
# PERCEPTIONS, KNOWLEDGE AND ATTITUDES OF WOMEN TOWARDS MATERNAL DEATHS AT QAUKENI SUB-DISTRICT IN OR TAMBO HEALTH DISTRICT IN EASTERN CAPE PROVINCE, SOUTH AFRICA

**BY**

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**UNIVERSITY OF FORT HARE FACULTY OF HEALTH SCIENCES**

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## DECLARATION

I, Nomahlubi Dorcas Mayekiso, declare that this dissertation entitled ‘perceptions, knowledge and attitudes of women towards maternal deaths at Qaukeni Sub-District in or Tambo Health District in Eastern Cape Province, South Africa’ is my original work, and that the dissertation was never previously fully or partially submitted to any university for degree award.

Name…….

Signature……

Date……

## DECLARATION ON PLAGIARISM

I Nomahlubi Dorcas Mayekiso student number 201415887 hereby declare that I am fully aware of the University of Fort Hare's policy on plagiarism and I have taken every precaution to comply with the regulations.

Signature: ……..

## DEDICATION

To my husband, Ntsikelelo Mayekiso, who has been a source of encouragement and inspiration.

To my children, Sonwabiso, Sinovuyo, Abulele and Sikhosonke.

To the community of Qaukeni Sub-District.

## CERTIFICATION

This dissertation entitled *Perceptions, knowledge and attitudes of women towards maternal deaths at Qaukeni sub-district in OR Tambo Health District in Eastern Cape Province, South Africa meets the regulation governing the award of the degree of Masters of the university of Fort Hare and is approved for its contribution to scientific knowledge and literary presentation.*

…… …….

Prof DT Goon DATE

Supervisor

……... ……

Dr NM Vellem DATE

Co-Supervisor

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## ABSTRACT

**BACKGROUND AND AIM:** Maternal mortality is a global problem, with the risk of death ever present during pregnancy, labour and postnatal, particularly in developing countries. The purpose of the study was to explore the perceptions, knowledge and attitudes of women of child-bearing age concerning maternal deaths in Qaukeni Sub-District, Eastern Cape Province, South Africa.

**METHODS:** A descriptive, contextual, exploratory research design was used to explore the perceptions, knowledge and attitudes of child-bearing-age women. Interviews were conducted with 21 purposively selected multiparous pregnant women.

**FINDINGS:** Some of the participants knew signs and symptoms of pregnancy as well as danger signs during pregnancy such as haemorrhage, sepsis, high blood pressure and complications of unsupervised home deliveries; while others had little knowledge about these signs and symptoms. Some participants knew about the causes of maternal deaths and a number of them had beliefs that can be construed as myths. The use of herbal medications in pregnancy, such as *gwarugwaru* and *mbelekisane*, were highlighted as a problem in maternal health, with serious complications that can lead to maternal deaths. The participants have negative attitudes towards the clinics and hospitals due to the ill treatment they received from health professionals in labour wards, which may have led to the loss of lives of women and children. Lack of resources, unskilled traditional birth attendants, lack of accountability and responsibility by health professionals were contributory factors towards maternal deaths.

**CONCLUSIONS:** Lack of resources, unskilled traditional birth attendants, lack of accountability and the irresponsibility of professional nurses and doctors were all pointed out by participants as either direct or indirect causes of maternal deaths. The recommendations include frequent in-service training for unskilled birth attendants, and the provisions of more professional nurses and doctors. Campaigns also need to be held to highlight the risks that women are exposed to during pregnancy, and the importance of early interventions.



**KEY WORDS:** Maternal mortality**,** knowledge**,** perceptions**,** attitudes, South Africa.

## ABBREVIATIONS AND ACRONYMS

| | |
|---|---|
| ANC | Ante-natal care |
| ARV | Anti-retro virus |
| CD4 cells | Cluster of differentiation 4 cells |
| DHIS | District health information system |
| H1N1 | Hemagglutinin-neuraminidase |
| HIV/AIDS | Human immunodeficiency virus/Acquired Immune Deficiency Syndrome |
| ICD CODE 10 | International statistical classification of diseases and related health problems |
| ICU | Intensive Care Unit |
| MEC | Member of Executive Council |
| MM | Maternal Mortality |
| MMR | Maternal Mortality Ratio |
| MDG | Millennium Development Goals |
| NCCED | National Committee for Confidential Enquiries Into Maternal Deaths |
| PPIP | Perinatal Problem Identification Programme |
| PMTCT | Prevention of Mother to Child Transmission |
| TAC | Treatment Action Campaign |
| TBA | Traditional Birth Attendant |
| UNFPA | United Nations Population Fund |
| WHO | World Health Organisation |

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# CHAPTER 1: INTRODUCTION

## 1.1. INTRODUCTION AND BACKGROUND

Maternal deaths are a global challenge. Hagman (2013) discovered that a woman dies each minute somewhere in the world from complications during pregnancy. According to World Health Organisation (2013) the majority of maternal deaths take place in women aged 15 to 45 years – the full range of child-bearing ages. Most of these deaths are preventable. The challenge of maternal deaths triggered the World Health Organisation to set goals in relation to pregnancy as part of the Millennium 1Development Goals. These targets were set as the means to reduce maternal deaths and to improve the general health of women (WHO 2013).

