



**Factors contributing to poor utilization of public health facilities for maternity care
Services at Mpumalanga Province, South Africa**

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**A Research Dissertation submitted for the requirements for the degree of Master of
Nursing**

At the

UNIVERSITY OF VENDA

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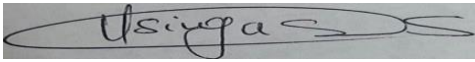
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JUNE 2025

DECLARATION

I, Usinga Sibusiso declare that this research dissertation I on the “***Factors contributing to poor utilization of public health facilities for maternity care services at Mpumalanga Province, South Africa.***” is my work and that all the sources used or quoted have been indicated and acknowledged by means of complete references and that this work has not been submitted before by any other institution or any other degree.

Signature:



Date: 23/06/2025

DEDICATION

I dedicate this study to my personal LORD and Saviour, Jesus Christ of Nazareth. To my first born Child Bernice, to my spiritual father prophet JD and my mentor Bishop C Boldness, to my mother Melita Silinda and to my brothers for their unconditional support and encouragement without whom, this would not have been possible.

ACKNOWLEDGEMENTS

I thank God almighty for giving me the wisdom and knowledge to finish this study.

I also want to express my sincere gratitude to the following persons for their respective contributions to this study.

- A special thanks to my supervisor Professor Mulondo SA, and my co-supervisor Mrs Chewe VM for their endless encouragement, support, and motivation. Your contribution was greatly appreciated.
- To my spiritual father Prophet JD and my spiritual mentor Bishop C Boldness for their support and encouragement.
- Bushbuckridge sub-district manager Mr Simon Mabika for his support in the fulfilment of this project.
- Thulamahashe local area supervisor Mrs Lindiwe Hlatswayo for her support
- To the operational managers Mculu JR and Maria Mkhari thank you for your support.
- A heartfelt appreciation to Mpumalanga Department of Health, for granting me permission to study, therefore contributing to my professional development.
- Thanks to the staff of all the six primary health care facilities and all pregnant women, that participated in this study.

LIST OF ABBREVIATIONS AND ACRONYMS

EMS	Emergency medical services
MDG	Millennium Development Goals
MMR	Maternal mortality rate
NDoH	National Department of Health
SA	South Africa
SDG	Sustainable Development Goal
SPSS	Statistical Package for Social Sciences
UNFPA	United Nations Population Fund
UNICEF	United Nations International Children's Emergency Fund
UNPD	United Nations Population Division
WHO	World Health Organization

ABSTRACT

Utilizing maternity care services as soon as possible will guarantee maternal health and ensure that babies have the best possible start in life. Around 75% of births occur outside of a health facility worldwide which means that it is rare for experienced midwives to be present in these situations. Despite all the efforts the Department of Health makes to implement standards and develop programs like the South African Maternal, Perinatal, and Neonatal Health Policy, Basic Antenatal Care Approach, traditional approach, and updating standards to minimise maternal mortality rate and complications, poor utilization of public health facilities for maternity care services remains high in rural based health facilities of Ehlanzeni district. Therefore, this study aimed at identifying and describing factors that contribute to poor utilization of public health facilities for maternity care services at Thulamahashe local region, Bushbuckridge local municipality of Mpumalanga Province, South Africa. A quantitative cross-sectional descriptive design was employed for this study. A questionnaire was employed and simple random probability was used to select 204 pregnant women from the six selected primary health facilities of Thulamahashe local region. The sample size was calculated using Slovin's formula. A pre-test of the data collection instrument was done on 22 respondents from one of the selected health facilities. The researcher used Excel and the statistics program SPSS version 30.0. This software produces tables, charts, and numerical statistical measures with the click of a mouse. Validity and reliability were maintained. Ethical standards such as permission to conduct the study, informed consent, confidentiality and privacy, principle of beneficiary, respect and human rights and justice were taken into consideration. The study indicated that core barriers for maternity care service utilisation listed by respondents were that they were waiting for too long in the healthcare facility, fear of being scolded by midwives, distance from home to the health facility and lack of education. The conclusion drawn from this study is that awareness to maternity care services utilisation needs to be consistently raised so that utilisation might increase. Pregnant women are encouraged to initiate ANC services as soon as they find out they are pregnant and Nurses' attitude should be addressed through trainings on interpersonal communication skills.

Keywords: maternity care services, maternal health, midwives, poor utilization, public health facilities.

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CHAPTER ONE

ORIENTATION TO THE STUDY

1. INTRODUCTION

Utilizing maternity care services as soon as possible will guarantee maternal health and ensure that babies have the best possible start in life. Around 75% of births occur outside of a health facility worldwide (Dantas, Sing & Lample, 2023), which means that it is rare for experienced midwives to be present in these situations. As a result, maternal mortality ratio (MMR) reduction is still a concern for world health. According to Lawrence, Klein and Beyauo (2022), the leading causes of maternal mortality are haemorrhage, complications of abortions, sepsis, hypertensive disorders of pregnancy, and thromboembolism. The causes can be prevented if pregnant women use maternity care services offered by midwives and/or accoucheurs as stipulated in the maternity guidelines (World Health Organization [WHO], 2020). It is noted that, despite significant advancement over the previous 15 years, the MMR remains high, particularly in low middle-income countries such as the Democratic Republic of Congo, Yemen, Somalia, South Sudan, the Syrian Arab Republic, the Central African Republic, Chad and Afghanistan (WHO, 2020), with a global estimate of 289000 women dying yearly as a result of pregnancy-related conditions including birth conditions (Katella, 2023). In South Africa (SA) for example, even though several strategies and policies were implemented to improve maternity care services, as well as the provision of free maternity care services at public health facilities, the utilisation of such services is not up to the mark of expectations (National Department of Health [NDoH], 2020). Additionally, the utilization of public health facilities for maternity care services in the Thulamahashe local area is still a concern, in September 2022 alone, the local area presented with 26 live births wherein, 27% (n=7) were births before arrival (BBAs), 15%(n=4) of unbooked cases, 1 case eclampsia, and 19% (n=5) presented after the first trimester. That is a total of 61.03%, suggesting underutilization (Thulamahashe local area's report, 2023). Therefore, the researcher sought to identify and describe factors that lead to such poor utilization of public health facilities for maternity care services at the Thulamahashe local area, Mpumalanga Province, SA.

1.1 BACKGROUND OF THE STUDY

The background for this study is based on the literature review done by the researcher on the study topic. A literature review is an extensive summary of earlier studies on a particular subject (McCombes, 2023). The researcher reviewed published journals, articles, and reports on the study topic in this study. This literature review aimed to determine what is already known about the intended study topic and how the intended study will fill the identified gaps and bring or add new knowledge to the existing scientific knowledge.

Maternity care refers to the health services provided to women, babies, and families throughout the whole pregnancy, during labour and birth, and after birth for up to six weeks (Prinds, Paal & Hansen, 2021). The report from the WHO (2020), stated that even though some countries report significant improvement and progress in reducing MMR, women in low- and middle-income countries die because of inadequate utilization of maternity care services and the MMR rate is still high (Katella, 2023). This calls for increased utilization of maternity care services by pregnant women so that pregnancy-related complications such as hypertensive disorders, anaemia, and haemorrhage can be detected early and managed.

The WHO, United Nations International Children's Emergency Fund (UNICEF), United Nations Fund for Population Activities (UNFPA), World Bank Group, and United Nations Department of Economic and Social Affairs (UNDESA)/Population Division in their 2023 report: Trends in Maternal Mortality 2000 to 2020, stated that In 2020, an estimated 287 000 women globally died from a maternal cause, equivalent to almost 800 maternal deaths every day and many of these deaths could have been easily prevented if pregnant women adequately utilised health facilities for maternity care services (WHO, 2019). This indicates that the health system worldwide is still experiencing the consequences of poor maternity care utilisation. Although, according to the WHO (2019), globally 90% of maternal deaths are attributable to preventable causes, it is important to note that these deaths differ from region to region or from continent to continent, for example, pregnant women in sub-Saharan Africa are at risk of losing their lives 47 times higher than pregnant women in America.

Three other countries also had more than 10 000 maternal deaths in 2020: India (24 000), the Democratic Republic of the Congo (22 000) and Ethiopia (10 000) – 8.3%, 7.5% and 3.6% of global maternal deaths (WHO, 2023). Therefore, according to Camara, Delamou, Grovogui, De Kok, Benova, El Ayadi and Gerrets (2021) future health policies and initiatives must be reinforced to boost the use of maternity care services and address gaps in the utilisation, particularly among the poor and those living in rural parts of sub-Saharan African countries.

As per Apanga and Awoonor-Williams (2018), as cited in Barbi (2021), the difficulty in attending maternity care services is recognised as a contributory factor to maternal deaths, particularly in less developed countries. Previous studies indicate that distance and transport costs to attend maternity care services are the main obstacles in seeking care. The way these factors interact is not straightforward. Moreover, according to Tedla (2019), it is important to conduct further studies to determine the other factors besides transport costs and distance that prevent pregnant women from utilising maternity care services.

According to a study by Hosler, Abrahams and Godsay (2019) at the University of Maryland in Haiti, high reported rates of maternal mortality persist in Haiti despite the introduction of strategies like community-based care and task-shifting strategies for maternity care. In 100,000 live births, there are 380 maternal fatalities. Additionally, there is a 1 in 83% lifetime risk of passing away from problems during childbirth. A 2017 study about the standard of antenatal treatment and patient satisfaction in Kenya and Namibia was conducted by Do, Wang, Hembling and Ametepi (2017). It was stated that there has been no improvement in maternity care despite the Donabedian framework being applied in Kenya as cited in Mahada (2022). Furthermore, pregnant ladies were said to wait in queues for an exceptionally long time, and this leads to reduced client satisfaction. Similar findings were obtained in Namibia because nearly all expectant women have restricted access to maternity care services, which lowers access to emergency obstetric care and contributes to an increase in MMR.

According to Ntuli, Mogale, Hyera and Naidoo (2017) as cited in Mahada (2022) factors that include inadequate facilities, limited accessibility to care, lack of trained practitioners at multiple skill levels, inappropriate treatment, medication errors, inaccurate diagnosis are contributing to high MMR in Sub-Saharan Africa. Furthermore, sub-Saharan Africa was the only region with a very high maternal mortality rate (MMR) estimated at 545 maternal deaths per 100 000 live births with Nigeria having the highest estimated number of maternal deaths, accounting for over one quarter (28.5%) of all estimated global maternal deaths in 2020, with approximately 82 000 maternal deaths.

South Africa is one the most developed countries in Sub-Saharan Africa and has made extensive investments to its healthcare sector. However, the nation's efforts to lower its MM rates have not yet shown progress far enough (United Nations and Sustainable Development Goal [UNSDG], 2022). Despite the national decline in maternal mortality in facility ratio (MMFR) from 105 deaths per 100,000 live births in 2019 to 88 in 2020 (stats SA, 2022), a lot still need to be done so that the country achieves an exponential decline. Several studies about maternal health services were conducted in SA. However, maternity care service utilisation was given less attention. According to Ngxongo (2018), the high maternal

mortality rate in SA results from inadequate quality services offered to poor pregnant women. It is further stated that 16.6% of neonatal mortality is linked to late antenatal care (ANC) booking, and inadequate ANC utilisation. Although 75.5% of pregnant women attended four ANC visits in 2016, according to WHO (2019), around 16000 stillbirths still occur annually in SA (Hlongwane, Botha, Nkosi & Pattinson, 2022). Therefore, inadequate utilisation of maternity care services in SA results in poor pregnancy outcomes.

In Mpumalanga province, it should be emphasized that the majority of the studies mainly focused on the aspects of ANC late booking, and thus, they did not cover some of the main aspects of maternity care services, such as factors influencing the place for undergoing labor and delivery. For example, a study by Mkhari (2016) mainly focused on identifying factors leading to late booking for ANC at Thulamahashe, Mpumalanga province. A Similar study on factors contributing to late booking for ANC was conducted by Drigo, Luvhengo, Lebesse and Makhado (2020) at Mbombela municipality. Despite the existence of similar studies, the issue of underutilisation of maternity care services is still prevalent. For example, according to Bushbuckridge health stats, from April 2022 to March 2023, Bushbuckridge recorded a total of 905 ANC initial visits, 534(59%) of them above 20 weeks of gestation. A total of 11453 live births were recorded, 2636 were births outside a health facility. According to Thulamahashe local area's quarterly perinatal reviews (2022), 77 % of cases such as BBAs, hypertensive disorders in pregnancy, and complications of abortions are directly linked to underutilisation of public health facilities for maternity care services. Considering this, the researcher thought it was essential to investigate what contributed to the inadequate utilisation of maternity care services at public health facilities in Thulamahashe, Bushbuckridge local municipality, SA.

1.2 PROBLEM STATEMENT

A problem statement is a brief explanation of the problem or problems that the project aims to solve. All midwives/accoucheurs are expected to follow regulations, policies, standards, and procedures when offering maternity care services to pregnant women. To deliver high-quality maternity care services to pregnant women, they have to manage and uphold safe, clinically sound procedures. Despite the free provision of maternity care services in Mpumalanga's public health facilities, there was rather a notable poor utilisation of these facilities. For example, a file audit at Mapulaneng Hospital during monthly perinatal evaluations reveals that 80% of cases such as births before arrival (BBAs), hypertensive disorders, and anaemia in pregnancy may have been avoided if pregnant women had utilised public health facilities for maternity care services earlier (Mkarhi, 2016). Similarly, Drigo et al (2020), found that underutilisation of public health facilities for maternity care

services such as ANC services was still prevalent in Mpumalanga province due to distinct factors such as previous experiences encountered by pregnant women in the health facilities. Additionally, Mkhari (2016) found that the issue of late booking for ANC is also prevalent among pregnant women in the local municipality of Bushbuckridge. The researcher initially worked at Mapulaneng Hospital at Bushbuckridge of Mpumalanga Province during community service as a professional nurse before taking up a post at Thulamahashe Community Health Center and has been working there for a year and a half now. The researcher observed that some pregnant women were reluctant to utilise maternity care services at Thulamahashe local area in Bushbuckridge. During the month of September 2022 among a total of 26 live births; 7 (27%) of these live births took place outside of a healthcare facility, and 04 out of 26 live births were unbooked cases (although one eclampsia case was accounted for, and out 26 live births, 05 presented after the first trimester of pregnancy) this was according to the Thulamahashe local area's 2023 report on mother and child health. Furthermore, the local area saw a maximum of 41 ANC first visits in the same month. Only 13 of the 41 pregnant women who attended the initial ANC visits were under 20 weeks of gestation, contrasting with the WHO's recommendation of 8 ANC visits (WHO, 2016). The local area only recorded 4 cases of eclampsia for the entire year of 2022, and they were either unbooked or late-booked cases. Considering this evidence, the researcher thought it was essential to investigate what contributed to the inadequate utilisation of maternity care services at public health facilities in Thulamahashe, Bushbuckridge local municipality.

1.3 RATIONALE OF THE STUDY

This study aimed to identify and describe factors that led to the inadequate use of public health facilities for maternity care services in the Thulamahashe local region. The researcher chose to conduct this study because even though there were several studies on maternal health care in SA, maternity care service usage has been given less attention. Nevertheless, in Bushbuckridge, a similar study was conducted by Sack, Wagner, Ohene- Kwofie, Chodziwadziwa, Price, Ginsburg and Audet (2021) on pregnancy-related healthcare utilisation in Agincourt, South Africa, 1993– 2018. The study sought to find out whether the trend of using the Agincourt Health Center facility for pregnancy-related conditions had decreased or increased over time. However, the study was not aimed at identifying factors that lead to poor utilisation of public health facilities for maternity care in this region. Furthermore, in the same local area where the researcher intends to conduct the study, Mkhari (2016), had previously conducted a study which focused only on exploring factors that contributed to late antenatal booking by women at Thulamahashe local area. The study

did not cover all aspects of maternity care service utilisation such as the place to conduct termination of pregnancy, and the choice for undergoing labour and delivery services. Even though studies have been conducted in the same study setting, there is still a gap regarding the underutilisation of public health facilities for maternity care services. Therefore, the researcher intended to conduct this study which aimed to identify and describe factors that contributed to the underutilisation of public health facilities for maternity care services. The study focused on identifying and describing factors contributing on the choice for undergoing labour and delivery services as well as ANC services utilisation in Thulamahashe local region, Bushbuckridge Local Municipality, Mpumalanga Province.

