and Christian (2020), most women reported to have experienced issues with operating hours of healthcare facilities. The operating hours serve as a barrier to access maternal healthcare services. Acceptability constraints were reported by only 10% due to the share of the community members bypassing the nearest facilities because their choices were more important and reliable than other preferences. According to Burger and Christian (2020), some women reported to have bypassed nearest healthcare facilities due to various reasons. The reasons include dirty healthcare facilities, unfriendly healthcare professionals, incorrect diagnoses but most importantly due to dissatisfaction with the service provision. Negative attitude of healthcare workers has been reported as the major barrier to women accessing maternal healthcare services (Burger & Christian, 2020).

Furthermore, Burger and Christian (2020), highlighted that only 53% of South Africans have full access to healthcare services which are available and affordable. Vulnerable groups such as the

less educated, unemployed and disadvantaged tend to lack access to adequate maternal healthcare services. All the challenges are rooted in the legacy of South African underdeveloped communities. Migration to urban areas have resulted in underdevelopment in rural areas thus preventing further organic migration coinciding with the regional dynamics of development. Geographical constraints also serve as an underdevelopment of South Africa's public transport which constantly increase travel costs. This kind of constraints does not fall within the realm of South Africa's departments of health. Despite several efforts to improve affordability and availability of maternal healthcare with training, motivation as well as distribution of healthcare workers, some policies have not made a difference. Policies, particularly the free care for women accessing maternal healthcare contributed to many challenges including declining staff morale due to being implemented without the input of the women accessing maternal healthcare and healthcare workers. Hence this study aims to explore the experiences of women accessing maternal healthcare services during Covid-19 in Mmabatho, North West.

2.7 Efforts to improve maternal health care services

After the democratic elections of the ruling party in 1994, which was African National Congress (ANC) at the time, implemented the National Health Plan (NHP) which was aimed at improving the health conditions of all South African citizens not only through equitable economic and social development but also through amongst other aspects such as education, water and electricity. Soon after that, another programme (Reconstruction & Development Programme) was introduced as a way of addressing the disparities which existed within the health sector. The RDP was introduced in order to minimize or even resolve the racialized socioeconomic inequalities across the country. Despite the programmes and interventions implemented by the South African government, there are still challenges because of unequal circulation of resources amongst the two sectors; the public and private sectors. The health system financing plays a significant role in the access as well as the financial burden that citizens experience in accessing health care

services. The majority of citizens still rely on the public sector because they cannot afford the services provided by private healthcare sectors (Silal *et al.,* 2012; Silal *et al.,* 2014).

The inadequate circulation of resources in the public sector has negatively affected the provision and access to existing health care services in and around African countries. Most healthcare systems are unable to react to different healthcare requests. In South Africa, there has been an increase in the use of healthcare services due to an increase in disease burden, communicable disease such as HIV/AIDS and patient load between 1997 and 2010. South Africa was ranked the 4th country in spending priorities. Consequently, major challenges of the healthcare system occurred in the public healthcare sector were reported and the challenges include long waiting hours, negative attitude from healthcare workers, dirty facilities, inability to control infections as well as compromised safety of both patients and healthcare workers. A poor performing South African healthcare system might fail to control epidemics as it was observed during the Ebola disease epidemic where West African countries struggled to combat the Ebola outbreak (Silal *et al.,* 2012; Silal *et al.,* 2014).

The South African government has been formulating policies, strategies as well as plans as efforts to improve the performance of the public healthcare system since 1994. The building block approach formulated by WHO has also been adopted at national and provincial level in South Africa to assess the performance of the public health system. Despite the efforts to enhance access and availability of maternal healthcare, severe difficulties in relation to the implementation have been reported. For instance, some policies such as the free care for expectant women and children have indicated a decline in staff morale as it was implemented without the engagement of healthcare workers and in turn caused an increased workload for healthcare providers as well as increased demand of services without corresponding an increase in resources in order to meet the increased demand of services. This is the case in rural areas around South Africa. Although

South Africa has high levels of the use of maternal healthcare services with approximately 90% of women accessing antenatal care and access to delivery with skilled healthcare workers, a magnitude of women still encounters barriers to access maternal health care services (Silal *et al.,* 2012).

2.8 The South African adequacy of continuum of care for maternal health

Continuum of care has been adopted as the strategy to address the challenges related to access to maternal healthcare in South Africa. According to Singh *et al.,* (2016), the continuum of care in the area of maternal and child health, refers to the importance of having access to important healthcare services throughout the cycle of life. Of importance to this study is the access of the key services from pregnancy, childbirth and postnatal care. Singh *et al.,* (2016) emphasises the fact that this access to services is in the determination to avoid maternal and infant mortality.

The framework was developed for developing countries with low and middle incomes and has since been adopted by different healthcare system stakeholders within the South African context (Mothupi *et al.,* 2021). Continuum of care in South Africa is expected to diminish maternal mortality. The Department of Health has also outlined the continuum of care framework for maternal health which has similar principles compared to the Kerber framework. The National Strategic Plan for Maternal, new-born, child and women's health and nutrition of 2012 to 2016 has also set out priority intervention taking place after delivery. Continuum of care for maternal health care has been proven to be the approach that can be used to enhance health and safety for both mothers and their children.

The continuum of care was developed by South African National stakeholders. The framework outlines the link that exists between intervention packages from different families, communities as well as the district level of care. A strategic goal of delivering and monitoring services along continuum of care in relation to maternal and other health related issues have been introduced in

South Africa. Despite the introduction of the strategic goal, there is still a huge gap along the definition of the indicator set for service delivery monitoring to support the goals along continuum of care. The adequacy approach which was introduced emphasizes the monitoring and measurement of continuum of care in a more multidimensional and comprehensive manner. This in turn also means that all aspects of access to care, quality of care as well as the link between different levels of care as well as social determinants of health care should also be measured (Mothupi *et al.,* 2020; Mothupi *et al.,* 2021). An effective continuum of care is expected to yield positive results on maternal healthcare outcomes. It is also important to utilise frameworks in order to ensure that there is improvement in enhancing women's access to continuum of care through measurements and monitoring. However, the approach of measurement to assess how districts perform in providing quality continuum of care has not been defined (Mothupi *et al.,* 2018).

The South Africa adequacy of continuum of care for maternal health is made up of merged metrics including the quality coverage, more components of maternal health as well as the multidimensional quality measurement. Maternal healthcare components are inclusive of skill birth attendant, referral system as well as enabling environment. Several gaps have been identified amongst these components. Adequacy on the other hand, emphasizes indicators of maternal health, the intersectional factors across continuum of care as well as the integration of quality measures. Adequacy has also been used in the evaluation of antenatal related programs, health system and human assessment, assessment of different dimensions of care as well as the effect of evaluation on interventions. Adequacies represent the combination of interventions that yield positive results on maternal health outcomes. According to Mothupi *et al.,* (2018), continuum of care perspective emphasizes collective threshold of interventions required for positive outcomes of maternal healthcare. South Africa is one country with special challenges on maternal health care which include teenage pregnancy, gender-based violence, different inequalities as well as inequitable quality and access to maternal healthcare. According to the results of the study

conducted on improving the validity, relevance and feasibility of continuum of care in South Africa: a thematic analysis of experts' perspectives by Mothupi *et al.,* (2020), indicators of the framework need constant improvement in order to include indicators that were not explored. Indicators of the framework also need to utilise factors such as age, socioeconomic, ethnicity and other factors; all these disparities need to be explored (Mothupi *et al.,* 2020). This is important for this study as it set in a province in South Africa where an effective continuum of care is expected to yield positive results for maternal healthcare outcomes. Furthermore, it provides a framework for understanding the experiences of the women in Mmabatho who needed access to maternal healthcare within this framework.

During Covid-19, the government implemented a few interventions to combat the spread of the virus as well as to cater for women accessing maternal healthcare services. The interventions will be discussed in the following chapter and how they played a role in assisting women accessing maternal healthcare services during Covid-19.

2.8 Conclusion

The purpose of this chapter was to provide the historical background of maternal healthcare within the South African context both during the apartheid era and post-apartheid era. The chapter also provided the prolonged effects of apartheid era and how they still affect the provision of healthcare to date. Lastly, the chapter outlined the adequacy of continuum of care in South Africa.

The following chapter discusses the utilisation of maternal healthcare services during the Covid-19 pandemic, the provision of healthcare and how different disease outbreaks have affected the use and provision of maternal healthcare services including Covid-19. The chapter also outlined the consequences of poor consumption of maternal healthcare services.

CHAPTER THREE

The utilisation of maternal health care during disease outbreaks

3.1 Introduction

Access to maternal healthcare speaks of availability of resources and the ability of women in childbearing ages to apply this. This study argues that to understand this access, the experiences of women need to be collected and analysed in order to provide a nuanced understanding. This chapter looks at the following issues from literature reviewed, provision of maternal primary health care globally, availability and accessibility of effective primary health care services, access to maternal healthcare services during disease outbreaks. This chapter also discusses the consequences of poor maternal healthcare services, stakeholders involved in maternal healthcare services, factors affecting the use and provision of maternal healthcare services, barriers affecting access to maternal healthcare services and efforts to enhance maternal healthcare services.

3.2 Poverty and utilisation of maternal healthcare

Maternal healthcare indicators fall within the health indicators that represent the greatest disparity in developed and developing countries globally (World Bank Report, 2013; Hassan & Basirka 2021). Poor maternal healthcare has been reported as an indicator of extreme poverty and that is the reason why the United Nations (UN) adopted the Millennium Development Goals (MDGs) and Sustainable Development Goals (SDGs), Goal 3. Specifically, SDG Target 3.1 aims to reduce

the global maternal mortality ratio to less than 70 per 100,000 live births. World Health Organization (WHO), (2019), assert that most maternal death are preventable as healthcare solutions are available to prevent possible complications. All women need to access high quality care during pregnancy and after childbirth. This could only be achievable through timely management care which could make a difference between life and death for the mother as well as the baby. However, this is almost impossible during disease outbreaks as health systems of most countries are often burden by disease outbreaks. This often affect the experiences of women accessing such healthcare services, affecting how they view and perceive maternal healthcare services.

Additionally, MDG number 5 aims to improve maternal health as a way of saving the lives of more than half a million women who die as a result of complications from pregnancy and childbirth each year. According to the World Health Organization (WHO), (2013), approximately 30 to 50 women encounter maternal morbidities. This is due to poor use of maternal healthcare services, which in this instance serves as an extension of access to services. In developing countries including South Africa, women in their reproductive years encounter maternal injuries and deaths as a result of poor utilisation of maternal healthcare. Some countries have used open temporary maternal healthcare centers, visual consultations with healthcare workers as well as telemedicine services to assist women seeking and accessing maternal healthcare services (Manyati and Mutsau, 2021). Most studies conducted on the impact of Covid-19 and access to maternal healthcare during Covid-19, assert that Covid-19 has affected access to maternal healthcare directly or indirectly. Underdeveloped health system in South Africa struggled to cope with the additional challenges produced by the pandemic, which affected the routine provision of maternal healthcare services such as immunizations and antenatal care. Another point highlighted by these studies was that different health systems have been affected severely and can barely cope with the disease burden (Kotlar *et al.,* 2021; Padhye *et al.,* 2022; Shapira *et al.,* 2021; Temesgen *et al.,*

2021). The emergent theme emanating out of these reports is that disease outbreaks such as Covid-19 cause tremendous damage to the political and socio-economic sectors (Lapeyre *et al.,* 2020; McCloskey and Heymann 2020; Shen Fu *et al.,* 2020; Tesarik, 2020). However, the previous studies did not take into consideration the effects of these disease outbreaks on pregnant women and maternal health care. Therefore, this study aims to fill in that gap as it seeks to explore the experiences of women in accessing maternal healthcare services during the Covid-19 pandemic.

3.3 Provision of maternal primary health care globally

Primary healthcare has been prioritized as the key to achieving 8 Millennium goals aimed at the provision of good healthcare services for all the citizens around the world with the full coverage of affordable and quality health care services (Ajaegbu, 2017; Nnebue *et al.,* 2014; Waqas & Bilal, 2018). This serves as one of the representatives of few major healthcare forums since the last century. The main aim of primary healthcare is to ensure universal access to quality healthcare resources with regards to the important healthcare needs of every country's citizen. Due to the increased vulnerability of women and children, priority has been shifted to healthcare planning, inclusive of child health and maternal healthcare services. Globally, primary healthcare has also identified maternal healthcare as one of the most significant of its eight essential healthcare components (Shizheng *et al.,* 2019). Maternal healthcare services in every health care system offer quite a number of services aimed at improving the healthcare of women, particularly women in their reproductive phase as well as their babies. The main aim of maternal healthcare services is to also reduce maternal mortality while ensuring that women remain healthy and safe throughout their pregnancy, delivery and fully recover from the changes that occur during pregnancy (Nnebue *et al.,* 2014; World Bank, 2008).

In 1987, Nairobi held its first Safe Motherhood conference which was aimed at identifying and challenging the primary healthcare principles. The emergent theme emanating from the conference was that women encounter a magnitude of experiences in maternal health care (Behruzi, 2020; Waqas & Bilal, 2018). Although maternal healthcare has been globally prioritized as well as the efforts directed at the improvement of maternal primary healthcare services, the progress has been gradual. For instance, 358 000 women were estimated to have died due to the complications encountered during pregnancy and delivery in 2008. An estimate of 1 out of 31 women lose their lives during delivery in Sub-Saharan Africa as compared to 1 out of 4,200 women in different European countries. Approximately seven million women suffer severe injuries to as far as disabilities from maternal health care complications every year (Ajaegbu, 2017).

The empirical evidence from the study conducted on the utilisation of maternal healthcare services by women in the rural Zaria environs by Ejembi *et al.,* (2004), confirmed that primary health care is the backbone of the national health policy. Its active health forum has not enhanced its effort to ensure an improved maternal healthcare coverage among the rural parts of communities in Zaria. As a result, the millennium development goal number 5 of reducing maternal mortality by 75% has not been achieved and remains an unattainable goal in most regions in the world including Zaria because globally, only 44 per cent decline has been achieved since 1990. The efforts directed at constituting maternal primary healthcare were globally prioritized in order to reduce maternal mortality by approximately 75% between 1990 and 2015 and since 1990 only a decline of 169 from 385 to 216 deaths resulting from maternal health complications per 100 000 live births have been achieved (Alkema *et al.,* 2016; Ejembi *et al.,* 2004; Jennings *et al.,* 2017; WHO *et al.,* 2016). Ajaegbu (2017) is of the viewpoint that maternal health care complications are the leading cause of a high maternal mortality among women in their reproductive phase more in developing countries. Most deaths resulting from maternal health care complications can be traced back to lack of access as well as delayed access

maternal healthcare services. In addition to delays associated with access to appropriate maternal healthcare services (WHO, 2017). Ensor (2004) further adds that different delays including delays to make appropriate decision to seek care, delays to reach healthcare facilities, are attached to different sociocultural beliefs of women seeking maternal healthcare services (WHO, 2017; Ajaegbu, 2017)

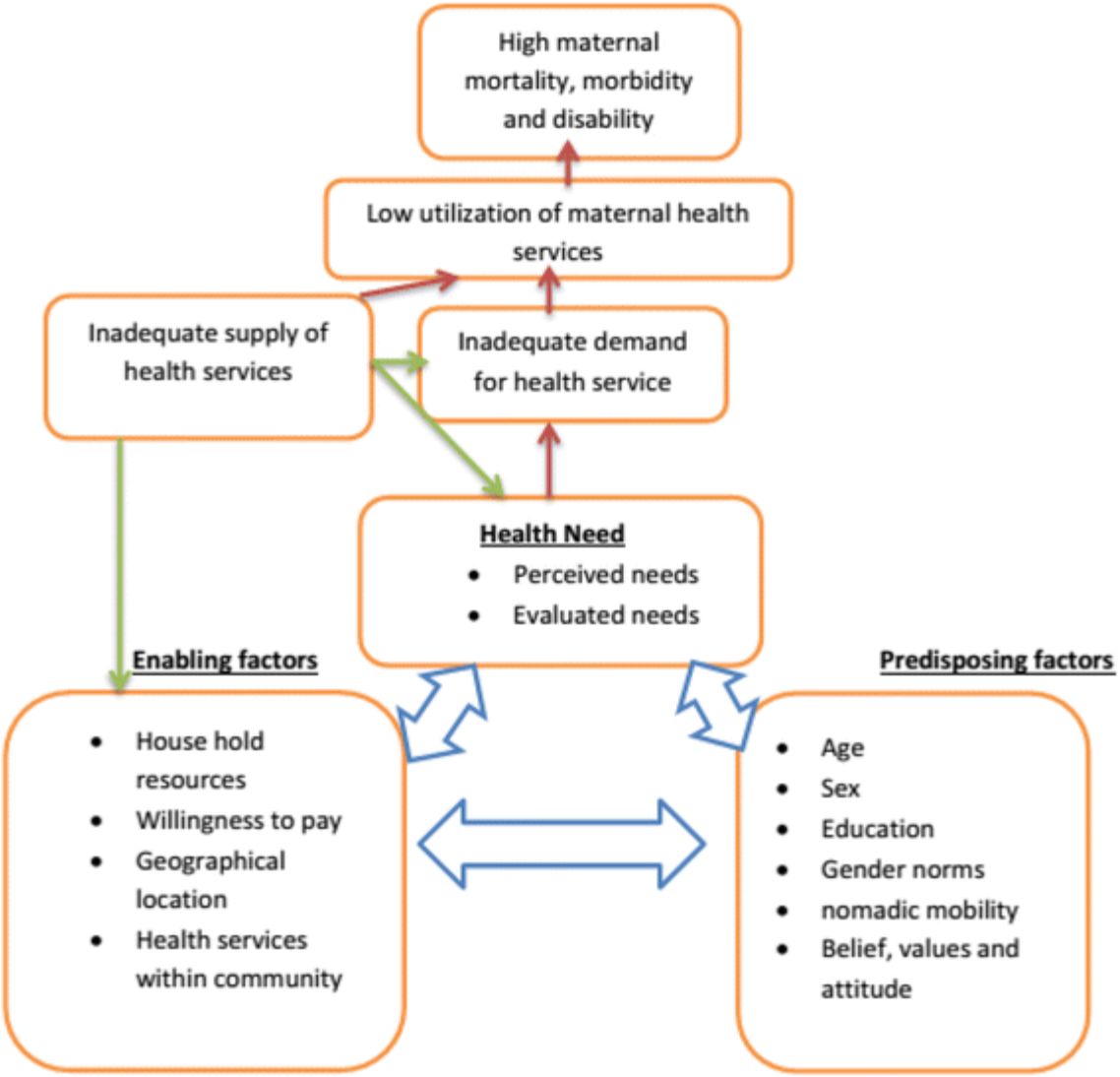
The following section discusses the different factors affecting how women experience and perceive maternal healthcare services and how previous disease outbreaks affected access to maternal healthcare services

3.4 Factors affecting the utilisation and provision of maternal healthcare services

It has been recognized that health and health related outcomes are not only affected by access and use of healthcare services globally, as illustrated by the diagram below, there are also complex and multidimensional factors which play a role as social determinants of healthcare. As emphasized by Ataguba & McIntyre (2015), political, economic, social, environmental factors as well as inequalities are considered linked to the provision and access of quality healthcare services within different healthcare sectors in South Africa. The different factors affect how women experience and perceive maternal healthcare services.

Despite health not being the main aim in several policies involving these sectors, they play a significant role on health equity including inequalities experienced within the healthcare sector. In the context of South Africa for instance, inequalities still exist when it comes to the distribution of resources within different health care sectors. The diagram below illustrates how different factors play a vital role in the high level of maternal mortality, morbidity as well as disability. The inadequate supply of health services lead to low maternal health services use which give rise to a high maternal mortality rate.

Figure 3.4: *Factors contributing to low maternal health care services utilsation as well as a high mortality rate*



Source:El Shiekh & Kwaak (2015).

As emphasized by El Shiekh & Kwaak (2015), women's ability to seek maternal healthcare services has been linked with the influence of components of predisposing and enabling factors as well as health needs. The above factors inspire people particularly women in this instance, whether or not to use formal or traditional healers' services. The above diagram emphasizes amongst other things, how lack/low use of maternal healthcare services pose a high risk that often led to different consequences that also lead to high maternal mortality, morbidity and to some extent, disability.

Various mechanisms of predisposing factors are intertwined and interconnected. The figure disparagingly analyses maternal healthcare utilisation from both perspectives of the supply and demand side. Lack of maternal healthcare use is affected by the demand or supply related factors. Demand side includes people's willingness to pay for maternal healthcare services according to their needs. The decision about the use of maternal healthcare is also influenced by the presence and absence of predisposing factors such as beliefs, attitudes and values, enabling factors such as the family and community and health needs such as gender, culture and tradition. The factors such as beliefs and values, attitudes also influence people in whether to use formal or informal maternal healthcare services. On the other hand, informal maternal healthcare services are linked with low levels of education and lack of knowledge about maternal healthcare and health in general. Physical movement serve as one of the predictors of maternal healthcare including distance to and from healthcare facilities which also serve as a crucial factor. Health seeking behaviours are also shaped by different beliefs, attitudes and values about health needs. The kind of responsiveness of healthcare and healthcare workers also plays a major role in maternal healthcare use (El Shiekh & Kwaak,2015).

The literature available suggests that pregnant women experienced fear and mistrust as barriers to seek and access maternal health care services. Henwood *et al.,* (2017), assert that pregnant women experienced fear and mistrust in multiple aspects including engaging with healthcare such as, contracting the virus from health care facilities, being transferred to Ebola treatment centres, seeing healthcare workers with personal protective equipment, possible refusal of services of maternal healthcare by health care providers. According to the results of the study conducted on barriers to maternal healthcare services during the Ebola virus epidemic in West African countries, pregnant women feared going to healthcare facilities due to the stigmatization of healthcare providers. The fear was smoothed by the existing mistrust of the government. Fear and mistrust were found to be the most significant barriers to both the delivery and utilisation of maternal

healthcare services. According to Miller *et al.,* (2018), there was a certain notion that healthcare workers increased the risk and exposure of contracting the virus because healthcare workers were allegedly injecting and spreading the virus in exchange for money and were also unnecessarily admitting Ebola free patients to Ebola treatment centres and other reasons known by them. The notion affected the access and provision of maternal healthcare services. While the literature available suggest that fear posed a barrier for expectant women to seek and access services, the estimated number of pregnant women who actually manage to seek maternal healthcare services, were reportedly mistrusted by the health care workers (Henwood *et al.,* 2017; Miller *et al.,* 2018; Yerger *et al.,* 2020).

The emergent theme emanating from literature shows that the health care system of Liberia has not fully recovered since the Ebola disease outbreak. Pregnant women have had a strained maternal healthcare system because of the distance and substantial effort. Most studies did not look at the experiences of deep inside issues which pregnant women were experiencing with regard to accessing maternal healthcare. There is also a lack of recommendations and solutions on the studies already conducted in terms of how stakeholders come into play in order to reduce the effects that disease outbreaks have had on pregnant women (Henwood *et al.,* 2017; Miller *et al.,* 2018; Yerger *et al.,* 2020).

As alluded by Henwood *et al.,* (2017) and Yerger *et al.,* (2020), most healthcare systems of different countries affected by the Ebola epidemic including Liberia have not fully recovered from the challenges and difficulties encountered during the Ebola outbreak. The dearth of recommendations and solutions available also play a role in the prolonged effects of Ebola.

3.4 Barriers affecting access to maternal health care services

Several studies have been done in terms of barriers to access maternal healthcare services during the Ebola virus outbreak in West African countries including Sierra Leone, Liberia and Guinea. The reported barriers include delays linked with seeking services of maternal healthcare during disease outbreaks which the study discusses in more detail below. The delays in maternal healthcare services plays an important role in the experiences of women accessing maternal healthcare services. The experiences of women which this study aims to explore in the maternal healthcare sector during disease outbreaks.

These studies only report barriers in terms of scarcity and provision of healthcare, they provide the experiences both positive and negative of pregnant women accessing maternal healthcare, However, do not look at the effects of disease outbreaks on maternal health (Conakry *et al.,* 2017; Delamou *et al.,* 2015; Drevin *et al.,* 2019; Jones & Ameh, 2015; Rise *et al.,* 2017; Rise *et al.,* 2018; Miller *et al.,* 2018; Yerger *et al.,* 2020).

3.4.1 Delay in seeking maternal healthcare services during the Covid-19 pandemic

National lockdowns, curfews and the fear of possibly being in contact with the virus act as barriers to every pregnant woman trying to access services of maternal healthcare. One of the delays identified was the delay to seek maternal healthcare services. According to Goyal *et al.,* (2020), the reason for the delay was due to the strict lockdown put forth by the government as a way of combating the spread of Coronavirus. However, approximately 33,4% of women avoided routine visits due to fear of contagion. Additionally, Pant *et al.,* (2020) advanced the notion that pregnant women reported to have experienced anxiety due to the fear of possibly contracting the virus. A survey was conducted among close to 100 pregnant women in Italy. The results showed that approximately 68% of pregnant women expressed anxiety. The other 43% reported concerns related to possibly transmitting the virus to their unborn babies. In other parts of New York,

however, pregnant women expressed great fear of being exposed to the virus. As a result, stopped using services of maternal healthcare in health care facilities and opted for home deliveries. Even though most expectant women in different countries expressed fear of going to healthcare facilities, movement restrictions have also made it harder. Expectant women struggled to reach health care facilities due to insufficient transportation available during lockdowns. This result in women reporting bad experiences in maternal healthcare utilisation and provision due to the above-mentioned barriers.

3.4.2 Delays experienced in reaching healthcare facilities during the Covid-19 pandemic

In third world countries including India, Nepal and Zimbabwe, pregnant women have experienced difficulties in seeking health care services due to Covid-19 pandemic. There also has been an increase in the number of women delivering babies on the road and ambulances due to roadblocks and delays in services rendered by ambulances. In Sierra Leone and Guinea during the Ebola virus outbreak, public facilities were closing in numbers and more of the private health care facilities remained open and most women could not afford the maternal healthcare services from private healthcare facilities. Even after a number of public healthcare facilities reopened, some women could still not access maternal healthcare services because of the travel restrictions and quarantines. According to McQuikin *et al.,* (2017), Elston *et al.,* (2016) and Waris & Antahal (2014), geographical accessibility also posed a barrier because some pregnant women could not travel to other regions in order to access maternal healthcare services. Contradictory to Pant *et al.,* (2020) regarding the challenges that some pregnant women encounter, Saccone *et al.,* (2020), assert that there is still a certain percentage of women able to reach health care facilities and not receive appropriate care in time as compared to others. In some facilities, healthcare professionals were not enough to attend to Covid-19 patients and pregnant women at the same time despite maternal health being considered an essential service. Furthermore, healthcare

professionals also expressed fear of possibly being infected because of insufficient personal protective equipment, less are even motivated to report for duty (Beni & Maurizio, 2020; Pant *et al.,* 2020; WHO, 2019).

3.4.3 Delay in access to maternal health care services due to socio-cultural beliefs

Socio-cultural beliefs may also contribute to delays in accessing maternal healthcare services. Mumtaz *et al.,* (2014) & Choudhary *et al.,* (2017), have documented the link that exist amongst cultural and religious beliefs and health risks associated with expectant women. For instance, Muslim women usually prefer faith based maternal healthcare services. These services involve of traditional and spiritual doctors without proper academic background to support their services. In particular, women from families that are improvised and have inadequate access to formal education are marginalised from accessing formal maternal healthcare services. This in turn affect the experiences of women in accessing proper maternal healthcare services, resulting in doubt in the health system while strengthening the preference for informal maternal healthcare services. Women disregard proper formal maternal healthcare services during pregnancy which in turn result in negative effects on their health. Complications such as child mortality and mental health conditions (Choudhary *et al.,* 2017; Mumtaz *et al.,* 2014; Omer *et al.,* 2021).

The findings of the study conducted on the influence of social and cultural practices on maternal morality by Omer *et al.,* (2021), assert that women from lower socio-economic background in most countries are exposed to certain cultural practices such as early marriages as well as closed spaced and multiple pregnancies. Such women have a strong dependency on socio-economic statuses of their men, which in turn delays them from making decisions about their well-being (Omer *et al.,* 2021).

Additionally, some of the barriers identified which plays a role in access to maternal healthcare services will be discussed below. he following section discusses the barriers affecting the utilisation and access to maternal healthcare services during disease outbreaks.

3.5 Resource Scarcity and Diversion

The lack and uneven distribution of resources posed a barrier to access and provision of maternal healthcare services. Another barrier reported by Estifanos *et al.,* (2021) & Ribacke *et al.,* (2016), the scarcity and insufficient provision of healthcare professionals. More and more of the healthcare professionals were abandoning their jobs because of the fear of contracting the Ebola virus whereas some healthcare professionals were being transferred to quarantine centers (Drevin *et al.,* 2019; Gizelin *et al.,* 2017; Henwood *et al.,* 2017). Resource scarcity plays a significant role on how women experience and perceive maternal healthcare services. The inconvenience resulting from shortage of resources affect women in different ways.