Hospitals' perinatal reviews show that omissions and sometimes negligence by clinicians in the delivery room have led to maternal deaths (Hofman & Mohammed 2014). Under-reporting of maternal deaths has been a problem, especially in underdeveloped, under-resourced sub-Saharan countries. Maternal mortality is high in Asia and in sub-Saharan Africa; of 99% (302 000) of the global maternal deaths, 66% (201 000) are attributed to sub-Saharan Africa alone, followed by Southern Asia with 66000 maternal deaths (WHO 2015).

European countries have been able to examine levels and trends by which maternal deaths occur over a period of time because of their comprehensive registration systems, unlike in sub-Saharan Africa, which has limited resources and poor data (Garrene, 2013)**.** In the United States of America the monitoring of progress in the area of maternal deaths was prioritised and policies were renewed to achieve goals through Obama's Global Health Initiative (Hogan 2010).

The only developing country to have a system of monitoring maternal deaths is South Africa, which established the National Committee for Confidential Enquiries into Maternal Deaths (NCCEMD) to engage in an audit of maternal deaths in health facilities. These death audits have formed a basis for decision-making in South Africa (Moodley & Pattinson 2014). NCCEMD released a report showing an increase in maternal deaths from 1998 to the latest reporting period of 2014 (Moodley & Pattinson 2014).

A study conducted in East London indicated that some maternal deaths may be attributed to a shortage of nurses assisting in deliveries in the maternity wards, poor quality care, late detection of complications during labour and progression of labour taking place without the assistance of a midwife (Rala 2013).

It has been reported that Oliver Reginald Tambo District Municipality is the worst-performing district in the Eastern Cape in terms of maternal and child deaths, with 450 deaths per 100 000 live births (De Waal 2012). The fact that the district covers a deep rural area with poor infrastructure, poverty, high employment and a mostly previously disadvantaged population contributes to its poor health outcomes. During April to October 2013 there was an alarmingly high number of maternal deaths (52 maternal deaths) in OR Tambo district. The OR Tambo district had 91 maternal deaths per 100 000 live births in 2011 and 74 per 100 000 live births in 2012. A political decision was taken and resulted to the establishment of a project called the Rapid Response Team, comprising of senior managers from different directorates who formed a delegation mandated to solve the problems related to maternal deaths in OR Tambo (Zuzile 2013).

An analysis of deaths at Qaukeni Sub-District from January 2011 to December 2014 showed a significant number of maternal deaths. The national target for maternal deaths is 38 per 100 000 live births; at Qaukeni it was 154 per 100 000 live births according to District Health Information System (DHIS 2014). In the light of the above, the study was undertaken to explore the perceptions, knowledge and attitudes of women in Qaukeni Sub-District concerning maternal deaths, since information in this regard was lacking.

## 1.2. STATEMENT OF THE PROBLEM

Maternal deaths are high in Qaukeni Sub-District. The death rate in the sub-district was 154 per 100 000 live births in 2014 (DHIS 2014). Qaukeni Sub-District is very rural, with some parts that are unreachable by car. Clinics are widely separated from each other and ward-based outreach teams are few and not fully functioning. While there are several studies done by the following authors (Abdulkarim, Abubakar & Mohammed, 2008; Igberase, 2009; Jogdand, Pravin & Jogdand, 2013, Butawa, Tukur, Idris, Adiri & Taylor, 2010; Getachew, Kassa, Ayana & Amsalu 2017; Eni-Olorunda, Otito, Ayobami, & Akinbode, 2015; Rööst, Johnsdotter, Liljestrand & Essén 2004) exploring the knowledge and perceptions of women concerning maternal deaths in other settings as reflecting in this study, scanty information exists in Qaukeni Sub-District. It was not known whether

maternal deaths in the sub-district could be attributed to a lack of knowledge and awareness concerning maternity-related issues or whether other reasons were responsible. Therefore, this study was designed to explore the perceptions, knowledge and attitudes of women of child-bearing age towards maternal deaths in Qaukeni Sub-District.

## 1.3. MAIN PURPOSE OF THE STUDY

The main purpose of the study was to explore the perceptions, knowledge and attitudes of women of child-bearing age concerning maternal deaths in Qaukeni Sub-District in order to institute intervention strategies.

## 1.4. SPECIFIC OBJECTIVES

The specific objectives of the study were:

- To explore the knowledge of women about causes of maternal deaths at Qaukeni Sub-District.
- To determine the perceptions and attitudes of women concerning maternal deaths at Qaukeni Sub-District.

## 1.5. RESEARCH QUESTIONS

- What are the causes of maternal deaths?
- What do you understand by maternal deaths?