1.4 SIGNIFICANCE OF THE STUDY

The findings of this study might assist midwives and/or accoucheurs in providing safer care as well as reducing MMR. Furthermore, the intrapartum, postpartum, and neonatal care in public health facilities might improve. To pregnant women, the implementation of the findings might assist in improving adequate maternity care service utilisation which in turn might reduce MMR, long queues, or waiting time as well as prevention of pregnancy-related complications. Furthermore, the Department of Health might develop strategies that might improve the quality of care of pregnant women, and this may reduce lawsuits that come about due to malpractice by midwives, thus saving funds. In health facilities, the findings may assist midwives in being subjected to enough workshops and in-service training to boost them with recent data in providing maternity care services. Policymakers might formulate policies /strategies and guidelines for improving the provision of maternity care services utilisation amongst pregnant women. Furthermore, institutions of research may also gain knowledge about this area of study and discover new aspects of the health process that many scholars were unable to examine through this study. To, the health care system and the community of Thulamahashe, the implementation of the findings, might reduce the long-standing incidence of BBAs, long waiting queues for pregnant women, late ANC booking, and reduce pregnancy-related complications which lead to either poor maternal health or mortality.

1.5. PURPOSE AND OBJECTIVES OF THE STUDY

1.5.1. The purpose of this study

This study aimed to investigate the factors that led to the inadequate use of public health facilities for maternity care services in the Thulamahashe local region.

1.5.2 Objectives of this study

According to Ryan (2022), research objectives outline research endeavour's goals. In other words, they should direct each phase of the research process, such as data collection, argument development, and conclusion development. The research objectives for this study were:

- To identify and describe factors that led to poor utilisation of public health facilities for maternity care services at Thulamahashe local region.

1.6 DEFINITION OF CONCEPTS

For this study, the following terms are used as defined below:

1.6.1 Factors- as per Tedla (2019), factors mean those that actively contribute to the production of a result. In this study, it referred to situations that made pregnant women poorly utilise public health facilities for maternity care services.

1.6.2 Contribute- according to Winger (2023), to contribute means giving something to help attain a cause. In this study, it referred to leading associative factors for poor utilisation of maternity care services by pregnant women.

1.6.3 Poor utilization- according to (Tedla, 2019) utilisation means the act of making practical and effective use of something, in this case inadequately. In this study, it meant the act of inadequately using public health facilities for maternity care services as prescribed by SA maternity guidelines, at Thulamahashe local area, Bushbuckridge.

1.6.4 Maternity care services- services received by women from antepartum, intrapartum, and postpartum care (Gamble, 2019). In this study, it referred to the care received by pregnant women for ANC, labour, and Childbirth at Thulamahashe local area, Bushbuckridge, SA.

1.6.5 Public health facilities- medical facilities offered by the government wherein in most times the provision of health care is free of charge (Malakoane, Heunis, Chikobvu, Kigozi & Kruger, 2020). In this study, it referred to public health facilities found at Thulamahashe local area.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter focused on the reviewed literature to enhance the comprehensibility of the topic understudied. . A literature review is a summary of the works that researchers and acknowledged scholars have published on a subject, according to McCombes (2023). In this section, the researcher provided some of the factors that other researchers have found to be contributing to poor utilisation of maternity care services across the world. As per Snyder (2019), in a literature review, the researcher reviews published works that have been exposed to critical evaluation, such as theoretical articles and studies relevant to the subject matter and research objectives. As a result, the researcher reviewed prior work and looked into already published available data that forms the basis of the study. Journals, papers, books, and reports made up the reviewed literature for this study.

2.2 Maternal Wealth and utilisation of public health facilities

Maternal health inequality is one of the key issues facing low- and middle-income nations (Nwase, Brenner, Mazalele, Lohmann, Hamadou, Sonda, Ridde & De Allegri, 2023). For example, women from wealthy origins were 2.7 times more likely to use midwives for birth than those from less fortunate backgrounds, Khankhell, Ghotbi and Hemat, (2020). Therefore, the use of maternity care services is also found to be associated with maternal wealth.

2.3 Women's Status

In some rural areas of SA, the husband is frequently the main decision-maker due to the status of women. In other words, their husbands make decisions about things like when to have sex, how many children to have, and whether to use a hospital for maternity care services (Baird, Smith & Debacco, 2021). In addition, a cross-sectional study conducted in Yangon by Wai, Shibanuma, Filman, Saw and Jumba (2019) indicated that 69, 7% of husbands participated in the choice of the delivery location. In other words, Women typically lack the power to choose whether they need healthcare for themselves and their children.

2.4 Distance as a factor for poor utilisation of health facilities

Despite efforts to bring specialised services closer to the populace, physical distance brought on by a lack of road networks and poor transportation alternatives continues to be a significant concern in rural Pakistan. The underutilisation of maternal healthcare services is exacerbated by these circumstances, which make it challenging for the community to contact and engage with midwives (Sarfraz, Tariq, Hamid & Iqbal, 2020).

2.5 Delay of Emergency Medical Service (EMS) Transport

According to a study by Wirtu, Yeshanew and Geda (2023) on the use of ambulance services and related factors among lactating mothers in Buno Bedele Zone, Southwest Ethiopia, many pregnant women were unable to access medical facilities during labour because EMS would either arrive late or not at all. Therefore, delay in EMS was also found to be a contributory factor to the inadequate utilisation of health facilities for maternity care services.

2.6 THEORETICAL FRAMEWORK

Donabedian mode theoretical framework

For this study, the researcher used the Donabedian model as a frame of reference. As per Malomane (2019), the Donabedian model is a theoretical framework for analysing healthcare services and assessing the standard of treatment. According to Voyce, Gouveia, Medinas and Santos (2015) structure, process, and outcome are the three key components of quality assessment, and a Donabedian model assumes that there may be a causal relationship between them. Structure describes the people, organisational framework, and resources required for the work that must be done. Process is referred to be a measure that deals with how the services are provided, between professionals and patients, as well as between professionals and one another. It has both interpersonal and technical components (Tedla, 2019). The outcomes are those that arise from the care activities (Donabedian, 2005), including clinical outcomes, quality of life, and satisfaction with the care provided. Additionally, the structure measures have an impact on the process measures, which in turn affects the outcome (figure 1.1). Figure 1.1 outlines the three categories of the study as explained in the Donabedian model.

Application of the Donabedian Model

According to this model, in this study, utilisation of public health facilities for maternity care services could only be provided if the structure were characterised by motivated human resources and enough material resources and finally consider whether the facilities and working conditions were suitable. As a result, the process measure could be followed correctly to obtain the desired outcome, which included clinical outcomes, quality of life, and satisfaction with the care provided. To summarise, the outcome measures demonstrate the impact on pregnant women and their offspring. This model was used to identify and describe the factors contributing to poor utilisation of public health care facilities for maternity care services in the Thulamahashe local area.

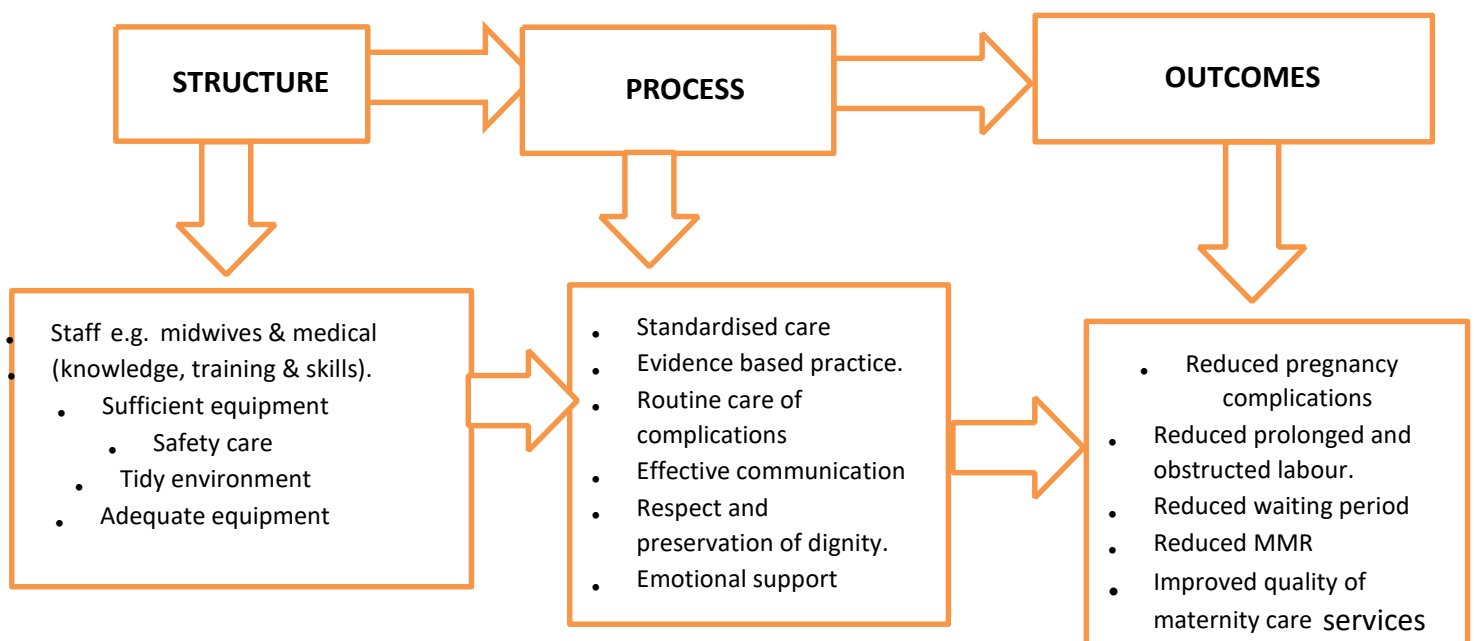


Figure1.1: Donabedian model (Adopted from Donabedian, 2005)

2.7 Conclusion

The above distinct factors proved to the researcher, that more studies needed to be conducted on contributory factors leading to poor utilisation of public health facilities for maternity care services by pregnant women. The researcher also noted that these factors are complex and differ from place to place. Therefore, this reality confronted the researcher to conduct a study that aimed at identifying and describing factors that led pregnant women to poorly utilise available public health facilities for maternity care services in Thulamahashe local area, at Bushbuckridge local municipality, Mpumalanga Province.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The systematic approach to solving a research topic through the collection of data using various approaches, the provision of an interpretation of the data collected, and the drawing of inferences from the study data is known as a methodology in research. A method of research can be thought of as the general plan for a research project or study (Sileyew, 2019). This chapter showed adequate information about the study, the research design, data collection method, instrument, and the procedures that was considered for data collection and analyses.

3.2 Research approach

Two types of research designs determine a research project, namely, quantitative, and qualitative methods. For this study, the researcher used the quantitative approach as a research methodology to conduct the study about the Factors contributing to poor utilisation of public health facilities for maternity care services at the Thulamahashe local area.

3.2.1 Quantitative approach

According to Rhodes (2021), researchers that follow the scientific paradigm typically use this method. This approach aims to generalize findings from a sample of a target population and quantify data (Bhandari, 2023). It uses structured data collection techniques and outputs data as numerical data. Statistically based objective analysis is another aspect of quantitative research that is seen (Bhandari, 2023). Additionally, quantitative research was suitable for this study due to the need to collect and analyse numerical data. Therefore, this approach assisted the researcher in collecting a large amount of data regarding the factors that contribute to the poor utilisation of public health facilities for maternity care services by pregnant women.

3.2.2 Research design

Research design refers to the systematic and structured ways that researchers use to conduct research. It is about the steps from broad assumptions aiming to explain data collection methods, data analysis and interpretation (Muhammad, 2023). In this study, the design was cross-sectional descriptive design to investigate and describe the factors that contribute to poor utilisation of public health facilities for maternity care services by pregnant women in Thulamahashe local area's health facilities as well as to answer the research objectives to improve utilisation of these public facilities for maternity care services.

- **Cross-sectional design**

In cross-sectional research, groups of participants at different developmental stages are examined concurrently to characterise the distinctions between them. The foundation of a cross-sectional study is the idea that the phases found in various participants at one moment are indicative of a process that develops across time. The population of interest in cross-sectional research is thoroughly detailed (Wang & Cheng, 2020). The researcher chose this design because it allowed the researcher to collect data concerning poor utilisation of public health facilities for maternity care services from a large number of pregnant women at a single point in time and because data collection is easier, less time-consuming, and more convenient to carry out through the usage of this design (Thomas, 2023).

- **Descriptive design**

This design helps to provide insight into a studied topic. The researcher can use it to review data patterns, evaluate how diverse groups react to changes, and validate conditions found in previous experiments (Wang & Cheng, 2020). This design assisted in identifying, describing, and understanding factors that contribute to the inadequate utilisation of public health facilities for maternity care over a single period. Therefore, in this study, aspects such as sociodemographic, socio-economic, cultural, and other aspects that are thought to influence the utilisation of public health facilities for maternity care services were identified by the use of questionnaires and described by the use of descriptive statistics (McCombes, 2019).

3.3 Study setting

According to Koswara (2022), study setting is defined as the specific place or places where data is collected. The study was conducted at the Thulamahashe local area, which is found at the Bushbuckridge sub-district, Ehlanzeni district of Mpumalanga province, SA. The local

area consists of only 06 primary healthcare facilities. Amongst these facilities, one is a Community Health Centre, which operates 24 hours 07 days per week with no call system, and the other 05 are merely 08 hours clinics. The local area consists of no hospital. Mapulaneng Hospital (30km away) and Tintswalo Hospital (25 km away) are the nearest referral hospitals. The study was conducted in all 06 Primary healthcare care facilities because all provide maternity care services, even though Thulamahashe Community Health Center receives the highest number of maternity care cases than the rest. After all, it is a 24-hour 7 health facility (Thulamahashe local area: mother and child's report, 2023).

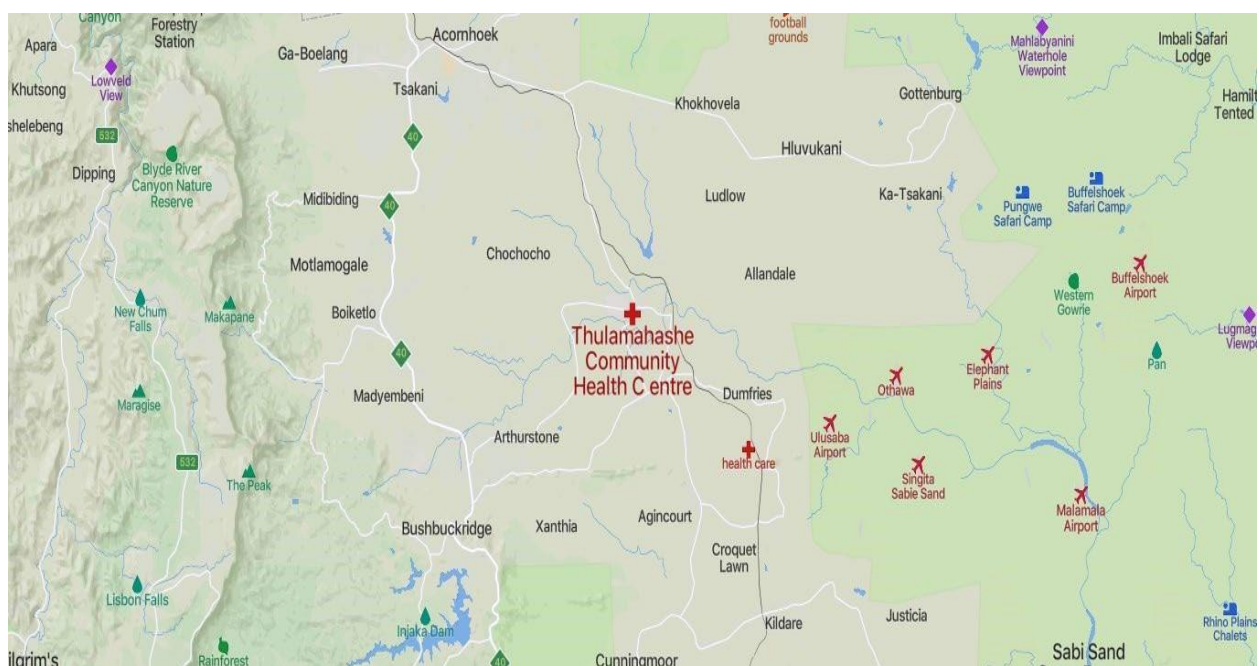


Figure 1.2 of Thulamahashe Local Area (Bushbuckridge local municipality. Local Economic Development Strategy 2020-2021)

3.4 Population

A population was described by Shah (2023) as the complete population, individual, or element that meets the sample requirements. In this study, the population comprised of all pregnant women attending maternity care services at all 06 Primary healthcare facilities at Thulamahashe local area. The target population consisted of all pregnant women who were available at ANC during data collection time in all the selected 06 healthcare facilities. Accessible population, according to Thacker (2020) is defined as the aggregate of cases that conform to the designated criteria and that are accessible to the researcher as a pool of

subjects for the study. In this study, the accessible population consisted of all pregnant women who agreed to be part of the study.