In third world countries, including South Africa, healthcare professionals cannot access appropriate equipment and infrastructure for management of Covid-19 infected patients and as a result other healthcare sectors including maternal healthcare sectors are affected (Darankus *et al.,* 2020; Pant *et al.,* 2020). Even in developing countries such as Europe and the United States some healthcare facilities have turned maternity wards into Covid-19 treatment wards due to the increasing number of infected people and the immunisation services have also been disrupted due to the pandemic which in turn negatively affect the health of new born babies. The state is even worse in developing countries which experience absence of proper infrastructure and appropriate resources (Manyati & Mutsau, 2021). There is also reduced availability of certain medications essential for expectant women due to medications not being able to be transported because of lockdowns (Darankus *et al.,* 2020; Pant *et al.,* 2020; Wiley, 2020; Woodley, 2020).

In addition to the challenges that the South African health system is facing, Mbunge (2020) assert that South African health system is overwhelmed with severe scarcity of personal protective equipment (PPEs). There are insufficient face shields, protective gloves, N95 respirators as well as protective aprons for healthcare workers amid Covid-19 due to the disruptions of distribution globally. Without relevant equipment, the Covid-19 chances of infections are more likely to increase. Furthermore, there is also an imbalance of distribution of healthcare workers. Thus, striking a balance of providing essential services to both Covid-19 patients and women accessing maternal healthcare services. Furthermore, Akaba *et al.,* (2022), assert that there was a consensus amongst the stakeholders involved in maternal healthcare, service providers as well as policy makers that the shortage of personal protective equipment had an impact on the capacity of health facilities. Health facilities were unable to effectively maintain optimal levels of service delivery and respond to Covid-19 at the same time. The government was unresponsive in terms of providing more PPEs. The only PPEs available were basic facemasks and basic gloves. Healthcare facilities were not provided with any PPEs except the above mentioned. Women accessing maternal healthcare services are unable to receive proper care due to the fear of contracting the virus as healthcare workers also do not have enough resources to cater for Covid-19 patients and women accessing maternal healthcare services (Akaba *et al.,* 2022; Mbunge *et al.,*2022).

3.6 Global disease outbreaks

The following section discussed the different disease epidemics and pandemic and how they have affected access to maternal healthcare services as well as the relevant stakeholders involved in maternal healthcare and lastly, different maternal interventions in place to improve the provision and utilisation of maternal healthcare services.

3.6.1 Ebola Epidemic

Ebola virus was first discovered in 1976 in different regions of central Africa. The first occurrence of the virus was near the Ebola River, hence the term. The second occurrence was in 2004 in South-eastern parts of Guinea and spread rapidly in different borders in several weeks. Major epidemics such as the Ebola virus are considered public health emergencies. In March 2004, West African countries were faced with the Ebola virus outbreak, which was considered the most severe disease outbreak to ever occur in the history of pandemics with the largest recorded infection cases of 28616 and 11310 confirmed fatalities (Delamou *et al.,* 2017; Gizelis *et al.,* 2016).

Ebola virus became a serious public health crisis not only to the entire country but more especially to the healthcare system of Liberia. Health system of Liberia has not fully recovered since the civil war. It has also affected a special group of women, pregnant women, leaving the already strained maternal health care systems of many countries in distress. Even after the substantial effort made globally over the past decade in reducing maternal health mortality and providing better access to maternal health care services, the Ebola virus was so severe that countless number of health care professionals left their respective jobs in health care facilities. According to Gizelis *et al.,* (2016), there are two dimensions considered in the healthcare sector for pregnant women, firstly, it is the demand by pregnant women for healthcare services and the availability of quality medical services. The Ebola virus disrupted the use of the above-mentioned dimensions. Morse *et al.,* (2016), also found that survivors of Ebola virus were unlikely to use health care services, in turn signifying that their bad experiences drove them to not seek medical attention during the disease outbreak (Barden O'Fallon *et al.,* 2015; Delamou *et al.,* 2017; Estifanos *et al.,* 2021; Gizelis *et al.,* 2016; Henwood *et al.,* 2017; Kassebaum *et al.,* 2015; Morse *et al.,* 2016).

The Ebola virus outbreak also caused a disruption in healthcare services leading to significant decline in immunization of children vulnerable to vaccine preventable deaths as well as a high possibility of an increase in the mortality rate. (Kassie *et al.,* 2020; Orjingene *et al.,* 2020; Pant *et al., 2020).*

A number of authors discussed the effects of disease outbreaks on social, political and economic institutions of different countries (Beni & Maurizio, 2020; Olawale *et al.,* 2019; Pant *et al.,* 2020; Woodley, 2020). A major finding from these studies is that some countries are able to recover from the economic setbacks caused by disease outbreaks. It is also unfortunate that some countries never recover or take years trying to rebuild what was politically, socially and economically destroyed during disease outbreaks. Despite the preventive measures implemented by various countries during pandemics to control the spread of infections, the fact of the matter is that some countries with limited resources still suffer the most from disease outbreaks. Although literature indicates the impacts of these disease pandemics on the political, social and economic standing of these countries, the experiences of women accessing MHC were not recorded. Hence this study aims to explore the different gender vulnerabilities and experiences that disease outbreaks produce. The vulnerability and experiences vary from one context to another and from one demographic group to another.

According to the results of the study conducted on Ebola virus disease and pregnancy by Henwood *et al.,* (2017), there was absolutely no direct or indirect evidence supporting an increase in the risks associated with Ebola virus disease in pregnant women as compared to non-expecting women. Although the sample is usually relatively small, mortality rate was low as compared other epidemics. There are a lot of studies that have been done on Ebola outbreak and how it affects public health emergencies (Barden O'Fallon *et al.,* 2015; Estifanos *et al.,* 2021; Henwood *et al.,* 2017; Rice *et al.,* 2018; Kassebaum *et al.,* 2015). The argument that came out of these studies regarding public health was that some countries do not have alternative interventions during

disease outbreaks that could assist in combating different diseases. The healthcare unreadiness of such countries lead their public health system to major setbacks. Although some countries are able to recover after major healthcare setbacks, some counties are unable to recover.

During the Ebola outbreak, there was an increase of maternal and neonatal deaths. These deaths resulted from direct and indirect contact due to the overwhelming need to access maternal healthcare services. The Ebola outbreak had an impact on the already struggling maternal healthcare sector. The findings of the study conducted on the Ebola virus disease on maternal healthcare service utilisation in West African countries have highlighted a significant decline in maternal healthcare services especially on antenatal care. Access to maternal healthcare services declined due to the absence of healthcare workers, the fear of possibly being exposed to the virus as well as women's belief that healthcare facilities could be the source of the transmission of the virus. Kassa *et al.,* (2022), assert that maternal and child healthcare experts, governments as well as policy makers have implemented various intervention strategies to improve the operation of maternal healthcare services in affected West African countries. The intervention strategies implemented include preparing alternative waiting areas for women, community involvement in maternal healthcare and the provision of free maternal healthcare services. Despite the above-mentioned interventions, the provision of antenatal care still declined by approximately 59% every month in Guinea, in Liberia by 38% and Sierra Leone antenatal care was likely to decline six times higher every month. Other maternal healthcare services also showed a significant decline during Ebola (Kassa *et al.,* 2022).

However, previous studies have not highlighted the experiences of women accessing maternal healthcare services during the Ebola outbreak and how the intervention strategies were implemented in accordance with those experiences. Hence this study aims to explore the experiences of women in accessing maternal healthcare services during disease outbreaks within a South African context.

3.6.2 HIV/AIDS Epidemic

HIV (Human Immunodeficiency Virus) and AIDS Acquired immunodeficiency syndrome) pandemic have created a devastating tragedy all over the world even after efforts to curb the pandemic. HIV/AIDS is still prevalent to date and continues spreading. HIV is the virus that makes an individual vulnerable to other diseases and the virus also causes AIDS. AIDS was first discovered in the early 1980s in the United States of America and later managed to spread to European and African countries. HIV is still prevalent all over the world. The literature available suggests that it was estimated that over 40 million people will be living with HIV in 2010 (Carr & Collymore, 2015; United Nations, 2008).

South Africa has the largest number of HIV/AIDS infections (13,7%) than any other country in the world, with Botswana occupying the second place to South Africa (Stats SA, 2022). Despite the fact that men reported the largest number of infections at the beginning of the pandemic, the number of infections of women now surpasses men especially in countries where there is extreme poverty and limited resources. HIV/AIDS had an impact on maternal healthcare. Women are more vulnerable to infections especially pregnant women because according to the results of the study conducted on facing HIV/AIDS outbreak, 90% of HIV positive children acquired the virus from their mothers and the risk of transmission from the mother to child is associated with the delivery process and how the mother feeds the child (Carr & Collymore, 2015; United Nations, 2008). In developed countries the transmission rates range from between 15% to 25% whereas in undeveloped countries the transmission rates range from 25% to 40% (Carr & Collymore, 2015; United Nations, 2008). Previous studies have not highlighted the lived experiences of women accessing maternal healthcare during HIV/AIDS epidemic and how full or inadequate access to maternal healthcare services have impacted their experiences. The studies focused more on how the HIV/AIDS epidemic contributed to the rate of maternal mortality and less on the experiences of women accessing maternal healthcare services during the epidemic. Hence, the study aims to

explore the experiences of women in accessing maternal healthcare services during the Covid-19 pandemic.

3.6.3 Covid-19 Pandemic

The recent Covid-19 outbreak which was globally felt as compared to previous epidemics, did not only take the whole world by surprise, it also brought disastrous effects on the healthcare systems of many countries including on people of different age groups, with pregnant women encountering the most unfavourable situations more than the rest of the people, the outbreak of Covid-19 has reversed the gains made previously towards minimizing maternal and child mortality. In assessing why there is often insufficient maternal healthcare services, Pant *et al.,* (2020) developed the three models inclusive of delays in maternal healthcare services, delay in reaching different healthcare facilities and delay in decision making to seek healthcare services. The models of inclusive delays were discussed further below. In order to assess the effect of Coronavirus pandemic on the access of maternal healthcare services, different internal and national reports on global pandemics were reviewed. It has been reported by Jeranji (2021), that South Africa is facing an increase in maternal deaths, an increase of 30% since the pandemic and the increase reported only covered the first wave of Coronavirus (Pant *et al.,* 2020; Jeranji, 2021). As outlined by the study conducted on the effect of the Coronavirus pandemic on maternal health due to delay in healthcare seeking by Goyal *et al.,* (2020) different disease outbreaks have had either directly or indirectly effects on different age and gender groups, there is, however, a special group of women taken into consideration and that is pregnant women together with the maternal healthcare sector. According to the results of the studies carried out by Kassie *et al.,* 2019 and Pant *et al.,* 2020 on global disease outbreaks and effects new-born, child and maternal health in the global south, there has been a significant decline in maternal and childcare services. In countless countries including Libya, Ethiopia, Nigeria, health care programmes have been

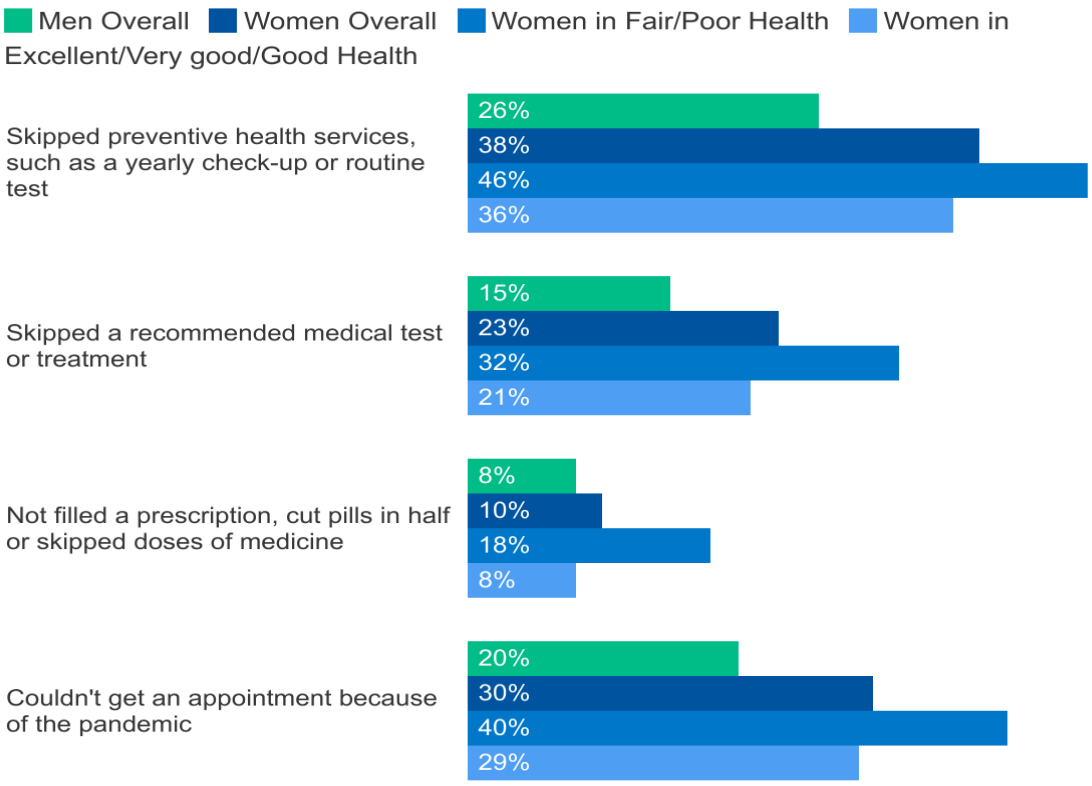
disrupted, more especially immunization programs due to the Coronavirus pandemic. In relation to a similar study conducted by the Kaiser Family Foundation women's survey by Frederiksen (2021) on women's experiences with healthcare during the Covid-19 pandemic. Thus, the findings show the transformation in the way women access services of maternal healthcare in other parts of the world. The following figure illustrates the above mentioned.

Figure 3.6.3.: An illustration of women who have gone without services of maternal healthcare during the Covid-19 pandemic

Figure 1

A larger share of women have gone without health care services during the COVID-19 pandemic, particularly women in fair or poor health

Since March 1, 2020, have you experienced any of the following because of the COVID-19 pandemic, or not?



NOTE: All comparisons between women in fair/poor health and women in excellent/very good/good health are significantly different ($p < 0.05$), while all comparisons between men and women are significantly different except for "Not filled a prescription, cut pills in half or skipped doses of medicine."
SOURCE: KFF Women's Health Survey 2020

KFF

Source: Frederiksen (2021).

3.7 Stakeholders involved in maternal health care services

Although there has been a reduction in maternal and child mortality achieved in the MDGs era, there is still a lot of effort needed especially in Sub-Saharan countries to meet the MDGs at least

by 2030 (Meulen *et al.,* 2019). There are 2,7 million estimated neonatal deaths with 2,6 million stillbirths occurring annually. Healthcare facilities that have enough and well-equipped staff with relevant resources can be eligible to provide quality care during crucial moments surrounding pregnancy and childbirth or delivery. An estimation of 75% of deaths can be prevented with adequate care as well as the majority of maternal deaths. Therefore, different stakeholders and community engagements form part of the most significant process of ensuring that the necessary care for women in accessing maternal healthcare services is sufficient as per their preferences as well as their needs (Meulen *et al.,* 2019; WHO, 2020). The South African National stakeholders together with the district health system have introduced the continuum of care in order to enhance the effectiveness and efficiency of maternal healthcare service delivery. Furthermore, the World Health Organization (2020) have also introduced a network which aims to improve maternal health quality of care. The quality-of-care network aims to achieve a vision where expectant women and new born babies receive adequate care throughout pregnancy and childbirth as well as after delivery. A number of Sub-Saharan countries have also joined the quality-of-care network process since it was announced by the World Health Organization (World Health Organization, 2020).

The journey of pregnancy and motherhood comprise a complicated amalgam of emotional work, practical as well as educational work. However, divided attention has been shifted to the effect of emotional availability, although a growing body of social science research points to the gendered nature of emotional availability in the journey of pregnancy and motherhood (Reayi, 2004). A solid support system has been considered an integral part to a healthy journey of pregnancy and safe delivery, support could be from family members, loved ones or even other women going through the same experience. Social support consists of several important aspects including the provision of emotional support such as caring for the pregnant woman or new mother, support can also be informational, whereby one provides the necessary details required throughout the journey of

pregnancy and motherhood. Lastly, the support could also be tangible, where financial assistance is provided by loved ones. The assistance is not limited to family members. In some instances, women offer and receive support from other women through social media. As it enables them to share experiences with one another, and this has been an alternative since the pandemic. Having a solid support system also enhances physical and emotional well-being of women accessing maternal healthcare services.

Morikawa *et al.,* (2015) assert that lack of support during pregnancy and motherhood could be the leading cause of depression and a greater risk of giving birth to unhealthy babies. Since the outbreak of the Coronavirus pandemic, only the woman giving birth and the midwife are allowed in the maternity room and this led to reduced support from loved ones as they are not allowed in the delivery room. The rule is one of the preventive measures of Covid-19, put forth by the government to try to combat the spread of the Covid-19 virus but it is negatively affecting the maternal healthcare sector. Zhou *et al.,* (2021), assert that lack of support has an impact on new mothers and pregnant women. Lack of support place expectant women them at a greater risk of developing postpartum depression, unpleasant birth experiences as well as several number of physical health and mental consequences. The empirical evidence from the study also showed that virtual support from friends and families during delivery had a positive impact on perceived support levels during the Coronavirus pandemic (Zhou *et al.,* 2021).

Furthermore, various stakeholders involved in maternal healthcare services can hinder or even facilitate access to maternal healthcare services. As it has been reported previously by other studies how healthcare professionals hinder access to maternal healthcare services by the way they treat patients on a daily basis. Considering the attitude of nurses which has led to some women withdrawing from accessing maternal healthcare services. This has been highlighted as one of the major factors hindering women from accessing maternal healthcare services. It was also confirmed by the findings of the study conducted on community's experience and perceptions

of maternal health services across the continuum of care in Ethiopia by Turineh *et al.,* (2021). Turineh *et al.,* (2021), state that healthcare workers hinder access to maternal healthcare service as some women have reported to have stopped accessing maternal healthcare services due to the disrespectful care they receive from nurses. The findings of the study identified disrespectful and bad maternity care hinder women from seeking continuous maternal healthcare. Amongst disrespectful care, abuse and disrespect, various discriminatory acts based on socio-economic status were also highlighted. The findings of another study conducted by Adatara *et al.,* (2019), on rural women's experiences relating to the operation of birth care provided by skilled attendants in rural areas of Ghana confirm the above findings. Adatara *et al.,* (2019), emphasises that women have reported to have experienced various forms of mistreatment either during childbirth or monthly visits as well as discrimination. Another qualitative study conducted on the experiences of and responses to disrespectful maternity care and abuse during childbirth by McMahon *et al.,* (2014), also highlighted that women often withdraw from accessing maternal healthcare services due to mistreatment from healthcare workers.

3.8 Interventions in place for maternal healthcare

The South African government implemented primary healthcare as it was considered to be cost effective and that meant improving the health status of citizens who could not afford private healthcare services. In the same year, free maternal healthcare services to all pregnant women and children under the age of 6 years as well as universal access to primary healthcare for all South African citizens were introduced and implemented. The main emphasis of the two policies was on the development and improvement of healthcare facilities. These included clinics and maternal healthcare related programmes. Maternal healthcare programmes which included the extension of immunizations, child nutrition and child and mother healthcare. And lastly, the management of diseases as well as Act No 92 of 1996 which introduced the termination of pregnancy and gave all women in their reproductive years the legal right to terminate pregnancy

(Nteta *et al.,* 2010). Various interventions have been implemented to improve access to maternal healthcare will be discussed thoroughly below.

Even though there are various interventions implemented to improve access to maternal healthcare, the interventions are not designed in accordance with women's experiences in accessing material healthcare. For instance, the MomConnect and MAMA interventions were developed and implemented in order to disseminate information to patients. However, the initiatives did not consider women in remote areas where there are connectivity issues or women who might not have cell phones. Interventions are meant to improve the experiences of women accessing maternal healthcare and not produce unpleasant experiences. Hence, the study aims to explore the experiences of women accessing maternal healthcare services in order to possibly fill in the gap in policy making by assisting policy makers to further improve how certain policies meant to cater for vulnerable groups are designed to meet the needs of women accessing maternal healthcare services.

3.8.1. Community based intervention

Community based intervention has been identified as a component that can be used to reduce maternal mortality in many healthcare systems, particularly in remote areas of developing countries. In some countries, community healthcare workers are volunteers that often receive a stipend from the Department of Health. In South Africa for instance, there is a policy which states that Community healthcare workers should be employed on a permanent basis. However, the National health department district cluster officials advocate for only 75% of permanent positions, which still exists in some provinces. High coverage of community health workers involvement has not yielded any improvement to maternal mortality. In South Africa the use of community healthcare workers initiative has also been introduced in order to provide accessible and appropriate care to mothers and their children. However, the positive outcome of the involvement

of community health workers depends on the relationship and trust between the healthcare system, patients as well as the community health workers. The South African Medical Research Council introduced a Cluster Randomized Control Trial in 2008, The Goodstart III which comprised the home visit programme. The aim of the programme was to assess the effectiveness of community health workers on maternal health related issues (Besada *et al.,* 2020).

Soon after the Goodstart III programme, the National Department of health also introduced the Re-engineering of Primary health care in 2011 which relied on community healthcare workers. Over 2 decades ago, Brazil and other countries reported a successful community healthcare workers program. Community healthcare workers have introduced preventive interventions which have in turn indicated a significant decline in child mortality. By highlighting improvements in access to maternal health care as well as improvements on child development and growth. According to the results of the study conducted on community healthcare workers' impact on maternal and child health outcomes in rural South Africa, a non-randomized two group comparison study by Roux *et al.,* (2020), the introduction of community healthcare workers has yielded positive outcomes. In several parts of South Africa, particularly in rural areas, the study indicated that since the introduction of community healthcare workers high attendance of antenatal care have been reported. Expectant mothers who accessed interventions have been reported to feeding their babies until 6 month which is crucial to their health and mothers who accessed interventions had healthier babies. There have been improvements in maternal health outcomes over a decade ago, yet substantial needs remain. The improvements, however, do not highlight the experiences of women accessing maternal healthcare services during disease outbreaks and how the challenges could be tackled from women's perspectives (Besada *et al.,* 2020; Katzen *et al.,* 2020;).

3.8.2 mHealth Initiative in South Africa

Momconnect

The South African Department of Health implemented the mHealth intervention called MomConnect in August 2014. The purpose of the MomConnect is to support women accessing maternal healthcare services around South Africa through text messages which are available in all 11 South African official languages. Moreover, the MomConnect seeks to minimise the paper-based registration of pregnancies by introducing a mechanism of registering pregnancies electronically in the public health system, the MomConnect also reckon that sending of text messages to women will assist in finding ways to improve the rendering services of maternal healthcare as women accessing maternal health care services provide feedback regarding the services they have received (Barron *et al.,* 2016). Agarwal & Labrique (2014) further add that mHealth intervention have the potential to improve neonatal survival by not only catalysing but also improving the delivery of different interventions of adjusting the demand for quality maternal healthcare services as well as validating the provision of not only targeted care but also the benefits needed (Barron *et al.,* 2014; Agarwal & Labrique, 2016).

The following is MomConnect initiative poster with all the details inclusive of what the application offers, and the steps required to access the services offered on the application.

Figure 3.8.2: MomConnect initiative poster

Source: Department of Health, (2014)

The diagram below illustrates how MomConnect works and the necessary steps required to access it. MomConnect step by step poster also illustrates what is required of the pregnant mother by the Department of health in order to access MomConnect application.

Figure 3.8.2.1 Step by step instructions to access MomConnect

Source: Department of Health, (2014)

3.8.4. Health systems intervention

The implementation of the health system interventions that can successfully improve the quality and outcome of healthcare in developing countries have proven to be a challenge (Manyati & Mutsau 2021b). However, the South African government has adopted the health system intervention in order to support national care initiatives. The programme has been implemented and evaluated over the past 2 decades and has also indicated an improvement in healthcare outcomes (Murdoch *et al.,* 2018). Amongst other interventions which South Africa have implemented was the MAMA intervention. MAMA intervention consists of the use of cell phones as a mode of communication between women accessing maternal healthcare services and healthcare workers, women accessing maternal health care services receive text messages about maternal healthcare and infant information. The MAMA Intervention was implemented with the aim to support women in their journey of pregnancy and motherhood. The MAMA intervention has

also been implemented globally and has been regarded as providing relevant and supportive information to pregnant women and new mothers. The use of cell phones has proven to be useful when it comes to information sharing and health systems across the world have adopted mHealth (Mobile Health) in order to promote health outcomes, increase engagement between women accessing maternal healthcare and health care workers as well as strengthen health systems. Since the previous studies did not take into consideration the gendered effects that disease outbreaks have on women specifically more on women accessing maternal healthcare services during disease outbreaks. Therefore, this study is intended to find out the experiences of women in accessing maternal healthcare during the Covid-19 pandemic outbreak, in the context of Mmabatho in the North West Province. The experiences of women during disease outbreaks in this case, Covid-19 pandemic might assist North-West Department of health in formulating strategies that will assist women accessing maternal healthcare services in future epidemics and pandemics and also be fully ready to also prioritize each patient according to their specific health needs (Coleman *et al.,* 2020; Murdoch *et al.,* 2018).

3.9 Conclusion

The review of works of literature have made it obvious that the prevention of adequate maternal healthcare services is a necessary health concern and one of the principles that guide human rights. Findings from studies have shown a direction on the need to further research on interventions and policy frameworks that would help in supporting and protecting children, women, families and communities at large. This would enable a reduction in the lingering burden of deaths for mothers and their children, as well as economic and emotional crises that follow poor maternal outcomes.

CHAPTER FOUR

THEORETICAL FRAMEWORK

4.1 Introduction

This chapter aims to discuss the theoretical framework which anchors this study. It uses the combination of Andersen's expanded socio-behavioural model and Bourdieu's theory of social practice. Andersen's socio-behavioural model of 1995 aimed at exploring the relationship as to how and why people seek and access maternal healthcare services. Bourdieu's theory of social practice was aimed at proving the relationship that exists between people and social structures and how social structures offer access to a variety of different social, economic and even cultural conditions which in turn influence how they perceive and act towards issues. This chapter discusses the overview of Andersen's expanded behavioural model and Bourdieu's theory of social practice as well as major tenets emerging from both theories.

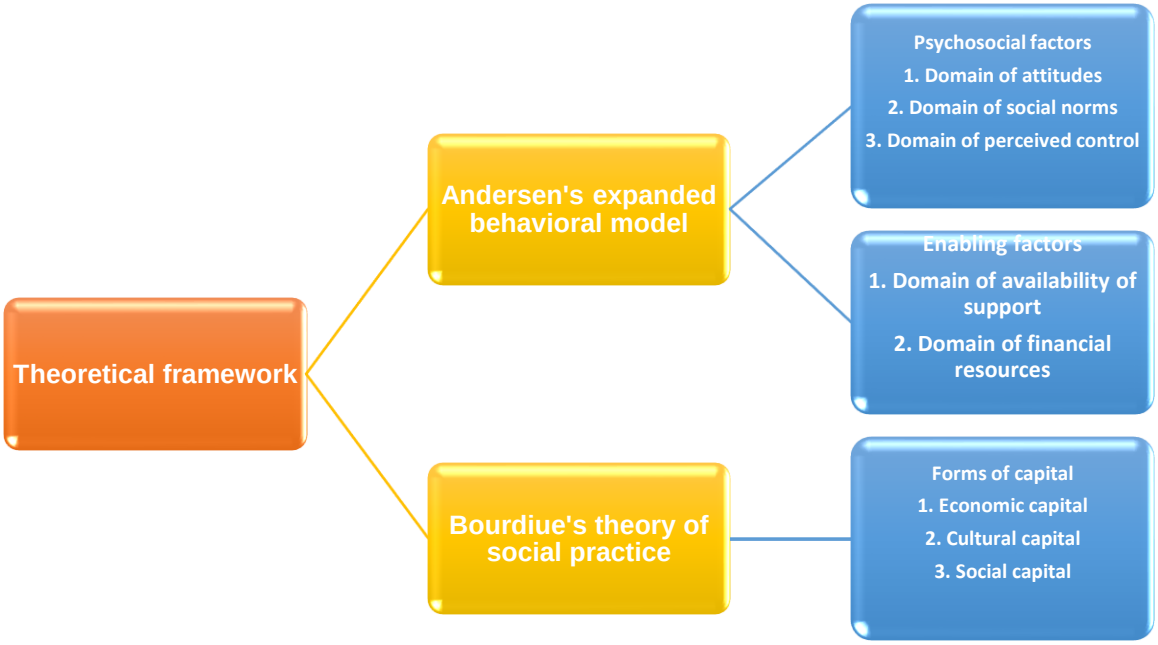
4.2 Overview of Andersen's expanded behavioral model and Bourdieu's theory of social practice

To understand the experiences of pregnant women in accessing maternal health care services, this study utilised the combination of Andersen's expanded behavioural model of health use which serves as augmentation of Andersen's socio-behavioural model of 1995 and Bourdieu's theory of social practice. The socio-behavioural model of 1995 sought to explain and predict the provision of health care services and the utilisation of such services in relation to people's traits, the characteristics of the population they belong to as well as the environment in which they live. The socio-behavioural model explains healthcare services and utilisation of services utilising psychosocial factors and enabling factors. Both factors consist of different domains including domain of attitudes, social norms and perceived control and enabling factors which consist of

domain of availability of support as well as financial resources. Most theoretical frameworks including health belief model and social cognitive theory view people's behaviour in association with how they seek health care as people's rational choices in turn providing inadequate focus to the impact of social context in people's actions (Anderson, 1995).