## 1.6. SIGNIFICANCE OF THE STUDY

It is expected that the findings from this study might help in informing public health bodies to design strategies to prevent maternal deaths in Qaukeni Sub-District.

## 1.7. DELIMITATION

The study was limited to Qaukeni Sub-District only and to pregnant women in the age group of 18-45 years. Participants should already have had children. The study excluded nulliparous women.

## 1.8. DEFINITION OF CONCEPTS

Maternal mortality, perception, knowledge and the attitudes of women towards maternal deaths were key concepts used in this study. These are defined below**:**

### 1.8.1. Maternal deaths

Maternal death refers to a death of either a pregnant woman or death of a woman within 42 days of delivery, miscarriage, termination or ectopic pregnancy provided the death is associated with pregnancy or its treatment (WHO 2014).

### 1.8.2. Perceptions

Perceptions in this study refer to the various ways women perceive or interpret maternal deaths, the loss in the family and the community and implications thereof (American Heritage Dictionary 2018).

### 1.8.3. Knowledge

Knowledge in this study refers to the extent of awareness and familiarity of women of child-bearing age with the concept maternal deaths, causes of maternal deaths, preventive measures and the prevalence of the phenomenon. Knowledge also includes the extent to which women of child-bearing age demonstrates awareness about signs and symptoms of pregnancy and early signs of obstetric problems that may lead to maternal deaths (American Heritage Dictionary (2018).

### 1.8.4. Attitudes

Business dictionary.com (2018) defines attitudes as a predisposition or a tendency to respond positively or negatively towards a certain idea or object, person or situation. In this study women of child-bearing age have a negative attitude towards the occurrence of maternal deaths, have negative attitudes towards hospitals and clinics due to the unbecoming behavior of doctors and nurses in the labour rooms.

## 1.9. CONCEPTUAL FRAMEWORK

A conceptual framework represents the researcher's synthesis of the literature on a given phenomenon. It maps out the actions required in the course of the study, given the researcher's previous knowledge of other researcher's points of view and his observations on the subject of research (Regoniel 2015).The conceptual framework used in this study is adaptation theory, a concept discussed by Cherry (2017). Cherry defined adaptation as the ability to adjust to new information and experiences. She also stated that adaptation takes place through assimilation and accommodation. The study selected adaptation theory

because it is a reliable theory for this study and meets the specific objectives of the study, which are:

- To explore the knowledge of women about causes of maternal deaths at Qaukeni Sub-District.
- To determine the perceptions and attitudes of women concerning maternal deaths at Qaukeni Sub-District.

Cherry (2017) uses Piaget's theory to discuss how human beings assimilate and accommodate new information into their existing schema, in order to explore knowledge, perceptions and attitudes and then develop changed behavior**.** A schema according to Collins dictionary (2018) is an outline of a plan or theory.

The current study used adaptation for the women of child bearing age to cope with change. Piaget's theory was used to detect if the affected women felt inadequately equipped, as reflected in their knowledge, perception and attitudes. I II-equipped women are unlikely to be able to prevent the occurrence of maternal deaths. An adaptation process is critical in the development of the cognitive function of the human being, because it enables the individual to assimilate new information and new ideas that result in changed behavior. Such a person is prepared to adapt and deal with any changes in the environment (Cherry 2017).

During the focus group discussions some participants cited the causes of maternal deaths and the signs and symptoms of pregnancy. The participants who lacked knowledge about these concepts received new information from other participants. In understanding the causes of maternal deaths, the phenomenon of pregnancy and the signs and symptoms of pregnancy by those participants, women of child-bearing age will have a better understanding of the phenomenon and be able make their own plans of changing their behavior and attend antenatal clinic before twenty weeks to improve maternal health.

## 1.10. DISSERTATION OUTLINE

This dissertation contains the following chapters:

**Chapter 1:** Chapter one comprises an introduction, statement of the problem, main purpose of the study, specific objectives, research questions, and significance of the study, delimitation, limitations and operational definitions.

**Chapter 2**: Chapter two is a full literature review outlining the relevant literature on the phenomenon under investigation, giving global statistics on maternal deaths, causes of maternal deaths, perceptions, knowledge and attitudes about maternal, deaths, and a conclusion.

**Chapter 3**: Chapter three presents the methodology used in the research. The chapter focuses on the research design and setting, population, sampling, the research instruments, the trustworthiness of the study, and ethical considerations. This is followed by a description of the data collection procedure. Finally, the research data analysis is described.

**Chapter 4**: Chapter four comprises data presentation and discussion of the data.

**Chapter 5:** Chapter five presents a summary, conclusion, limitations and recommendations based on the findings.

# CHAPTER 2

# LITERATURE REVIEW

## 2.1. INTRODUCTION

Chapter one provides an introduction and background on maternal deaths generally and in the women in Qaukeni Sub-District in OR Tambo District Municipality. Chapter two focuses on a literature review related to maternal deaths. Recent literature was reviewed from a variety of sources, including online sources such as Ebsco, Google Scholar and PubMed. The key words used in the search for articles were ‘maternal death’, ‘deaths of women during delivery’, ‘causes of maternal death’, ‘attitudes, perceptions and knowledge of maternal deaths’, ‘maternal mortality’ and ‘foetal mortality’. Unpublished literature and grey literature were included for review in this chapter.