3.5 Sample and sampling procedure

According to McCombes (2023), a sample is a portion of an interested population used to make observations and draw conclusions using statistics about the population. In this study, the researcher used probability sampling because according to Williams (2024), all elements had an equal chance of being included in the sample and it increased the representativeness of the target population. Pregnant women were selected by the use of Simple random sampling as it creates samples that are highly representative of the population (Glen, 2023). Furthermore, the sample population for this study consisted of all pregnant women attending ANC services in all six primary health care facilities in Thulamahashe local area. As of November 2022, the local area had registered a total of 488 pregnant women, and it was the highest attendance for 2022 (Thulamahashe local area mother and child report, 2023). Therefore, the sample size was calculated from the 488 pregnant women using Slovin's formula below: $n = \text{sample size of the adjusted population}$. $N = \text{population size}$ $e = \text{accepted level of error set at 0.05}$.

$$n = \frac{N}{1 + N(e)^2}$$

$$1 + N(e)^2$$

$$n = \frac{488}{1 + 488(0.05)^2}$$

$$1 + 488(0.05)^2$$

$$= 488 / (1 + 1.25)$$

$$= 488 / 2.25$$

$$= 217$$

Therefore, the actual sample size for this study was 204 pregnant women attending ANC at all six primary healthcare facilities and the 13 questionnaires were incomplete.

3.5.1 Sampling of the health facilities

The study was conducted in all six primary healthcare facilities of Thulamahashe local area (Thulamahashe Community Health Centre, Rolle Clinic, Edinburgh Clinic, Dingledale Clinic, Arthurstone Clinic, and Xanthia Clinic). These facilities were selected because of the low uptake of ANC services before 20 weeks of gestation and a notably persistent incidence of BBAs in the area. For example, according to Thulamahashe local area 2023 report, 2022 registered 23 cases of BBAs in the local area. Furthermore, in October 2022, the local area had a maximum of 46 ANC first visits, and 28\46 (61%) of them were above 20 weeks of gestation. Therefore, the researcher decided that a study must be conducted which aimed at looking into factors that contribute to such poor utilisation of public health facilities for maternity care in this area.

3.5.2 Inclusion criteria

The qualities a prospective subject must possess to be included in the study are known as inclusion criteria (Nikolopoulou, 2023). For this study, the inclusion criteria were all pregnant women of childbearing age who attended ANC in all the 06 selected health facilities and those who consented to be included in the study.

3.5.3 Exclusion criteria

It includes traits that are used to identify possible research participants who should not be included in a study, and these can also be the ones that cause participants to leave a study after being recruited first (Nikolopoulou, 2022). This study included all pregnant women who were not willing or able to participate in the study for whatever reasons they presented during the data collection process. Also, mentally incapable pregnant women and underage pregnant women whose parents did not sign the parental consent form in order for them to be included in the study.

3.6 Data collection instrument

Data collection instruments are tools used by researchers to collect data in the research process and the common data collection instruments in research include interviews, questionnaires, documentary analysis, and observation (Mosweu & Mosweu, 2020). In this study, the researcher used a structured questionnaire adapted from Tedla (2019) and Mkhari (2016) with closed-ended questions, which collected data and made use of a self-report design. According to Shah (2023), a questionnaire is an instrument requiring the respondent to provide written or verbal replies to a set of questions. Additionally, the questionnaire consisted of 23 questions, divided into three sections: section A which dealt with demographic details of the respondents, section B which dealt with questions regarding ANC service utilisation and section C which deals with questions regarding delivery services (both motivation and hindrances to deliver in a facility). The questionnaire was in English (Annexure A) for academic purposes. Translation from English to Xitsonga and back translation was done using an independent translator who does not know the original document. The questionnaires were issued out to be completed and returned the same day to the researcher.

3.7 Pre-test of the study instrument.

As per Brink et al. (2018), pre-test studies include feasibility studies that are scaled down from full-scale studies and the pre-testing of research tools like questionnaires or semi-structured interviews. Twenty-two respondents from Thulamahashe Community Health Center at Thulamahashe local area were randomly selected to complete 22 questionnaires as part of the researcher's test of the data collection tool. The 22 respondents who participated in the pre-test are 10 % of the total sample size and were not used in the main investigation. The healthcare workers were not part of the study and the study did not contain the pre-test study's findings. Therefore, to find potential errors that might have occurred throughout the data collection process, a pre-test was conducted, and the instrument was found to be effective or suitable for data collection. Therefore, no adjustments were made to the instrument.

3.8 Plan for the data collection and data collection process

According to Bartosinska (2021), data collection is the precise, systematic gathering of information relevant to the aim of the research or specific objectives, questions, or hypotheses of the study. The researcher obtained permission to conduct research from the Mpumalanga Department of Health. Prospective respondents were randomly recruited from those who were coming for ANC. They were informed about the objectives of the study before signing the consent form to participate in the study. Respondents who could read and write were given the questionnaire with black pens to complete it under the supervision of the researcher and where clarity was needed, understanding was provided. Respondents who were not able to read and write were asked questions in their language (Thulamahashe is made up of Tsonga-speaking people) by the researcher who completed the questionnaire and ensured that there was a lack of interviewer bias, and privacy was observed to ensure candid responses. This was done to ensure the quality and accuracy of translation (Temelkova, 2021). A maximum of 40 minutes to complete the questionnaire was allocated to the respondents who met the inclusion criteria. The questionnaires were issued out to be completed and returned the same day to the researcher.

3.9 Plan for data management and analysis

In this study, the researcher used statistical methods to analyse data because it contains numerical information that may be used to calculate data points. The researcher used Excel and the statistics program SPSS version 30.0. This software produces tables, charts, and numerical statistical measures with the click of a mouse (Tedla, 2019). Descriptive statistics which summarise data using indexes such as Mean, Median, Mode, and other inferential statistics were used. Chi-square, graphs, and tables were used to analyse and present the association between demographic variables and other factors (Biswal, 2023). Additionally, the researcher managed the collected data by fixing or removing incorrect, corrupted, and duplicated data within a data set (Bordelon & Starry, 2024). Furthermore, to manage the collected data, the researcher used of numerical codes so that participants' names were not included.

3.10 Validity and reliability

As the study employed quantitative methods, content and construct validity measures were used to ensure the quality of the design of the research. Validity and reliability measures were used to ensure the quality of the data collection instrument.

3.10.1 Validity of Research Instruments

Validity refers to how accurately a method measures what it is intended to measure (Midleton, 2019). For example, if a study has high validity, it means it produces results that correspond to real properties, characteristics, and variations in the physical or social world. In this study, content and construct validity were conducted before data collection.

3.10.2 Content validity

As per Nickerson (2023), Content validity is the extent to which an instrument has a suitable sample of items for construct being measured. In this study, the researcher tried to include a suitable sample of items that were used while developing the data collection instrument. For example, the questionnaire was validated by involving experts in maternal and child health such as experienced midwives, advanced midwives, and the mother, Child, and Women's Health (MCWH) coordinators who evaluated the questionnaire to be content valid before it was used. No changes were made to the questionnaire.

3.10.3 Construct validity

Construct validity refers to the extent to which a test or measurement tool actually measures the theoretical concept or construct it's designed to assess (Arteaga, 2023). According to Nickerson (2023), construct validity entails the study and testing of links inferred from conceptualizations that have a solid foundation. In this study, factors contributing to poor utilization of public health facilities for maternity care services were identified and described. Furthermore, a pretest was done to assess the data collection instrument before a full scale implementation.

3.10.4 Reliability of Research Instrument

How consistently a method assesses something is referred to as its reliability. The measurement is regarded as dependable if the same result can consistently be obtained by applying the same techniques under the same conditions (Midleton, 2019). By conducting a pre-test study on a small portion of the chosen sample, the researcher described the factors that contribute to the underuse of public health facilities in the Thulamahashe local area while also ensuring the reliability of the questionnaire. The researcher employed the test-

retest technique by administering the same instrument to the same respondents on two separate occasions. The results show a positive correlation coefficient of +1, therefore, the research instrument was highly reliable.

3.11 Ethical consideration

Ethical considerations are regarded as principles of respect for persons, beneficence, and justice relevant to conducting the research (David & Resnik, 2020).

3.11.1 Permission to conduct study

The researcher obtained ethical clearance to conduct this study from the University of Venda Ethical Committee (Appendix A), the permission was granted by Mpumalanga Provincial Department of Health, Ehlanzeni District Office of Health (Appendix C) by writing letters which state the study objectives, the procedure to undergo during research activities and the foreseeable benefits and the risks associated with the study.

3.11.2 Informed consent

A participant must be adequately informed and provide their consent only after doing so voluntarily and without being forced. This type of consent is known as informed consent (Hosely, 2021). Explanation of the information to the respondents was done verbally and the respondents were allowed to ask questions if they did not understand. Furthermore, respondents signed a consent form that states the purpose, objectives of the study, and the fact that participation is voluntary, and that they could withdraw from the study anytime they felt so without any repercussions.

3.11.3 Confidentiality and privacy

The practice of maintaining confidentiality entails the researcher's duty to prevent any relationships between or disclosures of the study's data to other individuals (Adarmouch, Felaefel & Silverman, 2020). The names of the respondents were not included on the questionnaires or the concern form to protect their privacy for this project. Each response was assigned a number, which was written outside the filled-out questionnaires, keeping respondents anonymous. Data analysis also made use of the assigned numbers (Adarmouch et al, 2020).

3.11.4 Principle of beneficence

According to this principle, the researcher must protect the respondents' psychological, emotional, spiritual, and social well-being, as well as their right to be protected from exploitation. In addition, the researcher must safeguard the information provided by the respondents. In case of emotional stress, the researcher would halt the data collection process and provide counselling. This principle is focused on actions taken for the benefit of others (Cheraghi, Valizadeh & Jafarzadeh, 2023).

3.11.5 Principle of justice

To ensure that all respondents are treated equally and fairly, the researcher used probability sampling, through a simple random sampling method, during the selection period. The researcher selected the respondents for reasons that were related to the research problem rather than because they were readily available or could be easily manipulated.

3.11.6 Respect for human dignity

The right to self-determination and the right to full disclosure are examples of respect for human dignity. The respondents in this study had the right to ask questions (Barrow, Brannam & Khandhar, 2022). In case of emotional reaction, support was offered and the participant was provided an opportunity to withdraw from the study, regroup or continue. Additionally, the respondent had the right to withhold certain information they deemed private.

3.12 Conclusion

In this chapter, the researcher discussed and described in detail the research design and the research approaches employed in this study. The researcher applied a quantitative cross-sectional and descriptive design to conduct this study at the Thulamahashe local area. Important aspects of the instrument of data collection were explained. The fundamental ethical principles of public health research employed to this study were also considered. The next chapter analyses and present the findings of the study.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION OF THE RESEARCH FINDINGS

4.1 Introduction

In this study, the researcher used statistical methods to analyse data from 204 of the proposed. Therefore, the researcher did not include them in the study. The purpose of the study was to identify and describe the factors that led to the inadequate use of public health facilities for maternity care services in the Thulamahashe local region. Furthermore, the study sought to answer the following objectives:

- To identify factors that contributed to poor utilization of public health facilities for maternity care services at Thulamahashe local region.
- To describe factors that contributed to poor utilization of public health facilities for maternity care services at Thulamahashe local region.

4.2 RESEARCH RESULTS

In this study, the questionnaire consisted of 23 questions, divided into three sections: section A, which dealt with demographic details of the respondents; section B, which dealt with questions regarding ANC service utilisation; and section C, which dealt with questions regarding delivery services (both motivation and hindrances to deliver in a facility). Therefore, in this section, the researcher will be analysing and presenting the data collected.

The study's findings are presented in tables, charts, and numerical statistical measures with the click of a mouse (Tedla, 2019). The researcher used Excel and statistical program SPSS version 30.0. Descriptive statistics were used to summarise data using indexes such as Mean, Median, Mode, and other inferential statistics. The chi-square was used to analyse and present the association between demographic variables and other factors (Biswal, 2023). Additionally, the researcher managed the collected data by fixing or removing incorrect, corrupted, and duplicated data within a data set (Tableau, 2024). Furthermore, to manage the collected data, the researcher used numerical codes so that participants' names were not included.

4.2.1. Demographic details of the respondents

In this subsection, the demographic details of the respondents, including age, marital status, level of education of the respondents, occupation and religion are presented in one table. The distance from respondents' homes to the health facility and ethnicity are presented using a bar graph and a pie chart as they provide a clear distribution of the data (Yi, 2024). Table 4.1, Figures 4.2 and 4.3 present the demographic profile of the respondents.

Table 4.1 Respondents' demographic profile

Characteristics	Number	Percentage
<u>1.Age in years</u>		
18 to 25	101	49, 5%
26 to 35	80	39, 2%
36-45	23	11, 3 %
<u>TOTAL</u>	204	100 %
<u>2. Marital status</u>	Number	Percentage
Married	30	14, 7%
Single	94	46, 1 %
Divorced	1	0,5%
Stable relationship	77	37, 7%
Widowed	2	1 %
<u>TOTAL</u>	204	100%
<u>3. Level of education</u>	Number	Percentage
none	2	1 %
Primary school	8	3,9%
High school	148	72,5%
Tertiary education	46	22,5%
<u>TOTAL</u>	204	100 %
<u>4. Occupation</u>	Number	Percentage
Civil servants	13	6, 4%

Housewives	21	10, 3%
Owner of a business	27	13,2%
Unemployed	143	70, 1%
TOTAL	204	100%
5. Religion	Number	Percentage
Islam	3	1, 5%
Protestant	1	0,5 %
Catholic	2	1%
Traditional belief	6	2,9 %
Other specify	0	0%
Christianity	192	94, 1%
TOTAL	204	100

6. Distance from home to the healthcare facility.

The findings regarding the distance from home to a healthcare facility are presented in the Bar graph below.

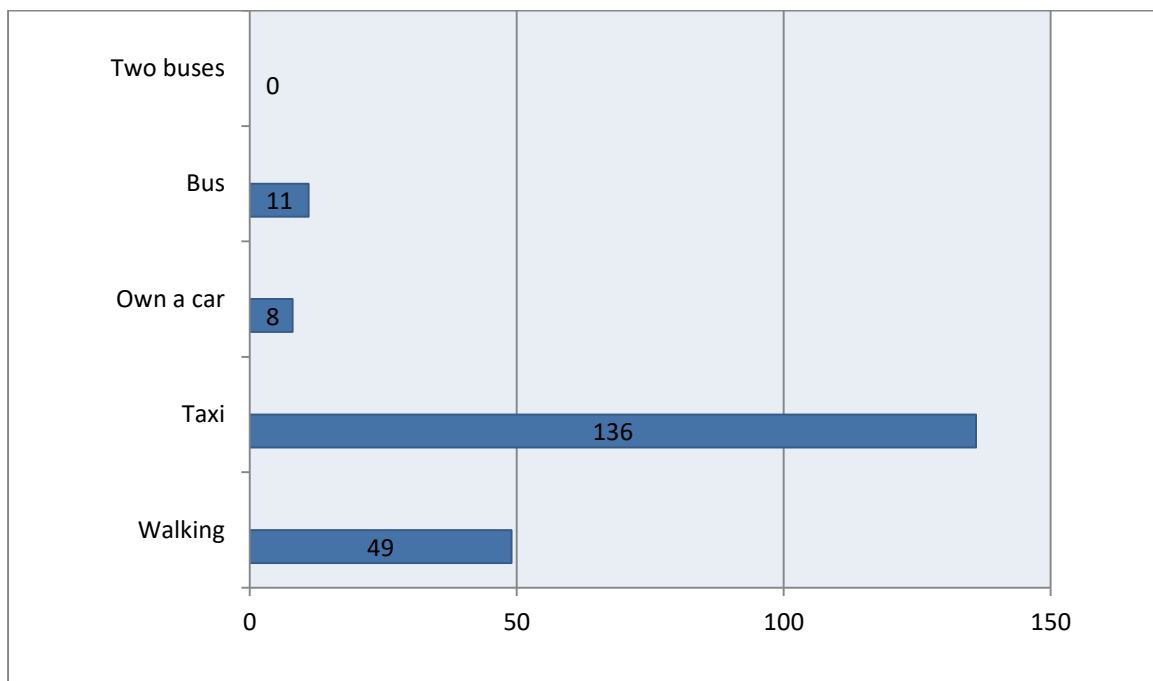


Figure 4.1: Bar graph shows the distance from respondents' home to a health facility.