In order to conceptualise the patterns of predisposing characteristics, the analytical framework also draws from Bourdieu's theory of social practice. Bourdieu's theory of social practice is used to explain the relationship that exists between people and social structures and how social structures offer access to a variety of social, economic and even cultural conditions which in turn influence how they perceive and act towards issues. Field and capital are two important concepts of the Practice theory. According to Bourdieu and Wacquant (1992: 22-28); field refers to resources such as maternal healthcare, jobs, marriage and so forth, which available to individuals with varying level of power or ability. These individuals are said to be in competition over these resources. On the other hand, capital refers to the power or ability which individuals have to enable them to gain access to the field. In this study, capital can be economic, social or cultural. Bourdieu's view has been used to identify the gaps that exist in health care sectors and the reasons behind people's conditions i.e., illnesses and how pregnant women behave during childbirth (Simkhada *et al.,* 2008). In this context, the experiences of pregnant women are influenced by the group in which they belong. The theory of social practice emphasises how women accessing maternal healthcare services can acquire knowledge and other ways of using maternal health care services. For instance, women could learn alternative ways of accessing maternal healthcare services from others. In turn the experiences of older women can influence the behaviour of young women in terms of the utilisation and no utilisation of maternal health care services. According to theory of social practice, most women tend to learn from other women's past experiences of maternal healthcare services as well as society's acceptable behaviour during pregnancy and delivery (Anderson, 1995 & *Simkhada et al.,* 2008).

Figure 4.2.1: Major tenets of Andersen's expanded socio-behavioural model and Bourdieu's theory of social practice



Source: Travers *et al.,* (2020); Andersen, (1995)

However, both the expanded model and the 1995 model did not take into consideration the relationship between gender dynamics and their influence in accessing and utilising maternal healthcare services. A better understanding of the relationship between gender dynamics and decision making of intended or planned behaviour would assist researchers to better understand women's choices in seeking and accessing maternal healthcare services (Andersen, 1995). In order to conceptualise the patterns of predisposing characteristics highlighted in Andersen's expanded socio-behavioural model, the analytical framework also draws from Bourdieu's theory of social practice. Bourdieu's theory of social practice attempts to provide the relationship that exists between people and social structures and how social structures offer access to a variety of different social, economic and even cultural conditions which in turn influence how they perceive

and act towards issues. Both Bourdieu's theory of social practice and Andersen's socio-behavioural model do not highlight the relationship that exists between gender dynamics and the utilisation and access to maternal healthcare services during disease outbreaks. Gender has been considered a secondary principle and paired with other demographic characteristics in previous studies, however, there is a dearth of literature concerning the role of gender in accessing maternal healthcare services (Andersen, 1995; Bradley *et al.,* 2002; Bradley *et al.,* 2004; Travers *et al.,* 2020).

Gender dynamics has not been a major focus in epidemiological research aimed at assessing psychosocial factors related to inequalities in relation to accessing quality and efficient maternal healthcare services. Gender dynamics, social capital as well as cultural capital mediate effects on healthcare access and health outcomes and inequalities between different households. Gender dynamics also plays a major role in women's health. The following section discusses the major tenets emerging from Andersen behavioural model as well as Bourdieu's theory of social practice. The section below discusses the integration of gender into psychosocial factors, affordability of maternal healthcare services, Bourdieu's concept of capitals, the integration of gender into cultural capital.

4.3 Psychosocial factors

Psychosocial factors include demographic characteristics of women accessing maternal healthcare services. However, little attention has been shifted to the relationship that exists between gender and how it influences the utilisation of maternal healthcare services. The following section discusses the integration of gender into psychosocial factors and access to maternal healthcare services.

4.3.1 Integration of gender into psychosocial factors

Gender inequality plays a key role in the utilisation of healthcare use, in this context, maternal healthcare. The empirical findings from the study conducted by Tolhurst *et al.,* (2009), assert that gender inequalities that exist in maternal healthcare have an adverse impact on the utilisation and access to maternal healthcare services. Kraft et al., (2014), substantiate the above findings by Tolhurst *et al.,* (2009). Kraft et al., (2009), highlight the demand side of maternal healthcare, and lack of access and control of medical resources. Furthermore, Kraft et al., (2014) highlight the gendered division of labour as well as the lack of decision-making authority limit and pose as a barrier to women in accessing maternal healthcare services. This in turn also shows how the gendered inequalities impact access to maternal healthcare. On the supply side, societal gender discrimination is often portrayed as the delivery of maternal healthcare services. According to Davis *et al.,* (2012), gender intersects with other demographic characteristics. demographic characteristics such as ethnicity, race, education, income, class as well as age which further exacerbate the different effects of gender inequalities on access to maternal healthcare services for marginalised women from disadvantaged backgrounds. The findings of the study conducted on gender, psychosocial factors and use of medical services by Green & Pope (1999) confirm that in deed gender plays a vital role in accessing maternal healthcare services. Additionally, Green & Pope (1999), argued that gender indirectly predicts the long-term utilisation of maternal health care (Davis *et al.,* 2012; Green & Pope, 1999).

A study was conducted on gender dynamics affecting maternal health care and healthcare access and use in Uganda by Morgan *et al.,* (2017). The findings state that men affect women's access to healthcare particularly prenatal care. This is due to their role as life partners, healthcare providers as well as community leaders who have control and power over resources and decision making (Morgan *et al.,* 2017). Elmusharaf *et al.,* (2015), also advanced the notion that since gender dynamics affect the utilisation and access to maternal healthcare services. Gender

dynamics should be incorporated into maternal healthcare interventions. Kraft *et al.,* (2014), also support the above statement by Elmusharaf *et al.,* (2015) and highlight that gender conscious interventions can be gender unequal. Furthermore, a review on gender integrated interventions, for instance, found that the effects of integrating gender dynamics into interventions were mixed. The overall studies also recommended that addressing structural and social factors is imperative in improving access to maternal health care. Structural and social factors within child health and maternal health intervention such as inequalities as well as gender norms is advantageous for effective outcomes of such interventions. According to Holmes *et al.,* (2013), maternal healthcare interventions have been successful in increasing access to as well utilisation of maternal healthcare services. However, overlooking gender dynamics has limited the sustainability of the generated benefits. Gender power relations must be fully understood and not limited to how power is constituted or negotiated alongside access to services and resources, social norms or division of labour but also on how the intersect that exist affect access to maternal healthcare services (Elmusharaf *et al.,* 2015; Holmes *et al.,* 2013; Kraft *et al.,* 2014; Morgan *et al.,* 2017).

4.3.2 Affordability of maternal healthcare services

Financial resources during pregnancy and motherhood play a significant role in ensuring that women receive proper maternal healthcare services. This is one aspect of people's lives that was negatively affected by the Covid-19 pandemic due to people losing their jobs. Traveling to healthcare facilities requires funds and some women could not afford the traveling costs as prices soured during the Covid-19 pandemic. As North West Province was declared a Covid-19 hotspot, some clinics had to close for some time and women had to find alternative ways to receive maternal healthcare services. Some women from high income backgrounds had the means to make alternative ways to receive proper maternal healthcare services. However, some women from low-income social groups could not and this clearly illustrates the inequalities that exist within healthcare sectors in South Africa. As alluded in Bourdieu's forms of capital, economic capital

assert that all material resources required to reach or pay in advance for standard maternal healthcare services or receive better service cannot be accessed in public healthcare institutions. Also drawing back to Andersen's expanded socio-behavioural model within the domain of attitudes which clearly states that affordability of healthcare services is the core element of the utilisation and access to maternal healthcare services. In the context of women accessing maternal healthcare services in Mmabatho, some women cannot afford services offered in private healthcare institutions, this then placed them at a greater disadvantage of not receiving proper care during pregnancy and motherhood, which could in turn lead to complications and contribute to the higher rate of maternal mortality

4.4 Andersen's expanded behavioral model of health use

Andersen's expanded behavioural model of health use seeks to assess the effectiveness and efficiency measure of access to healthcare alongside the different healthcare systems impacting access and utilisation of healthcare services. The purpose of Andersen's expanded behavioural model also serves as an improvement to the socio-behavioural model of 1995's ability to explain in detail the impact that concept of race and ethnicity has on the utilisation of healthcare services, in this context maternal healthcare services (Travers *et al.,* 2020). Andersen's expanded behavioural model of health use has two additional factors; enabling factors as well as need factors which are similar to Andersen's socio-behavioural model of 1995. The factors emerged on Andersen's expanded behavioural model serve as domains within the factors that describe the knowledge, attitudes, social norms as well as perceived control of people accessing healthcare services.

The following section discussed the psychosocial factors from Andersen's expanded behavioural model of health as well as their domains in more detail.

4.5 Psychosocial factors

Psychosocial factors are predisposing characteristics as themed previously on Andersen's socio-behavioural model that impact the decision making of intended behaviour. For instance, psychosocial factors forms part of the attitudes women accessing maternal healthcare services have towards the utilisation of maternal healthcare services, the kind of knowledge they have regarding maternal healthcare services limited not to when and how such services should be utilised, the social norms women accessing maternal healthcare services they are subjected to from the society and their perceived control over the utilisation of maternal healthcare services (Travers *et al.,* 2020). The psychosocial factors to be discussed include the domain of attitudes, domain of knowledge as well as domain of perceived control.

4.5.1 Domain of Attitudes

Attitudes serve as personal views concerning the utilisation of healthcare services, in this instance maternal healthcare services. This domain includes the role of the healthcare workers regarding the utilisation of maternal healthcare services, their ability to render maternal healthcare services to different women as well as their interpersonal skills, compassion, trustworthiness, their ability to listen and communicate with patients within the maternity department. In the previous studies (Harris *et al.,* 2011;Yamada *et al.,* 2015) that have utilised Andersen's socio-behavioural model, the results of the study indicated that most participants mentioned the affordability of healthcare services; being able to afford maternal healthcare services serve as an important aspect of the utilisation of maternal healthcare services for instance. Even though South Africa has been providing free maternal healthcare services, not all services are offered at local clinics and public hospitals. In addition to the affordability of maternal healthcare services, the social environment is also essential for women accessing maternal healthcare services as they have to establish connections through interaction in order to have an opportunity to share spaces with other women

accessing maternal healthcare services; uniformity of background has been proven to be helpful to many women in their reproductive years, new mothers and those expecting to give birth (Bradley *et al.,* 2002).

4.5.2 Domain of Knowledge

The domain of knowledge has been consistent with Andersen's behavioural model as it relates to the long-term utilisation of maternal healthcare services. Knowledge goes hand in hand with attitudes. Within the domain of knowledge there are several themes including the availability of knowledge, where and how women accessing maternal healthcare services obtain all the information required during their journeys of pregnancy and delivery. Within the journey of pregnancy, there is also important information regarding the first day/ month to book for maternity, regular check-ups and collection of medication that healthcare workers should disseminate to women accessing maternal healthcare services. Another theme is the source of information which in this case is the North West department of health through its various healthcare facilities. The North West Department of Health is responsible for healthcare related information dissemination. Women accessing maternal healthcare services require information on how services should be rendered during the Covid-19 pandemic as there are certain regulations which citizens must abide by. Lastly, the accessibility of such information shows how and when women accessing maternal healthcare services can access information regarding the use of maternal healthcare services (Bradley *et al.,* 2002; Lederle *et al.,* 2021; Tolera *et al.,* 2020).

4.5.3 Domain of Social norms

The expanded social behavioural model consists of two themes within the social norms' domain: relevant and referent norms. The expanded behavioural model perceives referent norms as the legitimate source of authority. The decision makers within the maternal healthcare sector can be defined as collective individuals that possess knowledge and experience of maternal healthcare

services (midwives) and can also refer other individuals or professionals within their field. Relevant norms in this context can be referred to all the aspects that could have born on one's choice of the use of maternal healthcare services. The expectations of care focus on the goals of women accessing maternal healthcare services; expectations include ways to better maternal healthcare services as well as different communication channels. The loss and change in this instance refer to all the adjustments which a new or an expecting mother has been subjected to. Lastly, the dimension of family burden comprises of all the comfortability that comes with the additional member of the family. (Bradley *et al.,* 2002; Lederle *et al.,* 2021; Tolera *et al.,* 2020).

4.5.4 Domain of perceived control

The domain of perceived control on Andersen's expanded behavioural model assert that women accessing maternal healthcare services have a limited decision-making authority, in some instances, decisions are made on their behalf. This domain consists of women accessing maternal healthcare services, the role of choice in the use of maternal healthcare services, prior planning for future needs as well as the two emerging dimensions consisting of decision makers and alternatives. The dimension of decision makers also has five sub-dimensions or categories which are: autonomous, collaborative, placement which consist of transfer, sent from facility, put or taken from home patients, last but not least unsure patients. The utilisation of maternal healthcare services serves as an important phase in a woman's journey from pregnancy to motherhood. Women make autonomous decisions with regards to how to access maternal healthcare services. Despite the decision being theirs, collaborative support and input is also required from their loved ones. Alternatives on the other hand consist of changes of care needs, different preferences and options that influence the utilisation of maternal healthcare services. Planning for future needs comprises consists of long-term decision making as a process of unfolding over time and it considers financial planning as well as psychological planning. Psychological planning has been considered the most important as women accessing maternal

healthcare services go through psychological counselling before giving birth, a mother should be psychologically ready for all the changes that comes with being a mother (Bradley *et al.,* 2002; Lederle *et al.,* 2021; Tolera *et al.,* 2020).

4.6 Enabling factors for long-term use and support use

Enabling factors consist of family and community resources and the accessibility that comes with acquiring those resources including the availability of support and financial resources.

4.6.1 Domain of availability of support

A solid support structure has been considered an essential component during the journey of pregnancy and motherhood. Support gives rise to proximity as it has been described in several forms including the proximity of meals when going through monthly maternity check-ups, services offered within the maternity department, different activities offered including antenatal classes, as well as care within the family and community of the expecting woman (Bradley *et al.,* 2002; Lederle *et al.,* 2021; Tolera *et al.,* 2020). This shows that it is important to consider the intersectionality of the availability of social support and the uptake of maternal health services and how this may have been affected during the Covid-19 pandemic and the ensuing lockdowns. This speaks not only of the provision of maternal health services in healthcare facilities but also to the impact on family structures during pregnancy, giving birth and postnatal care.

4.6.2 Domain of financial resources

The domain of financial resources includes the well-being of women accessing maternal healthcare services and protection against risks serve as important dimensions as they determine one's ability to access healthcare services (Bradley *et al.,* 2002; Lederle *et al.,* 2021; Tolera *et al.,* 2020). As alluded by Bourdieu (1977), traveling to healthcare facilities requires money or better yet private healthcare institutions require payments for their services, some women accessing

maternal healthcare services from disadvantaged backgrounds, work low-income jobs or are unemployed may be excluded from being able to access the needed services including mere immunisation fees. Financial resources play a major role in whether women access maternal healthcare services or not. This means that even if the services rendered are free or cheap, some women may still lack access depending on where they stay or whether or not they are available when they get to the healthcare facilities. In the context of Covid-19, some facilities may have been closed as a result of Covid-19 cases and women would have been forced to spend money in order to obtain medicine or assistance or travel longer distances for other facilities.

4.6.3 The critique of Andersen's behavioral model of health use

Andersen's behavioural model has been utilised countless times in several studies that were investigating different diseases and different aspects of healthcare utilisation. However, this model has been criticised for focusing on specific factors (predisposing factors) which in turn led to overlooking certain diseases that were identified as need factors. In most studies, researchers shifted more focus to predisposing and enabling factors that play a significant role in the utilisation of maternal healthcare services. However, the model did not clearly highlight the relationship that exists between gender dynamics and provision and utilisation of healthcare. Establishing the relationship between gender dynamics and provision as well as utilisation of maternal healthcare enabled researchers to better understand women's access to maternal healthcare services, how resources are distributed as well as women's ability to make decisions regarding seeking and accessing maternal healthcare services (Andersen, 1995; Andersen, 2008; Babitsch, 2011; Bradley *et al.,* 2002; Davidson *et al.,* 2004)

Furthermore, this model assert that socioeconomic status of a community may be perceived as a predisposing factor, given that the induced supply affects the demand as well as an enabling factor in terms of its association to the individual together with community income. Sex and age

may also be categorised as demographic predisposing variables as well as proxies of need variables on the basis that they go hand in glove with morbidity. It is therefore difficult to identify the factors that contribute the most in the utilisation of maternal healthcare services. Even though the socio-behavioural model version of 1995 has been disapproved for its nonexistence of dynamic character and its overemphasis of the need as well as at the expense of different beliefs in relation to health care and social structures, Anderson (1995) reported that need represents a social construct. Need is divided into perceived and assessed, therefore, the socio-behavioural model best describes the utilisation of maternal health care services in South Africa particularly in Mmabatho, North-West as all factors play a significant role in influencing the behaviour of women in seeking health care (Anderson, 1995). Furthermore, although the model of 1995 identifies predisposing, enabling and need factors as key determinants of healthcare use, the model does not clearly highlight how the factors are interrelated.

Since little attention has been shifted to the relationship that exists between gender and how it influences the utilisation of maternal healthcare services as well as how gender intersects with other demographic characteristics. The theoretical framework integrates gender into psychosocial factors in order to determine its role in the utilisation of maternal healthcare services. The framework also highlights the relationship that exists between women's provision and utilisation of maternal healthcare services as well as gender dynamics.

4.7 Bourdieu's theory of social practice on maternal healthcare services

Several studies reckon health status predicts the utilisation of maternal healthcare services. Health status serves as the most significant factor in the utilisation of maternal healthcare services. However, the negligence of class-related individual resources accumulated cannot be overlooked. Since class-related individual resources serve as translated health literacy and health

prevention practices that assist women accessing maternal healthcare services to optimise their maternal healthcare services utilisation (Harris *et al.,* 2011; Yamada *et al.,*2015).

Bourdieu's theory of social practice serves as an important aspect in understanding the current state of underlying inequalities within the healthcare sector. It does not only highlight the monetary dimension of capital but other social and cultural aspects that form part of other forms of capital. In a broader sense, the social and cultural forms of capital represent not only lifestyle indicators, educational backgrounds, they also stretch the importance of social relationships as well as gender (Harris *et al.,* 2011; Paccoud *et al.,* 2019; Yamada *et al.,* 2015). The following are the three Bourdieu's forms of capital and their impact on maternal healthcare in detail.

4.7.1 Bourdieu's forms of capital on maternal healthcare

The following serve as an overview of Bourdieu's forms of capital and their impact on the utilisation of maternal healthcare services.

4.7.1 Economic capital on maternal healthcare

Bourdieu's theory of social practice has been useful in highlighting inequalities that exist within healthcare sectors. Firstly, by examining the economic capital which accounts for the monetary dimension including properties and other financial related assets. Within the context of maternal healthcare, economic capital accounts for all material resources required to reach or either pay in advance for standard maternal healthcare services or even purchase for better services and that includes medical aids, health insurances as well as treatments that cannot be offered in public healthcare institutions. Economic capital draws back to Andersen's expanded behavioural model within the domain of attitudes where it states that affordability is one of the core elements of the utilisation of maternal healthcare services. Affordability somehow has an impact on women's attitudes towards utilising maternal healthcare services, taking into consideration the fact that

North West was identified as a Covid-19 hotspot and most local clinics were closed at some point because of the spike in the number of Covid-19 cases. Closure of local clinics meant that women who were accessing maternal healthcare services at that particular clinic had to find alternatives which goes back to the domain of availability of support and financial resources. Traveling to another clinic requires money, or better yet private healthcare institutions require payments for their services. (Bourdiue, 1986; Collyer *et al.,* 2015; Hastings & Matthews, 2015; Paccoud *et al.,* 2020).

4.7.2 Cultural capital on maternal healthcare

Cultural capital comprises of different learned behaviours from cultural belief or practices that tend to be from other women's past experiences of maternal health care services as well as society's acceptable behaviour during pregnancy and delivery. For instance, according to the results of the study conducted on health-service utilisation by expectant women in Mafikeng Mmabatho district by Pretorius (2004), pregnant women have traditional values, especially women in rural areas. Some women from rural areas are illiterate and have proven to portray unawareness of values of optimal maternal healthcare services and they also believe that their mothers and grandmothers are capable of taking care of their maternity needs that leads to less or even no maternal healthcare services utilisation. This form of capital has been divided into three different forms including behaviours learned through other different behaviours and characters accumulated over time (embodied state), behaviour learned through cultural practices (objectified state) and lastly behaviour learned through educational qualifications which falls under the institutionalised state. However, in the context of maternal healthcare, cultural capital represents different skills of women in Mmabatho accessing maternal healthcare services, their verbal and non-verbal competencies, how they interact with healthcare workers and other women accessing maternal healthcare services, last but not least, different attitudes and behaviours which relate to different healthcare practices including the utilisation of maternal healthcare services. It is also a vital

component in unequal distribution and production of maternal healthcare services (Collyer *et al.,* 2015; Hastings & Matthews, 2015; Paccoud *et al.,* 2020). This is important in the context of the Covid-19 pandemic as there was a need for alternative ways of accessing healthcare which included for example, a heightened dependence on the use of social media.

4.7.3 Social capital on maternal healthcare

Social capital as defined by Bourdieu (1986), is the aggregate of the actual resource which relates to the possession of a durable network of more or less different institutionalised relationships or mutual acquaintance for recognition. Shifting the focus to maternal healthcare, this form of capital represents women accessing maternal healthcare services' social interactions/network. These networks include those groups that women draw on to access maternal healthcare related information, support and recommendations regarding such services. Social capital has a direct and in turn an indirect intervening impact on the social reproduction of maternal healthcare such as through recommending valuable and quality networks, solid emotional support and encouraging participation in different healthy behaviours amongst other things (Collyer *et al.,* 2015; Hastings & Matthews, 2015; Paccoud *et al.,* 2020). It is noteworthy that the social aspect of society was greatly impacted by the lockdowns that resulted from Covid-19, this makes it important to look at the experiences of women in this area considering the importance of social capital.

4.8 Critique of Bourdieu's theory of social practice

Bourdieu's theories of social practice have been perceived as discrete structures or institutions consisting of its own histories and approaches. It has also been criticised for being overly deterministic (Bourdieu, 2005; Maller, 2015; Williams, 1995), on the contrary, there has also been an overemphasis on individuals as the area of focus and analysis in the empirical application regarding Bourdieu's ideas, which in health research dominant paradigm has been behaviourism.

Shifting the focus from individuals as the unit of analysis in empirical work, the calculated risk of putting all the blame and responsibility on agents for health outcomes, in turn overlooking the impact that different institutions have on health outcomes can be avoided. However, the social learning theory still have much to contribute to the current healthcare crisis and understanding of healthcare and individuals' well-being, not limited to the well-being of citizens but also the field of health in sociology and other public health research in promotion of health in a broader perspective (Bourdieu, 2005; Maller, 2015; Williams, 1995).

The following section thoroughly discusses Bourdieu's concept of capitals in maternal healthcare.

4.9 Bourdieu's concept of capital

Bourdieu clearly stipulates the theoretical understanding of different forms of capitals. The primary relational concept which exists in conjunction with other capitals and cannot be understood in isolation is the cultural capital. Cultural capital, social and economic capital generate inequalities within different societies. Social capital is generated through socialization such as through social media, for instance there are motherhood pages like the clueless mom found on Instagram where new mothers connect with other mothers to share experiences of pregnancy and motherhood. Social capital can also be established through the relationships which exists between families and the society at large. Economic capital on the other hand consists of individuals' state of wealth also generated through socialisation or through inheritance whereas cultural capital has to do more with the skills and practices acquired through interactions. Cultural capital can also be converted into social capital. However, these processes are not clearly demonstrated and the manner in which they are achieved. Each form of capital has an impact on society. Cultural capital is usually transmitted through family relations. It is from the family that women acquire ways to take care of their children and how and when to seek and access maternal healthcare services. Forms of capital enable women to acquire modes of thinking, different sets of qualities needed to

take care of their well-being during pregnancy and motherhood as well as dispositions. Cultural capital, therefore, is an integral part of the relationship that exists between women's behaviour in seeking and accessing maternal healthcare services and their home background inclusive of support systems.

The following section discusses the integration of gender into Bourdieu's cultural capital

4.10 Integration of gender into Bourdieu's cultural capital

Gender inequalities does not appear in Bourdieu's fundamental principles of maternal healthcare use. According to Bourdieu (1984), gender has been paired with other demographic characteristics such as age as a secondary principle, thus Bourdieu (1984) does not clearly highlight the strength and acknowledge the power of gender dynamics on access to maternal healthcare services. Contradictory to Bourdieu (1984), McCall (1992) state that gender dynamics should be acknowledged as being moulded by a specific historicity. As emphasized by Bourdieu (1984), cultural capital exists in three forms, in the embodied state, where behaviours learned through other behaviours and characters accumulated over a certain period of time, in the form of embodied state, inclusive of cultural practices where women would rather opt for practicing what they have learned from elders during pregnancy and motherhood and lastly in the form of institutional state. The institutional state in the context of maternal healthcare represents different skills and cultural practices of women accessing maternal healthcare services whether verbal or non-verbal competences, their interactions with other women going through the same experiences and lastly different attitudes moulded by different experiences in relation to their personal experiences pertaining maternal healthcare practices inclusive of the use of maternal healthcare services. Gendered dynamics pertain precisely to different skills and cultural practices of women accessing maternal healthcare services which are acquired over time through socialisation. Thus, gendered dynamics relate to the embodied state of the cultural capital

(Bourdieu, 1984; McCall, 1992). Additionally, Bourdieu's cultural capital as part of the analytic framework and epistemology is an important attempt at conceptualizing gender to further understand it as a fundamental principle in women accessing maternal healthcare services.

4.11 Conclusion

This chapter outlined the theoretical framework of the study in detail. The discussion also included the critiques of the theories utilised as well as their relevance on the problem under study. Andersen's expanded behavioural model of health use was useful in assessing the effectiveness and efficiency measure of access to maternal healthcare alongside the different healthcare systems impacting access and utilisation of maternal healthcare services. Bourdieu's theory of social practice was useful in highlighting the relationship that exists between people and social structures and how social structures offer access to a variety of different social, economic and even cultural conditions which in turn influence how they perceive and act towards issues.

CHAPTER FIVE

RESEARCH METHODOLOGY

5.1 Introduction

The Covid-19 pandemic had adverse effects on various structures of society, and studies have focused on the impact that the pandemic has made on different populations across the world. This study is intended to find out the experiences of women seeking to access maternal healthcare during the initial outbreak of the Covid-19 pandemic, in the context of the population of Mmabatho in the North West Province. The chapter discussed the methodology and methods used for this study. It critically discusses the research design linking the methodology and the theory. It further unpacked the population and sampling, data collection procedures data analysis and ethical issues.

5.2 Social constructionism and phenomenology

The methodology of this study hinges largely on constructivism and phenomenology. As a constructive researcher, the aim was to engage with the participants collaboratively and respectfully, seeking to understand their perspectives and experiences through open-ended questions and reflection. The link between constructivism and phenomenology lies in their shared emphasis on the importance of experience and subjectivity in shaping the researcher's understanding of the world. Both approaches recognize that our experiences shape our perception of reality and that reality is not a fixed, objective entity. In this study, the researcher was interested in examining women's experiences in accessing maternal healthcare services during COVID-19. Incorporating constructivism, the research explored the experiences of nursing mothers and pregnant women during the COVID-19 pandemic, including their challenges, their

coping strategies, and the support they receive from their families and communities. As a result, a qualitative research design was used to unravel opinions from selected pregnant women, nursing mothers (20), and healthcare workers (10). In the context of studying nursing mothers and pregnant women during the COVID-19 pandemic, phenomenology as a method of inquiry was enabled by conducting in-depth interviews and collecting data from participants to gain a rich, personal understanding of their experiences. This was further facilitated through virtual and augmented reality technologies. These tools created interactive, immersive learning experiences that allowed the researcher to explore and experiment with different concepts and ideas. The results of this study provided valuable insights into the experiences of nursing mothers and pregnant women during the COVID-19 pandemic. They informed healthcare providers, policymakers, and support groups on better supporting his vulnerable population (Andrews, 2012; Burr, 2015; White, 2004).