## 2.2. GLOBAL AND LOCAL STATISTICS ON MATERNAL DEATHS

Maternal mortality is a global public health concern all over the world. The United States of America experienced an increase in maternal mortality from 1987 to 2011. It was estimated that 18.5% of mothers per 100 000 live births died in 2013 from pregnancy and medical conditions in the US; about 800 deaths in total (Morello, 2014). Between 2008 and 2010, the rate of maternal mortality in the US was discovered to be two times higher than that of Saudi Arabia and Canada. When compared to the United Kingdom, the maternal death rate in America was three times higher (Morello 2014).

Canada had 6.1% maternal deaths per 100 000 live births in 2009-2010 (Canada Institute of Health Information 2011). Saudi Arabia was at 14% per 100 000 live births in 2010 (WHO, UNFPA & UNICEF 2015). The United Kingdom had the lowest number of maternal deaths at 9 per 100 000 live births in 2015. The United States holds position 60 for maternal deaths in a list of 180 countries, while China comes in at 57 (Morello 2014).

India is rated as having the highest number of maternal deaths in the world, with Nigeria having the second-highest number. According to Mboho (2013) it is likely that one third of all maternal deaths globally occur in India and Nigeria.

Ghana had approximately 2 700 maternal deaths yearly which were linked to complications of childbirth, but the death rate declined from 740 deaths per 100 000 live births to 451 between 1999 to 2008. The rate by which pregnant women were dying in Ghana was

alarming compared to the United Kingdom, which had 92 maternal deaths a year, while Sweden had only four maternal deaths a year (Hagman 2013).

Globally, however, there has been a decline in maternal deaths; it was estimated that there were 293 000 deaths from maternity-related conditions worldwide in 2013, a remarkable decline from 376 000 in 1990 (Global One 2015). In total, six countries account for 50% of maternal deaths (Global One 2015).

Udjo & Lalthapersad-Pillay (2013) had contradictory findings to those of Garenne (2013). When using data for maternal deaths from the 2001 census and 2007 community surveys and death registrations, their results showed a significant increase in maternal deaths in South Africa in the Eastern Cape and Western Cape provinces, even after the introduction of PMTCT; Garenne (2013), on the other hand, noticed a decline. Cullinan (2013) concurred with Garrene's findings in declaring that maternal deaths had decreased in South Africa. South Africa held number 60 in the maternal death world list in 2015 and was at 138/100 000 live births. (CIA World fact book 2017)

Cullinan (2013) stated that maternal deaths in South Africa decreased from 189.5 per 100 000 live births to 132.9 per 100 000 live births; only Mpumalanga recorded an increase in deaths in 2012/13 compared to the previous year. The OR Tambo district had 244 maternal deaths per 100 000 live births and had the highest deaths when compared to other NHI districts like Vhembe 66.2, Eden in Western Cape had 76.5 per 100 000 live births (Massyn, Peer, Padahar & Berron 2016).

## 2.3. PREVALENCE OF MATERNAL DEATHS IN SOUTH AFRICA

In 2010, the average number of maternal deaths emanating from obstetric causes in South Africa was 185 per 100 000 live births. Maternal deaths associated with pregnancy were 423 per 100 000 live births, which was significantly high. This figure was reduced when PMTCT programmes were introduced in 2012/13; the statistic went down to 132.9 maternal deaths per 100 000 live births (Cullinan 2013)

According to Cullinan (2013) in the 2012/13 District Health Barometer, 27% of women died during pregnancy in Cape Town because of HIV/AIDS. South Africa was far from reaching Sustainable Development Goal number 5 (SDG); that of reducing maternal deaths by 75% from 1990 to 2015 (Cullinan 2013).

In 2001, Mpumalanga had 175.8 maternal deaths per 100 000 live births and Limpopo had an alarmingly high maternal mortality of 292.2 maternal deaths per 100 000 live births. Certain districts of KwaZulu Natal, such as Pietermaritzburg and UThungulu, did not do well in terms of reducing maternal deaths (Massyn et al 2013/141). In Durban, it was reported that out of 50 518 deliveries, there were 101 maternal deaths caused by co-morbidity of TB/HIV (Massyn et al 2013/14).

Six maternal deaths per 100 000 live births were recorded in Cape Town in 2013 as per the findings of Saving Mothers 2011-2013 report on confidential enquiries into maternal deaths in South Africa (Department of Health 2013). According to Pattinson and Moodley (2014) the findings of the Saving Mothers and Saving Babies of 2008–2010 report on the Confidential Enquiries into Maternal Deaths in South Africa were that maternal deaths had declined due to improvements in clinical management of HIV/AIDS and the introduction of District Clinical Specialist Teams (DCST) who rendered support services to clinicians in the districts.