7. Respondents' ethnicity

The findings regarding respondents' ethnicity are presented in the Pie chart below.

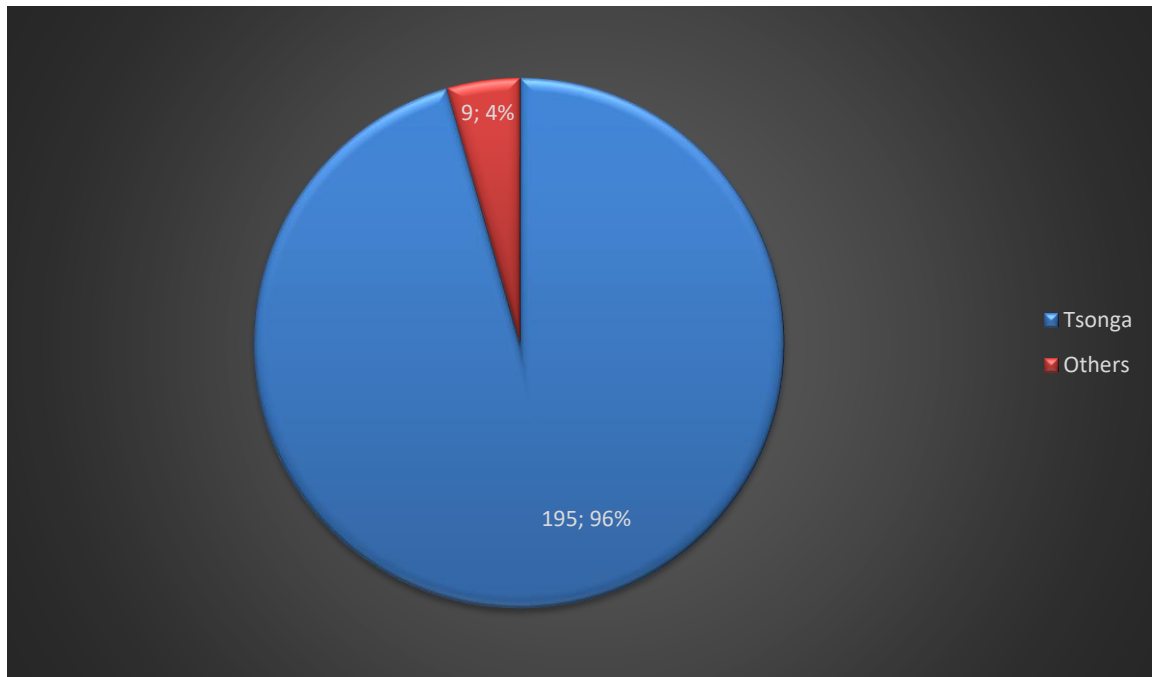


Figure 4.2: Pie shows respondents' ethnical background

In **item 1**, almost half of the respondents (49, 5 %; n=101) were young pregnant women at the age category of 18 to 25 years, age category of 26 to 35 years accounted for 39,2%(n=80) and Only 11, 3% (n=23) pregnant women were between the age category of 36 to 45 years. The mean age of the respondents was 62 years with a standard deviation of nearly $\sigma=1$. There is thus, 0% (n=0) of the respondents above 46 years. **Item 2**, 14, 7% (n=30) were married pregnant women. Forty-six and one-tenth percent (n=94) of pregnant women were single. Seventy-seven (37, 7 %) of respondents indicated they were in a stable relationship with their partners. The remaining 3 (1, 5%) respondents were either divorced and/or widowed. Regarding the educational level in **item 3**, 148 (72, 5 %) of pregnant women are having High school as the highest form of education with a mean of 3, 17. 22, 5 % (n=46) accounted for having a tertiary education. **Item 4** of occupation status, more than 70% of respondents indicated (n=143) indicated that they were unemployed. Of the respondents, 6, 4% (n=13) were civil servants. 10, 3 % (n=21) of respondents were housewives and lastly, 13, 2 % (27) were owners of a business. In **item 5** of the religion, more than half of the respondents (n=192; 94, 1%) were Christians. Of the respondents 1, 5% (n= 3) belonged to Islamic religion. 6 (2, 9%) were traditional belief followers. 2 (1 %) were catholic Christians, only 1 (0, 5%) was protestant Christian follower. With regards to **item 6**, the mode of transport from respondents' home to the health facility 136 (66, 7 %) respondents demonstrated that they use one taxi to

reach the health facility meanwhile, nearly a quarter (24%; n= 49) of respondents indicated that they walk to reach the health facility for maternity care services. Furthermore, only 3, 9% (n=8) respondents indicated using their own car as a mode of transport to reach the health facility. Nearly half a quarter (n=11; 5, 4%) use a bus to access maternity care services at Thulamahashe local area. **In item 7**, the study revealed that 195 (95, 6%) respondents were Tsonga speaking and only 9 (4, 4%) belonged to other ethnicities.

4.2.2 Antenatal care service utilisation

In this section, the researcher presents the data collected with regards to ANC utilisation at Thulamahashe local area as shown in Table 4.5 below and the findings will be presented at the end of the table.

Table 4.2 Indicating ANC service utilization at Thulamahashe local area

Characteristics	Number	Percentage
<u>8.Numbers of previous pregnancies</u>		
0 (primigravida)	53	26%
1	60	29,4%
2	40	19,6
3	32	15,6
4	15	7,4
5	4	2%
TOTAL	204	100 %
<u>9. Access to antenatal care information before pregnancy</u>		
Yes	156	76, 5 %
No	48	23, 5 %
TOTAL	204	100

Antenatal service utilization continues...

<u>10. Source of information for ANC before pregnancy(n=156)</u>	<u>Frequency</u>	<u>Percentage</u>
Friends and family	136	87,2%
Radio	12	7, 7%
Television	3	1,92%
Community campaigns	4	2, 6%
Magazine and newspapers	1	0, 6%
TOTAL	156	100 %
<u>11.Stages in months at which respondents started their ANC with their previous pregnancy</u>	<u>Number</u>	<u>Percentage</u>
01 to 03 months	70	34, 3%
03 to 06 months	67	32, 8%
06 to 9 months	10	4. 9%
Primigravida:		
01to 03 months	13	6,4%
03 to 6 months	24	11,8%
06 to 09 months	7	3,4%
Unbooked	13	6, 4%
TOTAL	204	100 %

Antenatal services' utilization continues

<u>12. Best time for attending ANC</u>	<u>Number</u>	<u>Percentage</u>
01 to 03 months	156	76, 47%
03 to 06 months	40	19, 61%
06 to 9 months	8	3, 92 %
TOTAL	204	100
<u>13. Why should ANC be sought</u>	<u>Frequency</u>	<u>Percentage</u>
To prevent complications	150	71, 8%
To get an antenatal card	11	5,3 %
To go hospital for delivery	13	6, 2%
To confirm pregnancy	22	10, 5%
To get tested for HIV	2	11%
To get vitamin tablets	11	5, 3 %
TOTAL	209	100
14. Contributory factors for starting ANC during the time of data collection	<u>Frequency</u>	<u>Percentage</u>
To have an HIV test	12	1, 7%
To get antenatal card		
To be referred to Hospital for delivery	26	3, 7%
To confirm pregnancy	132	18,9%
Experiencing problems with the current pregnancy	146	20, 9%
Encouraged by friends and family	142	20, 3%
To check for gestational age	138	19, 7%
TOTAL RESPONSES	699	100%

ANC services' utilization continues

15. <u>Benefits of starting ANC in early pregnancy</u>	<u>Frequency</u>	<u>Percentage</u>
Early diagnoses of complications	102	29, 9%
Prevention of complications	100	29, 3%
To get tested for HIV	16	4, 7%
For initiation of antiretrovirals if positive	12	3, 7%
To get knowledge care about pregnancy	111	32, 4%
TOTAL	341	100
16. <u>Contributory factors on ANC late coming</u>	<u>Frequency</u>	<u>Percentage</u>
Ignored signs of pregnancy	26	3,6 %
Distance to the health facility	32	4,4%
Lack of transport money to the health facility	132	18, 1%
Nurses' attitude	192	26,3%
Lack of infrastructure	21	2, 9%
Lack of privacy	105	14,4%
Long waiting time	199	27, 3%
Unplanned pregnancy	23	3,2 %
TOTAL RESPONSES	730	100

<u>17. Motivating factors for attendance of ANC services in early pregnancy</u>	<u>Frequency</u>	<u>Percentage</u>
Clinic operating 12 hours instead of 8 hours	79	13, 7%
Infrastructure improvement	38	6, 6%
Improvement of staff attitude	150	26, 1%
Community mobilization	28	4,9%
Health education to clinic attendees	93	16, 2%
Availability of IEC materials	24	4, 2%
Improvement of waiting hours	163	28, 3 %
TOTAL RESPONSES	575	100

In **item 8**, the number of previous pregnancies ranged from 0 to 5 per respondent. More than a quarter (n=60; 29, 4%) of respondents had at least one previous pregnancy, with 53(26%) respondents having the current pregnancy as their first (Primigravida). The remaining 91(44, 6%) respondents had at least 2 to 5 previous pregnancies and the mean number of previous pregnancies that a pregnant woman had was 2, 44 and the maximum number of previous pregnancies that a respondent had was five. With regards to **item 9**, having access to ANC information before starting ANC services, out of 204 respondents more than half (n=156; 76, 5%) indicated that they had ANC information before they got pregnant meanwhile, 48 (23, 5%) respondents indicated that they had no ANC information before they got pregnant. Furthermore, in **item 10**, respondents who had access to ANC information before they started ANC services were asked about the source of information and 136 of 156 (87, 2 %) respondents indicated that they got the ANC information from friends and family. 12(7, 7%) respondents indicated that they got the information from radio meanwhile, 03(1, 92%) respondents indicated that they got it from television. Furthermore, 04(2, 6%) got ANC information from Community campaigns. Only 01(0, 6 %) showed that magazine and newspapers as the source of ANC information.

In **item 11**, respondents were asked at what stage did they start ANC with their previous pregnancies and the study found that 13 (6, 4 %) respondents had not booked for ANC meanwhile, 76 (37, 3%) respondents began ANC with their previous pregnancies late (between 3-9 months). However, the highest frequency was 69 (33, 8%) respondents who started ANC with their pregnancies early (between one to three months). Amongst those who were Primigravida in their last pregnancy (n=44; 21, 6%), 31 of them had started their ANC late (between three to nine months of pregnancy). With regards to **item 12**, more than half (n=157; 77%) of respondents demonstrated that the best time to start ANC is between one to three months whilst, 39 (19, 1 %) showed that the best time to attend ANC is between three to six months. Of the respondents, 8 (3, 9%) indicated that the best time to start ANC is between six to nine months.

Regarding **item 13**, respondents were asked about their most reasons for attending ANC services at Thulamahashe local area and the study found that to prevent complications as the reason to attend ANC was the most selected option (n=150 times, 71, 8%) meanwhile, 'to get tested for HIV' was the least selected option (n=2; 1%), respondents indicated 22 times (10, 5%) that the reason why ANC should be sought is to confirm pregnancy whilst 11(5, 3%) times it was indicated that 'to get vitamin tablets' was the reason for ANC. Only 24 (11, 5%) times respondents chose 'to get ANC card and to go to hospital for delivery' as the reason for attending ANC. A total of 209 times these options were chosen as demonstrated in the table 4.2 above. Furthermore, in **item 14**, the researcher asked about the contributory factors for starting ANC at the time of data collection. The respondents were asked to select more than one probable reason as shown in the Table 4.2 above. The most chosen reason for starting ANC at the time of data collection is that they were experiencing problems with the current pregnancy (n=146; 20, 9 %). Wanting to confirm pregnancy was chosen as the fourth highest reason for starting ANC by 132(18, 9%) pregnant women, while to check gestational age was indicated by 138(19, 7%) pregnant women. Furthermore, having HIV test (1, 7%), to get antenatal card (14, 7%), wanting to be referred to hospital for delivery (3, 7%) were some of the responses given by respondents as the reasons for coming to ANC at the time data was collected.

Regarding **item 15**, the researcher wanted to know respondents' perception with regards to the benefits of starting ANC services early in pregnancy and this is what they had responded: It was indicated in this study that 111(32, 6%) of pregnant women responded that the benefit of starting ANC in early pregnancy is so that they get knowledge care about pregnancy, meanwhile 102 (29, 9%) respondents indicated that early diagnose of pregnancy complications was a benefit, 100(29, 3%) choose prevention of pregnancy complications as a benefit for starting ANC in early pregnancy. additionally, getting tested for HIV 3, 7 % and

initiation of antiretroviral treatments (ARVs) 3, 5% were among the responses selected by respondents.

In **item 16**, the researcher also sought to identify the factors that contributed to late coming for ANC at Thulamahashe local area and the study findings indicated the highest number 199(27, 3%) respondents were demotivated to start ANC in early pregnancy because of the long waiting hours experienced at public health facilities followed by 192(26, 3%) of respondents indicating nurses' attitude as a contributing factor for late ANC initiation. Furthermore, lack of transport money is the third highest 132(18, 1%) selected contributory factor for ANC late coming. Lack of infrastructure, lack of privacy at the health facility, unplanned pregnancy, ignored signs of pregnancy were among the major contributory factors for late ANC coming.

In the last **item 17**, respondents were asked on what should be done to motivate pregnant women to attend ANC early in pregnancy and were given 8 options to choose and were allowed to choose more than one option as shown in **Table 4. 5**. The findings of the study showed that more than half (n=163; 28, 3%) of the responses were on improvement of waiting hours as a factor that would motivate pregnant women to attend ANC early in pregnancy. 150 (21, 6%) indicated that if nurses were to improve their attitude, pregnant women would be motivated to attend ANC early in pregnancy. In some 8-hour health facilities, respondents indicated that improving operating hours to 12 hours would motivate them to attend ANC. Furthermore, the study found that availability of information, education and communication (IEC) materials (n=24; 4.2 %); Health education to clinic attendees (n=93; 16, 2%); community campaigns and improvement of infrastructures were among the major factors that may motivate pregnant women to attend ANC in early pregnancy.

4.2.3 Delivery services

In this section, the researcher presents data regarding to delivery services utilisation at the Thulamahashe local area.

18. Place of delivery

The findings regarding place of delivery are presented in the Pie chart below.