The justification for the choice of this was informed by Flocco *et al.,* (2020), on the need to explore the lived experiences of pregnant women and early motherhood in Italian women with congenital heart disease. An interpretative phenomenological analysis emphasise that phenomenology allows in-depth description of feelings and experiences. According to Tanwir *et al.,* (2021), on interviews in healthcare: a phenomenological approach is useful in healthcare on the basis that it produces an in-depth description of people's experiences and an unbiased interpretation of the data collected. Khan (2015) & Mohajan (2018) argued that a qualitative research method entails the collection of subjective data from respondents, and this was based on their personal experiences about the objectives and goals of the study. In addition, qualitative research design investigates individual occurrences in the belief that serious certainties about reality are grounded in people's experiences which have already occurred. However, the main aim of this study was to understand perceptions and experiences to which it gives rise. So, in this case in order for the researcher to understand the in-depth experiences of women accessing maternal healthcare and

getting insight into issues of maternal healthcare by women, this study utilised a qualitative research design (Collins & Hussey, 2003; Polit & Beck 2012). Furthermore, data collected was cross-sectional, that is, the data gathered was done at a specific time; hence, changes in trends over time were not considered (Hua & David, 2008; Lindenmayer *et al.,* 2011).

5.2.1 The linkage between methodology and theory

In the discussion on the use of interpretivism in research, Chowdhury (2014), draws our attention to the work of Walsham (1995) that emphasise the meaningful aspect of people's participation in both the social and cultural world based on their characters. Interpretivism seeks to explain meanings and the motives behind people's actions and behaviour. Similarly, to Bourdieu who views people's behaviours in relation to social structures, this study utilised interpretivism to bring in the humanistic aspect. Bourdieu's theory of social practice links with interpretivism due to its symbolic interactionist background as Bourdieu was more interested in treating human subjects with care. In this instance, Bourdieu's theory of social practice helps us to further understand the role of women accessing maternal healthcare services of what constitutes their experiences. Thereby providing insights to their needs as well as their experiences in accessing maternal healthcare services during disease pandemics. In addition, interpretivism follows the qualitative research paradigm which this study therefore espouses to study the experiences of women in Mmabatho in accessing maternal healthcare during the Covid-19 pandemic.

This study used in-depth interviews which enables the researcher to get an emic perspective with regards to the experiences of women accessing maternal healthcare services. The theoretical framework for this study takes into account economic and cultural components which are paramount in the experiences of women which makes the intended women and healthcare professionals central to the process. This is to ensure that women's voices are heard as an important aspect in this research; In terms of detailing their own experiences in accessing

maternal healthcare services Bourdieu's theory of social practice also highlights the issue of existing relationships in society as well as women's economic standing; how it affects women's experiences of accessing maternal healthcare services. There is so much to be gained by entering into women's world and respecting their versions of reality and this can also influence the provision of maternal healthcare services. It is important in this study because previous studies have only provided statistics on alternative ways to influence the provision of maternal healthcare services which in turn influence women's experience in accessing maternal healthcare services.

This section focused on the following: the research designs the study utilised, the size of the population of the study, sampling technique, data collection instruments and the data analysis technique.

5.2.2 Research Design

Qualitative research has been frequently utilised in maternal health care studies to examine how women are affected by disease outbreaks. The justification for the frequent utilisation of qualitative research design was that qualitative research design allows people to express their experiences in their own words and also enabled researchers to gain insights into people's experiences (Raven *et al.,* 2011; Richens & Smith, 2011).

Most authors have highlighted the benefits of carrying out a qualitative research study during disease outbreaks (McCusker & Gunaydin, 2014; Schulze, 2003). Qualitative methods play a vital role in assisting researchers understand disease outbreaks in more detail, the impact disease outbreaks have on people, and possible solutions to the challenges which arise during disease outbreaks. Additionally, the World Health Organization (WHO) & the Centre for Disease Control and Prevention (CDC) emphasizes the use of qualitative research methods when investigating epidemics. It is useful to carry out qualitative research as it enables researchers to gain insights

to people's experiences and explore in more detail as compared to quantitative (McCusker & Gunaydin, 2014; Schulze, 2003).

Quantitative mainly allows researchers to systematically test hypotheses and measure variables. Based on the studies that have been mentioned above, the study utilised qualitative research design. The study utilised a qualitative research design on the basis that it has potential of providing in-depth descriptions of the experiences of Mmabatho, North West women accessing maternal healthcare services (Mushunje, 2016; Rajasekar *et al.,* 2006).

Effective maternal health care has been proven to reduce complications during and after pregnancy more especially during disease outbreaks and this has been supported by the results of the qualitative study conducted on maternal healthcare seeking behaviours and associated factors among women in Eastern Ethiopia by Kifle *et al.,* (2017). Most of the studies conducted in the past have explored the factors needed for the utilisation of maternal health care services in different parts of the world and have also emphasized that the magnitude of the utilisation of maternal health care services varies across different geographic areas and socioeconomic settings (Tsawe *et al.,* 2015; Banke-Thomas *et al.,* 2017; Vidler *et al.,* 2016). There are several factors that influence the utilisation of maternal healthcare services on a daily basis, however, the most noticeable factor according to Zelalem *et al.,* (2014), is the perceptions of women accessing maternal health care services, on the quality of maternal health care services. The results of another qualitative study conducted on maternal health information-seeking behaviour of women of reproductive age in Mpwapwa district, Tanzania highlighted that maternal healthcare is essential and, in most cases, there is inadequate information about services available in the rural contexts. Hence relevant stakeholders including the governmental organisations involved in maternal healthcare services should strengthen the provision of information as well as encourage women to utilise maternal healthcare services (Conakry *et al.,* 2017; Drevin *et al.,* 2019; Kassim, 2020; Yerger *et al.,* 2020).

Furthermore, there are also studies that have been conducted on the essential quality needed in maternal healthcare services to ensure the safety of both the mother and the baby during pregnancy and delivery using a mixed method (Zelalem *et al.,* 2014; Kassim, 2020). These studies have highlighted that quality of care requires different perspectives including that of healthcare workers and women accessing maternal healthcare services. They further reveal different dimensions within the healthcare system through the provision of care and experience of care that can impact on the expectant mothers' experiences (Zelalem *et al.,* 2014; Conakry *et al.,* 2017; Drevin *et al.,* 2019; Kassim, 2020; Yerger et al., 2020;).

5.3 Study Area

The study was undertaken in Mmabatho Unit 9 and in Montshioa unit 1 clinics because there was insufficient literature concerning the effects of disease outbreaks on maternal healthcare in the North West province. Additionally, there is a dearth of literature with respect to the on the experiences of women accessing maternal healthcare in the context of disease pandemic within this geographic context South Africa implemented a free maternal healthcare service initiative in 1994 and more maternal healthcare services were allocated to the rural parts of the country including the greater Mafikeng, Mmabatho district, however, most women still could not access such services. The North West Province forms part of the nine South African Provinces with four districts i.e., Ngaka Modiri Molema, Dr Ruth Segomotsi Mompati, Dr Kenneth Kaunda as well as Bojanala district municipalities. The free maternal healthcare service was a commendable initiative implemented by the government according to Pretorius (2004), as the government was aiming to reduce the high maternal mortality rate, even though the necessary assessment and planning was not conducted prior to the implementation.

Women in the North West Province inclusive of Mmabatho have been utilising free maternal health care services since its implementation in 1994 even though the services were ineffective

to some women due to the several barriers that they encountered. The reported barriers include lack of emergency transport, poor conditions of the roads going to health care facilities amongst other issues (Pretorius, 2004). A qualitative study was conducted on health service utilisation by pregnant women in greater Mafikeng, Mmabatho district and the results of the study have highlighted the shortcomings and strengths of maternal healthcare in North West Province particularly in Mmabatho. Some of the factors promoting and preventing maternal health care services in Mmabatho highlighted was the insufficiency of important equipment, in terms of the efficacy of the antenatal services. There was a serious lack of information assome women had poor communication skills which led to not providing the necessary information needed for maternity bookings. Despite the good appraisals from women who were accessing maternal healthcare services, some women also revealed that there was some sort of unequal treatment from health care workers (Pretorius, 2004). Based on the above-mentioned factors, this study aimed to highlight the experiences of women accessing maternal healthcare in Mmabatho during the Covid-19 pandemic. The study also aimed to describe how the existing maternal healthcare interventions during the Covid-19 pandemic and to recommend practical interventions which can assist women in accessing maternal healthcare services during disease pandemics.

Furthermore, another qualitative study was conducted by Mothupi *et al.,* (2021), on the development and testing of a composite index to monitor the continuum of maternal health service at provincial and district level in South Africa. The results of the study declared the North West Province the worst performer in relation to maternal healthcare issues and health system indicators (Mothupi *et al.,* 2021; Pretorius, 2004). Despite the North West Province being declared the worst performer on maternal healthcare related issues, it was also classified as a Covid-19 hotspot. Being declared a Covid-19 hotspot meant harsher regulations by the government and this also affected the already suffering healthcare system of the province. Maternal healthcare utilisation dropped drastically as women accessing maternal healthcare services were afraid to

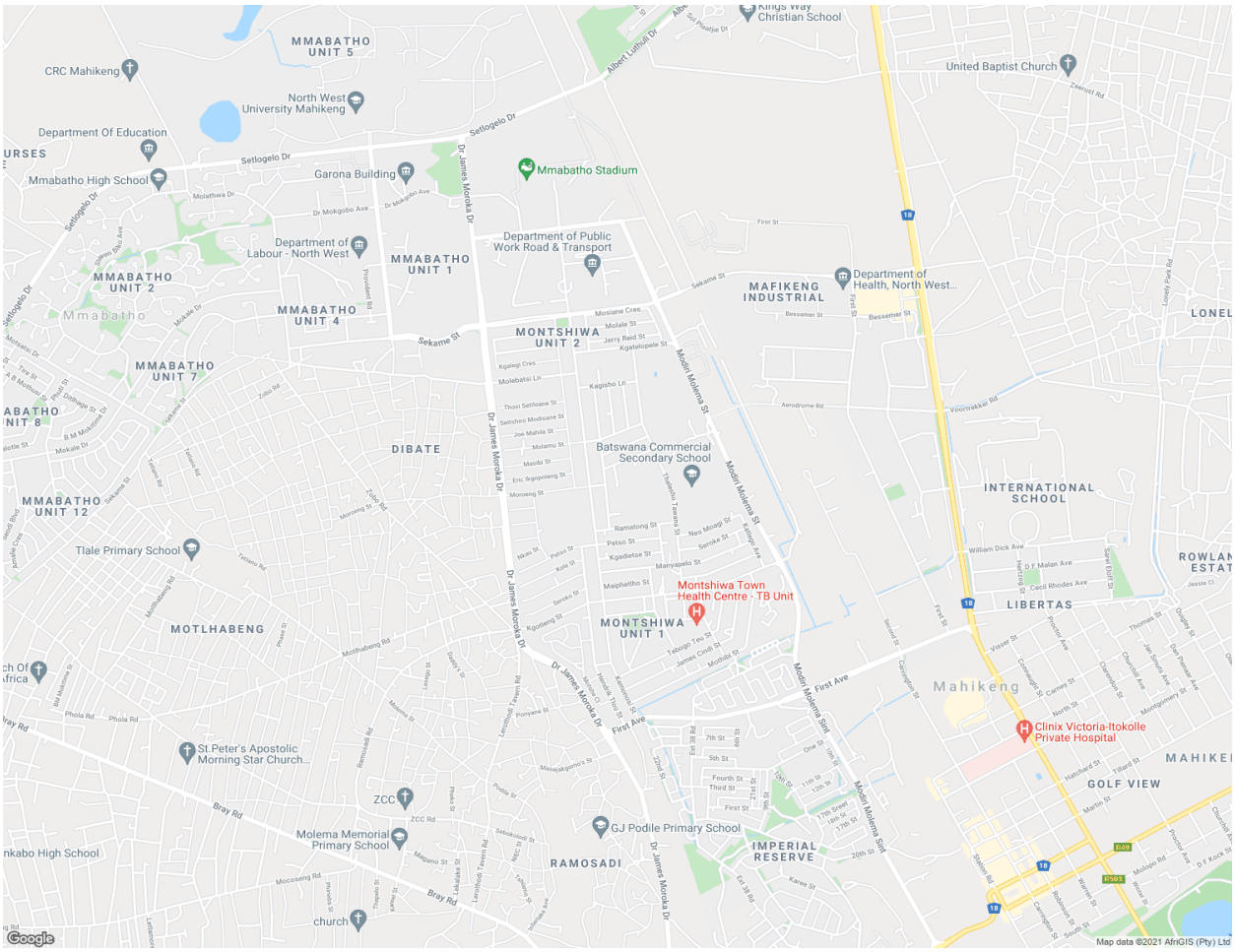
travel long distances to utilise services, the fear was not limited to traveling long distances to utilise services but being exposed to the virus. A point to note is that despite the province being classified as a Covid-19 hotspot, North West province has also served as one of the pioneers of primary healthcare quality improvement as well as ward-based outreach and the primary level clinic realization (Department of Health, 2018; Hunter *et al.,* 2017; Mothupi *et al.,* 2021; Scheider *et al.,* 2018). Thus, the justification of this study area to understand the experiences of women in accessing MHC during the Covid-19 pandemic.

Figure 5.3.1: Montshiwa Town clinic

Source: Fieldwork, (2021)

There was also a gap in terms of the experiences of women accessing maternal healthcare services during Covid-19 in the North West province particularly in Montshioa and unit 9 clinics as areas of study identified. Montshioa and Unit 9 clinics are the major service providers of maternal healthcare services within Mmabatho, North-West.Figure 5.4.1 and 5.4.2 are maps where the two clinics are situated and areas that they serve.

Figure 5.4.2: Mmabatho, North West Map



Source: Pretorius, (2004).

5.4 Population

A population consists of all the objects or events of a certain type about which researchers seek knowledge or information (Polit & Beck, 2012). The sample consisted of 20 women in their reproductive years both from the lower and working class, the distribution was between two clinics identified, 10 women per clinic. 10 women receiving maternal healthcare services and 5 health workers from Montshioa clinic as well as 10 women receiving maternal health care services and 5 health workers from unit 9 clinic.

Basically, the study population consisted of two (2) main set of people, namely,

1. Women accessing maternal healthcare services (n=20)
2. Health care workers (n=5)

The study included all women in their reproductive years from the age of 20 to 55 years old who gave birth from 5 March 2020 to date. The 20 to 55 age range was chosen because it consists of most women of the childbearing ages. Women who gave birth before 5 March 2020 and the announcement of the National lockdown were not included in the study. Women younger than 20 years old were excluded from the study because they are minors and might have ethical implications on the study. The justification for this population was because women receiving maternal health care services would be able to provide the researcher with the in-depth experiences of their journey of the essential healthcare services needed before and during giving birth during the Covid-19 pandemic. 10 healthcare workers were not subjected to the same inclusion and exclusion criteria as women accessing maternal healthcare services. Midwives from the identified clinics with an experience of rendering maternal healthcare services were part of the study. Healthcare workers that were not midwives and from the identified clinics with no experience of rendering maternal healthcare services were excluded from the study. Healthcare workers also assisted the researcher to understand the importance of maternal healthcare services rendered to women before and during pregnancy as their experience in rendering maternal healthcare services and to also gain the views of health care workers on certain issues related to the availability and the utilisation of maternal healthcare services.

5.5 Sampling technique and sampling frame

The: purposive and snowball non-probability sampling techniques were used in this study. Purposive sampling focuses on characteristics of the population that are aimed at providing answers to research questions and snowball sampling was not only time efficient but also enabled the researcher to communicate better with participants as they are acquaintances of the first

identified participant(s). The researcher therefore purposely selected healthcare workers specialising in midwifery because they specialise in maternal healthcare services and were able to provide the researcher with the necessary information regarding the problem under study. Purposive sampling also enabled the researcher to comprehend and understand the phenomena under study in more detail and to recruit more participants the researcher utilised snowball sampling technique (Lavrakas, 2008; Polit & Beck 2012).

Once ethics was approved (**NWU-00673-2-A7**), and approval from the North West department of health. The researcher received approval from the Clinic managers to carry out the research. The researcher was referred to the person in charge of the maternity departments in both clinics. All Covid-19 protocols were followed during this process, sanitising of hands, wearing of masks as well as 1-meter social distancing. The researcher sought assistance from the matrons to help recruit participants, through WhatsApp and the list of contacts they had, and this was done through snowball sampling. Various clinics have introduced WhatsApp groups where healthcare workers share maternal healthcare information with women receiving maternal healthcare services; WhatsApp groups are also created for women to share their daily experiences of their motherhood and pregnancy journeys. The matrons are WhatsApp groups administrators for groups created for women receiving maternal healthcare services, the researcher sought to gain access to the groups by being added to the groups and started making contact with women receiving maternal healthcare services. In the case where some women had left the groups after giving birth or had changed numbers, the researcher sought assistance from women already being contacted who were willing to refer the researcher to other women who were willing to be part of the study. The goal of the communication between the researcher and participants was so that they could express their experiences, thus providing relevant information that enabled the researcher to enrich their understanding of the problem under study. The target sample size of the study was 30 participants; the researcher used the saturation rule i.e., data collection was

stopped when no new themes were emerging from the data. Thirty participants formed part of the in-depth interviews, 20 women accessing maternal healthcare services and 10 healthcare providers. Only 4 women between the age of 20-25, 3 between 26-30, 3 between 31-35 and 10 between 26-55. Only 3 of women were single, 12 married, 3 separated and 2 divorced. The study consisted of 5 of students, 5 of unemployed and 10 employed. 1 of women were in possession of grade 9 or below, 11 matric, 3 diploma, 2 bachelor's degree and 3 in possession of master's degree or equivalent.

5.6 Data collection procedure

In a bid to get an in-depth understanding of this research questions set out for this study, the researcher ensured this research was qualitative in nature. Since a detailed input from respondents selected to participate in this study was needed, the use of structured interviews was ideal. The advantage of using qualitative research is that it provides researchers with descriptive and non-numerical findings of the study without generalisations compared to quantitative research (McCusker & Gunaydin, 2014; Rajasekar *et al.,* 2006; Schulze, 2003). As alluded by Mushunje (2016) on the assessment of antenatal maternity service quality among patients in Mafikeng Provincial Hospital, quantitative research is based on numerical content. It deals with theory testing which in turn provides a general outcome of the problem under study. Therefore, quantitative research presents findings that are generalisable as well as utilises statistical analysis. For example, what percentage of women accessing maternal healthcare during Covid-19 were satisfied with the services? According to Phophalia (2010), this type of research method adheres to strict sampling techniques and research design. It is also based more on methodological principles of positivism. Quantitative research, however, does not take into consideration individual perceptions as it puts more emphasis on statistical information. Therefore, since thick deep descriptions were sought from respondents selected, the use of qualitative research was ideal.

The researcher undertook a review on the use of qualitative research methods to investigate health emergencies and 22 studies were identified. The studies identified were utilised qualitative methods to understand, investigate problems experienced in the maternal health care, health needs of women and the state of health systems during disease outbreaks such as Ebola and Malaria. The empirical findings of the reviewed studies assisted in providing in depth views of women experiences on the problem studied. This section was to emphasise that the researcher has been aware of other forms of research methods.

In-depth Interviews were employed as the primary data collection method. According to Yin (2003), interview is a technique used in getting insights on reasons for a particular behaviour. Yin (2003) further suggests that there are advantages of the use of interviews in a study. These advantages are:

- The researcher has the ability to examine the respondent's behaviour
- The technique can be used as a guiding tool for other techniques yet to be adopted.

Hence this study used an in-depth interview method to gain insights to women's experiences in accessing maternal healthcare services during Covid-19.

This study aimed to utilise telephone interviews and online platforms due to the Covid-19 regulations and also to ensure that both the researcher and participants do not risk being exposed to the virus. Participants were expected to revert to the researcher after 14 days indicating their interest in participating in the study. The researcher went through an informed consent process, where the aims of the study were explained, and the participants would indicate if they would voluntarily participate in the study. Participants were contacted telephonically prior to the distribution of informed consent forms to find out possible ways for them to get consent forms and also to make arrangements for those who did not have access to emails or WhatsApp. The

researcher made arrangements with the clinic managers to get a vacant room at the clinic for those who were signing consent forms physically, both the researcher and the participants adhered to Covid-19 regulations such as wearing facemasks, social distancing and avoiding handshakes, hand sanitising and ensuring that the room is well ventilated, after which an appointment for the interview was set between the researcher and participants through telephone or an online platform of the participants choice. Participants who did not have access to online platforms such as zoom, WhatsApp or Skype were interviewed telephonically. Participants who were interviewed through online platforms were provided with data and the provision of data did not serve as compensation. Participants who were also signing consent forms physically were reimbursed their transport costs.

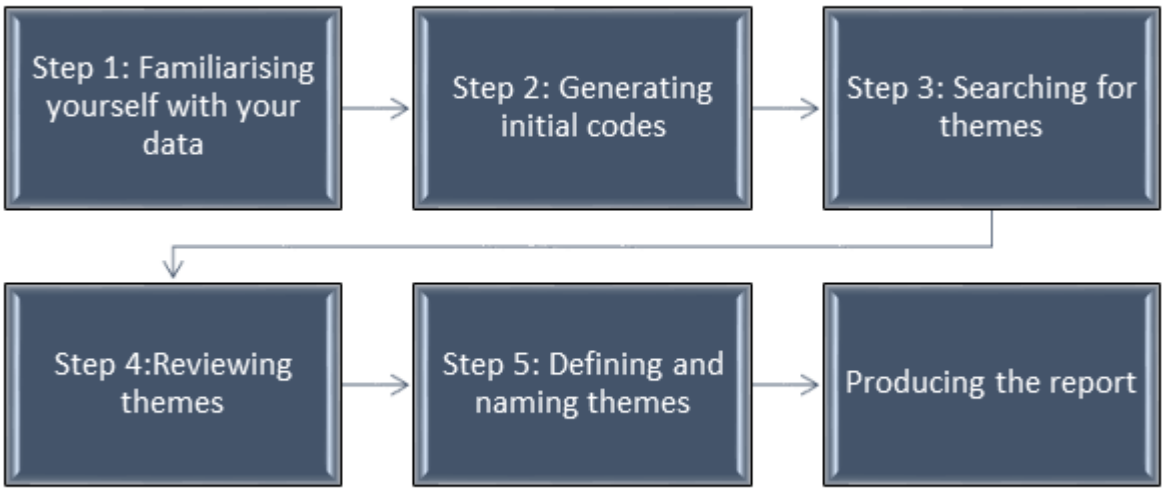
Data collection procedure was adaptive and allowed the researcher to recruit participants who own cell phones. Audio-visual online platforms allowed the researcher to gain an in-depth insight of the women's experiences in accessing maternal health care. This was shown through the deep thick descriptions of their experiences. The researcher sought permission from participants for the telephone Interviews to be recorded and transcribed, pseudonyms were utilised. The researcher utilised interview guides prepared in English; however, interviews were in the participants' language of choice, preferably Setswana and English and the researcher used a translator. In order to ensure validity and reliability, the researcher utilised the procedure of sharing the research tool with the supervisor to ensure content validity. Content validity was ensured to ascertain that the tool addressed the themes that were to be extracted from the objectives of the study. To ensure validity and trustworthiness, interviews were conducted with health care workers and women who had been or were accessing maternal healthcare services during Covid-19 pandemic (Denzin & Lincoln, 2011; Greeff, 2020; Polit & Beck 2012). For participants the researcher rephrased questions, proposed further and made follow interviews to clarify any issues which came through the interview process. Data was audio-recorded and

transcribed later. Raw data was safely stored in an encrypted device and the researcher will keep the data for a period of 5 years before disposal after all the subsequent analysis and write ups are completed.

5.7 Data analysis

Qualitative data analysis converts data into findings thus, refers to reducing raw data into themes (Des Vos, 2005). This study utilised Braun and Clarke's 6 steps of thematic analysis as shown in figure 6.3 below to bring meaning and order to the mass of data collected.

Figure 5.7.1: Braun & Clarke's 6 steps of thematic analysis



Source: Braun & Clarke, (2006)

The researcher adopted the following steps in analysing data

Step 1: Familiarizing with data

This step required the researcher to fully engage with the data collected. After conducting the field research, the researcher organized the data collected from women accessing maternal healthcare services during Covid-19 in Montshioa town and unit 9 clinics. The researcher started by transcribing the data collected by listening to recordings, as it is important for the researchers to familiarize themselves with the aspects of data collected. This step provided the researcher with the foundation for subsequent analysis (Braun & Clarke, 2006).

Step 2: Generating initial codes

This step requires researchers to identify preliminary codes after familiarising themselves with data collected. Preliminary codes awarded the researcher an opportunity to identify interesting and meaningful features on the data collected. Even though codes are numerous and specific as compared to themes, they have provided an indication of the context to be analysed (Braun & Clarke, 2006).

Step 3: Searching for themes

On this step the researcher searched for themes. The codes initially extracted from the chunk of data collected were split and some combined according to their similarities and differences. The researcher was able to identify the relationship and link between codes, themes as well as subthemes (Braun & Clarke, 2006).

Step 4: Reviewing

After searching for themes, then the researcher identified themes which cohered together meaningfully. Identification of themes award the researcher to produce themes that are clear and could be differentiated easily. This step usually has two phases where the researcher has to link the themes and codes initially extracted as well as the overall data set (Braun & Clarke, 2006).

Step 5: Defining and naming themes

The researcher then defined and named the different themes that emerged from the data collected. A unified story/ finding has to emerge from the themes defined and named by the researcher (Braun & Clarke, 2006).

Step 6: Producing the report

Finally, the researcher is required to transform the analysis into a report using examples that relate to the research questions, themes and the literature reviewed. The report compiled by the researcher should go beyond a mere description of the themes emerged, additionally, the report should produce an analysis supported by empirical evidence that addresses the problem of the study (Braun & Clarke, 2006).

Data was analysed to gain insight into the participants' experiences as obtained from the interviews conducted (Des Vos, 2005). Data was also analysed and presented into themes. In the course of analysing data gathered, theories identified in the study were incorporated to further enrich the discussion and enable the achievement of the identified objectives. Two theories were identified, Andersen's behavioural model and Bourdieu's theory of social practice. The former sought to examine as well as predict the provision of healthcare services and how such services were being used with regards to people's traits, the characteristics of the population they belonged to as well as the environment in which they lived in. While the latter provided a nexus between people and social structures and how that offered access to a variety of socio-economics and cultural conditions which in turn influenced how they perceived and acted towards issues. After the analysis of data, the researcher aimed to conduct a data sharing webinar with all the relevant parties involved. The webinar allowed the researcher to engage with all the parties involved and enabled the researcher to go through the results of the study with them. However, in the case of participants who were interviewed telephonically, provisions were made for them to receive the results of the study. The research results will also be disseminated through publishing the

research findings in national journals and state-wide publications, presenting at conferences and meetings of professional associations. Since research is replicative, some outputs from the study will be published in peer reviewed journals. Through this, the academic community with focus on health-related matters, population issues and demography among others will benefit from this study

5.8 Ethical issues

This study was subjected to certain ethical issues. The researcher underwent ethics training. The researcher **obtained permission** from the Department of Health, North West Provincial office to visit the identified clinics, the final approval letter from North West department of health was used to gain access at the two identified clinics and involved the staff from both clinics.

The researcher made provisions for the data obtained from participants since the interviews were conducted through online platforms. Participants who were signing consent forms physically were also reimbursed their transport costs. After obtaining an ethical clearance certificate, the researcher **requested assistance for counselling services** of the resident counsellor in case of emotional distress. The researcher obtained **Informed consent** from all the participants of the study. The participants were also informed about the contents of the study as well as the reasons in advance while being reassured that their answers will be treated with **confidentiality** and solely be used for the academic purposes of this study. The researcher **assigned fictitious names** to participants before the interview started. Only the fictitious names were used in the research process and not the participant's real name, in order to protect the identity of the participant. Interviews were therefore conducted telephonically in the case of participants who did not have access to internet and online platforms due to the regulations of Covid-19. Telephonic interviews and online platforms were aimed at allowing the participants and researcher to engage well without the disturbance of face masks and social distance that might have prevented the researcher and participants from being audible to one another. Participants were provided with

data and the provision of data was not to compensate the participants for being part of the study. The following were the possible risks from the study as well as mitigation strategies. There was a possibility that participants could face some form of depression in the course of the interview, due to the flashbacks of unpleasant experiences. The researcher had employed the services of the counsellor as a mitigation strategy. This was used in the course of the interview. Another possible risk identified was the level of iteration that might have been experienced in the course of the interview sessions, participants got tired and bored. However, the researcher as a mitigation strategy infused 10 minutes breaks in between the sessions, to allow participants to rest for every 20 minutes used in the course of the interview.