## 2.4. CAUSES OF MATERNAL DEATHS

The causes of maternal death may be categorised as direct or indirect.

Direct causes are ‘deaths that are related to obstetric complication during labour, pregnancy or peuperium or resulting from any treatment received.’ Indirect causes refer to deaths associated with a disorder, the effects of which are exacerbated by pregnancy (Payne 2016).

A World Health Organization study conducted in 2012 revealed four major causes of maternal deaths; hemorrhage, hypertensive disorders, sepsis, and obstructed labour. Hemorrhage was found to be the leading cause in Africa and in Asia followed by Latin America and the Caribbean; deaths due to sepsis were also discovered to have increased in Africa (Say, Daniels, Gemmill, Tuncalp, Moller, Gulmezoglu, Temmerman & Alkem 2014).

### 2.4.1. Direct causes

In Australia, 49% of maternal deaths were ascribed to direct causes, ie. Obstetric haemorrhage (placenta accrete/percreta), with post-partum haemorrhage and hypertensive disorders totalling 61% (Humphrey et al 2015).

Maternal mortality declined in Russia by more than 50% from 23.4 per 100 000 live births in 2004 to 10.8 in 2014. Siberian had 15.2 per 100 000 live and the Far East Federal Districts of Russia. Causes of maternal mortality in Russia were also mostly direct, and related to both legal and illegal abortions, with complications including sepsis and haemorrhage. Indirect causes from non-obstetrical causes were at 34.8 per 100 000 live births, haemorrhage was at 20.1 per 100 000 live births and amniotic embolism (12.3%). The success of the decline was attributed to the birth control in Russia (Shuvalova, Yarotskaya, Pismenskaya,Dolgushina, Baibarina & Shukhikh 2015).

In Afghanistan causes of maternal deaths were directly pregnancy-related, namely obstructed labour, haemorrhage, pre-eclampsia/eclampsia and infections (Hogan, 2010).Ghana had a significantly high number of maternal deaths which were attributed to complications of pregnancy and unsafe abortions (Hagman 2013). South Africa's variety of causes for maternal deaths have been categorized according to the International Classification of Diseases-10 (ICD–10) code as both direct and indirect, being hypertensive disorders (indirect cause) and hemorrhage, puerperal sepsis, abortion, ectopic pregnancy and obstructed labour (direct causes) (Hagman 2013). In OR Tambo District the major causes of maternal deaths are direct causes such as post-partum haemorrhage and eclampsia.

### 2.4.2. Indirect causes

Indirect causes include cardiovascular diseases, psychosocial causes and suicide, infections, TB and HIV/AIDS (Garenne 2013). In the United States of America, causes of maternal deaths were not clear, but have been attributed to heart diseases, diabetes mellitus and hypertension (Global One 2015).

Brazil conducted a study on severe maternal morbidity in women admitted in ICU, revealing that the majority of women who died were under 20 years of age and died post- delivery. The main causes of death were hypertension (72.7%), bleeding (20.8%) and infections (3%) (Neto, Parpinelli, Gecatti, Souza, & Souza 2009).

The United States of America faces a similar challenge that faced underdeveloped countries; the under-reporting of maternal deaths. Some deaths are said to be mischaracterized when coded on the death certificates, with many death certificates listing cause of death as 'unknown'. (Morello 2014). This finding concurs with that of Hogan (2010)

who states that the monitoring of progress for the maternal deaths is prioritised in the United States where policies were renewed to achieve goals through Obama‘s Health Initiative.

Hogan (2010) stated that countries like India, Pakistan, Afghanistan, Democratic Republic of Congo, Nigeria and Ethiopia have experienced a substantial increase in maternal deaths due to HIV/AIDS, with no mention was made of other causes.
In Australia the Aboriginal population (indigenous to Australia) had higher maternal deaths (13.8%) than other Australian women (6.6%). Non-obstetric maternal deaths were due to splenic artery aneurism (bulges occurring on the weakened walls of the arteries of the spleen). Non-obstetric maternal deaths (3) were related to the H1N1 influenza pandemic of 2009 (H1N1 is a flu virus) (Humphrey*,* 2015).

According to Steamer (2013) Cuba’s maternal mortality rate has fluctuated between 40 and 80 deaths per 100 000 live births in the past twenty years, declining after huge investments in health sector by government. Causes of maternal deaths were poverty, domestic violence and anaemia (50%) although the latter was rectified by the government by putting vitamin programmes in place for every pregnant woman.

In sub-Saharan Africa research indicates that maternal deaths emanate mostly from late booking, poverty and the poor quality of health care services, with standards of care varying greatly (Nabakulu, Grobusch, Herbst & Newell, 2013). Negligence in rendering quality health care by health professionals was another causative factor discovered by the activist group Treatment Action Campaign (TAC) in Kampala and Uganda, where two women were left alone to deliver babies without the assistance of a midwife, resulting in deaths due to unattended bleeding (Ray, Madzimbamuto & Fonn, 2012).