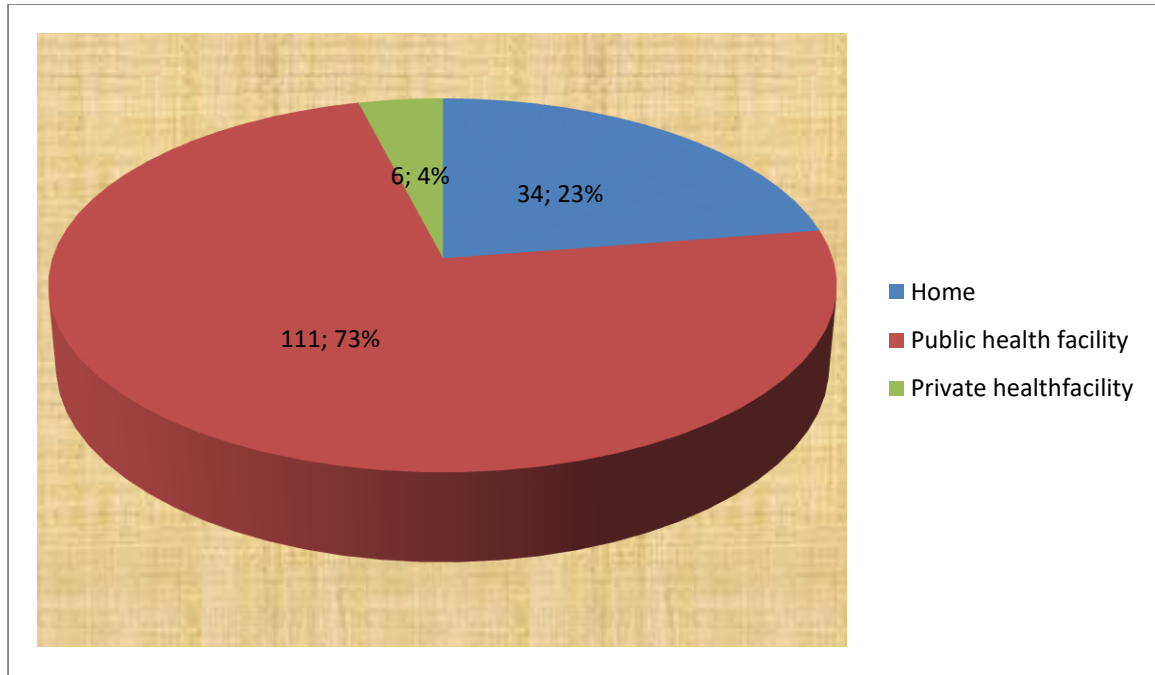


Figure 4.3: Pie chart indicating respondents' previous place of delivery

The findings of this study show that more than a quarter (n=34; 23%) of respondents delivered at Home whilst more than half (n=111; 73%) of respondents delivered at a public health facility. Furthermore, a smaller number (n=6; 4%) of patients indicated that they have delivered at a private health facility.

19. Reasons for not giving birth at public health facilities at the Thulamahashe local area

Table 4.3: Reasons for not giving birth at public health facilities at the Thulamahashe local area.

Characteristics	Frequency	Percentage %
<u>Reasons for not giving birth at public health facility</u>		
Long waiting time	7	3.4
No complications experienced with previous pregnancy	25	12, 2
Do not trust the facility	16	7, 8

Unavailability of quality services	15	7.3
Fear of being scolded by midwives	31	15.1
Lack of privacy	8	3.9
Husband did not allow	7	3.4
Family did not allow	22	10.7
Previous bad experience from health facility	13	6.3
Facility closed(off hours)	18	8.8
Little respect from midwives	40	19.5
Total responses	202	100

Women who gave birth at home were asked about the reasons that hindered them from delivering at a public health care facility. Forty respondents were allowed to give more than one probable reason. It was indicated in this study that 40(19.5%) respondents did not deliver at a public health care facility because of fear of being disrespected by midwives. The second reason mentioned for not delivering at a public health facility is because they did not experience any complications with the previous pregnancies. Thirty- one (15.1%) indicated that they did not deliver at a public health facility because of fear of being scolded by midwives. Family did not allow, lack of privacy, unavailability of quality services, husband did not allow no previous bad experience from the health facility, the facility closed (off hours), long waiting hours were among the major reasons for delivering outside the public health facilities (see Table 4.3).

20. Who attended the delivery at a public health facility?

Table 4.4: shows who attended respondents' last delivery at a public health facility

Characteristics	Number	Percentage
Midwife	96	86.5%
Physician	15	13.51%
Other specify:	0	0%
TOTAL	151	100%

In this study, the findings show that 111 respondents had at least one previous pregnancies delivered at a public health facility and 96 (86, 5%) of respondents indicated they were assisted by a midwife to give birth at public a health facility. In addition, a physician assisted 15 (13, 51%) respondents.

21. Time spent from home to the health facility

The bar graph below shows the time spent in minutes from respondents' homes to a health facility of Thulamahashe local area.

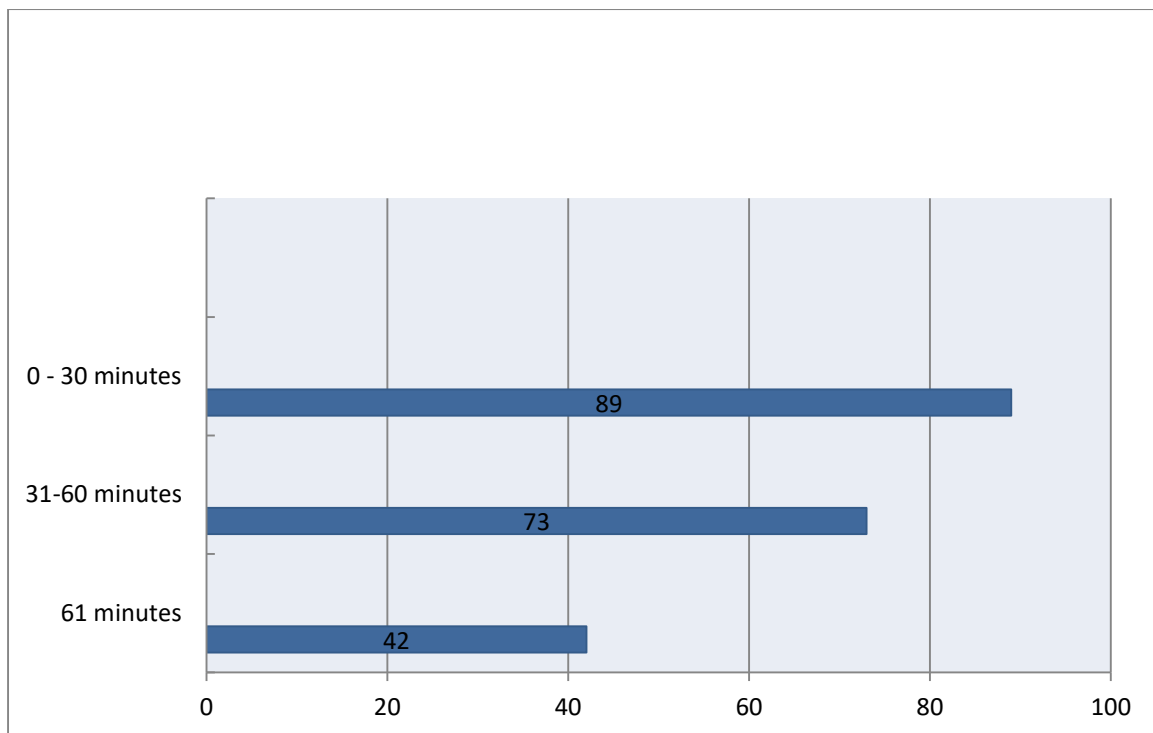


Figure 4.4: The bar graph shows time spent from respondents' homes to the health facility

Forty-three percent (n=89) of the respondents spend 30 minutes to reach the health facility from their home. Meanwhile, 73(35, 8%) respondents spent approximately an hour to reach the health facility for maternity care services. This study shows that the mode time is between 0-30 minutes, suggesting that many respondents are closer to the health facility. Only 42 (20, 6%) of the respondents spend more than 60 minutes to reach the facility as shown in the **Figure 4.4** above.

22. Amount paid to access maternity care services at a public healthcare facility

Table 4.5 below shows the amount paid by respondents in accessing maternity care services at Thulamahashe local area.

Table 4.5 The amount paid by respondents at public health care facilities

Characteristic	Frequency	Percentage
Amount		
R0-100	204	100 %
R100>	0	0%
TOTAL	204	100 %

This study found that all 204 (100%) respondents paid nothing to access maternity care services at public health facilities as shown in Table 4.5 above. This is because maternity care services in South Africa are free of charge in public health care facilities.

23. Client's satisfaction survey

Client's satisfaction survey was conducted amongst pregnant women at Thulamahashe local area and the results are shown in **Table 4.6** below.

Table 4.6 Proportion of pregnant women who indicated their satisfaction with regard to the maternity care services they received at the Thulamahashe local area

Clients satisfaction survey with regards to maternity care received	Frequency	Percentage %
YES	142	69, 6
NO	62	30, 4
Total	204	100

Respondents who had either ANC or delivery care visits were asked whether they had been satisfied with the maternity care services received. Out of 204 pregnant women who responded to this question, 142(69, 6%) respondents were satisfied with the maternity care

services they received at the public health care facilities. Meanwhile, 62(30, 4%) were not satisfied with the maternity care services they received.

4.3 Association between Demographics variable and ANC services using chi -squared test for association.

Table 4.7, Table 4.8, and Table 4.9 present associations between the demographic Profile of respondents with ANC and delivery services use in the Thulamahashe local area.

Table 4.7: Association between demographic variables and best Time for ANC

Variable 1	Variable 2	χ^2	p-value
Age group	Best time for ANC	3.3567	0.500
Marital status	Best time for ANC	13.6357	0.092
Education level	Best time for ANC	4.0145	0.675
Distance from your home to the health facility	Best time for ANC	9.1641	0.165
Occupation	Best time for ANC	3.8292	0.700
Religion	Best time for ANC	10.1284	0.256
Ethnicity	Best time for ANC	2.8186	0.244

Table 4.7 shows associations between demographic variables and best time for ANC. The chi-squared p-values show no associations between demographics and best time for ANC as all the p-values are >0.05 .

The following Tables 4.8 and 4.9

Table 4.8: Association between demographic variables and why did you come late for antenatal care (ANC)

Variable 1	Variable 2	χ^2	p-value
Age group	Why did you come late to ANC	23.0019	0.114
Marital status	Why did you come late to ANC	19.5077	0.959

Table 4.8 continues...

Variable 1	Variable 2	χ^2	p-value
Educational level	Why did you come late for ANC	13.6613	0.010
Distance from your home to the health facility	Why did you come late	9.1641	0.044
Occupation	Why did you come late for ANC?	34.4570	0.077
Religion	Why did you come late for ANC?	41.0087	0.132
Ethnicity	Why did you come late for ANC?	2.8186	0.321
Access to antenatal care information	Why did you come late for ANC?	8.999	0.045

In Table 4.8 above, we found association between education and late ANC initiation (p-value = 0.010). We also found an association between distance from respondent's home to the health facility and late ANC initiation (p-value=0.044).

Table 4.9: Association between demographic variables and place of delivery

Variable 1	Variable 2	χ^2	p-value
Age group	Where did you deliver?	45.9546	0.000
Marital status	Where did you deliver?	32.2989	0.040
Education level	Where did you deliver?	28.7945	0.017
Distance from your home to the health facility	Where did you deliver?	21.3806	0.125
Occupation	Where did you deliver?	48.3898	0.000

Table 4.9 continues...

Variable 1	Variable 2	χ^2	p-value
Religion	Why did you come late for ANC?	41.0087	0.132
Ethnicity	Why did you come late for ANC?	2.8186	0.321
Access to antenatal care information	Why did you come late for ANC?	8.999	0.045

In Table 4.9 above we found association between age, marital status, education level, occupation and where a woman delivered ($p\text{-value} < 0.05$)

4.4 CONCLUSION

This chapter provided the analysis and presentation of the data of factors contributing to poor utilisation of maternity care services at Thulamahashe local region. The presentation included an introduction, followed by descriptive and inferential statistical analysis. Tables and figures were used for the descriptive statistics. Chi-square was applied to draw conclusions regarding the strength of the association between the dependent and independent variables. The next chapter discusses the results of the study and literature control.

CHAPTER FIVE

DISCUSSION OF THE RESULTS AND LITERATURE CONTROL

5.1 Introduction

The previous chapter (chapter four) dealt with the analysis and presentation of research findings. The presentation included an introduction, followed by descriptive and inferential statistical analysis. In this chapter, the researcher discusses the findings of the study in relation to factors that contribute to poor utilisation of maternity care services at Thulamahashe local area. The discussion is based on the demographic characteristics, ANC service utilisation and delivery service factors.

5.2 Association between socio demographic factors and delivery at public healthcare facilities.

In this study, less than a quarter of respondents delivered at Home whilst more than half of respondents delivered at a public health facility. In addition, a smaller number of respondents indicated that they have delivered a private health facility. Furthermore, chi-square analysis shows that factors such as age, marital status, educational level, occupation, and delivery had statistical significance as the p- value was <0.05 .

- a) Age, in this study the age of pregnant women ranged between 18-45 years. The study results indicated a correlation between the age of the pregnant women and the choice of place for delivery wherein, the study found that younger pregnant women of less than 25 years old preferred to give birth at home compared to older pregnant women of more than 25 years old who preferred to give birth at a public healthcare facility. Therefore, age was a significant contributory factor to poor utilization of maternity care services at Thulamahashe local area. The same is true in several studies which show that there is a relationship between the age of pregnant women and the place for delivery. For example, Xu, Yao-Ping Peng, Ahuru, Muhamad, Osabohien, and Aziz (2022) revealed that 69% of young Nigerian pregnant women choose to give birth home and some of these pregnant women pass away as a result of untreated related issues. Moreover, Rodrigo-Gallardo, Chuquineyra, Fernandez- Guzman, Urrunaga-pastor, Alejandro-salinas, Vasquez-Chavesta , and Toro-Huamanchumo (2023) revealed that the odds of giving birth in a public healthcare facility were 1.7 times higher for women aged 20–24 and 3.5 times higher for women aged 25 and older than for those aged 15–19. This might be because older pregnant women were more aware of the associated risks for home delivery compared to younger women.

b) Marital status

According to the findings of this study, married pregnant women were significantly less likely than single pregnant women to give birth in a public healthcare facility. This might be because the decision about where to give birth could be influenced by marital status, most likely by its impact on the autonomy and status of pregnant women or through financial means. Compared to married women, single or divorced women may have less money but more freedom. Similar findings have been observed in a qualitative study in a rural Ghanaian district which showed that married pregnant women prefer giving birth at home over public healthcare facilities largely due to weak women's autonomy in healthcare decision –making, the unfriendly attitude of health workers and myths about the consequences of facility-based delivery (Alatinga, Affa & Abiir, 2021). This could be because married women must ask their husbands or mothers-in-law for permission to seek care, and most of them lack the authority to control resources. In contrast, young single mothers may receive care from their birth family, which may encourage attendance by midwives, particularly for a first birth.

c) Pregnant women's occupation

The findings of this study show that there is a strong association between the occupation of pregnant women and the choice of place of delivery. The study showed a significant factor because employed pregnant women preferred to deliver at private healthcare facilities compared to unemployed pregnant women. Similarly, according to the study conducted in Uganda on factors associated with facility delivery among mothers living in hospital catchment areas in Rukungiri and Kanungu districts have likewise shown correlation between the choice of delivery location and economic status of pregnant women (Mugambe, Yakubu, Wafula & Kasasa, 2021). According to some researches, women in formal employment and with greater incomes are more likely to use delivery services in private healthcare facilities (Mlotshwa & Sibiya, 2023; Doherty, Solanki Daviaudi, Bartmaan, Hawckridge & Fawcus, 2023). This might be because pregnant women who are employed or have stable businesses could be able to save money and choose to use it for private health care facility delivery.

d) Educational level

In this study, the level of education had a strong association with the choice of place of delivery. The study found that majority pregnant women with secondary and tertiary education preferred to deliver at a health public healthcare facility compared 24, 4% of pregnant women with primary or no education. The findings were consistent with other studies done in different areas for instance, a study done by Shikuku (2023) in Nairobi Kenya showed that pregnant

women with primary and higher education were more likely to deliver in health care facilities compared to pregnant women with no education, Also Gashaye, Kibret, Bazezew and Mengist (2021) found that pregnant women with higher education in rural eastern Ethiopia tend to deliver in public health facilities compared with those with primary or no formal education

5. 3 Demographic factors and antenatal care attendance

In this study, the majority of pregnant women with secondary education indicated optimal utilization of ANC services. Thus, educational level and ANC utilization, had a significant statistical relationship. Similar findings have been observed from the South African Demographic and Health Survey (2016) and in Zimbabwe and Ghana where pregnant women with greater level of education use ANC optimally than those with no education (Owusu, 2021; Raru, Ayana, Zakaria & Merga, 2022). Furthermore, in Uganda a study revealed that 71% of pregnant women with higher education were utilising ANC services optimally than those with little or no education (Atuhaire & Mugisha, 2020). This suggests that levels of education remain a factor in maternity care service utilisation. This might be because pregnant women with higher levels of education are thought to be more conscious of illnesses, more knowledgeable about the resources that are available, and better able to use this knowledge to preserve or improve their overall well-being.