5.9 Limitations of the study

Research encountered several constraints in execution, specifically related to time and the sample size itself. The sample size in qualitative research design is usually relatively small and the results cannot be generalised to give a complete picture of the utilisation of maternal health in the North West province but the sample therefore gave an indication of the issues and situation with regards to maternal health care services within the primary health care sector and a bigger sample would have probably enhanced the reliability of the research. The research tool which was applied: the interview guide for women accessing maternal healthcare services in Mmabatho. The researcher also took note of the time dynamic issue, data collected within a certain period, during Covid-19 and things may change afterwards in post Covid-19 as normalcy returns or partially return to normalcy. The procedure of sharing the tool with the supervisor was done to safeguard content validity which is generally utilised in the progress of interview guides. Content validity was utilised to guarantee how good the tool signified all the apparatuses of the variables to be measured. To ensure validity and trustworthiness, interviews were conducted with informants accessing maternal healthcare services. Research encountered challenges related to telephonic interviews, for new mothers it was difficult to take part in the interview while taking care

of the child at the same time and social media platforms in terms of connectivity. In this case, the researcher consulted the participants regarding the time they were most comfortable to conduct interviews specifically when their babies were resting.

5.10 Conclusion

This section aimed to provide an overview of the methodology utilised including the research design, data collection procedure, sampling techniques as well as data collection analysis methods. In this study, the researcher utilised qualitative research design in order to understand and gain insight into the participants' experiences of accessing maternal healthcare services. For analysing the outcomes of the study, the chapter applied Braun & Clarke's six steps of thematic analysis to gain deeper understanding of the themes derived from the study. The next chapter discusses and presents the findings of the study as well as conclusions regarding theoretical and empirical objectives of the study.

CHAPTER SIX

PRESENTATION, ANALYSIS AND DISCUSSION OF FINDINGS

6.1 Introduction

This section presents and discusses the findings of the study that sought to explore and investigate the experiences of Mmabatho, North West women seeking to access maternal healthcare services during Covid-19 pandemic. The objectives that guided this study were

- To explore the experiences of Mmabatho, North West women in accessing maternal healthcare services during Covid-19
- To describe how existing maternal healthcare interventions assist Mmabatho, North West women to access maternal healthcare services.
- To recommend practical interventions to assist Mmabatho, North West women to access maternal healthcare services during disease outbreaks.
- To explore existing theoretical and methodological paradigms employed in addressing access to maternal healthcare services during disease outbreaks.

Covid-19 pandemic brought disastrous effects on the health system of many societies, including people from various age categories, and vulnerable groups like pregnant women which this study basically focuses on. Although studies have indicated how healthcare systems have been compromised in different countries (Wanyana *et al.,* 2021), the health of women and children have been reported to have been suffering unbearable conditions (Goyal *et al.,* 2021; Jeranji, 2021; Pant *et al.,* 2020). The fear of women accessing maternal healthcare services as well as of healthcare workers have substantially reduced the utilisation and rendering of maternal healthcare services across the world (Wanyana *et al.,* 2021). This is why adequate attention must be focused on new born babies and their mothers in the course of accessing maternal health care services, because they have heightened risk of contracting the virus. As a result, this study mainly

focused on the experiences of women in accessing maternal healthcare services during Covid-19 pandemic outbreak; specifically, in Mmabatho, North West. This was facilitated through in-depth interviews with women accessing maternal healthcare services and experienced healthcare workers in maternal healthcare services. The in-depth interview method was adopted to answer the following research questions:

- What are the experiences of Mmabatho, North West women seeking to access maternal healthcare services during the initial outbreak of the Covid-19 pandemic?
- Are there any existing maternal healthcare interventions in place to assist Mmabatho, North West women in seeking to access maternal healthcare during the initial outbreak of the Covid-19 pandemic?
- What practical interventions of maternal healthcare in Mmabatho, North West can be useful to assist women to access maternal healthcare during disease pandemics?
- How can existing theoretical and methodological paradigms be employed in addressing access to maternal healthcare services in Mmabatho, North West during disease outbreaks? What is the suitable literature, theories and research approaches for investigating access to maternal healthcare services during disease outbreaks?

The following are the findings of the study conducted on the experiences of women in accessing maternal healthcare services during Covid-19 in Mmabatho, North West. The emerging themes were derived from the objectives of the study. The objectives of this study were to

1. To explore the experiences of Mmabatho, North West women seeking to access maternal healthcare services during the initial outbreak of the Covid-19 pandemic.
2. To describe how existing maternal healthcare interventions assist Mmabatho, North West women to access maternal healthcare services during pandemics.
3. To recommend practical interventions to assist Mmabatho, North West women to access maternal healthcare services during disease outbreaks.

4. To identify the suitable literature, theories and methodological approaches to investigate access to maternal healthcare services during disease outbreaks.

The findings are presented in the form of interview excerpts. The following table consists of the themes derived from the study, and this would form the basis for the analysis and discussion.

Table 6.2. Emerging themes from the study

Objectives	Emerging themes from the study
1. Experiences of women accessing maternal healthcare services during Covid–19	**Availability of Services** • The experiences of expectant mothers with formal maternal healthcare providers • The experiences of expectant mothers with informal maternal healthcare providers • Preparedness for birth • Maternal health treatment pathway • HIV/AIDS counselling • Provision of maternal healthcare counselling **Adequacy of Services** • Expectant mothers feeling lonely and detached due to limited in-person services **Utilisation of Services** • Fear experienced by women in accessing Maternal healthcare • The impact of Covid-19 on the provision and utilisation

	• Socio-cultural beliefs affect decision making to seek healthcare services • The impact of the national lockdown • Discontinuation of antenatal care **Access to Services** • Barriers to accessing maternal healthcare services • Lack of medical equipment at public healthcare facilities • Lack of nurses • Shortage of medicines • Inadequate ambulances in public healthcare facilities • Payment dynamics of maternal healthcare services
	• Accessing prenatal medication at pharmacies • Choices in maternal healthcare decision making
3. Interventions in place for maternal healthcare services during the Covid-19 pandemic	**In Person Service Provision** • Community healthcare workers (Home-based care workers) • Provision of maternal healthcare • Provision of free prenatal care • Maternal healthcare day **Virtual Service Provision**

	• The role of digital health to improve access to maternal healthcare • mHealth (MomConnect) • Telehealth intervention
4. Recommend ways in which women can have access to maternal healthcare services	• Integration of mHealth (MomConnect) with in-person service provision • Integration of Telehealth with in-person service provision

The following section discusses the demographic characteristics of participants.

6.3The impact of demographic characteristics on the experiences of women in accessing maternal healthcare services

The following section presents the demographic characteristics of participants interviewed in the study i.e., women accessing maternal healthcare services excluding healthcare workers because the primary focus of the study was to find out the experiences of women accessing maternal healthcare services and not that of healthcare workers. The purpose of this section is to discuss how the demographic characteristics of the participants may have an influence on the findings which will be presented and discussed below.

Table 6.3.1 Demographic characteristics of participants

Variables	Categories	Percentage (%)
Age	20-25	30
	26-30	45

	31-35	15
	36-55	10
		100.0
Marital Status	Single	15
	Married	60
	Separated	15
	Divorced	10
		100.0
Employment Status	Student	25
	Employed	50
	Unemployed	25
		100.0
Educational Level	Grade 9 or below or equivalent	5
	Matric or equivalent	55
	Diploma	15
	Bachelor’s Degree of equivalent	10
	Master’s degree or equivalent	15
		100.0

Source: Fieldwork, 2021

Table 6.3.1.1 above provides the socio-demographic characteristics of the participants for this study which are age, marital status, employment status and educational level. The findings from the above table show that participants whose age fall within the bracket 26-30 were more represented, with 45% of the total population. Furthermore, those within the 36-55 age bracket formed the minority of the respondents; representing 10%. In addition, more married women participated in this study, representing 60%, while the separated and single were both represented by 15% each and the divorced, with 10%.

Women's ability and inability to access maternal healthcare services is influenced by predisposing factors as emphasized by Andersen's expanded behavioural model of healthcare use (Travers *et al.,* 2020). In line with the results of the study, women access maternal healthcare services in accordance to the kind of influence they get from their surroundings through socialisation but also in accordance to the characteristics of their surroundings.

6.3.1.2 Maternal age and access to maternal healthcare

Similar to the results of the study Juqu (2021) argued that maternal age is positively related to access to maternal healthcare services. According to the results of the study, maternal age is significantly associated with access to maternal healthcare services with women between the age of 26-30 years more likely to access maternal healthcare services as compared to women between 36-55 years. Women between the ages 36-55 years were less likely to access maternal healthcare services due to the assumptions that they have had children before, therefore they are more knowledgeable about maternal healthcare from previous pregnancies and childbirth as compared to new mothers who are vigilant about pregnancy and delivery. Lack of the utilisation of maternal healthcare service might be due to previous experiences, unsatisfactory experience of services received. Contrary to the results of the study, the empirical evidence from the study conducted on access and utilisation of maternal health in rural Ghana by Nuamah *et al.,* (2019), revealed that maternal age is significantly associated with access to maternal health care with

older women over the age of 30 years more likely to have access. Another study by Magadi & Gazimbi (2017) confirmed that mothers below the age of 30 years have poor access to maternal healthcare as compared to older women.

6.3.1.3 Marital Status and access to maternal healthcare

Marital status of women has a significant influence in access to maternal healthcare services, this is supported by the findings of the study. The findings of the study state that 50% of married women were more likely to access maternal healthcare services as compared to the 10% of divorced women. Married women reported better access to maternal healthcare than divorced and unmarried women due to spousal support. A solid support system also plays a significant role in access to maternal healthcare. The empirical findings are similar to findings of the study conducted by Samba *et al.,* (2020) which revealed that married women made greater use of maternal healthcare services as compared to single women. It was further emphasised that single pregnant women used less maternal healthcare services due to fewer financial resources. Additionally, in Indonesia for instance, single pregnant women are considered a disgrace and are not allowed to further socialise with the community. The condition discourages single pregnant women to access and utilise maternal healthcare services (Wulandari *et al.,*2020).

6.3.1.4 Employment status and access maternal healthcare

Findings of the study as indicated in the table above show that employed women are more likely to access maternal healthcare services. This is similar to what Naumah *et al.,* (2016), state that there is a positive relationship between access to maternal healthcare and a woman's employment status. Substantiated by the findings of the study, approximately 50% of employed women were more likely to access maternal healthcare services. Additionally, employed women were more likely to afford maternal healthcare services from private institutions when clinics were temporarily closed due to Covid-19 infections and more likely to afford transportation costs to and from different healthcare facilities as compared to unemployed women and students. This is in

line with Bourdieu's economic capital which accounts for the monetary dimension including properties and other financial related assets. Within the context of maternal healthcare, economic capital accounts for all material resources required to reach or either pay in advance for standard maternal healthcare services or even purchase for better services. Better services include medical aids, health insurances as well as treatments that cannot be offered in public healthcare institutions. Economic capital draws back to Andersen's expanded behavioural model within the domain of attitudes where it states that affordability is one of the core elements of the utilisation of maternal healthcare services. It was further emphasised that women from the highest household wealth index quartile showed higher odds of accessing maternal healthcare services compared to women from the lowest quartile. Another study by Furuta & Salway (2006) argues that women that are employed with a household income have control over finances, which makes it easier for them to afford healthcare services and have some kind of exposure to necessary information in relation to maternal and child health as compared to other women.

6.3.1.5 Educational level and access to maternal healthcare

The findings of the study found that over 50% of women with matric or equivalent were more likely to access maternal healthcare services than women with only grade 9 or below. Additionally, women with matric or equivalent were more likely to access maternal healthcare services on the basis that they understand the importance of all the services offered throughout pregnancy. Moreover, women with matric and Master's degrees are more likely to access maternal healthcare services also on the basis of understanding the importance of acquiring more knowledge regarding the necessary tools of maternal healthcare services inclusive of the importance of socialisation between different women as a way of sharing experiences. Therefore, the higher the level of education, the higher the chances of attitude changes towards the use of maternal healthcare services and this is also supported by Mensch *et al.,* (2019). Findings are similar to Tsawe, (2015) study conducted in Swaziland which revealed that literate women were more likely to access maternal healthcare services as compared to women with no education.

United Nations (2000), assert that there is a correlation between women's level of education and access to maternal healthcare. Education level has a powerful influence on health care, and this is also seen in maternal healthcare. Women with formal education have been associated with higher odds of accessing and utilising maternal healthcare services as compared to women with no formal education. The utilisation of maternal health care goes hand in glove with the level of education a woman has. For instance, 69,3 percent of women without formal education were less likely to access antenatal services as compared to the 69,8 percent of women with formal education that were more likely to access antenatal services (Statistics South Africa, 2022). Women with formal education are able to access knowledge regarding the importance of antenatal health and other maternal healthcare related services as compared to women without formal education. Most women accessed credible information about the Covid-19 pandemic and their decision to take up maternal health services was not hindered by the prevailing myths and misconceptions about Covid-19. The purpose of accessing maternal healthcare services award healthcare workers the opportunity to detect health issues that might arise during the journey of pregnancy. The early detection of possible complications plays a significant role in preventing maternal mortality. Thus, the level of women's education plays a role in the rate of maternal mortality (Statistics South Africa, 2022).

6.4 The experiences of women in accessing maternal healthcare services during Covid-19

Findings from this study show how the global Covid-19 Pandemic has challenged and changed so many aspects of women's lives in Mmabatho in the North West Province of South Africa. The major aspect coming out from the field research was how maternal healthcare services have been delivered and used to pregnant women and nursing mothers alike. This was corroborated by Sweet *et al.,* (2021), who stated that the experiences of women accessing and providing maternal healthcare services play a vital role in guiding healthcare practices during this challenging phase. Findings of this study show that different women accessing and providing maternal healthcare services have had diverse experiences, undoubtedly, these experiences gave rise to many

unanswered questions, overwhelming and mixed emotions, however, for some women it was a great experience to give birth during the Covid-19 pandemic. The experiences of women accessing maternal healthcare services were influenced by the availability of services, the adequacy, utilisation as well as access to maternal healthcare services.

6.4.1 Availability of maternal healthcare services

6.4.1.1 The experiences of expectant mothers with formal health care providers

The findings of the study also revealed that women accessing maternal healthcare services in Mmabatho experienced being rushed during delivery which put women and their children's health at risk. Due to the increased workload during the Covid-19 pandemic, some nurses were impatient with their clients which in turn affected the quality of maternal healthcare services and care. This was substantiated by the nine studies conducted in Africa by Mannava *et al.,* (2015) who emphasise that attitudes and behaviours of nurses are an important element in quality care as they influence how women experience and perceive maternal healthcare. Andersen's expanded model within the domain of attitudes also supports the results of the study as it highlights how attitudes and behaviours of nurses affect how women experience maternal healthcare services throughout their journeys of pregnancy and delivery in Mmabatho. Andersen's domain of attitudes state that the role of nurses regarding how they render maternal healthcare services including how they treat and communicate with patients affect their experiences of accessing maternal healthcare services. Therefore, it is important that women accessing maternal healthcare services and nurses have healthy relationships to better the experiences of women accessing maternal healthcare services in Mmabatho.

Most women were asked about their experiences in accessing healthcare services and according to the results of the study most women skipped their monthly health service consultations, recommended treatments, even certain medical tests because of not only the fear of contracting the virus but the treatment from nurses. The interviewee confirmed that:

"This has been the most stressful phase of my life and not because of the pregnancy. I remember at one of the clinics, the midwife was so rude to me. She spoke to me as if I was a high school teenager and that has really affected my experience in accessing maternal healthcare services. I even changed clinics because of the bad experience. Nurses must really change their attitudes **(Interviewee No. 2, 11 October 2021)**

And

"I was deeply affected by the nurses' attitudes honestly. It was as if they were forced to assist us. And the most devastating part is that when such things happen, we do not know where to lodge our grievances. I would not say it was a bad experience but nurses should learn how to treat patients with respect. We are all stressed out" **(Interviewee No. 6, 29 September 2021).**

Formal nurses have an impact on the experiences of women accessing maternal healthcare services; women's ability and inability to utilise and access maternal healthcare services. One of the highlighted experiences from expectant mothers was the attitude of healthcare professionals. Despite the overwhelming experiences of accessing maternal healthcare services during Covid-19, the positive and negative attitudes portrayed by the nurses also influenced the experiences of expectant mothers. As alluded to by Mannava *et al.,* (2015), the attitude of nurses are key elements of quality as they influence how women experience maternal healthcare services. The negative experience reported by the women accessing maternal healthcare services in Mmabatho involves interpersonal interactions inclusive of inappropriate communication. This is one of the factors which affected how women experience maternal healthcare services in Mmabatho.

6.4.1.2 Preparedness for birth

The recent Covid-19 outbreak which was globally felt as compared to previous pandemics, did not only take the whole world by surprise, but it also brought disastrous effects on the healthcare systems of many countries. A lot things had to be adjusted in order to combat the spread of the virus, including how women accessed maternal healthcare services. Maternal healthcare services

inclusive of giving birth. The findings of the study confirm that the birthing experiences of women differed in terms of their plans and the clinic/hospitals preventive measures. Some women reported to have had pleasant birthing experiences while others did not due to various reasons. But the most important aspect which affected their birthing experiences was not being able to get support from their loved ones during labour. The birthing experiences also differed in terms of the state of pregnancy. Unavailability of social support appeared to mitigate the negative experiences of women in Mmabatho. Interviewees confirm that

> *"My birthing experience was not what I initially planned. I had planned a home water birth but unfortunately home births were cancelled"* **(Interviewee No. 8, 2 October 2021)**

And

> *"My husband was unable to join us during labour or even stay with me and our baby after birth. I was sad, not a birthing experience I had hoped for, for my first child"* **(Interviewee No. 18, 19 October 2021).**

The results of the study confirm the findings of the study conducted by Goyal *et al.,* (2020), that different disease outbreaks have had either direct or indirect effects on women accessing maternal healthcare services which is also supported by Andersen's domain of social norms. Domain of social norms comprises of expectations of care which focuses on the goals of women accessing maternal healthcare services which were not fulfilled during the Covid-19 pandemic. Furthermore, some women reported that their child delivery experiences were affected by lack of support from their loved ones. The domain of availability of support clearly state that a solid support structure has been considered an essential component during the journey of pregnancy and motherhood. A solid support structure plays a significant role in shaping how women perceive and experience maternal healthcare services. It is important to have a solid support system throughout the journey of pregnancy.

6.4.1.3 Experiences with the maternal healthcare treatment pathway

There are quite a number of essential services offered within the maternal healthcare sector. The various services are offered and rendered to women throughout their journeys of pregnancy, in order to safeguard the well-being of both the baby and mother. The various services include HIV/AIDS and maternal healthcare counselling, consisting of family planning services as well.

6.4.1.4 HIV/AIDS counselling

The findings of the study emphasise that women go through quite a number of tests during their journeys of pregnancy. The first test identified was the urine test, where urine is tested to confirm the pregnancy and how far long the pregnancy is. There is also a blood test to confirm whether the woman is pregnancy or not because in most cases urine can falsely detect that the woman is pregnant. High levels of hormones (human chorionic gonadotropin) can falsely detect that the woman is pregnant. The blood test is not done only to confirm the pregnancy but also to test for HIV/AIDS. Interviewees confirm that:

"The journey of pregnancy can be quite tiring especially the first month. There is just a lot required from you. There are tests, I took a urine test first to confirm the pregnancy and I also took an HIV/AIDS test. There after the is also one on one health education where I was told about the importance of these tests and how I have a human going inside of me, that I have to take care of myself" ***(Interviewee No.1, 42 September 2021)***

And

"I was given face to face talk about health education before anything else. Then I did a urine test to confirm the pregnancy, then after the nurse took my blood for other tests. After I went to an ultrasound test. Honestly, the process is tiring emotionally especially the HIV testing" **(Interviewee No. 2, 11 October 2021).**

The results of the study are in line with Andersen's psychosocial factors within the domain of knowledge, knowing the right and necessary information of the services within maternal health sector is essential to expectant mothers. The right and necessary information also affect how women perceive and experience maternal healthcare services in Mmabatho. During pregnancy, there is also important information regarding the first day or month to book for maternity where women go to monthly check ups and the necessary information regarding the correct medication required for pregnancy. All the highlighted services have been reported as an emotionally draining process especially during the process of HIV/AIDS testing and counselling. The whole process requires emotional support which is an important aspect also through the journey of pregnancy. As stated by Tolera *et al.,* (2020), Support gives rise to proximity as it has been described in several forms. Various support systems are essential when going through monthly maternity check-ups, services offered within the maternity department.

6.4.1.5 Provision of maternal healthcare counselling

The empirical findings of the study highlighted that not all women accessing maternal healthcare services received maternal health counselling due to the workload of nurses and Covid-19 preventive measures. The findings of the study state that maternal health care counselling is offered before all the tests are done and after birth where women are informed about various methods of family planning. Family planning information include how contraceptive use reduces the occurrence of high-risk and high-parity births as well as postpartum family planning education, allowing women to determine healthy birth spacing practices. Some women reported to have been offered the information about family planning prior to booking for maternity and after birth while others did not receive the information after birth due to the overcrowded hospitals and clinics and healthcare workers not having enough time after delivery due to the high influx of Covid-19 patients. Interviewees confirm that

> *" After giving birth I was informed about different family planning methods, their side effects as well as how effective they are. I was then given the opportunity to choose one which is*

suitable for me. All the necessary information about the chosen family planning method was provided. **(Interviewee No. 18, 19 October 2021).**

And

"I gave birth during lockdown level 5 and I did not receive any maternal healthcare counselling. The hospital was crowded and only one midwife working, there was just a lot happening and the only thing I wanted was to give birth and go rest at home with my family" **(Interviewee No. 1, 24 September 2021).**

As the findings of the study state, some women received the necessary information about family planning services which form part of maternal healthcare counselling while some women did not get the information due to reasons beyond control. Receiving the necessary family planning information during and after pregnancy is essential to the well-being of women and the right information can shape how women perceive and experience maternal healthcare services. The findings of the study support Anderson's behavioural model that argues that the availability of knowledge also plays a significant role in shaping women's experiences when it comes to accessing maternal healthcare services (Traver *et al.,* 2020). If the necessary information is not available where the women give birth, the woman do not receive the important information that she should have received. Information unavailability also contribute to how women perceive and experience maternal healthcare services in Mmabatho.

6.5 Adequacy of maternal healthcare services

6.5.1 Expectant mothers feeling lonely and detached

The findings of the study reveal that the reduced support during Covid-19 resulted in some women experiencing extreme feelings of loneliness and detachment during the journey of pregnancy and delivery due to Covid-19 preventive measures as they could not be accompanied by their families to monthly check-ups as well as during delivery. Similarly, UNICEF (2021) also noted and

identified how only mothers were allowed in the maternity wards in a bid to limit transmission of the Covid-19 virus. The results of the study confirm that Covid-19 indeed brought disastrous effects on the health care systems of many countries including on people of different age groups of 31-55 years old, with women accessing maternal health care services encountering the most unfavourable situations including reduced support from their families, friends, and partners. This did not go down well with some mothers who lamented the reduction in the support they had in their journey from pregnancy to delivery. In one of the interviews, an interviewee confirmed that,

> *"Pregnancy and motherhood are exciting and scary, now with Covid-19 added to the list it was just hectic. One had to be cautious all the time. With a large family like mine, it was difficult to explain why they cannot visit to see the child as it was a norm before Covid. How do you begin to sanitize your great uncle before he carries the child? And preventing them from kissing your cute baby. During her vaccine days we had to go early so that when people gather, we are long gone. As a working mom, I must constantly sanitize and dispose of the mask when I get home because my workplace can be a possible spreader or harbour of the virus"* **(Interviewee No. 14, 12 October 2021).**

And

> *"During delivery, no one was allowed to visit the hospital as there were risks of spreading the virus, this meant I had to embark on this scary journey alone"* **(Interviewee no. 11, 7 October 2021).**

And

> *"I had the loneliest journey of pregnancy. My partner could not even hold my hand during delivery let alone be allowed inside the maternity ward"* **(Interviewee No. 2, 11 October 2021).**

As emphasised in Andersen's socio-behavioural model, a solid support system goes a long way during the journey of pregnancy and motherhood as it awards the mothers with a sense of

proximity. Proximity in the sense of meals during monthly check-ups, different maternal healthcare services offered in maternity, activities offered in antenatal care as well as support from family and community at large. In trying to combat Covid-19, the government introduced preventive measures which affected access to maternal healthcare. The preventive measures including only one person allowed in maternity ward, being the mother giving birth and the midwife. Social distancing also affected in-person visitation and routine access of maternal healthcare services (Andersen, 1995).

However, healthcare facilities have prioritised high risk pregnancies. And adopted alternative strategies to minimise complication. Some of the strategies identified by Wanyana *et al.,* (2021), include drive through consultations, virtual follow-up sessions consisting of antenatal class which can be transferred easily through different social media platforms (Azziz *et al.,* 2020; Wanyana *et al.,* 2021).

6.6 Utilisation of maternal healthcare services

6.6.1 Fear experienced by women in accessing maternal healthcare

One of the major findings emanating from the study was the fear of contracting the virus in the course of accessing maternal healthcare services. This notion was similar to Pilay *et al.,* (2021); Juliana *et al.,* (2021); Ombere (2021) who advanced that women accessing maternal healthcare services around the world have expressed great fear of being exposed to Covid-19 and as a result stopped utilizing maternal healthcare services in health care facilities and opted for home deliveries in some parts of the world.

Similarly, as in the case of Mmabatho in the North West Province, many women accessing maternal healthcare services expressed fear of going to healthcare facilities. Movement restrictions have also made it difficult for pregnant women and mothers to reach healthcare facilities due to insufficient transportation available during the Covid-19 lockdowns. In one of the interviews the interviewees confirm that:

"I was nervous and excited all together. Though I knew this was a blessing, I wondered whether the timing was perfect. I was also nervous about whether I would contract the virus or not because I had monthly check-ups and that meant getting on and off taxis" **(Interviewee No. 6, 29 September 2021).**

And

"I knew going for monthly check-ups was essential and highly recommended but my worst fear was contracting the Covid-19 virus. I kept thinking about the worst-case scenario of contracting the virus. What if I die from the virus, I have a daughter? That was my biggest fear amongst other things" **(Interviewee no. 11, 7 October 2021).**

Some women interviewed expressed positive feelings of giving birth under such Covid-19 conditions. Undoubtedly, the results of the study confirm that there were mixed feelings outcomes of giving birth during Covid-19 as some women confirm. By implication, some women enjoyed their experiences during the pandemic as they got to spend more time with their new born babies, while some had unpalatable experiences which further created some fears in them while seeking maternal healthcare services. Some research participants confirmed that

"I was so happy that I gave birth to a healthy baby under such circumstances. I was also happier for the treatment that I got from the nurses. It was a tough journey but I am truly grateful to the nurses that were supportive and helpful throughout the journey" **(Interviewee No. 18, 19 October 2021).**

And

"I was so excited about giving birth, this is my first child, and it was a great experience overall. I did not encounter any challenges. **(Interviewee No. 8, 2 October 2021)**

As much as some women in Mmabatho were happy about giving birth, they still wondered whether the timing was right for giving birth under the Covid-19 lockdown restrictions. Some women

stopped going for their monthly medical check-ups because of the fear of possibly contracting the virus. The results of the study confirm the previous findings conducted on barriers to maternal health care services during the Ebola virus outbreak in three West African countries (Palo *et al.,* 2022; Lawry *et al.,* 2021; Campbell *et al.,* 2022). During the Ebola pandemic most women accessing maternal healthcare services feared going to healthcare facilities, reason being the possibility of contracting the virus and possibly dying from the virus. Similarly in this study, some women went through drastic measures, like, going as far as putting on hold, their monthly check-ups altogether.

Fear was found to be the most significant barrier to both the provision and utilisation of maternal healthcare services. According to Miller *et al.,* (2018), there was a certain notion that health care workers had increased risk and exposure of contracting the virus. In consistency with the Centre for Disease Control and prevention (CDC), approximately 148 327 pregnant women had SARS-CoV-2, the virus that cause Covid-19 and out of the estimated number, 241 women died of Covid-19.