According to Ray et al (2012) NCCEMD would not have been effective had it not been for pressure exerted by the activist group Treatment Action Campaign (TAC) on countries like South Africa, Botswana, Kenya and Uganda. The Treatment Action Campaign linked maternal deaths to HIV/AIDS and further stated that certain anti-retroviral drugs predisposed pregnant women to anaemia, which worsened the condition of pregnant women with HIV/AIDS and eventually led to maternal deaths.

Indirect causes of maternal deaths in South Africa are TB and HIV/AIDS, with 92% of maternal deaths attributed to HIV/AIDS and others to infections (Garenne 2013). Rala

(2013) had similar findings to those of Ray, Madzimbamuto & Fonn (2012) pertaining to negligence by health professionals in rendering quality care. Rala (2013) mentioned that in the Buffalo City area in the Eastern Cape there was a shortage of staff in the labour wards, resulting in situations where women were left on their own to give birth, putting the lives of women at risk.

The area which forms the focus of the study Qaukeni sub-District forms part of OR Tambo District Municipality. It is a rural district characterised by long distances to health care centres, which results in a high number of home deliveries. The district is classified as among the poorest, falling into socio-economic quintile 1(Massyn et al 2015).

Results of a workshop conducted in 2014 were that complicated deliveries and delays in the arrival of pregnant women in hospitals contributed to maternal deaths (Massyn et al. 2015). Age is a contributing factor to maternal deaths, with most maternal deaths in Australia occurring in women aged between 17 and 50 years of age. Those over 40 years of age suffered from obesity, with a body mass index (BMI) of 30 or over (Humphrey, Bonello, Chugtai, Machaldoni, Harris, & Chambers 2015). Age is also an underlying cause of maternal deaths in South Africa with an estimated iMMR estimated that is compared to 20-24 year olds (Department of Health 2011-2013).

Generally, maternal deaths from non-pregnancy-related infections (HIV/AIDS) occur in women aged 20 to 34, because most births take place in women of that age group. Women at high risk of maternal death are those over 30 years of age, because older women are more prone to diseases such as pregnancy-induced hypertension. HIV/AIDS complicate pregnancy in women of all ages. The risk of death among young mothers may be attributed to incomplete pelvic growth, which predisposes such women to obstructed labour. In rural areas, both old and young women tend not to attend antenatal care. Older women's resistance to change make them prefer home deliveries, with the assistance of unskilled birth attendants, rather than hospital deliveries (Blanc, Winfrey & Ross 2013).

A study was conducted in Brazil on severe maternal morbidity in women admitted to ICU, the findings were that the majority of women who died were less than 20 years and died post-delivery. The main causes of death were hypertension (72.7%), bleeding (20.8%) and infections (3%) (Neto et al 2009).

In OR Tambo District Municipality, the ages of women delivering in public hospitals start at 14 years (DHIS 2018). At such a young age, the risk of death is attributed to incomplete

pelvic growth and inability to cope with labour pains, as pointed out by Blanc et al (2013). In direct causes of maternal deaths are attributed to herbal intoxication, HIV/AIDS and rheumatic heart disease at Qaukeni Sub-District in the District Health Barometer (Massyn et al 2015/16).

## 2.5 INTERVENTIONS

In Afghanistan, the statistic for maternal deaths was 400 per 100 000 live births in 2010 (Hogan 2010). The United Nations Population Fund (UNFPA) then made crucial interventions to help that country build up its health system. A two-year midwifery training programme was introduced, in which midwives were empowered with knowledge and skills (Hogan 2010). Donors also funded a four-year degree for midwives in Afghanistan to increase their number and improve maternal and child health (Hogan 2010).

The Cuban government also made huge advances in its health care drastically reducing maternal deaths through specific interventions. A policy was introduced according to which all births had to be attended by a skilled health professional. In addition, all pregnant women were put on a vitamin programme to prevent anaemia (Steamer 2013) and all pregnant women had to attend a physician ten times before delivery.

Cuba, a developing country, is recognised by the world as having a particularly effective health plan, which has improved maternal health through the use of trained staff (Steamer 2013).

## 2.6. Registration system

The registration of maternal deaths is still a challenge in sub-Saharan countries and in under-developed countries, so that the results given in the studies reviewed may not reflect actual figures. The strengthening of vital registration systems needs to be prioritized by developing countries in order to reveal the true picture of maternal deaths globally (Pattinson & Moodley 2014).

South Africa is the only country amongst the sub-Saharan countries that has improved reporting of maternal deaths since a reporting tool was devised which audited deaths in facilities (Pattinson & Moodley 2014). Maternal mortalities have been audited and reported

by the NCCEMD, with data obtained from the Perinatal Problem Identification Programme (PPIP) (Pattinson & Moodley 2014).