In this study, distance was measured in terms of mode of transport used to attend the public healthcare facilities of Thulamahashe local area and the findings of this study indicate that more than half of pregnant women had to use transport to reach public health facility for maternity care services. In a study conducted in the Eastern region of Ghana, it was observed that there was a significant 6.7% decrease in the prevalence rate of women attending ANC at public healthcare facilities for every kilometre of distance (Gborgbotsi, Dwomoh, Alegana, Hill, Tatem & Wright, 2020). In addition, a study conducted in South Africa on 'Factors affecting antenatal care attendance in Soweto, Johannesburg: the three-delay model' found that the delay in attending ANC services was associated with lack of transportation (Myburgh, Qwabi, Shivambo, Ntsie, Sokani, Maixenchs, Choge, Mahtab, Dangor & Madhi, 2024). This might be because many majority of pregnant women around Thulamahashe local area are unemployed and therefore could not have enough funds to attend ANC services regularly. However, according to a study by Adewuyi, Auta, Adewuyi, Philip, Olutuase, Zhao & Khanal (2024), distance was not cited as a major contributory factor to inadequate utilisation of ANC services. This might be because the study was conducted in an urban area with proper transport services and road infrastructure compared to rural areas. In this study, using a chi-square

method, the researcher found that there was an association between distance and ANC service utilisation. Therefore, ANC service utilisation decreased with increased distance from respondents' homes to the health facility. This suggests that distance continues to be a contributory factor to inadequate utilisation of public health facilities for maternity care services at Thulamahashe local area.

5.4 Barriers to antenatal care and delivery services at public healthcare facilities at Thulamahashe local area.

In this study, major contributory factors for poor utilisation of maternity care services with regards to ANC were: lack of transportation to the public healthcare facility, long travel time, negative attitude from midwives, husband did not allow, little respect from midwives, long waiting time, no complications experienced with the previous pregnancy, unavailability of quality services and fear of being scolded by midwives. Similarly, these findings coincided with available literatures, for a study by Myburgh et al. (2024) revealed that nurses' attitude, lack of transport money and long waiting time at the public healthcare facilities brought about frustrations among pregnant women which in turn made them to present late for ANC thus contributing inadequately the utilisation of public healthcare facilities for maternity care services. In contrast to the study findings, in a study conducted by Uldbjerg, Schramm, Kaduchu, Ovuga and Sodemann (2020) revealed that poor quality care, institutional structures and procedures at the health centres in terms of compulsory HIV testing and material requirements ranked high as the major factors that contributed to poor utilisation ANC services in Northern Ghana. On the other hand, previous studies revealed that pregnant women with wealthy husbands or partners prefer to use private facilities for ANC services over public healthcare facilities (Sarraz, Tariq, Hamid & Iqbal 2020; Wirtu, Yeshanew & Geda (2023). This contrast in findings might be because the studies were conducted in different geographical areas. According to WHO (2020) every pregnant woman should start their first ANC visit between 8- 12 weeks of gestation, which is equivalent to one to three months. However, in this study, majority of respondents though demonstrated a better understanding of the best time to start ANC, which is between one to three months, less than half of them still presented late for ANC in Thulamahashe local area. This inconsistency in knowledge and action might be attributed to the above contributory factors for poor maternity care service utilisation in public health facilities. The study findings suggest that underutilisation of public health facilities for maternity care service is still a concern at Thulamahashe local area.

With regards to barriers to delivery services, in this study, the findings show that more than half of respondents at least had one previous pregnancy delivered at a public health care

facility and more than three quarters of respondents indicated they were assisted by a midwife when giving birth at public health facility. In addition, a physician assisted less than a quarter of respondents. However, in contrast to research done in Ethiopia, where 59.1 % of deliveries were done at home, the number of home deliveries in this study was less than a quarter, which is not particularly high (Teressa, Legesse, Nigussie, Deriba, Guye, A.H., Girma, Dejene, Adugna, Birhanu, Eshetu, Tadele & Mideksa, 2024). Moreover, pregnant women who had previously delivered at home or chose to deliver at a private healthcare facility, were asked about the reasons for not delivering at a public healthcare facility and the study revealed that no complications experienced with previous pregnancy, little respect from midwives, fear of being scolded by midwives and previous bad experience from health facility were the most cited barriers to delivery services. Most of the findings of this study were similar to available literature (Zitha & Mokgatle, 2020; Amungulu, Nghitanwa & Mbapaha, 2023). However, according to some previous studies, cultural views on maternity care services and diseases may discourage pregnant women from using modern maternity care services (Akokuwebe & Idemudia, 2023). Furthermore, ignoring social and cultural aspects while making decisions about health care could also account for inadequate use of maternity care services, this implies that a lot still need to be done in order to reach optimal utilisation of public healthcare facilities for maternity care services and to maintain or decrease the national rate of home deliveries of 4% (Akokuwebe & Idemudia, 2023).

5.5 Antenatal care services utilisation and exposure to antenatal care information

Several studies have shown that exposure to ANC services information is known to influence the utilisation of maternity care services possibly because of its ability to quickly and cheaply disseminate maternity care related and context specific information to a large audience (Sserwanja, 2022; Seidu, Ameyaw & Ahinkorah, 2022). In this study, more than half of respondents indicated that they initiated the ANC visit because they had access to ANC information from family members or friends, a magazine, or newspaper, radio, and television. However, nearly a quarter of respondents who had no access to ANC information were associated to late ANC coming compared to those who had access to it. This implies lack of access to ANC information negatively affected the utilisation of maternity care services at the Thulamahashe local area. Similarly, a study done in Indonesia on improving the information availability and accessibility of antenatal measurements to ensure safe delivery: A research-based policy recommendation to reduce neonatal mortality in Indonesia' found that access to antenatal care information among pregnant women would increase the utilisation of maternity care services in public healthcare facilities which would in turn prevent pregnancy-related

complications such anaemia, hypertension in pregnancy and even preventing maternal and neonatal mortalities (Anggrain, Abdollahain, Marion, Meilani & Annisa, 2023). Therefore, it can be said that lack of ANC information is related to poor utilisation of maternity care services (Amungulu, Nghitanwa & Mbapaha, 2023). Moreover, for improved utilisation of maternity care services at public healthcare facilities of Thulamahashe local area, women should be educated on the advantages of attending ANC in early pregnancy as well as making ANC information accessible in all platforms.

5.6 Time spent to reach to the health facility

In this study, more than three quarters of respondents indicated that it took them not more than an hour to reach to the health facility, meanwhile only nearly a quarter of respondents stated that it took them more than an hour to reach to the public health care facility. Previous research findings from Thulamahashe local area showed that majority of pregnant women took an hour to reach the public healthcare facility, meanwhile, less than a quarter of respondents took more than an hour. Furthermore, the study indicated that an increase in time spent to reach public facilities could result in inadequate utilization of maternity care services (Mukhari, 2016). Therefore, the research findings are consistent to each other. This might be because both studies were conducted in the same study area and involving same communities. Therefore, time to reach to the health facility could have contributed to the poor utilization of public health facilities in this area. These findings are similar to studies conducted in Addis Ababa, Ethiopia and in South Australia which revealed that the length of time spent travelling to public health facilities significantly impacted the use of maternity care services wherein, pregnant women that spent less than hour to reach public health facilities were 2.1 times more likely to use maternity care services than those that spent more than an hour (Temesgen & Netangaheni, 2024; Leach, Gunn & Muyambi, 2022).

5.7 Pregnant women's satisfaction with the services

Pregnant women who had come for ANC services at Thulamahashe local area were asked whether they were satisfied with maternity care services they had received. In this study, more than half of respondents indicated that they were satisfied with the care they received and less than half of respondents indicated dissatisfaction with maternity care services received. A similar study conducted at Bertha Gxowa district hospital, South Africa showed that 73% of the pregnant women were satisfied with the maternity care services they received from the health care professionals (Khumalo & Rwakaikara, 2020). The proximity

of the public healthcare facilities to the pregnant women seeking maternity care services was assumed to be the cause of this higher level of satisfaction. Compared to the findings in the available literature, this study's findings are significantly lower. Pregnant women at Thulamahashe local area highlighted long waiting times, nurses' attitude, distance, lack of transport money as key obstacles to using maternity care services, which could underestimate the overall satisfaction.

5.8 Conclusion

In this chapter, the researcher discussed the findings of the study. The aim of the study was to identify and describe factors contributing to poor utilization of public health facilities for maternity care services at Thulamahashe local area. Furthermore, the study findings show that at this area, underutilization of maternity care services is still a concern. Some of the reasons presented by respondents as barriers to ANC and delivery services were nurses' attitude, distance to the health facility, fear of being scolded by midwives and long waiting hours. The study also revealed that through chi-square analysis, a strong association between demographic profile with ANC and delivery services was found. Therefore, maternity care services utilization in public healthcare facilities need to continuously sensitize the community so that the number of pregnant women delivered in health facilities and the number of pregnant women who initiate ANC early may increase to attain the National target. The next chapter discusses the study limitation and recommendations.

CHAPTER SIX

SUMMARY, LIMITATION, RECOMMENDATIONS AND CONCLUSION

6.1 Introduction

The previous chapter dealt with data discussion in relation to the available literature and the association between demographic details with ANC and delivery services utilization. Chapter six presents summary of the study, limitations of the study, recommendation of the study, methodology of the study, future research and conclusion based on the study objectives.

6.2 Summary of the study

The study was on factors that contribute to poor utilization of public health care facilities for maternity care services at Thulamahashe local area, Bushbuckridge-subdistrict, Mpumalanga province.

The objectives of the study were:

- To identify factors that led to poor utilization of public health facilities for maternity care services at Thulamahashe local region.
- To describe factors contributing to inadequate utilization of public health facilities for maternity care services.

6.2.1 Methodology

For this study, the researcher used the quantitative approach and the cross-sectional descriptive design as a research methodology to identify and describe factors contributing to poor utilization of the six available primary healthcare facilities for maternity care services at Thulamahashe local area. The researcher used probability sampling to sample all the six primary healthcare facilities and 204 respondents. Thulamahashe local area is made up of one 24-hr Community Health Centre and five eight-hour clinics. The questionnaire was administered to collect data. The questionnaire was in English for academic purpose. A pre - test was conducted on 22 respondents at Thulamahashe Community Health Centre and the results were not part of the main investigation. To ensure the validity of the instrument, content and construct validity were used. The researcher used Excel and the statistics program SPSS version 30.0 to analyse data and to get frequency and percentages presented in distribution tables and graphs. The researcher adhered to all the ethical considerations, including permission, informed consent, confidentiality, and anonymity.

6.2.2 Results

The study fulfilled two objectives which were to identify and describe factors that lead to poor utilization of public health care facilities in Mpumalanga province.

From the results presented in chapter four and discussed in chapter five, the study revealed that the frequency of late ANC coming was at least high for one selected factor regarding ANC late coming as compared to other research findings (El Drigo, 2020). The findings also showed that perceived change in nurses' attitude and improved waiting hours would motivate pregnant women to utilize maternity care services at public health facilities.

In this research, the core barriers for ANC services utilization listed by respondents were that they were waiting for too long in the health care facility, lack of transport money, signs of pregnancy were ignored, lack of privacy, distance to the health facility from their home, the fact that the pregnancy was not planned and lack of infrastructure. The pregnant women indicated that the fear of being scolded by midwives, family and their husbands' influence, no complications experienced with the last pregnancy, little respect from midwives, lack of privacy, were the reasons that hampered them from delivering at a public healthcare facility. The study findings from Chi- square also demonstrated association between educational level and distance from respondents' home to the health facility with pregnant women's reasons to come late for ANC, wherein pregnant women with secondary education were more likely to start ANC services between One to Three months as compared to those with little or no education. Furthermore, the findings demonstrated that factors such as owning a business were associated with the choice of place of delivery (choosing private health facilities over public health facilities).

Another independent variable that showed statistical significance with the choice of place for delivery is unemployment. Unemployed pregnant women were more likely (70%) to deliver at home than deliver at a public health facility. Furthermore, marital status was closely related to the choice of place of delivery whereby single pregnant women were more likely (51, 4%) to deliver at a public health facility compared to married women (22%).

Respondents were asked whether they were satisfied with the maternity care services they received. The study findings demonstrated that 69, 6 % of the respondents were satisfied with level of maternity care they received whilst 30, 4 % were not satisfied.

6.3 Study limitations

The limitation of this study is that the study was conducted in 06 primary health care facilities of Thulamahashe local area at Bushbuckridge local municipality of Ehlanzeni district, Mpumalanga Province. Hence the findings cannot be generalized to the whole Ehlanzeni district. Although the study is about the utilization of public health facilities for maternity care services, the study did not contain data about other issues related to maternity care service utilization such as for postnatal care services. Therefore, the study findings were limited to the use of public health facilities for maternity care services from ANC to birth and thus, overlooking postnatal care. Furthermore, not all respondents completed the questionnaires accurately and only predefined variables were studied.

6.4 Plan for dissemination and implementation

The study outcomes might be presented to the Mpumalanga Department of Health, Ehlanzeni District Department of Health, and the University of Venda Library as a publication and a DISC. The respondents will be informed about the study findings. Ultimately, the results might be published in peer-reviewed journals and presented at various conferences.

6.5 Recommendations

6.5.1. Pregnant women

- Pregnant women should always adhere to follow-up dates for ANC.
- Pregnant women should always initiate ANC as soon as they find out that they are pregnant.
- Pregnant women are encouraged to lodge any complaint concerning mistreatment or unsatisfactory maternity care services.

6.5.2 Midwives

- Antenatal booking should be done on daily basis and no client should be turned away without getting the service.
- Nurse's attitude should be addressed through trainings on interpersonal communication skills.

- Health workers should always maintain privacy when consulting clients.
- Health discussions and community awareness efforts about the significance of early bookings may influence pregnant women to make earlier reservations for their subsequent visit.
- Prevention of teenage pregnancy awareness campaign should be conducted at primary and high schools this would reduce the number of births before arrivals.
- Pregnant Women should be made aware to plan ahead before falling pregnant including how to get to health facility for ANC if they need transport.
- Pregnant women visiting public health care facilities should be prioritised, they should not wait long queues.

6.5.3 Department of Health

- The Department of Health should consider changing all public healthcare facilities into 24-hour facilities to accommodate to accommodate working women.
- The government should set up mobile clinics to offer ANC interventions in communities that are difficult to reach; this will lessen the burden of pregnant women's higher transportation expenses.
- To increase awareness of the value of early ANC and public healthcare facility delivery, other media should be used, such as radio, television, school curricula in subjects like Life Orientation, and IEC materials.
- Quarterly surveys of employee and client satisfaction should be conducted, and the findings should be examined to pinpoint areas in need of development.
- In order for men to help their pregnant wives and girlfriends, communities should set up men's forums to promote partner participation in ANC.
- Pregnancy testing has to be always available in public health care facilities to help alleviate uncertainties among pregnant women.

6.5.3 Recommendations for future research

- For comprehensive research of the perception of women regarding the utilization of maternity care services at public health facilities, qualitative research is recommended.

- This study should be repeated in various regions of the country with the participation of male spouses or partners of pregnant women, family members, and other members of the community.

6.6 Conclusion

Chapter 6 summarized and discussed the results of the study, including the limitations of the study and the aspects of recommendations for future research. The objective of the study was to identify and describe factors contributing to poor utilization of public health facilities for maternity care services at Thulamahashe local area. The conclusions drawn from this study supported assumptions that there are factors that contribute to poor utilization of maternity care services. Limitations noted were that there are few studies conducted on poor utilization of maternity care services at public health care facilities at Thulamahashe local area. Recommendations were made based on the results of the research to improve utilization of maternity care services.

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APPENDIX A: ETHICAL CLEARANCE CERTIFICATE

ETHICAL APPROVAL CERTIFICATE

RESEARCH AND INNOVATION
OFFICE OF THE DIRECTOR

NAME OF RESEARCHER/INVESTIGATOR:
Mr S Usinga

STUDENT NO:
17022802

PROJECT TITLE: **Factors contributing to poor utilization of public health facilities for maternity care services in Mpumalanga Province, South Africa.**

ETHICAL CLEARANCE NO: **FHS/24/PDC/07/1208**

SUPERVISORS/ CO-RESEARCHERS/ CO-INVESTIGATORS

NAME	INSTITUTION & DEPARTMENT	ROLE
Prof SA Mulondo	UNIVEN, ADVANCED NURSING SCIENCE	Supervisor
Ms V Chewa	UNIVEN, PUBLIC HEALTH	Co-Supervisor
Mr S Usinga	UNIVEN, PUBLIC HEALTH	Investigator – Student

Type: **Masters Research**

Risk: **Minimal risk to humans, animals, or environment (Category 2)**

Approval Period: **August 2024 – August 2025**

The Human and Clinical Trials Research Ethics Committee (HCTREC) hereby approves your project as indicated above.