Empirical findings also confirm the results of the study conducted by Mantagnoli *et al.,* (2021); Reale *et al.,* (2020); Murphy *et al.,* (2020) which have shown that during pandemics healthcare systems are often compromised. Additionally, the health of women as well as their children are the most affected as they face the highest rate of deaths. The information received by women has created some form of apprehension and anxiety in them, because of the experience of a health system which is close to not working effectively. One of the respondents whose response captured majority of women had this to say:

> *"I was so happy. I am an educator by profession, so for me being a mother during Covid-19 was a blessing because that meant raising and spending more time with my child, at the same time, I am scared and apprehensive of this COVID. I continue to ask myself, how safe is our health system? I am just scared, honestly***" (Interviewee No, 5, 26 September 2021).**

Contrary to the highlighted difficulties and challenges experienced by women accessing maternal healthcare services during Covid-19 Pandemic, some women expressed a different view of giving birth during Covid-19 as compared to other women, as emphasised by some women there are advantages of giving birth during Pandemics and disease outbreaks. Similar to the findings, Wang *et al.,* (2021); DeYoung and Mangum (2021) confirm that some women did not experience any difficulties throughout their journeys of pregnancy and delivery, not even the shortage of medication experienced by other women during their monthly visits.

6.6.2 Delays in maternal healthcare due to cultural beliefs

Findings from the study reveals that most women prefer traditional ways of preserving pregnancies including not announcing the pregnancy until the baby has been born. However, for some women the decision was also influenced by the fear of contracting the virus. Additionally, most women from low-income social groups and rural background preferred to deliver at their homes not because of the fear of contracting the virus but also due to past experiences learned from the old generations. The knowledge passed from generations to generations also play a vital role in the health of pregnant women and new mothers. Interviewees confirm that

"My late grandmother made sure I had a safe pregnancy and delivery during my first pregnancy. I only went for monthly check-ups for 3 months. She always told me that she got all the teachings from my great grandmother and that was when she was expecting my mother. I was sceptical about it during my second pregnancy but because of Covid-19 and movement restrictions, I had to use all the traditional ways of maternal health I got from my elders." **(Interviewee no. 11, 7 October 2021).**

And

"I prefer traditional ways of preserving the pregnancy. I had to go for check-ups here and there just for formality. Another thing which made me consider traditional ways was the way Covid-19 cases kept on increasing, I was worried that I might get infected. **(Interviewee No. 1, 24 September 2021).**

Most studies have highlighted the relationship that exists between social and cultural beliefs as well as the health risks which result from such beliefs (Choudhary *et al.,* 2017; Omer *et al.,* 2021; Mumtaz *et al.,* 2014). Some women in rural areas believe that their mothers and grandmothers are capable of taking care of their maternity needs. Therefore, accessing proper maternal healthcare services is not a priority to them. This kind of behaviour Bourdieu referred to as an objectified state, which is behaviour learned through cultural practices. One of the interviewees mentioned that

"Some women only came to register their pregnancies and we never saw them again. We saw another 3 months after delivery and they also delivered at home assisted by their mothers and grandmothers. The reason for not coming was that they preferred traditional ways of maternal health and there was nothing we could do as midwives" **(Interviewee No. 21, 23 October 2021).**

And

"I believe in traditional ways too but I also know how essential it is to get proper maternal healthcare attention. Some women were only here to register their pregnancies and we would only see them after several months after delivery. It is totally acceptable because when they come back, we have to attend to them" **(Interviewee No. 22, 25 October 2021).**

The findings above concur to Omer *et al.,* (2021) who conducted a study on the influence of social and cultural practices on maternal mortality. They argued that societal norms, cultural beliefs and values have an impact on maternal mortality rate. Women make decisions to seek healthcare based on cultural beliefs passed on from generations to generations, for instance, some communities believe in home delivery instead of delivering at clinics or hospitals. The results are also like Bourdieu's cultural capital which state that women tend to make decision to seek maternal healthcare services based on cultural beliefs. Furthermore, Pretorius (2004), pregnant women in greater Mafikeng, Mmabatho district value traditional beliefs especially women from rural areas.

6.6.3 Discontinuation of antenatal services

Findings from the study show and reveal that discontinuation of antenatal classes due to the National lockdown that brought a ban on social gatherings. Despite all the challenges encountered during the journey of pregnancy and motherhood, getting to interact with other women seemed to be the only support system some women got. In some cases, women trying to access maternal healthcare services got as advice and recommendations from other women with respect to how they care receive care for complications during and after pregnancy. In one of the interviews, the interviewees confirmed that:

> *"I was so sad because I am young and clueless about motherhood and because of Covid-19 and its regulations, some services were cancelled such as antenatal classes. So, I could not get enough and appropriate information about the services and experiences from other women and what I should do as a first time Mother"* **(Interviewee No. 1, 24 September 2021)**

And

> *"I was hoping I would meet other women at antenatal classes like the first time I had a child, the journey was not as difficult as it is now"* (**Interviewee no. 11, 7 October 2021).**

The Covid-19 pandemic led to the enforcement of restrictions on movement which impacted on the access to and delivery of healthcare. Apart from some women being nervous about giving birth during Covid-19, some women reported to have been worried and sad because of different reasons other than possibly being infected with Covid-19. One of the reasons reported was the shortage and discontinuation of antenatal classes because of the high reported cases of Covid-19. As it has already been mentioned in the literature review, different maternal healthcare services routines inclusive of campaigns and outreach sessions were suspended due to the preventive measures put forth by the government and the absence of routine care can result in severe complications which could have been prevented (Durankus & Aksu, 2020; Goyal *et al.,*

2020; Orjingene *et al.,* 2020; WHO, 2020). The pandemic has taken a toll on the importation and exportation of essential commodities among nations. Hence, a shortage in necessary commodities to serve the healthcare system including the discontinuation of antenatal classes (Kumar, 2020).

This is substantiated by Bourdieu's social capital. Social capital has a direct and in turn an indirect intervening impact on the social reproduction of maternal healthcare. Impact through recommending valuable and quality networks, solid emotional support and encouraging participation in different healthy behaviours amongst other things. Social capital also highlights the importance of a solid support system during the journey of pregnancy and delivery (Collyer *et al.,* 2015; Hastings & Matthews, 2015; Paccoud *et al.,* 2020).

6.6.4 The Impact of Covid-19 on the provision and utilisation of maternal healthcare services

As North West was declared a Covid-19 hotspot, some clinics had to close and discontinue maternal healthcare services because some healthcare workers were infected. Preventive measures had to be implemented which included quarantine for the infected healthcare workers and that made it difficult for women who were accessing services at nearby clinics. Nonetheless, some participants revealed that Covid-19 did not have any negative impact on their journeys of pregnancy and delivery except difficulties of adhering to Covid-19 regulations during delivery. In one of the interviews, the interviewee confirmed that

> "*On one hand it has not affected them much, just that both the woman and the midwife have to wear masks during delivery while pushing the baby and it is difficult as the woman needs more oxygen during delivery*" **(Interviewee No. 10, 5 October 2021).**

And

> *"We have had challenges before which affected other women negatively but ever since the pandemic the number have doubled. Covid-19 has affected maternal healthcare services negatively, a lot is happening including the issue of visitation. It is really sad to*

witness women embarking on the journey of pregnancy and motherhood alone, it is so bad because some women are even afraid of coming for their monthly check-ups because of the stigma around Covid-19" **(Interviewee No 4, 11 September 2021).**

In some clinics Covid-19 have affected the way maternal healthcare services are rendered and utilised. In some instances, women accessing maternal healthcare services do not get adequate and appropriate care as they should because of the surging cases of Covid-19 as healthcare workers prioritised Covid-19 infected patients. One of the Interviewee confirmed that

"Ever since the pandemic, when we have a case of Covid-19 pregnant women in labour do not receive the necessary services and you would find that they get really affected" **(Interviewee No. 19, 20 October 2021).**

The results of the study support the results of the recent studies (Bisht & Sarma, 2020; Orjingene *et al.,* 2020; Pant *et al.,* 2020; Poudel, 2020; WHO, 2020), recent studies have reported that different disease outbreaks have had either directly or indirectly effects on different age and gender groups, there is, however, a special group of women taken into consideration and that is women accessing maternal healthcare services together with the maternal healthcare sector. Furthermore, the results of the study confirm the notion by Andersen's behavioural model that women access maternal healthcare services in relation to the environment in which they live in, the environment being Covid-19 in this instance.

6.6.5 The impact of the National lockdown on the utilisation of maternal healthcare services during Covid-19

As the country was trying to combat the spread of Covid-19, at some point almost all services were suspended with immediate effect. The findings of the study confirm that the sudden change in how maternal healthcare services were rendered affected pregnant women and new mothers the most because most women were not fully prepared for giving birth, some had not bought necessities for their unborn babies. In one of the interviews, the interviewee confirmed that,

"I knew I was expecting a child and I had to be prepared but with everything that was happening, I got overwhelmed and I was even afraid to go to the shops until they were closed without getting the necessities I needed for delivery. I had to borrow clothes from people, so that my baby could at least be covered after birth" **(Interviewee No. 20, 25 October 2021)**

And

"I was postponing shopping in preparation for delivery because I was scared to get infected. I went to the clinic with old clothes because Lockdown prevented me from going to the shops" **(Interviewee No. 8, 2 October 2021).**

And

"Maternal health care services are one of the departments of health priorities. So pregnant women were well taken care of during lockdown. And during lockdown, everyone who had anything that required medical assistance was allowed to go to the healthcare facilities, So I cannot really say they were affected that much" (**Interviewee No. 16, 13 October 2021)**.

The above interview excerpts show that the various measures implemented by the government to reduce the transmission of Covid-19 had a negative effect for women accessing maternal healthcare. The preventive measures were inclusive of social distancing. Social distancing was a challenge to some women due to several factors. The factors include lack of necessary outdoor space, inability to meet online shopping delivery slots as well as proper shopping for delivery. Most women worried about social distancing during labour, as it was impossible to maintain it. Social distancing was one of the reasons why some women limited their clinic visits (Anderson *et al.,* 2021). This is supported by Pant *et al.,* (2020), that Covid-19 brought disastrous effects on

the health care systems of many countries including on people of different age groups, with pregnant women encountering the most unfavourable situations more than the rest of the people.

6.7 Access to maternal healthcare services

6.7.1 The experiences of expectant mothers with informal healthcare providers

According to the findings of the study, some women in Mmabatho resorted to informal caregiving not by choice but due to the circumstances they found themselves in. Some women highlighted that their family members assisted them and it was a pleasant experience, if they had to choose, they would choose informal caregiving over assistance from qualified healthcare professionals. One of the reasons revealed by women on why they would choose informal over professional caregiving was that informal caregivers possess empathy and warmth. Empathy on the basis that the knowledge passed on from generations to generations is also passed on with love and patience unlike in clinics. After giving birth, the warmth and empathy still continues to ensure that women are well taken care of in order to recover. In one of the interviews, an interviewee confirms that:

"I remember how my mother took care of me after delivery. She prepared sitz baths for me until I fully recovered. She took care of my new born baby and used old ways of taking care of the baby's umbilical stump. It was a great experience" **(Interviewee No. 1, 24 September 2021).**

In one of the interviews, interviewees expressed their experiences with accessing informal maternal healthcare services. Some women have highlighted that their experiences with informal caregivers were pleasant as their caregivers were people close to them, with all the necessary indigenous knowledge about pregnancy and delivery.

"I am so blessed that I still have my great-grandmother who was supportive throughout pregnancy and delivery. I used both the professional and informal services and if I had to choose

one, I would choose to stay home and be taken care of. It was such a nice and peaceful experience" **(Interviewee No. 18, 19 October 2021).**

And

*"I stopped going to the clinic after the second trimester and I was assisted by my grandfather until delivery. I asked her where she accumulated all the knowledge and she said that is how things were done in the past and she also got the knowledge from her grandmother. My grandmother knew every single detail about pregnancy and giving birth. She helped me deliver my beautiful baby; I only went to the clinic to ensure everything went well. After birth she still assisted in making sure we were both fine. This is my first smooth pregnancy" (***Interviewee No. 8, 2 October 2021).**

The empirical findings of the study have highlighted how women in Mmabatho appreciate the assistance that they received from informal caregivers especially during difficult times of Covid-19. Due to the empathy and warmth from informal caregivers, some women had pleasant experiences as compared to going to qualified caregivers. The knowledge passed from generations to generation was helpful in making sure that informal caregivers provide proper care to expectant mothers. This is also supported by Bourdieu's cultural capital which states that learned behaviours from cultural practices from other experienced women influence how women access maternal healthcare services. Some women might not be cultural but the cultural knowledge regarding pregnancy and delivery come in handy when professional healthcare providers cannot provide the necessary information regarding pregnancy and delivery.

Childbearing is one of the most important events in women's lives. Therefore, pregnant women have to be taken care of both informally (Household setting) and professionally by qualified healthcare providers. Despite the sudden overwhelming experiences of Covid-19 pandemic, there were also drastic changes on how women accessed maternal healthcare services. The drastic changes include the discontinuation of antenatal care which is the most important care during the

first trimester. The drastic changes affected how women experience maternal healthcare in Mmabatho, luckily some women received some assistance from informal healthcare providers. Informal healthcare providers are usually great grandmothers, grandmothers, mothers or even neighbours who are experienced in some aspects of pregnancy and delivery. Upon the closure of some clinics due to Covid-19 cases, some women resorted to informal maternal healthcare service as they could not afford the cost of private healthcare services. In China, for instance, informal caregiving is part of Chinese culture. This is to ensure that women have pleasant experiences during pregnancy and delivery in case qualified caregivers fail to provide proper care. Zuo *et al.,* (2022), assert that most women have resorted to informal maternal healthcare services even prior to Covid-19 pandemic.

6.7.2 Barriers in provision and use of maternal health care services

Health and health related outcomes are not only affected by access and utilisation of health care services, but there are also complex and multidimensional factors which play a role as social determinants of health care. As emphasized by Ataguba & McIntyre (2015), political, economic, social and environmental factors, as well as inequalities are considered linked to the provision and access of quality health care services within different healthcare sectors in South Africa. This study found that the women in Mahikeng experienced a number of these factors in their journeys of maternal healthcare during the Covid-19 pandemic. These factors are discussed below.

6.7.3 Lack of Medical equipment at public healthcare facilities

Findings in this study revealed that there was a challenge with the provision of healthcare during the Covid-19 pandemic due to lack of medical equipment and supplies in the clinics. In one of the interviews, the interviewee highlighted that in some facilities, especially public healthcare institutions, there are not enough medical resources to cater for everyone. Consequently, this shortage of medical equipment and supplies negatively impacted the provision of maternal healthcare. They had this to say,

> *"In some facilities there is no equipment, especially in public healthcare facilities. We do not have necessary equipment; we do not have medication and the necessary medical necessities to administer to patients. So, if we do not have necessary equipment like the blood pressure machine, the stethoscope for assessments, it is quite a challenge. I mean a blood pressure machine alone is a necessity at the maternity ward. It is risky to try and deliver the baby without monitoring the mother's blood pressure. If the blood pressure of the mother is too high, the mother will lose a lot of blood and we are going to experience what we call haemorrhage, which can end up leading to maternal mortality that we are trying to prevent"* **(Interviewee No. 2, 11 October 2021)**

And

> *"Covid-19 really worsened the existing problems we encountered before the pandemic. First of all, there are not enough resources to cater for both Covid-19 patients as well as women that require maternal healthcare services. It is really a straining situation even for us frontline workers"* **(Interviewee No. 19, 20 October 2021).**

From the above results, the challenges that exist within the South African health system have worsened during the Covid-19 pandemic. Despite not having enough resources to cater for both Covid-19 patients and women that require maternal healthcare services, other factors have also affected how services are rendered. In addition to the challenges that exist within the health system, the social environment has proven to be essential for women accessing maternal healthcare services. Women establish connections through interaction in order to have an opportunity to share spaces with other women accessing maternal healthcare services. Uniformity of background has been proven to be helpful to many women in their reproductive years, new mothers and those expecting to give birth and this is in line with one of the psychosocial factors in Andersen's behavioural model (Tolera *et al.,* 2020). The results are in line with Darankus *et al.,* (2020); Pant *et al.,* (2020); Woodley, (2020); Wiley, (2020) who advance the notion that there is

decreased availability of certain medications necessary for pregnant women due to restricted movements.

6.7.4. Shortage of medicines in public healthcare facilities

Empirical evidence from the study indicates challenges of improving quality in the healthcare systems. Even though many initiatives have been done to improve the quality of healthcare in South Africa, they have not yielded desired outcomes. Consequently, leading the health system of South Africa to more challenges and not being able to handle disease outbreaks and pandemics. In one of the interviews, an interviewee validates that the situation in clinics is often bad as not receiving any medication

> *"The situation was really bad, sometimes we would go to the clinic and not receive any medication to ensure that my pregnancy goes smoothly"* **(Interviewee No. 7, 30 September 2021).**

And

> *"I do not remember receiving any pregnancy supplements during my monthly check-ups, each time I went to the clinic, I was told medication is not available and that I must come the following week and I could not because I stay far"* **(Interviewee No. 18, 19 October 2021).**

The findings highlighted above show that resource scarcity has been one major challenge for South Africa's healthcare system for years and this in turn has affected how women experienced maternal healthcare services. In the North West Province, the situation has worsened. How women experience maternal healthcare services during their journeys of pregnancy also affect their long-term use to access such services. Women experience pregnancy different and some women require more attention to avoid complications, insufficient resources might affect their health and well-being during this crucial phase. Proper medical attention as well as the right

medication are required. Maternal healthcare services were not prioritised and as a result women encountered challenges accessing proper services as more attention was shifted to Covid-19 patients. Similar to the results, Mololekwa (2021) also states there was a shortage of medical supplies and medication that had a negative consequence on the maternal health care services and how women experience and perceive maternal healthcare services. In June 2020, the North West province was reported as one province with the most reported cases of shortage of medicines out of the nine South African provinces during the first Covid-19 National lockdown. Prior to that, healthcare workers had been complaining about the severe shortage of medicines and personal protective equipment (PPEs) in the North West Department of health which has been under the National Department of health administration since 2018 in April (Molelekwa, 2020).

6.7.5 Lack of nurses at public healthcare facilities

As it has been highlighted on the interview excerpts below, Covid-19 negatively affected the rendering and operation of services, although the challenges were already there but during Covid-19 the situation worsened. The biggest setback highlighted is the shortage of nurses, undoubtedly, enough healthcare workers would have made a difference as according to the empirical results of the study. Lack of nurses also made it difficult for healthcare workers to render maternal healthcare services. One of the interviewees confirmed that,

And

> *"I would go to the clinic around 9 am in the morning and only leave the clinic at 2pm because of a shortage of nurses. We had to share nurses with other patients because their health also matters like ours. The situation was tiring, I am glad I am through that phase"* **(Interviewee No. 2, 11 October 2021).**

And

"We had to wait for the matron on duty to assist us and the queue was long. Sometimes there would be only one matron working and have to attend to us all" **(Interviewee No. 9, 3 October 2021).**

From the data presented above, healthcare workers play a fundamental role in assisting to combat the outbreak of Covid-19 as well as rendering maternal healthcare services, they are highly valued members of the society. However, they are often relatively scarce, and it is even worse during pandemics. The short-staffed healthcare systems have affected the healthcare outcomes of most women especially new mothers and pregnant women (Moodley *et al.,* 2020). In summary the most inconvenience experienced by most women accessing maternal healthcare services during Covid-19 was the shortage of nurses.

6.7.6. Inadequate ambulances at public healthcare facilities

The findings of the study highlight the consequences of inadequate ambulances women's experiences in the provision of maternal healthcare services. The results of the study attest that the South African health care system is still facing many challenges which do not show any signs of ending soon and the shortage of medication, healthcare workers and resource constraints are not doing any justice to the already existing challenges. In one of the interviews, one interviewee mentioned that

"Shortage of ambulances is a serious challenge. We have had a lot of emergencies and pregnant women get really affected to an extent that they end up delivering on their way to seek help because the ambulance also take time to reach their destinations because there are not enough ambulances to cater for pregnant women and Covid-19 patients" **(Interviewee No. 2, 11 October 2021).**

And

"Despite not having enough to cater for all patients, another challenge is shortage of ambulances. Women accessing maternal healthcare services are not the only ones affected, sometimes families even lose their loved ones while waiting for ambulances" **(Interviewee No. 2, 11 October 2021)**

According to Malakoane *et al.,* (2020), South Africa urgently needs to improve its health care system in order to reach Universal health care (UHC). As it has been reported by Malakoane *et al.,* (2020), South Africa is facing a quadruple disease burden which makes up 17% of the disease global burden exclusive of the maternal and child mortality which make up 1% of the global disease burden. According to the findings of the study the health system of South Africa needs to be adjusted in order to be able to cater for women accessing maternal healthcare services during disease pandemic and other patients. The already struggling health system of South Africa has negatively affected how women accessing maternal healthcare services in Mmabatho experience and perceive maternal healthcare due to the inability of the health system to handle disease burdens. Highlighted by the findings of the study, some women reported to have had difficulties due to insufficient ambulances in local clinics, thus affect how they experience maternal healthcare services during the phase of pregnancy.

6.7.7 Payment dynamics of maternal healthcare services

The findings from the study reveals that some women highlighted that as much as pregnancy and motherhood has its own challenges, they never encountered any challenges accessing maternal healthcare services as they highlighted that they were accessing services in private hospitals. However, some women could not afford private healthcare services as others were unemployed and from low-income families. The difficulties arose when clinics were closed because of increasing Covid-19 positive cases, where individuals had contracted the virus and some showed symptoms; hence, the need to fumigate the clinics and place the affected patients in isolation. For some women it meant they had to wait for the clinics to operate again to access maternal healthcare services. One interviewee that,

> *"The biggest challenge I encountered was having to travel long distances to other clinics and spend for trips which were not budgeted for as the clinic I had booked into had a case of Covid-19"* **(Interviewee No. 2, 11 October 2021)**

And

> *"The long trips to alternative clinics were financially draining because the clinic I used to go to was temporarily closed and I could not afford private hospital medical fees"* **(Interviewee No. 1, 24 September 2021).**

The highlighted challenge from the findings was budget constraints, as some women did not have any issues accessing maternal healthcare services in private hospitals, some women struggled to even travel to alternative clinics as nearby clinics were closed due to Covid-19 positive cases. However, the empirical results of the study confirm that affordability of services play a significant role in the well-being of women accessing maternal healthcare services and protection against risks serve as important dimensions as they determine one's ability to access healthcare services. Similar findings were also noted in a study conducted by Gandhi *et al.,* (2022), where it was revealed that the interaction between wealth index and healthcare (which drives affordability) is significant in determining access to maternal health care services; by implication, women belonging to higher income quintile receive better healthcare services; they could afford staying in urban areas which are embedded with better access to healthcare services. In the same vein, Babalola and Fatusi (2009) also reported that socio-economic status has a positive implication and impact with the access and use of maternal healthcare services. For instance, in this study, it was noted further that the odds of reporting use are almost six times higher among women from rich households who can afford it, compared to their counterparts who come from poor households.

Bourdieu's Economic capital theory also advances the notion that affordability of resources plays a significant role in the experiences of women accessing maternal healthcare services (Adam and Gerry, 2021; Ayesha and Muhammad, 2021; Baum *et al.,* 2021). It draws back to Andersen's

expanded behavioural model within the domain of attitudes where it states that affordability is one of the core elements of the use of maternal healthcare services and indeed, in one of the interviews, the interviewee confirmed that,

> *"I do not recall experiencing any difficulties because my gynaecologist was always present during my monthly visits"* **(Interviewee No. 8, 2 October 2021)**

And

> *"My challenge was having to travel to other clinics to the point that I ended up going to a private hospital. After the private hospital, my pregnancy journey became smooth. I never encountered any challenges although I had to pay for the services."* **(Interviewee No. 18, 19 October 2021).**

South Africa has high levels of unemployment, inequality and poverty which are the biggest factors affecting the provision and use of basic health care services in the country. In a study conducted on the role of social determinants of health-on-health inequality in South Africa by Ataguba & McIntyre (2015), good and quality healthcare services are the advantage of the privileged families that includes access to maternal health care services, other sectors apart from health also have substantial and important impact on the inequalities experienced within the health care sector. Some women can easily afford private health care services when clinics are not operational unlike others.

6.7.8 Accessing prenatal medication at pharmacies

The results of the study attest that the South African healthcare system still has a long way to go in terms of rendering quality and better services for its citizens. Most women accessing maternal healthcare services reported to have experienced difficulties buying supplements due to long queues. In one of the interviews, the interviewees confirmed that,

"My biggest challenge was shortage of medication at the clinics, we had to buy our own medication and that meant waiting in long queues at pharmacies" **(Interviewee No. 18, 19 October 2021)**

And

"Having to stand in long queues in Pharmacies was my biggest challenge, because private hospitals also did not have medicines" **(Interviewee No, 5, 26 September 2021).**

Figure 6.7.8.1: long queues in different Pharmacies 21 days before national lockdown.

Source: Reuters, (2020)

The interview excerpts and image above reveal that women had similar challenges of lack of medicines even the women that were accessing maternal healthcare services from private hospitals. Healthcare institutions did not have medicines as that has been another issue affecting the provision and utilisation of maternal health care services due to supply chain disruptions, company and border closures during the Covid 19 pandemic. Similarly, findings were in line with Maphumulo and Bhengu (2019), where it was noted that the South African government has, over

the years, introduced several developments and health care systems. Despite these, public health institutions have failed to meet their basic health care standards and expectations from patients; to the extent that, findings from Koelble and Siddle (2014) described it as a ruined health care system that needs a serious repair. Another factor delaying the provision and utilisation of maternal healthcare services in Mafikeng health care facilities identified were long queues. Some clinics were not operational at some point due to the spike in the cases of Covid-19 patients. Women accessing maternal healthcare services had to buy their own supplements at local pharmacies, increasing the cost of accessing maternal healthcare services.

6.7.9 Choices in maternal healthcare decision making

The empirical findings obtained from this study showed that women with high-risk pregnancies were transferred to the provincial hospital during the Covid-19 pandemic. Healthcare workers sent women with high blood pressure and caesarean section patients and other high-risk conditions like miscarriages, foetal distressed to Bophelong Provincial Hospital for further monitoring. This was to ensure that such women are able to access appropriate maternal healthcare services according to their health needs. Women had no choice in terms of the decision making but to follow the healthcare workers' recommendations. An interviewee confirmed that

"The midwife from the clinic I registered my pregnancy at advised me to go to Bophelong Provincial Hospital. I was initially advised to monitor my blood pressure at home but I could not afford the blood pressure machine. During my second trimester, my blood pressure was uncontrollable, so I needed emergency medical attention and I was sent to Bophelong Provincial Hospital" **(Interviewee No. 16, 13 October 2021).**

And

"I was initially transferred to Bophelong Provincial Hospital for further monitoring after registering the pregnancy in Montshioa Town clinic. I lost my second child because of complications related to high blood pressure. I was so happy that I got referred to Bophelong Provincial Hospital as early as possible, so that I can have a healthy pregnancy like other women. For me, it meant

despite Covid-19, maybe this time I will get to a normal pregnancy without complications as I will be closely monitored throughout pregnancy" **(Interviewee No. 7, 30 September 2021).**

As much as high blood pressure complicates at least 10 to 15% of pregnancies it can also increase maternal mortality. One of the participants confirmed that caesarean section patients were also sent to Bophelong provincial hospital for further assistance before delivery at approximately 32 weeks into the pregnancy but others were sent as early as the second trimester.

"I honestly opted for the Caesarean section because of Covid-19, and I gave birth prematurely, so I was referred to Bophelong provincial hospital. I was scared that I might contract the virus some way or the other. I saw caesarean section as a faster way of going home after birth, I do not have to serve my maternity stay in hospital" **(Interviewee No. 8, 2 October 2021).**

And

"I had my first child by Caesarean section and I had some complications during my first pregnancy, so I was given a referral letter to Bophelong provincial hospital as early as my first trimester to receive better care. I would say it's better care because I was carefully monitored unlike at the clinics. Clinics were short staffed, we had to wait for two or three midwives to assist us" **(Interviewee No. 20, 25 October 2021)**

The empirical evidence of the study highlight that the immediate strategic action from the North West department of health played a significant role in trying to combat the virus as well as ensuring that both women and children are safe from harm. High risk pregnancies were taken into consideration in order to control the high rate of maternal mortality which took place between 2020 and 2021. The findings of the study contradict Nteta *et al.,* (2010) that there have been developments and improvements of health care facilities. According to Nteta *et al.,* (2010) particularly in clinics, maternal health care related programmes which included the extension of immunizations, child nutrition and child and mother health care, as well as the management of diseases. However, supporting Silal *et al.,* (2014) that a poor performing South African health care system might fail to control epidemics as it was observed during the Ebola disease outbreak

where West African countries struggled to combat the Ebola outbreak. This was also evident during the Covid-19 pandemic (Silal *et al.,* 2012; Silal *et al.,* 2014).

The following section will present and discuss findings on the provision of maternal healthcare with respect to the second objective that sought to explore the interventions that were in place for maternal healthcare services during the Covid-19 pandemic.