## 2.7. THEORETICAL CONSTRUCTS USED IN THIS STUDY

Knowledge, perceptions and attitudes were key theoretical concepts used in this study. The concept of knowledge refers to the awareness of women of child-bearing age regarding causes of maternal deaths, and the signs and symptoms of pregnancy.

'Perceptions' refers to the various beliefs or opinions of women of child bearing related on the causes of maternal deaths.

'Attitudes' refers to the treatment that pregnant women receive at the hands of nurses and doctors, and the expectation that pregnant women have towards the health care services they will receive.

## 2.8. KNOWLEDGE, PERCEPTIONS AND ATTITUDES OF MATERNAL DEATHS

### 2.8.1. Knowledge

Knowledge, according to Merriam-Webster on line dictionary (2011, sv 'knowledge'), refers to ''the fact or condition of knowing something with familiarity gained through experience or the fact or condition of being aware of something or the range of one's information or understanding or the sum of what is known: the body of truth, information, and principles acquired by humankind'.

In Northern Nigeria the community's knowledge and the perceived implications of maternal mortality and morbidity were assessed. This was a population-based qualitative study conducted in both an urban and rural setting in Borno State, where 168 participants were interviewed The majority knew of maternal deaths in their community, and could mention two out of the five causes of maternal mortality. Some community members had misconceptions about the causes of maternal deaths (Abdulkarim, Mohammed & Abubakar, 2008).The overall finding of that study was that maternal deaths were well understood by community members. In the above two studies, attitudes were not under investigation; these may necessitate further study (Abdulkarim *et al.* 2008).

In Zaria in Kaduna State in Nigeria, a cross-sectional descriptive study was conducted to explore the knowledge and perceptions of maternal health and awareness of health services among women and men of reproductive age in rural communities. The study was

conducted among respondents aged between 15 and 49 years. The findings were that the majority of community members were of the Hausa and Muslim religion, where men were the decision-makers and women depended on decisions by husbands or in-laws as to whether to attend health facilities (Butawa, Tukur, Idris, Adiri & Taylor 2010).

The patriarchal culture in Zaria, Kaduna State in Nigeria caused delays and prevented pregnant women from getting assistance early in cases of emergency. A predisposing factor for maternal mortality in Zaria was the prevailing low educational level, which prevented women from knowing much about maternal health. Another factor was that 90.2% of deliveries were conducted by unskilled birth attendants and 44% of women delivered on their own without the help of a skilled birth attendant (Butawa *et al.* 2010).

### 2.8.2. Perceptions

Perceptions in this study refer to how maternal deaths are perceived by women and their interpretation of their causes and effects.

In India, a descriptive cross-sectional study was conducted on perceptions of maternal mortality among women in an urban slum area among 378 women who were over 20 years old. The finding was that participants were aware that death can occur from pregnancy-related complications. A number of participants (73.81%) identified possible causes of maternal deaths such as excessive vaginal bleeding and high blood pressure (Jogdand, Pravin & Jogdund 2013).

A study in Nigeria focused on the Niger Delta, and assessed the awareness and perceptions of maternal mortality among women in the reproductive age group amongst the Ogunu community in Warri South Local Government Area. The sample size was 400 women and the findings were that many participants agreed that delays could be responsible for the deaths. The study showed that participants were aware of maternal mortality and had accurate perceptions (Igberase 2009).

Another study was conducted by Okonofua (2009) in Nigeria on perceptions of policy makers towards unsafe abortion and maternal mortality. In-depth interviews were conducted with officials and 49 politicians to explore their views in relation to unsafe abortions and their implications for maternal deaths. The premise was that Nigeria had a high level of unsafe abortions that contributed to increased maternal deaths. It was estimated that about 20 – 40 % of maternal deaths were due to abortions. The high

percentage of unsafe abortions may have been an indirect result of strict abortion laws in Nigeria (Okonofua 2009).

Many respondents knew about pregnancy complications such as malaria in pregnancy, pre-eclampsia, eclampsia, abortion, ruptured uterus, obstructed labour and HIV/AIDS (Okonofua 2009). Cultural beliefs were cited as a predisposing cause of deaths among women, especially among Muslim communities, where women have to keep their bodies covered and are not allowed to see male doctors. Instead, their husbands have to see the doctor on their behalf. Jehovah's Witnesses prohibit blood transfusions, irrespective of profuse bleeding in pregnancy, and some deaths in Nigeria were attributed to this cause (Okonofua 2009).

### 2.8.3. Attitude

Attitude in the context of this study refers to both negative and positive feelings about care received by pregnant women. It includes the preconceived ideas women have about maternal deaths due to their lived experiences. It may also refer to the behaviour of health professionals in health facilities.