General Conditions

While this ethics approval is subject to all declarations, undertakings and agreements incorporated and signed in the application form, please note the following:

- The project leader (principal investigator) must report to the prescribed format to the REC:
 - Annually (or as otherwise requested) on the progress of the project, and upon completion of the project.
 - Within 48hrs in case of any adverse event (or any matter that interrupts sound ethical principles) during the course of the project.
 - Annually a number of projects may be randomly selected for an external audit.
- The approval applies strictly to the protocol as stipulated in the application form. Would any changes to the protocol be deemed necessary during the course of the project, the project leader must apply for approval of these changes at the REC. Would there be deviation from the project protocol without the necessary approval of such changes, the ethics approval is immediately and automatically forfeited.
- The date of approval indicates the first date that the project may be started. Would the project have to continue after the expiry date, a new application must be made to the REC and new approval received before or on the expiry date.
- In the interest of ethical responsibility, the REC retains the right to:
 - Request access to any information or data at any time during the course or after completion of the project.
 - To ask further questions; Seek additional information; Require further modification or monitor the conduct of your research or the informed consent process.
 - Withdraw or postpone approval if:
 - Any unethical principles or practices of the project are revealed or suspected.
 - It becomes apparent that any relevant information was withheld from the REC or that information has been false or misrepresented.
 - The required annual report and reporting of adverse events was not done timely and accurately.
 - New institutional rules, national legislation or international conventions deem it necessary.

ISSUED BY:

UNIVERSITY OF VENDA, RESEARCH ETHICS COMMITTEE
Date Considered: August 2024

Name of the HCTREC Chairperson of the Committee: Prof NS Mashau

Signature: 





APPENDIX B: REQUEST FOR PERMISSION TO CONDUCT THE RESEARCH STUDY

PO BOX 533

Mpumalanga

Mkhuhlu 1246

0826

Ehlanzeni district

Department of health

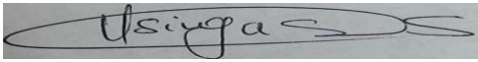
Private Bag X11285

REQUEST FOR PERMISSION TO CONDUCT THE RESEARCH STUDY

I, Usinga Sibusiso, student number: 17022802, a student at university of Venda, registered for Master degree in Nursing, hereby request for permission to conduct a research study at your institution on the Title: FACTORS CONTRIBUTING TO POOR UTILIZATION OF PUBLIC HEALTH FACILITIES FOR MATERNITY CARE SERVICES AT MPUMALANGA PROVINCE, SOUTH AFRICA.

The aim of the study is to identify as well as describe factors that contribute to poor utilization of public health facilities for maternity care services at Thulamahashe local area. The respondents in this study are all pregnant women who will be attending Basic Antenatal care during the time of data collection at the 06 primary healthcare facilities of Thulamahashe local area.

Your positive response will be highly appreciated.

Researcher's signature; _____  _____ the 31 October 2023

Contact details: 0761420753 E-mail address: usingaphilos93@gmail.com

Yours faithfully

Usinga S.

APPENDIX C: PERMISSION LETTER TO CONDUCT THE RESEARCH STUDY



Indwe Building, Government Boulevard, Riverside Park, Ext. 2, Mbombela, 1200, Mpumalanga Province
Private Bag X11285, Mbombela, 1200, Mpumalanga Province
Tel I: +27 (13) 766 3429, Fax: +27 (13) 766 3458

Litiko Letemphilo

Departement van Gesondheid

UmNyango WezeMaphilo

Enq: 013 766 3766
Ref: MP_202409_005

Research Permission Letter

**MR S USINGA
PRINCIPAL INVESTIGATOR
MKHUHLU, 1246**

Dear Mr Usinga

STUDY TITLE: FACTORS CONTRIBUTING TO POOR UTILIZATION OF PUBLIC HEALTH FACILITIES FOR MATERNITY CARE SERVICES AT MPUMALANGA PROVINCE, SOUTH AFRICA

The Mpumalanga Provincial Health Research and Ethics Committee (MPHREC) has accepted your research proposal in the latest format you sent, and hereby grant you permission to conduct your research as detailed below.

- Permission Reference Number: **MP_202409_005**
- Data Collection Period: **30/09/2024 - 30/09/2025**
- Permitted Data Collection Facilities:

ARTHURSTONE CLINIC, DINGLEDAL CLINIC,
EDINBURG CLINIC, ROLLE CLINIC, THULAMAHASHE
CHC & XANTHIA CLINIC

Kindly ensure that conditions mentioned below are adhered to, and that the study is conducted with minimal disruption and impact on our staff and ensure that you provide us with a soft or hard copy of the report once your research project has been completed.

Conditions:

- Researchers are not allowed to make copies, take pictures of medical records, or administer medicine to patients at the facility.
- Kindly notify the facility manager **a week BEFORE** you start with data collection to ensure that conditions are conducive in the facility.
- The FINAL RESEARCH FINDINGS must be uploaded on the NHRD website.

Kind regards


DR C NELSON
MPHREC CHAIRPERSON
DATE: 09/09/2024



APPENDIX D: INFORMATION LETTER

RESEARCH ETHICS COMMITTEE

UNIVEN Informed Consent

Title of the Research study: Factors contributing to poor utilization of public health facilities for maternity care services in Mpumalanga Province, South Africa.

Principal supervisor : Prof Seani Adrinah Mulondo (PhD)

Co-supervisor : Ms Chewe VM

Brief Introduction and Purpose of the Study: The researcher conducted this study for the requirement of completion of the master's degree in nursing. The researcher was interested in identifying and describing factors that contribute to poor utilization of public health facilities for maternity care services in Thulamahashe Local Area of Mpumalanga Province, South Africa. The study was conducted within the 06 primary health care facilities found in the local area namely Thulamahashe community health centre, Rolle clinic, Edinburgh, and Xanthia clinic, Arthurstone clinic and Denglidale clinic.

Outline of the Procedures: This study was about the factors contributing to poor utilization of public health facilities for maternity care services in Thulamahashe local area, in Bushbuckridge local municipality, Mpumalanga province. Therefore, willing respondents were recruited from the four primary health care facilities of Thulamahashe local area and given questionnaires to complete. One primary health care facility was conducted per day and each questionnaire could take about 30 to 40 minutes to be completed. The questionnaire was given to all interested pregnant women.

Risks or Discomforts to the Participant: In this study, there were no risks or discomforts to respondents because this study did not require any medication to be provided to respondents.

Therefore, the description of foreseeable risks or discomforts to for respondents is not applicable.

Benefits: There was no financial benefit to those who participated in this study.

Reason/s why the Participant May Be Withdrawn from the Study: In this study confidentiality and privacy were used to protect the name of respondents. Respondents were encouraged to withdraw if they felt uncomfortable to participate in this study.

Remuneration : There was no remuneration made in this study. Respondents were volunteering.

Costs of the Study : All the costs of this study were under the responsibility of the researcher.

Confidentiality : They were no publication of the names of the respondents and confidentiality was maintained. All respondents were anonymous and there was no respondents' name that appeared in the questionnaires.

Research-related Injury: There was no foreseeable research-related injury in this study.

Persons to Contact in the Event of Any Problems or Queries

(Supervisor and details) **Please contact the researcher, Usinga Sibusiso**(Tel no. ____0761420753____ email to: usingaphilos93@gmail.com____), **My supervisor, Professor Seani Adrinah Mulondo** (Tel no +27 824465625. or email to: Seani.Mulondo@univen.ac.za or the University Research Ethics Committee Secretariat on 015 962 905 8. Complaints can be reported to the Director: Research and Innovation, Prof GE Ekosse on 015 962 8313 or Georges.Ivo.Ekosse@univen.ac.za General:

Respondents were assured that participation was voluntary and the approximate number of respondents that was included was disclosed. A copy of the information letter was issued to respondents. The information letter and consent form were translated and provided in the primary spoken language of the research population.

CONSENT LETTER

Statement of Agreement to Participate in the Research Study:

I hereby confirm that I have been informed by the researcher, Usinga Sibusiso, about the nature, conduct, benefits, and risks of this study.

Ethical clearance number: FHS/24/PDC/07/1208

I have also received, read, and understood the above written information (*Participant Letter of Information*) regarding the study.

I am aware that the results of the study, including personal details regarding my sex, age, date of birth, initials and diagnosis will be anonymously processed into a study report.

In view of the requirements of research, I agree that the data collected during this study can be processed in a computerized system by the researcher.

I may, at any stage, without prejudice, withdraw my consent and participation in the study.

I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.

I understand that significant new findings developed during this research which may relate to my participation will be made available to me.

Full Name of Participant	Date	Time	Signature
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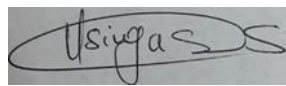
_____	_____	_____	_____
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I, Usinga Sibusiso herewith confirm that the above participant has been fully informed about the nature, conduct and risks of the above study.

Full Name of Researcher

Sibusiso Usinga	Date: 9/10/2023
------------------------	------------------------

Signature:



APPENDIX E: CONSENT FORM (XITSONGA)

Vito ra dyondzo: **“Swilo leswi hoxaka xandla eka ku tirhisiwa loku nga riki kahle ka switirhisiwa swa rihanyo ra vaaki eka vukorhokeri bya nhlayiso wa ku veleka Xifundzankulu xa Mpumalanga, Afrika-Dzonga.”**

Mulawuri-nkulu : Prof Seani Adrinah Mulondo (PhD)

Mulanguteri-kulobye: Ms Chewe VM

Xingheniso Xo Koma Ni Xikongomelo Xa Dyondzo: Mulavisisi u endlile ndzavisiso lowu eka xilaveko xo hetisa digiri ya master eka vuongori. Mulavisisi a a tsakela ku kuma na ku hlamusela swilo leswi hoxaka xandla eka ku tirhisiwa loku nga riki kahle ka switirhisiwa swa rihanyo ra vaaki eka vukorhokeri bya nhlayiso wa ku veleka eka ndhawu ya ndhawu ya Thulamahashe ya Xifundzha xa Mpumalanga, Afrika-Dzonga. Dyondzo leyi yi endlile endzeni ka switirhisiwa swa nhlayiso wa rihanyo ra le henhla swa 06 leswi kumekaka eka ndhawu ya ndhawu ku nga Thulamahashe Community Health Centre, Clinic ya Rolle, Edinburgh, na Tlilini ya Xanthia, Tlilini ya Arthursstone na Tlilini ya Denglidale.

Nkatsakanyo wa maendlelo: Ndzavisiso lowu a wu ri mayelana na swivangelo leswi hoxaka xandla eka matirhiselo yo biha ya switirhisiwa swa rihanyo swa mfumo eka vukorhokeri bya vutswediyani endhawini ya Thulamahashe, eka masipala wa Bushbuckridge, exifundzheni xa Mpumalanga. Hikwalaho ka sweswo, vanhu lava tsakelaka ku hlamula va hlawuriwile eka tindhawu ta mune ta nkathalelo wa rihanyo ta le Thulamahashe kutani va nyikiwa maphepha ya swivutiso leswaku va ma tata. A ku kamberiwa eka ndhawu yin'we ya vutshunguri siku ni siku naswona a swi teka kwalomu ka 30 ku ya eka 40 wa timinete ku kambela munhu ha un'we. Vavasati hinkwavo lava tikeke lava a va swi tsakela va nyikiwe phepha ra swivutiso.

Makhombo kumbe ku nga tsaki eka mutekaxiave: Eka ndzavisiso lowu, a ku ri hava makhombo kumbe ku nga tsaki eka vahlamuri hikuva ndzavisiso lowu a wu lava leswaku murhi wihi na wihi wu nyikiwa vahlamuri. Hikwalaho, nhlamuselo ya makhombo lama vonakaka kumbe ku nga tsaki eka eka vahlamuri a yi tirhi.

Mimbuyelo: A ku ri hava vuyelo bya timali eka lava hlanganyeleke eka nkambisiso lowu.

Xivangelo/swa swivangelo leswi nga ha endlaka leswaku munhu a nga ha hlanganyeli eka nkambisiso lowu: Eka nkambisiso lowu, ku sirheleriwa ka xihundla ni vuxokoxoko bya munhu swi tirhisiwile leswaku ku sirheleriwa vito ra lava va hlanganyelaka. Lava va hlamuleke va khutaziwe ku tshika loko va titwa va nga ntshunxekanga ku hlanganyela eka dyondzo leyi.

Hakelo: Ku hava hakelo leyi endliweke eka dyondzo leyi. Lava Hlamuriweke A Va Tirha Hi Ku Tirhandzela

Timali ta Dyondzo: Timali hinkwato ta dyondzo leyi a ti ri ehansi ka vutihlamuleri bya muendli wa ndzavisiso.

Xihundla: A ku humesiwanga mavito ya lava hlamuleke naswona xihundla xi hlayisiwile. Lava hlamuleke hinkwavo a va nga tiviwi naswona a ku na vito ra lava hlamuleke leri a ri humelela eka maphepha ya swivutiso.

Ku vaviseka loku vangiweke hi ndzavisiso: A ku vanga na ku vaviseka loku vangiweke hi ndzavisiso eka dyondzo leyi. Vanhu lava u nga tihlanganisaka na vona loko u ri na swiphiso kumbe swivutiso(Mulanguteri na vuxokoxoko).

Hi kombela u tihlanganisa na mulavisisi, Usinga Sibusiso(cell number: 0761420753).
Email: usingaphilos93@gmail.com

Mulawuri-nkulu : Prof Seani Adrinah Mulondo (PhD) (Tel no +27 824465625. or email eka:Seani.Mulondo@univen.ac.za or the University Research Ethics Committee Secretariat on 015 962 905 8. Swivilelo swi nga vikiwa eka Mulawuri: Vulavisisi na Vumaki. Prof GE Ekosse on 015 962 8313 kumbe Georges Ivo.Ekosse@univen.ac.za General: Lava hlamuleke va tiyisekisiwile leswaku ku hlanganyela a ku ri ka ku tirhandzela naswona nhlayo leyi ringanyetiweke ya lava hlamuleke leyi katsiweke yi paluxiwile. Tikopi ta papila ra mahungu ti nyikiwe lava hlamuleke. Papila ro tivisa na fomo ya mpfumelelo swi hundzuluxeriwile na ku nyikiwa hi ririmi leri vulavuriwaka ngopfu hi vaaki va ndzavisiso.

PAPILA RO KOMBELA MPFUMELELO

Xitatimende xa ntwanano xo nghenelela eka dyondzo ya ndzavisiso:

Ndzi tiyisisa leswaku ndzi tivisiwile hi mulavisisi, Usinga Sibusiso, hi ntumbuluko, maendlelo, mimpfuno na makhombo ya ndzavisiso lowu.

Nomboro ya ku basisiwa ka mahanyelo: FHS/24/PDC/07/1208

Ndzi tlhele ndzi amukela, ndzi hlaya, ndzi tlhela ndzi twisisa rungula leri tsariweke leri nga laha henhla (papila ra mahungu ra mutekaxiave) mayelana na ndzavisiso.

Ndza swi tiva leswaku vuyelo bya nkambisiso, ku katsa ni vuxokoxoko bya mina bya rimbewu, malembe, siku leri ndzi velekiweke ha rona, tinomboro ta mina to sungula ni vuvabyi lebyi ndzi khomiweke ha byona, swi ta hlanganisiwa swi nga tiviwi kutani ku tsariwa xiviko xa nkambisiso lowu.

Hi ku languta swilaveko swa ndzavisiso, ndza pfumela leswaku datha leyi hlengeletweke hi nkarhi wa ndzavisiso lowu yi nga tirhisiwa eka sisiteme ya khompyuta hi mulavisisi. Ndzi nga ha, eka xiyimo xin'wana na xin'wana, handle ka xihlawuhlawu, ndzi hoxa mpfumelelo wa mina na ku nghenelela eka nkambisiso.

Ndzi vile na nkarhi lowu eneleke wo vutisa swivutiso naswona (ya ntshunxeko wa mina wa ku tihlawulela) ndzi tivula ku tilulamisela ku nghenelela eka dyondzo.