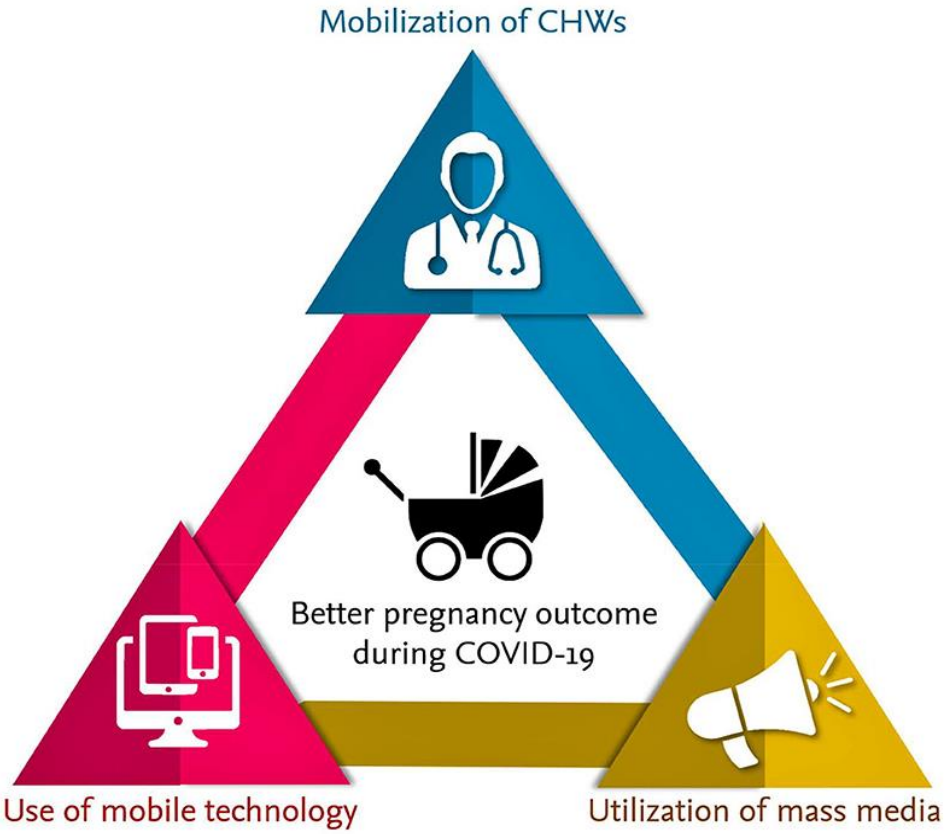
6.8 Interventions in place for access and availability of maternal healthcare services during Covid-19

6.8.1 In person service provision

In South Africa the use of community healthcare workers initiative has also been introduced in order to provide accessible and appropriate care to mothers and their children, but the positive outcome of the involvement of community healthcare workers depends on the relationship and trust between the healthcare system, patients as well as the community health workers (Nteta *et al.,* 2010; Silal *et al.,* 2012).

The following diagram illustrates possible interventions which can assist women in accessing proper maternal health care services.

Figure 6.8.1: *An illustration of the factors that could possibly mitigate complications during pregnancy*



Source: Uwambaye *et al.,* (2020)

6.8.1.1 Community Healthcare Workers initiative

Findings from the study indicated that community healthcare workers play a vital role in maternal healthcare by providing women with the necessary information needed during pregnancy. Some community healthcare workers were experienced mothers and such support was beneficial to pregnant women in Mmabatho. Furthermore, the findings of the study highlight that community healthcare workers were part of the “essential workers and services”, and they were authorized to go around during the Covid 19 pandemic to offer maternal healthcare services. community healthcare workers are appealing to and can reach women from low-income groups, (acceptability of intervention) usually middle and high women prefer engaging private doctors or medical facilities. The findings also note the readiness of the health system to adapt through its existing structures (CHWs) to ensure the continued provision and uptake of maternal health services but challenges are still there. The findings of the study substantiate the findings by Roux *et al.,* (2020)

who concluded that community health workers (CHWs) have yielded positive outcomes in some parts of South Africa and this is also supported by the following interview intercepts.

> *"Community based intervention really made a difference even though it was a bit difficult for our community helpers to go out and assist healthcare workers with patients because of the fear of contracting the virus. But overall, it is a fruitful initiative and it has been good to the maternal healthcare sector"* **(Interviewee No. 16, 13 October 2021).**

And

> *"I really hope the government will look into the issue of employing more people to assist healthcare workers on a daily basis. Community healthcare workers popularly known as Home-based care workers play a vital role in rendering healthcare services because some of these women are our experienced mothers. They know the ins and outs of what is required of a woman expecting a child and a woman recently gave birth, they are able to assist us in so many ways and they outdid themselves during Covid-19"* **(Interviewee No. 16, 13 October 2021).**

The results of the study confirm the results of the study conducted on Covid-19: pandemic adaptation in antenatal care for better pregnancy outcomes by Uwambaye *et al.,* (2020). The involvement of CHWs as well as the use of mobile health assist in mitigating pregnancy complications including all other maternal health related issues. Such initiatives are essential especially in developing countries including South Africa. Contrary to the findings of the study, Besada *et al.,* (2020) state that the introduction of Community Health Workers (CHWs) has not yielded any improvement to the health of pregnant women as well as the rate of maternal mortality. Furthermore, Besada *et al.,* (2020), argued that the Community healthcare worker initiative has yielded positive outcomes compared to other initiatives during the Covid-19 pandemic. Despite the heightened risk of possibly contracting the virus for both women accessing maternal healthcare services as well as community healthcare workers, positive responses from women interviewed substantiate the above statement. This is also substantiated in Andersen

behavioural model within the domain of perceived control that women make autonomous decisions to access maternal healthcare services, despite the decision being theirs, collaborative support and input is also needed from their loved ones. In this case, input of community healthcare workers which in turn influence how women from low-income communities experience maternal healthcare services.

6.8.3 Provision of maternal health care

6.8.2.1 Provision of free prenatal services

The results of the study have identified several barriers associated with access to maternal healthcare services. Additionally, a common concern throughout the interviews was shortage of prenatal medicines and appropriate medicines required by pregnant women. Too often, women were not given any medicine due to low supply resulting in more supply directed to Covid-19 responses and interventions. Clinics not having prenatal vitamins and other supplements was a major concern as according to the results of the study. In one of the interviews, an interviewee mentioned that,

"I do not recall receiving supplements that I received when I had my first child. There were no vitamins at all, so I had to make a plan and get some from the pharmacy" **(Interviewee No. 2, 11 October 2021)**

And

"I gave birth prematurely because I only started taking folic vitamins in my second trimester as the clinic did not have them and I also could not afford to get my own from the pharmacy. So, I also stopped going for my monthly check-ups altogether because I did not see the need to travel all the way to the clinic only to be told that there are no supplements. It was a monthly thing, no medicine every month" **(Interviewee No. 18, 19 October 2021).**

Findings above show that prenatal care services have been proven to be one of the effective means of detecting diseases earlier during pregnancy. During this phase, pregnant women are

introduced to certain supplements which assist in controlling the transmission of different diseases from the mother to child such as the prevention of mother to child transmission (PMTCT) or the vertical transmission of HIV. In the wake of Covid-19 pandemic, most health essentials for women have been discontinued, shifted even delayed, thus leading women to not seek prenatal care services. Morhe *et al.,* (2020) assert that lack of prenatal care services serves as one of the barriers in seeking maternal healthcare services. Additionally, the correlation between lack of prenatal care services and shortage of medication has been reported in other studies (Mantagnoli *et al.,* 2021; Murphy *et al.,* 2020; Reale *et al.,* 2020). This also plays a role in access to maternal healthcare as women who rely on free prenatal services cannot make other means to get medication. Leading back to financial resources which is highlighted in Andersen's availability of financial resources which state that final resources play a significant role in women's experiences in accessing maternal healthcare services.

6.8.2.2 Maternal healthcare day

Results from this study revealed that maternal healthcare day was utilised at the clinics. This is a day specifically reserved for all maternal healthcare services from regular check-ups to immunization of babies. Maternal healthcare day is every Wednesday in both Montshioa clinic and Unit 9 clinic. The results of the study confirm that maternal healthcare was helpful on the basis that midwives were able to pick up anything unusual at an early stage during pregnancy because during that day, the focus is solely on women accessing maternal healthcare services. In one of the interviews, an interviewee confirms that

"I was so excited after being informed that every Wednesday is maternal healthcare day, although it was always full but at least we were all assisted on that day" **(Interviewee No. 20, 25 October 2021)**

And

"Maternal healthcare day was stressful; every week is full but at least I received appropriate care. Even though we had to wait due to the long queue, it was worth it" **(Interviewee No. 2, 11 October 2021).**

Despite some women showing gratitude for the maternal healthcare day, some women have reported to have had a bad experience of the day. The empirical evidence from the study confirmed that some women were not satisfied because of the quality of the services received as well as the slow pace which the midwives were working at. It was confirmed that the clinics were always full and patients who would wait for hours only to be assisted because of shortage of nurses. Some women also mentioned that midwives did not do a proper job because they were sometimes in a hurry to assist all women. One interviewee confirmed that

"What a disaster day. You know I was happy that finally, there is maternal healthcare day, we will be thoroughly checked and given appropriate medication but the day was a disaster. Despite not receiving any medication because the clinic does not have any, their clinic was always full. I was not satisfied at all and I had to wait because I could not afford to go to the Doctor" **(Interviewee No. 18, 19 October 2021).**

And

"The clinic was so full at times that I would go back home without being assisted. Imagine leaving your house early in the morning only to be assisted after two to three hours. I was not happy with the services too" **(Interviewee No. 9, 3 October 2021).**

The evidence from the study emphasise that just like any other intervention, people will be happy with the initiatives but not necessarily all because people experience different situations differently. Every woman will have reasons as to why the intervention was not satisfactory for her or did not work out for her, same as the few that were satisfied with the intervention. However, the empirical evidence from the study suggests that the experiences of women from low-income backgrounds of such intervention are also influenced by several factors, some women do not have access to cell phones, which makes it harder for them to relate to the progress of such

interventions. The success of such initiatives and interventions is influenced by women's attitudes towards it. Attitudes serve as personal views concerning the utilisation of healthcare services, in this instance maternal healthcare services. This is also emphasised on Andersen's domain of attitude. This domain includes the role of the healthcare workers regarding the utilisation of maternal healthcare services, their ability to render maternal healthcare services to different women as well as their interpersonal skills, compassion, trustworthiness, their ability to listen and communicate with patients within the maternity department. In the previous studies (Harris *et al.,* 2011; Yamada *et al.,* 2015)

6.8.3 Virtual service provision

6.8.3.1 Role of digital health in improving access to maternal healthcare services

The findings of the study confirm that most women tend to be forgetful during pregnancy and initiatives such as telehealth become helpful (Barron *et al.,* 2016). Telehealth refers to "healing at a distance" and signifies the use of ICT to improve patient outcomes by increasing access to care and medical information (Manyati & Mutsau, 2021). The initiative also assists healthcare workers to plan the duties of the day in accordance with the appointments already made on the system. One of the few interventions introduced during Covid-19 pandemic was Telehealth, similar to the MomConnect. Short message services are utilised in mHealth initiatives from the Department of health with the aim to provide necessary information to women accessing maternal healthcare services during Covid-19 pandemic. mHealth can be defined as a healthcare delivery system that is carried out via mobile devices for better access to healthcare and to support the performance of health workers. (Manyati & Mutsau, 2021). The initiative works by sending low-income women accessing maternal healthcare services upcoming appointments with healthcare workers including dates of vaccinations for babies, health of the mother and the baby and other maternal health related issues, achieving a vast coverage of maternal health service delivery in a cost effectively and equitably manner across all social groups of women. This initiative was implemented on the basis that some women forget appointments and for women afraid of going to different clinics to access maternal healthcare services due to the fear of possibly contracting

the virus to receive necessary information during pregnancy. In one of the interviews, interviewees confirmed

"Initially I thought it was spam messages because I did not understand how I could be receiving text messages about maternity information during Covid-19 from numbers I do not know. The next appointment I enquired about it and the nurses that were on duty explained everything. But the text messages were really helpful because one tends to forget appointments especially in such a stressful state" (**Interviewee No. 22, 26 October 2021)**

And

"I do not normally check my text messages but I had to after receiving a few text messages from the Department of health about maternity. The text messages really assisted me because I often forgot the do and don'ts of pregnancy and motherhood and my appointments of course" (**Interviewee No. 26, 30 October 2021)**

In some of the interview, interviewees stated the following:

"The initiative was a bit of a challenge at first due to some women not having cell phones but it was really helpful to us as well, not only to the women accessing maternal healthcare services in Mmabatho. We are able to plan our day in accordance to appointments because we already know that on this particular day how many women are due for check-ups. Even though some women choose to ignore the text messages, some women were cooperative and we are grateful because our work also becomes less of a hassle (**Interviewee No. 16, 13 October 2021)**

And

"Some women were adamant about the whole process of text messages at first until we explained the initiative to them. I must really say, it is really helpful not only, it makes our job easier but also assists women who tend to forget their appointments **(Interviewee No. 19, 20 October 2021).**

From the interview above excerpts, both the women and the health workers commended the digital platforms in improving the experiences of women seeking maternal health care. The

findings of the study substantiate the findings by Agarwal & Labrique (2014) that further adds that mHealth intervention have the potential to improve neonatal survival by not only catalysing but also improving the delivery of different interventions of adjusting the demand for quality maternal healthcare services as well as validating the provision of not only targeted care but also the benefits needed

6.8.3.2 MomConnect initiative during Covid-19 pandemic in Mmabatho

Findings highlighted in the interview excerpts below show that the MomConnect assisted some women with information related to maternal healthcare services. Even though the application had its own shortcomings, it aided in terms of disseminating information regarding maternal healthcare, thus improving the experiences of women in accessing maternal health care. However, some women seemed not to know anything about the MomConnect initiative.

Even though a lot still needs to be done to ensure that the safety and confidentiality of patients are not compromised by the use of mHealth particularly the use of mobile technology during disease outbreaks. The empirical results of the study also put emphasis on the domain of knowledge from Andersen expanded behavioural model. Knowledge goes hand in hand with women's attitudes towards the utilisation of maternal healthcare services. The availability of knowledge, where and how women accessing maternal healthcare services access all the information required during their journeys of pregnancy and delivery play a vital role in accessing services. Within the journey of pregnancy, there is also important information regarding the need to book an appointment on the first day/ month for regular check-ups and collection of medication. In the following interviews, participants confirmed that the MomConnect is a commendable initiative despite the shortcomings, but it is really helpful.

> *"I do not know about the other parts of South Africa or other women but I happened to know about the MomConnect from a friend and it worked wonders for me. You get all the*

necessary information regarding immunization and other maternal healthcare related services through texts" **(Interviewee No. 8, 2 October 2021).**

And

"As a young Mother who is always on the phone, the app was convenient for me because it meant I get to spend my time learning about something maternal health care related" **(Interviewee No. 2, 11 October 2021).**

And

"The application had its shortcomings like any other application, but it was really helpful. I wish the government could adopt something like the clueless mom initiative. Well, the clueless mom initiative is a page on Instagram, where you get to meet other clueless moms and learn all the hacks of motherhood" **(Interviewee No. 7, 30 September 2021).**

The South African government also implemented the MomConnect which seeks to minimises the paper based registration of pregnancies by introducing a mechanism of registering pregnancies electronically in the public health system, the MomConnect also reckons that sending of text messages to women will assist in finding ways to improve the rendering services of maternal healthcare as women accessing maternal health care services provide feedback regarding the services they have received (Barron *et al.,* 2016). Agarwal & Labrique (2014) further adds that mHealth intervention have the potential to improve neonatal survival by not only catalysing but also improving the delivery of different interventions of adjusting the demand for quality maternal healthcare services as well as validating the provision of not only targeted care but also the benefits needed (Barron *et al.,* 2014; Agarwal & Labrique, 2016).

6.9 Conclusion

This section aimed to provide the presentation and discussion of findings. The findings are presented in interview intercepts from women interviewed as they provide a detailed description of the experiences of women accessing maternal healthcare services in Mmabatho. The findings

of the study clearly indicate that experiences differ as some women had more difficulties than others and some did not encounter any challenges during their journey of pregnancy. Additionally, according to the findings of the study, the health system of South Africa still needs a lot of interventions in order to cater for both Covid-19 patients as well as women accessing maternal health care services without considering the health needs of other patients more than others.

The following chapter provides conclusions and recommendations, inclusive of the summary and reflections of key findings, conclusions regarding empirical objectives as well as theoretical objective

CHAPTER SEVEN

CONCLUSION OF THE STUDY

7.1 Introduction

This chapter concludes this study, as it examines and gives a summary of the work. The main objective of the study was to examine the experiences of women in accessing maternal health care services during the Covid-19 pandemic. In order to limit the spread of Covid-19, inter-province travel was prohibited during lockdown level 5 which also led to the closure of local and international borders. Statistics from WHO (2022), show an approximately 6 240 619 Covid-19 related deaths globally out of over 511 965 711 cases reported. In South Africa from over 3 798 413 cases reported, at about 100 370 deaths were recorded with 94.2 percent recovery rate; while in the North West region, North West Department of Health, (2021) and SABC News, (2021) reported, there were approximately 62923 confirmed cases resulting in 1388 deaths. This shows that COVID-19 and other similar epidemics like Ebola Virus and Zika Virus among others are life threatening and have negatively affected some vulnerable groups.

The health sector was impacted and subsequently, maternal healthcare. Poor maternal health care has been reported as an indicator of extreme poverty and that is the reason why the United Nations (UN) adopted the Millennium Development Goals (MDGs) and Sustainable Development Goals (SDGs) in order to improve maternal health care services with the rate of less than 70 maternal deaths per 100 000 live births. For each death, approximately 30 to 50 women encounter maternal morbidities (WHO, 2019), poor utilisation of maternal healthcare services are the leading major cause of maternal deaths and injuries/disabilities amongst women in their reproductive ages especially in developing countries, South Africa inclusive. A number of pregnancies often lead to serious health complications which are life threatening and high risk at times even though pregnancy has been considered a natural process. Besides poor utilisation of maternal health care services, unsafe abortions, infections and haemorrhage have also been reported the contributing factors to maternal deaths.

Despite the efforts utilised to decrease the high rate of maternal mortality in the country, South Africa remains the country with a high maternal mortality rate (NCCEMD, 2018). This is facilitated by factors like shortage of healthcare professionals, shortage of healthcare facilities and is some instances in facilities which are ill-equipped, damaged, neglected or even unavailable. Some healthcare facilities are dysfunctional with unreliable emergency medical services and unreliable transport within and between provinces. However, these would have been prevented if adequate health care services and facilities are in place. In addition to the challenges mentioned above, unexpected changes in society such as disease outbreaks or pandemics would further aggravate an already problematic situation. It is for this reason that there was a need to study the experiences of women accessing maternal healthcare during the Covid-19 pandemic.

The objectives of this study were:

1. To explore the experiences of Mmabatho, North West women seeking to access maternal healthcare services during the initial outbreak of the Covid-19 pandemic.

2. To describe how existing maternal healthcare interventions assist Mmabatho, North West women to access maternal healthcare services.
3. To recommend practical interventions to assist Mmabatho, North West women to access maternal healthcare services during disease outbreaks.
4. To explore existing theoretical and methodological paradigms employed in addressing access to maternal healthcare services during disease outbreaks.

The study utilised the qualitative research method, and this was done using an in-depth interview method. This entails the collection of subjective data from respondents, and this was based on their personal experiences about the objectives and goals of the study. The study was undertaken in Mmabatho Unit 9 and in Montshioa unit 1 clinics because there was insufficient literature concerning the effects of disease outbreaks on maternal health care in the North West province. There was also a gap in terms of the experiences of women accessing maternal healthcare services during Covid-19 in the North West province particularly in Montshioa and unit 9 clinics as areas of study identified. Montshioa and Unit 9 clinics are the major service providers of maternal healthcare services within Mmabatho, North-West. 30 participants divided into two categories took part in the study. 20 women in their reproductive years both from the lower and working class were used, the distribution was between two clinics identified, 10 women per clinic. 10 participants were healthcare workers and the distribution was between two clinics identified. Also, purposive and snowball sampling techniques were used for the study in order to identify knowledgeable participants who were able to share their experiences with accessing maternal healthcare services during the Covid-19 pandemic. Purposive sampling only focuses on particular characteristics of the population that are aimed at providing answers to research questions and snowball sampling was not only time efficient but also enabled the researcher to communicate better with participants as they are acquaintances of the first identified participant(s).

7.2 Core argument

Disease outbreaks have lasting impacts on various aspects of society. Notwithstanding this, different demographic groups experience these effects in different ways. Of importance is the fact that these impacts are experienced along gender lines and other demographic factors such as age, race, geographic location and socio-economic status. This study argued for a consideration of the various factors when studying the impact of Covid-19 pandemic on access to maternal healthcare. This required an in-depth collection of the experiences of low-income women in accessing maternal health care services during the Covid-19 pandemic. The study focused on women making use of clinics in the Mmabatho region of Mahikeng in the North West province. The study area provided an important dimension as it is characterised with a rich history of Apartheid segregation and longstanding unequal distribution of resources.

On the other hand, the Covid-19 pandemic brought disastrous effects on the healthcare systems with pregnant women encountering difficulties in accessing services. In other words, the gradual decrease of healthcare services combined with the Covid-19 pandemic has led to the growing importance of academic scholarship in understanding the experiences of women in accessing maternal health care services during the pandemic. The following section summarises and reflects upon and key findings in order to elaborate certain aspects of the core arguments.

7.3 Summary and Reflection on Key findings

This section provides the summary of the key findings, relating to the experiences of Mmabatho, North West women seeking to access maternal healthcare during the Covid-19 pandemic. To describe how existing maternal healthcare interventions assist Mmabatho, North West women to access maternal healthcare services. To recommend practical interventions to assist Mmabatho, North West women to access maternal healthcare services during disease outbreaks. To explore existing theoretical and methodological paradigms employed in addressing access to maternal healthcare services during disease outbreaks

7.3.1. The experiences of Mmabatho, North West women seeking to access maternal healthcare services during Covid-19 pandemic

The experiences of women accessing and providing maternal healthcare services play a vital role in guiding healthcare practices during this challenging phase (Sweet *et al.*, 2021). The major aspect coming out from the field research was how maternal healthcare services have been delivered and used in Mmabatho. Results from this study indicate that different women accessing and providing maternal healthcare services have had different experiences. The results from the study show both negative and positive experiences in accessing maternal health care services. For instance, cases of nervousness were reported because some women reported to have been worried because of the fear of being infected with the virus. Findings are similar to arguments advanced by Durankus & Aksu (2020); *Goyal et al.,* (2020); Orjingene, (2020); WHO (2020).

Moreover, the results of the study have indicated how informal and formal healthcare givers have influenced the experiences of women in accessing maternal healthcare services. Comparing the two types of caregivers, the informal healthcare givers were reported to have been doing an outstanding job in assisting women during pregnancy and delivery. Therefore, more women were satisfied and had pleasant experiences with the informal healthcare givers. Attitudes and behaviours from qualified nurses were reported as one of the factors hindering access to maternal healthcare service during the Covid-19 pandemic. The findings of the study also revealed that women accessing maternal healthcare services in Mmabatho experienced being rushed during delivery which put women and their children's health at risk and nurses being impatient which has also affected how they experience maternal healthcare services. This was substantiated by the nine studies conducted in Africa by Mannava *et al.,* (2015). Andersen's expanded model within the domain of attitudes also supports the results of the study as it highlights how attitudes and behaviours of nurses affect how women experience maternal healthcare services throughout their journeys of pregnancy and delivery in Mmabatho. Andersen's domain of attitudes state that the role of nurses regarding how they render maternal healthcare services including how they treat and communicate with patients affect their experiences of accessing maternal healthcare

services. Therefore, it is important that women accessing maternal healthcare services and nurses have healthy relationships to better the experiences of women accessing maternal healthcare services in Mmabatho.

7.3.2. Factors affecting the utilisation of maternal healthcare services during Covid-19

It has been recognised globally that health and health related outcomes are not only affected by access and utilisation of maternal healthcare services. There are also multidimensional factors which play a role as social determinants of maternal healthcare. The findings of the study revealed that despite the logistical aspect of maternal healthcare provision, there is also a cultural aspect and financial components that affect the utilisation and provision of maternal healthcare services in Mmabatho. The empirical findings of the study have highlighted the impact that the lack of nurses in clinics had on expectant mothers, and how the lack of ambulances have affected the experiences of women accessing maternal healthcare services in Mmabatho. Furthermore, insufficient medical equipment has also been reported as one of the major factors affecting the utilisation of maternal healthcare services in Mmabatho and this was also supported by the findings of the study conducted by Bomela (2020). All the factors identified contribute to the maternal mortality of the province and to the statistics of the country as a whole due to poor quality in maternal healthcare services especially during a health disease pandemic. Amongst the factors that have been identified as affecting the provision and utilisation of maternal healthcare services In Mmabatho is the different cultural beliefs. Findings from the study revealed that most women prefer traditional ways of preserving pregnancies. According to the findings of the study, women make decisions to seek health care based on cultural beliefs that have been passed on from generations to generations, for instance, some communities believe in home delivery instead of delivering at clinics or hospital This is also supported by Bourdieu's cultural capital which state that women tend to make decision to seek maternal healthcare services based on cultural beliefs. Also supported by Pretorius (2004), pregnant women in greater Mafikeng, Mmabatho district value traditional beliefs especially women from rural areas. Another key factor identified was the financial component of the provision and use of maternal healthcare services. The highlighted

challenge from the findings was budget constraints, as some women did not have any issues accessing maternal healthcare services in private hospitals, some women struggled to even travel to alternative clinics as nearby clinics were closed due to Covid-19 positive cases. However, the empirical results of the study confirm that affordability of services play a significant role in the well-being of women accessing maternal healthcare services and protection against risks serve as important dimensions as they determine one's ability to access healthcare services. This was in consistency with the findings of Gandhi *et al.,* (2022), where it was revealed that the interaction between wealth index and healthcare (which drives affordability) is significant in determining access to maternal health care services. The findings of the study are also supported by Bourdieu's forms of economic capital which state that all material resources required to reach or pay in advance for standard maternal healthcare services or receive better service cannot be accessed in public healthcare institutions. Also, Andersen's expanded socio-behavioural model within the domain of attitudes clearly states that affordability of healthcare services is the core element of the utilisation and access to maternal healthcare services.

7.3.3. Existing Interventions in place for access and availability of maternal healthcare services during Covid-19

South Africa has introduced interventions prior to Covid-19 including the Community based intervention that has been identified as a component that can be utilised to reduce maternal mortality in many health care systems, particularly in remote areas of developing countries. Besada *et al.,* (2020) emphasise that high coverage of community healthcare workers involvement has not yielded any improvement to maternal mortality.

Besada *et al.,* (2020), found that the involvement of community health workers was not fruitful. However, according to the findings of the study, the Community healthcare worker initiative has yielded positive maternal healthcare outcomes compared to other initiatives during Covid-19 pandemic. Despite the heightened risk of possibly contracting the virus for women accessing maternal healthcare services as well as community healthcare workers. Another initiative

introduced by the government was the MomConnect initiative. The findings of the study revealed that the MomConnect assisted some women with information related to maternal healthcare services in Mmabatho but some women knew nothing about the initiative. Even though a lot still needs to be done to ensure that the safety and confidentiality of patients are not compromised by the use of mhealth interventions during disease outbreaks. The empirical results of the study also put emphasis on the domain of knowledge from Andersen expanded behavioural model. Knowledge goes hand in hand with women's attitudes towards the use of maternal healthcare services.

7.4 Conclusions regarding the theoretical framework used for the study

To address and understand the experiences of pregnant women in accessing maternal healthcare services, this study utilised the combination of Andersen's expanded behavioural model of health use which serves as argumentation of Andersen's socio-behavioural model of 1995 and Bourdieu's theory of social practice. The former attempted to explain and predict the provision of health care services and the utilisation of such services in relation to people's traits, the characteristics of the population they belong to as well as the environment in which they live in. The theory provides a framework for understanding the relationship that exists between people and social structures and how social structures offer access to a variety of different social, economic and even cultural conditions which in turn influence how they perceive and act towards issues. Andersen's behavioural model has been utilised countless times in several studies investigating different diseases and different aspects of healthcare use (Andersen, 1995; Andersen, 2008; Babitsch, 2011; Bradley *et al.,* 2002; Davidson *et al.,* 2004).

In most studies, researchers shifted more focus to predisposing and enabling factors that play a significant role in the utilisation of maternal healthcare services. For instance, the socioeconomic status of a community may be perceived as a predisposing factor, given that the induced supply affects the demand as well as an enabling factor in terms of its association to the individual together with community income as also confirmed by the results of the study. The study also

adopted Bourdieu's theory of social practice that was applied to this study in order to identify the gaps that exist in health care sectors and the reasons behind people's conditions i.e., illnesses and how pregnant women behave during childbirth. In this context, the experiences of pregnant women are influenced by the population in which they belong. The emphasis of the social learning theory is how women accessing maternal healthcare services can acquire knowledge and other ways of using maternal healthcare services. For instance, young women could learn alternative ways of accessing maternal healthcare services from older women and the experiences of older women can influence the health seeking behaviours and the decisions of young women in terms of the utilisation and no utilisation of maternal healthcare services. According to the theory of social practice, most women tend to learn from other women's past experiences of maternal healthcare services as well as society's acceptable behaviour during pregnancy and delivery. According to the results of the study other women found alternative ways to access the relevant maternal healthcare related information during the discontinuation of antenatal classes. The MomConnect was beneficial for some women as the results of the study corroborated. However, the theory of social practice should also not overlook the fact that in health research the dominant paradigm has been behaviourism. Shifting the focus from individuals as the unit of analysis in empirical work, the calculated risk of putting all the blame and responsibility on agents for health outcomes, in turn overlooking the impact that different institutions have on health outcomes can be avoided.

Bourdieu's theory of social practice was a sociological work which builds on practices and actions of agents; consequently, driving interactions among them in various life spheres in a defined time and place. Bourdieu connected structuralist approaches, which gave priority to the power of social structures as an underlying element of the society. The relational thinking built into his conceptual system allows us to see that any 'choice of practice', including health practices (which this current study on maternal health care is concerned), can be analysed in relation to people and structures of positions or of capitals distributed unequally within social fields. By implication, much of daily life (including health-related behaviour) is simply taken for granted and organized according to a

practical, largely unthinking, logic of which actors are only dimly aware. As put forward by Bourdieu, the healthcare field can be conceptualized as seen as Mmabatho in the North West Province of South Africa. This is the social space occupied by agents such as doctors, midwives, nurses, traditional birth attendants, and patients (for instance, nursing and pregnant mothers). Their positions are defined by the amount of capital that they possess. Each field is a space in which agents struggle to take the best position, i.e., achieve an advantage over other agents and appropriate the large capital that is valued in a given field.

From the context of this study, and as implied from Bourdieu's theory of social practice, the experiences encountered by mothers seeking maternal health care during the Covid-19 pandemic is a function of the effectiveness of the structure, social space and principal actors. This was majorly reflective in the first research objective which examined the experiences of women in accessing maternal healthcare services during Covid-19 in Mmabatho in the North West Province of South Africa. Part of the concerns raised by Bourdieu was discovered in the findings of this study, which showed how the global Covid-19 pandemic has indeed challenged and changed so many aspects of women's lives in the social space -Mmabatho in the North West Province of South Africa. Basically, these were the factors that were identified and raised in this study. By implication, when the structure and social spaces are not adequately positioned to provide effective healthcare services, it creates some behavioural tendencies, for instance, discontinuation of antenatal services, reduced support during Covid-19 and delay in maternal healthcare services, as discovered by this study. Other services include the affordability of the maternal healthcare services, long queues at pharmacies and several factors affecting the utilisation of maternal healthcare services among others. As a result of these behavioural tendencies articulated in Bourdieu's theory of social practice, the discontinuation of antenatal classes has resulted in a high rate of maternal deaths and the fear of women accessing maternal healthcare services have also played a role.

Though the state, being represented by the government `placed restrictions during the period of Covid-19, it affected the access and utilisation of maternal healthcare services due to policies of

social distancing which affected in-person visitation and routine access of maternal healthcare services, especially antenatal care in different healthcare facilities. Experience of extreme feelings of loneliness and detachment in the course of their journey delivery due to Covid-19 preventive measures as they could not be accompanied by their families to monthly check-ups as well as during delivery.

Andersen's expanded behavioural health model is also instructive in interpreting how people seek maternal healthcare during Covid-19 in Mmabatho in the North West Province of South Africa. With this model, one is able to assess measures of access (e.g., equitable, inequitable, effective, efficient) as well as understand the environment (external or healthcare system) impacting access and utilisation of healthcare services during the period of the pandemic. This model was improved, and majorly, it focused on the enabling factors that cause certain reasons for access or non-access to health facilities. From this study, it was discovered that health care professionals do not even have appropriate equipment and infrastructure for the management of Covid-19 infected patients and as a result other patients with other health conditions including those that require maternal healthcare are affected. As suggested by Andersen, this critical problem (limited access to maternal health care services) is caused by increased disease burden because of Covid-19 as well as poor management in relation to implementations of policies by the government to improve conditions in public health care settings and all these factors affect the experiences of pregnant women and the provision of maternal healthcare services. This is coupled with shortage of medications and healthcare workers in public health care facilities. They are often relatively scarce and it is even worse during pandemics and the short-staffed healthcare workers has affected the healthcare outcomes of most women, especially new mothers and pregnant women.

The point of convergence in Bourdieu’s theory of social practice and Andersen behavioural health model hinges on the fact that the Covid-19 pandemic has exposed how unequal the South African healthcare system is and has been like this over the past years. The way the healthcare system is funded plays a role in the inequalities that exist within the healthcare system. Amongst other

factors, the biggest setback is the largest population because the citizens' healthcare needs exceed the healthcare system capacity.

7.4 Conclusions regarding theoretical and methodological paradigms employed

Andersen's socio-behavioural model has undergone several developments over a couple of years. The new development focus was shifted to various factors in the 1970s including consumer satisfaction and in the 1980s more focus was shifted to health status and personal health practice as well as the influence of external factors. In 1995, the model underwent new developments and reviewed feedback loops identified on the treatment outcome affecting health behaviour. In addition to the new development, contextual and characteristics of individuals were added to the modified model of 2000. Years later, various versions of the model exist for different target groups and settings and used in health research. According to the model, access to various healthcare services is determined by different contextual characteristics, health outcomes and behaviours as well as personal characteristics; contextual characteristics include the

environment and circumstances of individuals' characteristics pertaining to personal experiences might be experiences through socialization or genetics (Andersen, 1995; Babitsch *et al,* 2021). The application of Andersen's socio-behavioral model of health use has been examined in several reviews (Babitsch *et al.,* 2012) focusing on different diseases and settings. Babitsch *et al.*, (2021) has examined Andersen's socio-behavioural model of health use in healthcare in general excluding maternal healthcare in specific target groups including veterans as well as on studies focusing on diseases such as Human Immunodeficiency Virus (HIV). The reviews used quantitative research methods excluding qualitative research methods even though qualitative research methods have been considered as a significant part of health research as they are useful in transcribing detailed descriptions of complex issues that arise in research specifically relating to the utilization of healthcare services. Andersen's socio-behavioural model of health use is the most cited model of health use in health research, however, an overview of the model in terms of its application and new development is lacking, more especially its application in qualitative research. Moreover, Lederle *et al.,* (2021) assert that Andersen's socio-behavioural model has

shown interesting developments as some authors have expanded on an older version of 1995 and justified missing factors such as negligence of healthcare workers, location of different healthcare facilities as well as dissatisfaction of patients. Although the model has shown new developments from publications which adopted the model since 2013, mostly being qualitative research studies, most still utilised the old version of 1995. Only one of the publications with a qualitative research design applied the expanded version of the model since 2013 (Andersen, 1995; Lederle *et al.,*2021). Furthermore, it would be of interest to compare the model in both quantitative and qualitative studies. However, the application of the older version of the model in different studies do not enable researchers as it is difficult to compare different studies with one another. Lederle *et al.,* (2021) state that the comparison would be important in the context of health studies. The current and comprehensive version of Andersen's socio-behavioural model of health use should always be considered for future research (Lederle *et al.,*2021).

7.6 Recommendations

The Covid-19 pandemic had a global impact as an unprecedented event, it caused disruptions and bottlenecks in the delivery of some health services, which maternal healthcare is part of. Covid-19 has rapidly spread, and it has not spared categories of women like pregnant women and those who just gave birth; hence, hindering their access to healthcare services. To this end, this study recommends the following:

- As there has been an alteration and disruption in the South African healthcare system, the government must act urgently to ensure that mothers and their children are able to get the needed care they need.
- The government should ensure that expectant mothers access the required information at any stage of their pregnancy (Pamphlets with all the relevant information should be placed at clinic receptions. Community healthcare workers could deliver the pamphlets when they do check-ups around the communities).

- The government needs to address the issues of inequality, lack of resources etc. (which existed even before the lockdowns) as they compound the effects of outbreaks and other disasters on mothers or mothers to be
- The government should device a strategy to pre-empt the negative impacts that the mothers and children are facing now as a result of their experiences before, during and after birth should they arise again in future. Challenges such as discontinuation of antenatal classes and other maternal healthcare related challenges should be addressed thoroughly to be avoided in future disease pandemics.
- There should be adequate funding to ensure the continuity of maternal healthcare; this should be in terms of prevention of infection, adequate supplies and control of PPEs
- Counselling should be offered on a monthly basis
- It was discovered in the study that transportation and logistics was a major challenge towards the access to maternal healthcare during the pandemic. To this end, the government and policy makers should create referral pathways and adequate transportation systems that can be utilised for emergencies of this nature. Arrangements should be made to ensure proper transportation networks during lockdowns of this manner.
- Special preference should be given to pregnant mothers and those with new born babies. Apart from this, effective strategies must be put in place to control cases of Covid-19 infection among pregnant women and nursing mothers.
- The South African government should plan and make sure that women have access to vital information on how to protect their health and that of their babies because even though the MomConnect initiative has assisted some women, others did not even know anything about the MomConnect initiative which was implemented in August 2014. To this day, some women do not know anything about the initiative. The government should ensure that the mHealth initiatives assist and meet its objectives. However, one of the ways in which that could be possible is as if women are aware of such initiatives and receive the necessary information regarding them.

- Covid-19 has exacerbated the insufficiency of information being accessible during the journey of pregnancy and women's reassurance about every single step of maternity. Therefore, maternity services should be modified substantially in response to disease outbreaks.
- The health system of South Africa should consider recognising the importance of indigenous knowledge in maternal healthcare in different communities. Indigenous knowledge/ informal maternal healthcare plays a significant role in maternal healthcare as it can affect maternal and child mortality rates.
- The government should ensure that informal healthcare providers obtain the legal documentation to assist women accessing maternal healthcare services.
- The government should ensure that there are outreach programmes whose primary objective is to document indigenous knowledge from informal healthcare providers with the cooperation as well as collaboration of informal healthcare providers and the community at large.

7.7 Chapter summary

This chapter provided the conclusions of the whole study in relation to its theoretical objectives and empirical objectives as well as the core and key findings of the study. Andersen's behavioural model was utilised in order to interpret how women in Mmabatho access maternal healthcare services during Covid-19. The model was also utilised to assess measures of access to various maternal healthcare services as well as to understand how the health system impact access to and utilisation of maternal healthcare services. The core argument of the study emphasise that disease outbreaks such as Covid-19 have long lasting impact on society. The importance of the matter is that the impacts are experienced long gender lines and different demographic characteristics. The chapter also provided recommendations for the Department of Health as a government department in order to design or adjust policies in accordance with the experiences of women accessing maternal healthcare services especially during disease outbreaks. The policies should be able to protect women during crises and disease burden periods and ensure

that women have the necessary information they require; combating the virus/disease without compromising the wellbeing of other patients. Furthermore, the chapter provided recommendations for researchers that might want to pursue a similar study

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APPENDICES

health
Department of
Health
North West Province
REPUBLIC OF SOUTH AFRICA

Cnr Sekame & First Street
New Office Park
Mafiheng, 2745
Private Bag X2068
MMABATHO, 2735

Enq: Ms. Tshiamo Mokate
Tel: 018 391 4501
TMokate@nwpg.gov.za
www.nwhealth.gov.za

2030 NDP

5

Name of Researcher **Ms. M.Z. Mohulatsi**

North West University

Physical Address _____

(Work/ Institution) _____

_____

DEPARTMENT OF HEALTH
OFFICE OF THE SUPERINTENDENT GENERAL
21-09-2021
PRIVATE BAG X 2068 MMABATHO, 2735

RESEARCH, MONITORING AND EVALUATION DIRECTORATE

This letter serves to inform the Researcher that permission to undertake the above-mentioned study has been granted by the North West Department of Health. The Researcher must arrange in advance a meeting with the District Chief Director and District Director to introduce their research team/members onthe proposed research to be undertaken. Further to the above the Researcher must produce this letter to the District and chosen facilities as proof that the Research was approved by the NWDoH.

This letter of permission should be signed and a copy returned to the Department. By signing, the Researcher agrees, binds him/herself and undertakes to furnish the Department with an electronic copy of the final research report. Alternatively, the Researcher can also provide the Department with electronic summary highlighting recommendations that will assist the Department in its planning to improve some of its services where possible. The results should be presented to the District Health and the Hospital **and Clinical Support Service branches.** Through this the Researcher will not only contribute to the academic body of knowledge but also contributes towards the bettering of health care services and thus the overall health of citizens in the North West Province.

HealthyLivingforAll

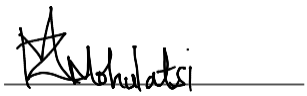
Below are the contact details of Office of the Chief Director and District Director for Ngaka Modiri Molema District.

Office of the Chief Director	Office of the District Director
Ms. Mosela Kaudi Ms. Boitumelo Sethaiso (PA)	Ms. Nomvula Legobye Kealeboga Lobega (PA)
MKauditQnwpg.gov.za BSethaiso@nwpg.gov.za	NLeoobye@nwpg.gov.za LobegaK@nwpg.gov.za
018 384 0240	018 384 0240

Kind Regards.

Dr. **F.R.M.** Reichel Director: RM&E 22. 09. 2021

Date



Researcher 22.09.2021

Private Bag X6001, Potchefstroom
South Africa 2520

Tel: 018 299-1111/2222
Web: http://www.nwu.ac.za

Basic and Social Science Research Ethics Committee (BaSSREC)

Faculty of Humanities
Tel: 018 299 1586

Email: 21081719@nwu.ac.za

30 November 2022

APPROVAL FOR CONTINUATION OF THE RESEARCH STUDY

Ethics number: NWU-00673-21-A7
Study title: The experiences of women in accessing maternal health care services during Covid-19: a case study of Mmabatho, North-West.
Study leader/supervisor: Dr. T. Garutsa
Student: MZ Mohulatsi 25351265
Application type:Single Study
Risk level:Minimal risk

Dear Researcher

You are kindly informed that this application was reviewed for monitoring at the meeting of the North-West University Basic and Social Science Research Ethics Committee (BaSSREC), Faculty of Humanities, North-West University, held on 30/11/2022. Following the review of the application, it has been decided that the study is approved for continuation.

Suspension	
Continuation	**X**
Termination	

Approval date: 30/11/2022
Expiry date: 30/11/2023

If you have any questions or need further assistance, please contact BaSSREC.

Yours sincerely

Professor Erhabor IdemudiaChairperson: NWU-BaSSREC

DEPARTMENT OF SOCIOLOGY

FACULTY OF HUMANITIES

INTERVIEW GUIDE QUESTIONS: Women accessing maternal healthcare services in Mmabatho Unit 9 and Montshioa clinic

Dear Participant

This research forms part of a Master's thesis title: **The experiences of women in accessing maternal health care services during Covid-19: a case study of Mmabatho, North West.** The objectives of this study are stated below.

Objectives of the study:

- To explore the experiences of women in accessing maternal health during Covid-19
- To discover interventions in place for maternal health during the Covid-19 pandemic.
- To recommend ways in which women can have access to maternal health care services.

Your information will be treated with confidentiality and solely used for the purpose of this study. Thank you for taking your time to participate in this study.

The following open-ended questions should be asked each participant interviewed:

SECTION A

DEMOGRAPHIC CHARACTERISTICS

1. How old are you?

Please indicate your age group with an (x) where applicable

20-25	
26-30	
31-35	
36-55	

2. Marital status: Please indicate with an (x) where applicable

Single	
Married	
Divorced	
Separated	

Widow	

3. Do you have children?

· How many children do you have?

Please specify with an (x) where applicable

None	
1-2	
3-4	
5 and above	

4. Employment status: please indicate with an (x) where applicable

Student	
Employed	
Self-employed	
Unemployed	

5. Educational level: please indicate with an (x) where applicable

Grade 9 or below or equivalent	
Matric or equivalent	
Diploma/certificate	
Bachelor's degree or equivalent	
Master's degree or equivalent	
Doctorate or equivalent	

SECTION B

6. What emotion did you experience when you first heard that you were pregnant?

7. What emotion did you experience when you heard about COVID-19?

8. Describe your first appointment at the clinic

    a. What was required from you?

    b. What was the process you were required to follow?

    c. What were the rules and regulations?

d. Were there any compulsory tests you had to do?

9. Did you have difficulties accessing maternal health care services during COVID-19 pandemic?

- What were those difficulties you encountered?
- How did you handle them?

10. What emotion did you experience when you had to go to health care facilities to access maternal health care services?

11. Were there any challenges you encountered which prevented you from reaching health care facilities?

12. Did the national lockdown and curfew have any impact on your journey of pregnancy and delivery?

13. Were there any challenges you encountered at health care facilities?

- What were/are those challenges?

14. Describe your overall experience as a mother/ soon to be mother during COVID-19

15. Did you receive appropriate maternal health care services?

16. How was the overall experience with health care workers?

17. How would you describe maternal care services rendered during COVID-19?

18. If it was up to you, would you have given birth during COVID-19?

- What would be the reason?

Thank you for your participation

DEPARTMENT OF SOCIOLOGY

FACULTY OF HUMANITIES

INTERVIEW QUESTIONS: HEALTHCARE WORKERS

Dear Participant

This research forms part of a Master's thesis title: **The experiences of women in accessing maternal health care services during Covid-19: a case study of Mmabatho, North West.** The objectives of this study are stated below.

Objectives of the study:

- To explore the experiences of women in accessing maternal health during Covid-19
- To discover interventions in place for maternal health during the Covid-19 pandemic.
- To recommend ways in which women can have access to maternal health care services.

Your information will be treated with confidentiality and solely used for the purpose of this study. Thank you for taking your time to participate in this study.

INTERVIEW GUIDE

The following open-ended questions should be asked each participant interviewed (Health care workers):

SECTION A

DEMOGRAPHIC CHARACTERISTICS

1. How old are you?

Please indicate your age group with an (x) where applicable

20-25	
26-30	
31-35	
36-55	

2. Marital status: Please indicate with an (x) where applicable

Single	
Married	
Divorced	

Separated	
Widow	

3. Do you have children?

· How many children do you have?

Please specify with an (x) where applicable

None	
1-2	
3-4	
5 and above	

4. Educational level: please indicate with an (x) where applicable

Diploma/certificate	
Bachelor’s degree or equivalent	
Master’s degree or equivalent	

Doctorate or equivalent	

SECTION B

5. Can you describe the experience of your first child and second child?
6. What is your role at the clinic?
7. What does your role entail at the clinic pertaining to pregnant women and mothers?
8. How are your working conditions? Do you work every day?
9. What does it mean for you to be a front worker?
10. How was work before the pandemic?

- Have you had a case/cases of Covid-19 at your clinic?
- How did you deal with it?
- What happened to maternal health care services, how were they affected?

11. What is the process that pregnant women have to go through according to DOH?
    - How many visitations should be reached by women accessing maternal health care services?
    - What is required from women accessing maternal health care services?

- Are there any compulsory tests that should be done?
- Were they tested for COVID-19?

12. What emotion did you experience when you heard about COVID-19?
13. How would you describe your experience as a frontline worker specifically since the pandemic?
14. Are there any difficulties you encountered/encounter as being a frontline worker during delivery or even rendering maternal health care services?
    - What were those difficulties?
    - How did you deal with them?
15. How did the national lockdown affect maternal health care services?
16. Are there any alternative ways in place to help women access maternal health care services?
    - What are those ways?
    - How effective are they?
17. Are there any interventions in place which currently assist women in accessing maternal health care services during COVID-19?
18. What are those interventions?
    - When were they implemented?
    - How effective are they?

19. How would you describe the rendering of maternal health care services during disease outbreaks, in this case looking at COVID-19?

INFORMED CONSENT FORM

Building F13, Room 116

Basic and Social Sciences Research Ethics Committee (BaSSREC)

21081719@nwu.ac.za

DATE: ……

BaSSREC Authorization

Approved 22 September 2021

PARTICIPANT INFORMATION LEAFLET AND CONSENT FORM

Title of the research project	**The experiences of women in accessing maternal health care services during COVID-19: a case study of Mmabatho, North West**
Ethics number	**NWU-00673-21-A7**

Principal investigator	**Makgake Ziphorah Mohulatsi**
Student number	**25351265**
Address	**30024 Holfontein, Mabaalstad 2841**
Email address	**ofentsezeezy@gmail.com**
Contact number	**0762676555**

You are being invited to take part in a research project that forms part of my Master of Social Sciences in Sociology. Please take some time to read the information presented here, which will explain the details of this project. Please ask the researcher any questions about any part of this project that you do not fully understand. It is very important that you are fully satisfied that you clearly understand what this research is about and how you could be involved. Also, your participation is entirely voluntary and you are free to decline to participate. If you say no, this will not affect you negatively in any way whatsoever. You are also free to withdraw from the study at any point, even if you do agree to take part. Prior to publication of the study's results (or the point that publication is in process), you may also withdraw the data you generate.

This study has been approved by the Basic Social Sciences Research Ethics Committee (BaSSREC) of the Faculty of Humanities of the North-West University (NWU-00673-21A7) and will be conducted according to the ethical guidelines and principles of the international Singapore Statement on Research Integrity (2010) 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 to make sure that we (the researchers) are conducting research in an ethical manner.

What is this research study all about?

- This study is an investigation of the experiences of women in accessing maternal health care services during COVID-19 and will involve the use of qualitative research methods.
- The researcher has been trained to use the methods mentioned in the previous sentence.
- Approximately 30 participants will be included in this study.
- The objectives of this research are:
- To explore the experiences of women in accessing maternal health during Covid-19.
- To discover interventions in place for maternal health during the Covid-19 pandemic.
- To recommend ways in which women can have access to maternal health care services.

Why have you been invited to participate?

- You have been invited to participate because you meet the criteria for the population needed to participate in the study. These include the following:
    - You self-identify as African, a woman in her reproductive age, part of a lower/working class social context, you have formal education or no formal education; you are currently employed/unemployed.
- You will be excluded if you are not in your reproductive age, not African and not a woman from either the lower or working class.

What will your responsibilities be?

- You will be invited to participate in the noted study by participating in a 45 minutes online/telephonic interview.
- You will have two weeks to indicate whether you would be willing to participate.

- You will be requested to sign this Informed Consent Statement before the commencement of the study.

Will you benefit from taking part in this research?

- The direct benefits for you as a participant will probably be learning from the participant's own experience in order to be more equipped with what to do next time she finds herself in the same situation.
- The indirect benefit will probably be contributing to knowledge generation about experiences of women in accessing maternal health care services, most especially during disease outbreaks such as Covid-19

Are there risks involved in your taking part in this research and how will these be managed?

The possible risks in this study, and how these will be managed, are summarized in the table below:

Possible risk	Mitigation strategy
Tiredness and discomfort.	Comfort breaks of 10 minutes.
Emotional distress	The researcher will seek support from the staff of both clinics because there are usually professional assigned in clinics to assist with
	such cases before the commencement of interviews.

- *However, we do believe that the benefits to you and to science (as noted in the previous section) outweigh the risks we have listed. If you disagree, then please feel free not to participate in this study. We will respect your decision.*
- *Should we learn, in the course of the research, that someone is harming you, or that you are intending to harm someone, then we must tell someone who can help you/warn the person you are intending to harm.*

Who will have access to the data?

- The *handling, storage, security* and *analysis of data* is critical in ethical considerations. I will ensure data in both hard-(printed) and soft copy (electronic) are safely locked away and password-protected, respectively. At the analysis stage, as will be the case throughout, the use of coding will reinforce participants' non-identification, hence upholding the assurance of confidentiality and anonymity.
- *Anonymity* will be ensured; I will assign a fictitious name to you before the interview starts. Only this name will be used in the research process.
- *Confidentiality* will include the use of pseudonyms for participants, organizations and locations. It involves not disclosing any information gained from an interviewee deliberately or accidentally in ways that might identify an individual.
- *Privacy* will be ensured by not probing unnecessarily if you do not wish to discuss particular matters.
- I will not use a *transcriber* for the purpose of the transcripts after the interview. I will be responsible for transcribing the data – no other person will have access to the data.

- I will use a *translator/interpreter* for the purpose of the interviews/explaining the informed consent, etc. This person will be required to sign a NWU Confidentiality Agreement and will not be permitted to share any information relating to the study with anyone else.
- The data will be *stored safely in electronic form* for a period of five years after which it will be destroyed.

What will happen to the data?

The data from this study will be reported in the form of themes; in all of this reporting, you will not be personally identified. This means that the reporting will not include your name or details that will help others to know that you participated (e.g., your address or any other identifiable information).

This is a once-off study, so the data will not be re-used.

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

No, you will not be paid/compensated for taking part in the study, if participating in the research means that you have to travel especially for the purpose of participating, then your travel costs will be paid. There will also be data costs involved, participants will be provided with data but not as a compensation to take part in the study.

How will you know about the findings?

- ➢ The general findings of the research will be shared with you by email or online platform used to collect data and hardcopies of the summary of findings will be shared per request.
- ➢ If you would like feedback on your personal results, then the investigator can give feedback depending on the participant's request.

Is there anything else that you should know or do?

- You can contact Makgake Mohulatsi at 0762676555 and ofentsezeezy@gmail.com if you have any further queries or encounter any problems.
- You can contact the chair of the Basic Social Sciences Research Ethics Committee (Prof Jacques Rothmann) at 018 299 1595 or 21081719@nwu.ac.za if you have any concerns or complaints that have not been adequately addressed by the researcher.
- You will receive a copy of this information and consent form for your own records.

Declaration by participant

By signing below, I _____ agree to take part in a research study entitled: "The experiences of women in accessing maternal health care services during covid19: a case study of Mmabatho, North West."

I declare that:

- I have read and understood 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 (if this is a different person), and all my questions have been adequately answered.
- I understand that taking part in this study is voluntary and I have not been pressured to take part.
- I understand that what I contribute (what I report/say/write/draw/produce visually) could be reproduced publically and/or quoted, but without reference to my personal identity.
- I consent to an audio and/or audio-visual recording of the … (study).
- I am aware of the fact that I may request that the researcher does not continue with said recording if I request it.
- I may choose to leave the study at any time and will not be penalised or prejudiced in any way.

Signed at (*place*) _____ on (*date*) _____ 20 _____

_____ _____

__

Signature of participant Signature of witness

- You may contact me again ☐ Yes ☐ No
- I would like a summary of the findings of this research ☐ Yes ☐ No
- I would like feedback on my functioning/wellbeing as reflected in the questionnaires I completed ☐ Yes ☐ No

The best way to reach me is:

Name & Surname: _____

Postal Address: _____

Email: _____

Phone Number: _____

Cell Phone Number: _____

In case the above details change, please contact the following person who knows me well and who does not live with me and who will help you to contact me:

Name & Surname: _____

Phone/ Cell Phone Number /Email: _____

_____

Declaration by person obtaining consent (if not the researcher)

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.

Signed at (*place*) _____ on (*date*) _____20 ____

_____ _____

Signature of person obtaining consent Signature of witness

Declaration by researcher

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.

Signed at (*place*) _____ on (*date*) _____20 _____

_____ _____

Signature of researcher Signature of witness

Declaration by researcher and participant

Personal face-to-face interviews during Covid-19 restrictions (If and when applicable)

Additional declaration by participant in those instances where the participant requests to participate in a personal face-to-face semi-structured interview:

By signing below, I _____, acknowledge the following information related to the required measures regarding Covid-19:

I declare that:

- It is my personal choice and preference to participate in a personal face-to-face semistructured interview with the researcher.
- This requires that I consent to the following strict measures to safeguard the personal health and safety of myself and that of the researcher/interviewer/primary investigator:

- I consent to the researcher taking my temperature before the interview using a thermometer. ☐ Yes ☐ No
- I confirm that my temperature measured at _____ degrees. ☐ Yes ☐ No ● I consent to use the three-ply mask provided by the researcher. ☐ Yes ☐ No ● I consent to wear the three-ply mask for the full duration of the interview.

  ☐ Yes ☐ No
- I consent to the researcher sanitising the interview context using a sanitiser with an 80% alcohol content before the commencement of the interview. ☐ Yes ☐ No
- I consent to the researcher using a sanitiser with an 80% alcohol content before and during the interview if required. ☐ Yes ☐ No

Signed at (*place*) _____ on (*date*) _____ 20 ____

_____	_____
Signature of participant	Signature of researcher