Ndza swi twisisa leswaku swikumiwa leswintshwa swa nkoka leswi tumbuluxiweke hi nkarhi wa ndzavisiso lowu leswi nga fambelanaka na ku nghenelela ka mina swi ta endliwa swi kumeka eka mina.

Vito leri heleleke ra mutekaxiave

Siku

Nkarhi

Nsayino

Mina, Usinga Sibusiso ndzi tiyisa leswaku mutekaxiave loyi a nga laha henhla u tivisiwile hi ku hetiseka hi muxaka, maendlelo na tinghozi ta ndzavisiso lowu nga laha henhla

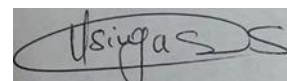
Full name of the researcher

Date

Signature

Usinga Sibusiso

15/09/2024



Xikombelo lexi xi ni swiyenge swimbirhi, xo sungula xi hlamusela hita dyondzo na swilaveko eka vavutisiwa. Xa vumbirhi I papilla ro kombela mpfumelelo eka muvutisiwa a seketeriwa hi muvutisi XIYENGE 1: PAPILA RA NHLAMUSELO Eka muyimani Hi mina Mkateko Maria Mkhari wa nomboro ya 33201765 ndzi dyondzela Master of Arts in Nursing na yunivhesiti ya Afrika Dzonga (UNISA). Xikongomelo xa papilla leri iku kombela mpfumelelo wo nghena na nwina eka dyondzo leyi hi ku mi vutisa swivutiso. Mahungu lawa minga ta ma hlamusela ya ta va xihundla. Mita boheka ku hlamula papilla ra swivutiso. Papila leri ari na byona vutitivisi

bya nwina, enkarhini wa dyondo leyi hi mina, mupfuni wa mina na UNISA Ethics committee hinga ta vona tinhlamulo ta nwina. Tinhlamulo ta nwina ti ta tirhisiwa ku antswisa vukorhokeri eka mintirho ya vayimana. Dyondzo leyi yi pfumeleriwe hi UNISA Ethical Committee Tivani leswi: Dyondzo leyi ayi kavanyeti vukorhokeri bya n'wina bya vuyimana -Mita komberiwa ku nghenelela eka dyondzo leyi hikuva mi tikile -Mi nghenelela hiku swi tsakela, loko mi nga ha swi tsakeli ma pfumeleriwa ku tshika -Mbuyelo wa kon wuta tirhisiwa hi ndlela ya sayense abyi nga humelerisiwi Mi ta sayina papilla ra mpfumelelo ntsena loko mi kumile nhlamuselo leyi enetisaka Loko u ri na swivutiso mayelana na dyondzo leyi unga lavisisa, Vuxokoxoko bya mina hi lebyi: Mrs Mkateko M. Mkhari Nomboro ya selula foni 0723087666 yale kaya 013-773-9907 XIYENGE 2: MPFUMELELO WO SAYINIWA HI MUVUTISIWA Mina ndzi hlayile swilaveko hinkwaswo swa dyondzo leyi na swona ndzi nyikiwile nkarhi wo vutisa swivutiso na nkarhi wo ti hleketa hi mhaka leyi. Xikongomelo xa kona xa twisiseka eka mina. Andzi tlimbeletiwanga ku nghenelela eka dyondzo leyi. 86 Ndza swi twisisa leswaku ku nghenelela aswi bohi loko ndzi lava ku huma ndzi nga endla tano kungari na nandzu. Leswi swinge kavanyeti ku kuma ka mina vukorhokeri eklilniki Ndza swi tiva leswaku dyondzo leyi yi pfumeleriwe hi va UNISA Ethics committee xikan'we na ndzawulo ya rihanyu ya Bushbuckridge. Ndza swi tiva leswaku mbuyelo wa kona wu ta tirhisiwa swa sayense. Ndza pfumela leswaku xihundla xa mina xita hlayiseka. Ndza pfumela ku nghenelela eka dyondzo leyi.

Vito.....
 Nsayino..... Ndhawo.....
 Siku..... Mbhoni.....
 XITATIMENDHE XA MUVUTISI Ndzi nyikile nhlamuselo mayelana ni dyondzo leyi. Ndza pfumela ku van a vutihlamuleri mayelana ni dyondzo leyi Ndzi ta landzelela ntwanano wa mpfumelelo Vito ra muvutisi.....
 Nsayino..... Siku.....

APPENDIX F: STRUCTURED QUESTIONNAIRE

FACTORS CONTRIBUTING TO POOR UTILISATION OF PUBLIC HEALTH FACILITIES FOR MATERNITY CARE SERVICES MPUMALANGA PROVINCE, SOUTH AFRICA.

Name of the
health facility.....
Subdistrict.....
District.....
Province.....
Code.....
Date of the interview.....

Questionnaire status at the end of interview (to be confirmed by researcher):

1.Complete

2.Incomplete Skip

SECTION A: DEMOGRAPHIC DETAILS

NB: Please tick out your answer where it is necessary.

AGE	choose	Tick
18-25	1	
26-35	2	
36-45	3	
46	4	

2.

Marital status	Tick
Married	1
Single	2

Divorced	3
Stable relationship	4
Widowed	5
Separated	6

3.

Educational level	Tick
None	1
Primary school	2
High school	3
Tertiary	4

4. . What is your Occupation?

Civil servant	1
Housewife	2
Owner of a business	3
Unemployed	4

5. What is your religion?

Islam	1
Protestant	2
Catholic	3
Traditional believe	4
Others specify	5
Christianity	6

6. Distance from your home to the health facility.

Walking distance	1
Taxi	2
Own car	3
Bus	4
Two buses	5

7. What is your ethnicity? (code will be provided by the research during data collection)

Tsonga	1
Others	2

SECTION B: ANTENATAL CARE SERVICE UTILIZATION

8. Number of previous pregnancies

0.(Primigravida)	1
1	2
2	3
3	4
4	5
5	6
Others	7

9. Did you have access to any antenatal information before you get pregnant?

YES	1
NO	2

10. If YES, where?

Friends and family	1
From radio	2
From television	3
From magazine and newspaper	4
From community campaigns	5
Not applicable	6

11. At what stage did you start antenatal care with the previous pregnancies?

Between 1-3 months	1
Between 3-6	2
Between 6-9	3
Primigravida:	
1 to 3 months	4
3 to 6 months	5
6 to 9 months	6
None (unbooked)	7

12. When do you think is the best time for attending Antenatal Care?

Between 1-3 months	1
Between 3-6 months	2
Between 6-9 months	3

13. Why should ANC be sought?

To prevent complications	1
To get antenatal card	2
To go to hospital for delivery	3
To confirm pregnancy	4
To be tested for HIV	5
To get vitamin tablets	6

14. Why did you start antenatal care at this time (you can choose more than one option)?

To have an HIV test	1
To get antenatal card	2
To go to hospital for delivery	3
To confirm pregnancy	4
Having problem in this pregnancy	5
Encouraged by friends and family	6
To check gestational age	7
Others....	8

15. What are the benefits of starting ANC early in pregnancy? (you can choose more than one option)?

For early diagnoses of complications	1
--------------------------------------	---

For prevention of complications	2
To get tested for HIV	3
For initiation of Antiretroviral treatment if positive	4
To get knowledge care about pregnancy	5

16. What are some of the things which made you present late for ANC (you can choose more than one answer).

Were the signs of pregnancy ignored?	1
Is it the distance to the clinic?	2
Is it lack of transport money to the clinic	3
Is it nurses' attitude?	4
Is it lack of infrastructure?	5
Is privacy maintained in the clinic?	6
Is the waiting time long?	7
Was the pregnancy planned?	8

17. What can be done to motivate pregnant women to attend antenatal care early?(you can choose more than one option).

Clinic operating 12 hours instead of 8 hours	1
Improvement of infrastructures	2
Improving of staff attitude	3
Community mobilization	4
Health education to clinic attendees	5
Availability of IEC materials	6

Improved waiting hours	7
------------------------	---

Section C: DELIVERY SERVICES

18. Where did you deliver your last child?

Home	1
Public health facility	2
Private health facility	3
Other(specify)	4

19. Why did you not deliver at public health facility?

Long Waiting time	1
Long distance	2
No complications experienced with the last pregnancy	3
Do not trust facility	4
Unavailability of quality services	5
Fear of being scolded by midwives	6
Lack of privacy	7
Husband did not allow	8
Family did not allow	9
Previous bad experience from health facility	10
Facility closed(off hours)	11
Little respect from midwives	12

Other(specify).....	13
Not applicable	14

20. Who attended your delivery at health facility?

Midwife	1
Physician	2
Other specify	3
Not applicable	4

21. How long does take you to go to the health facility from your house?

0 -30 minutes	1
31-60 minutes	2
61 minutes>	3

22. How much did you pay for the services you received at the facility?

R0-100	1
R100>	2

23. During your time in the healthcare facility, were you satisfied with the maternity care services you received?

YES	1
NO	2

APPENDIX G: STRUCTURED QUESTIONNAIRE (Xitsonga)

Swilo leswi hoxaka xandla eka ku tirhisiwa loku nga riki kahle ka switirhisiwa swa rihanyo ra vaaki eka vukorhokeri bya nhlayiso wa ku veleka Xifundzankulu xa Mpumalanga, Afrika-Dzonga

Vito ra ndhawu ya rihanyu

Xifundhzantsongo.....

Xifundhza.....

Xifundhzankulu.....

Khodi

Siku ra mbulavurisano.....

Xiyimo xa swivutiso eku heleni ka mbulavurisano (xi ta tiyisisiwa hi mulavisisi):

1. Yi herile

2. Ayi helangi

Xigenge xa A matimu ya wena:

NB: Hi kombela u fungha nhlamulo ya wena laha swi faneleke.

1.

Malembe	Hlawula	Fungha
18-25	1	
26-35	2	
36-45	3	
46	4	

2.

Xiyimo xa vukati	Fungha
U tekiwile	1
Awu tekiwangi	2
U tshikile	3
Mova vanghani	4
U feriwile	5
Mi hambanile	6

3.

Xiyimo xa dyondzo	Fungha
Ku hava	1
Xikolo xa le hansi	2
Xikolo xa le henhla	3
U dyondzele ntirho	4

4.Ntirho wa wena

Mu tirhela mfumo	1
Nsati wa munti	2
Nwa ma bindzu	3
Awu tirhi ndhawu	4

5. Xana vukhongeri bya wena hi byihi?

VuMoslem	1
Vuprotestanti	2
Mukhatoliki	3
Ripfumelo ra ndhavuk	4
Swinwana(boxa)	5
Vukreste	6

6. Mpfhuka wo suka ekaya ka wena ku ya exibedlhele.

U famba hi mi lenghe	1
U tirhisa tekisi	2
U tirhisa movha ya wena	3
U tirhisa bazi	4
U tirhisa ti bazi ti mbirhi	5

7. Xana uwa ri xaka rihi(khodi yi nyikiwa hi mulavisisi loko ku endliwa rungula).

Tsonga	1
Ri nwana	2

XIYENGE XA B: XIKALO XA VUYIMANA

8. Nhlayo ya makhwiri lama nga hundza

0.(Primigravida)	1
1	2

2	3
3	4
4	5
5	6
Kumbe ku tlula	7

9. U tshame ukuma mahungu ya xikalo unga se tika?

Ina	1
Ee	2

10. Loko ku ri ina u ma kume kwihi?

Ka vanghana na ndyangu	1
Ka xiyanimoya	2
Ka thelevhixini	3
Eka ma phepha-hungu	4
Eka swinavetiso swa le tikweni	5
Ayi tirhi	6

11. U sungule xikalo u ri na tinhweti tingani eka makhwiri la ma nga hundza?

Xikarhi ka 1 ku fika ka 3 ya tinhweti	1
Xikarhi ka 3 ku fika 6 ya tinhweti	2
Xikarhi ka 6 na 9 ya tinhweti	3
Wo sungula ku tika:	

1 ku fika ka 3 ya tinhweti	4
3 ku fika ka 6 ya tinhweti	5
6 ku fika ka 9 ya tinhweti	6
Awunga sungulangi	7

12. Xana hi wihi nkarhi wa kahle wo sungula xikalo xa khwiri?

Xikarhi ka 1-3 ya tinhweti	1
Xikarhi ka 3-6 ya tinhweti	2
Xikarhi 6-9 ya tinhweti	3

13. Xana hi wihi nkoka wo sungula xikalo xa vuyimana?

Ku sivela swiphiko	1
Ku kuma khadi ro ya bebulela exibedlhele	2
Ku kota kuya exibedlhele kuya bebulela koho	3
ku tiyisekisa leswaku u tikile	4
Ku ta kamberiwa HIV	5
Ku ta kuma mavhithamini	6

14. Hikwalaho ka yini u sungule xikalo xa vuyimana sweswi?(u nga hlawula swo tlula xinwe)

Ku ta kamberiwa HIV	1
Ku ta kuma khadi ro ya bubulela exibedlhele	2
Ku kota kuya exibedlhele kuya bebulela koho	3
Ku tiyisiseka leswaku u tikile	4
Kuva na swiphiko hi khwiri leri	5

Uhlohlotele hi vanghana na vandyangu	6
Ku kambela xiyimo xa khwiri	7
Swinwana hlamusela	8
15. Hi wihi nkoka wo sungula xikalo ka ha ri na nkarhi (unga hlawula ku tlula xinwe)	

Ku hatla ku voniwa switandzhaku	1
Ku sivela switandzhaku	2
Ku kamberiwa HIV	3
Ku sungula maphilisi yo titivata HIV	4
Ku kuma vutivi mayelana na vuyimana	5

16. Hi swihi leswi sivelaka vayimana ku hatla vasungula xikalo?

Ku ka vanga ri na mhaka na swona	1
Mpfhuka wo ya klilini	2
Ku kala mali yo khandziya	3
Matikhomele ya vaongori	4
Muako wa klilini awu tshamisekanga	5
Ku pfumaleka ka xihundla	6
Ku heta nkarhi wo leha klilini	7
A wu nga tiyimisela ku tika	8

17. Hi swihi swi nga hlohlotelaka vavasati ku hatla vas ungula xikalo?(unga hlawula ku tlula xinwe)

Kliliniiki yi tirha 12 wa tiawara ku ngari 8	1
Ku antswisa muako	2
Ku antswisa matikhomele ya vaongori	3
Ku hlohlotela vaaki	4
Tidyondzo eka lava taka etliliniiki	5
Ku kumeka swipapilana swa tidyondzo	6
Ku antswisiwa ka tiawara to rindza	7

Xiyenge xa C: Vukorhokeri bya ku bebula

18. U bebule kwi nwana wa wena wa makumu?

Ekaya	1
Exibedlhele xa mfumo	2
Exibedlhele xa phurayivhete	3
Swinwana(boxa)	4

19. Hikokwalaho ka yi ni unga bebulangi exibedhele xa mfumo ?

Ku rindza nkarhi wo leha swinene	1
Ku va kule na la u tshamaka kona	2
Awu zangi uva na swiphiqo eka khwirhi ra wena leri hundzeke	3
Awu xi tshembi xibedlele	4
Ku pfumaleka ka vukorhokeri bya nkoka	5
Ku chava ku holoveriwa hi vabeburisi	6

Ku pfumaleka ka xihundla	7
Nuna wa wena anga pfumelangi	8
Maxaka xa wena ama pfumelangi	9
Ntokoto wo biha wa khale ku suka eka ndhawu ya rihanyo	10
Xibedlhele axi pfarile(hiti awara to pfala)	11
Ku nga xiximiwi hi va beburisi	12
Swinwana(boxa).....	13
A yi tirhi	14

20. U beburisiwile hi mani exibedlhele?

Hiti nsungukati	1
Dokodela	2
Vanwana(boxa)	3
A yi tirhi	4

21. Xana swi ku tekela nkarhi wo tanihi kwihi ku ya exibedlhele ku suka ekaya ra wena?

Xikarhi ka 0 -30 watiminete	1
Xikarhi ka 31-60 watiminete	2
61 wa timinete ku tlurisa	3

22. Xana u hakele mali muni eka vukorhokeri lebyi u byi kumeke eka ndhawu ya rihanyu?

Xikarhi ka R0-100	1
R100 ku tlurisa>	2

23. Hi nkarhi lowu a wu ri exibedhlele, xana a wu enerisekile hi vukorhokeri bya ku veleka lebyi u byi kumeke?

Yes	1
No	2