A study conducted in the Abekouta area of Ogun State in Nigeria investigated the knowledge and attitude of mothers regarding risk factors influencing pregnancy outcomes. Pregnancy in women over 35 years of age was considered high risk. The study was conducted among 100 women who were randomly selected, and a descriptive design was used. It was found that only 37.8% were aware that problems could develop when women fell pregnant over the age of 35 years. In total, 75.5% of women were knowledgeable about the risk factor of malnutrition in pregnancy. Some respondents (59.6%) had the attitude that there was nothing wrong with being pregnant every year (Eni-Olorunda, Otito, Ayobami, & Akinbode 2015).

In another study, 39 out of 49 respondents agreed that abortion was a high contributor of maternal mortality in Nigeria. Some viewed abortion as having little effect, and five saw no relationship between the maternal death rate and unsafe abortions. It was concluded that radical health education needed to be conducted, and that there needed to be increased buy-in or political will by those in government to decrease abortion-related maternal deaths (Okonofua, Afolobi, Nzeribe, Buba, Abass, Adeboye, Adegun, & Okolocha 2009).

A qualitative, in-depth, interview-based study regarding perceptions and attitudes of traditional birth attendants (TBA) towards maternal mortality was conducted in Guatemala in Latin America. This country had a population of 35 000 people, most of whom were illiterate. The majority (80%) of pregnant women were attended only by traditional birth attendants. Maternal mortality was high in Guatemala, ranging from 156 to 270 deaths per 100 000 live births (Rööst, Johnsdotter, Liljestrand & Essén 2004).

Thirteen traditional birth attendants were interviewed in that study, only two acknowledged that there were maternal mortalities and could explain how the mother and child died during parturition. One traditional birth attendant stated that women believed that giving birth to a baby was a decision taken by God and if the baby didn't survive that means the woman hasn't been fortunate with God. The attendants felt that they had no role in referring women to the hospital because of their stubbornness and would take a decision themselves and their families whether to go to a hospital or not. Women of child bearing age had a negative attitude towards hospitals as they were afraid of an operation and had a belief that they would die then they preferred to die at home than in the hospital. Traditional birth attendants knew about maternal deaths but were adamant to share the experiences in fear of being blamed for the deaths (Rööst et al 2004).

Hogan (2010) stated that the monitoring of progress in preventing maternal deaths was prioritised in the United Sates, where policies were renewed to achieve goals through Obama's Global Health Initiative.

## 2.9. SUMMARY

Maternal mortality is a global public health problem. Millennium Development Goals were set by the World Health Organisation to try to mitigate this scourge. Generally there has been a marked decline in the maternal mortality ratio globally, despite many countries not meeting the WHO target. It is clear that the level of education in women contributes to the success or failure of maternal health goals. Countries like Nigeria and Afghanistan still have very high maternal mortalities and need more support from global donors.

The conclusion is that countries need to channel their resources to where they are needed if they are to solve the problem. A lesson may be learned from Cuba; even if a country is underdeveloped; with good planning, seemingly miracles can happen. Cuba turned around its health care and has become a good example upon which other countries may benchmark their own progress.

# CHAPTER 3

# RESEARCH METHODOLOGY

## 3.1. INTRODUCTION

This chapter presents the methodology used to conduct this research. It outlines the research method, the research design, population, sample, data collection instruments, trustworthiness of the research instruments, ethical considerations and data analysis used in the study.

## 3.2. SETTING OF THE STUDY

Qaukeni sub-District forms part of Ingquza Hill Local Municipality, one of several OR Tambo sub-districts. Ingquza Hill is located in the north eastern part of the Eastern Cape Province, the area serves a total population of 305 316, according to 2017 mid-year estimates (Statistics South Africa 2017). It is a deep rural area and the social determinants of health- poor portable water supply, poor sanitation, low educational level of the population, unsafe disposal of domestic waste and high unemployment rate are all predisposing factors for the high burden of diseases in the area. With these demographics, the OR Tambo is burdened by high maternal, neonatal and child mortality rate, as well as by a high burden of HIV/AIDS and a TB epidemic.

## 3.3. RESEARCH DESIGN

An explorative, descriptive and contextual design was used to explore the perceptions, knowledge and attitudes of women of child-bearing age. The researcher was interested in a full description and exploration of the causes of maternal death in the context of OR Tambo District Municipality. The research design selected enabled the researcher to understand the causes of maternal death (Brink et al 2013).

### 3.3.1 Descriptive design

With descriptive design, the researcher aims to get information through a description of the phenomenon under study which has naturally occurred (Burns & Grove 2011). Descriptive design was appropriate, since the researcher wanted information about maternal deaths of women, one of the objectives of this study. The rationale for using the descriptive design was to provide an accurate portrayal of facts regarding maternal deaths of women in order to discover the new meaning.

### 3.3.2. Contextual design

The researcher took context into consideration, since the phenomenon had to be understood according to the specific context in which it took place. The emphasis of the study was the perceptions, knowledge and attitudes of women towards maternal deaths at Qaukeni Sub-District, OR Tambo District Municipality.

### 3.3.3. Exploratory

An exploratory design was appropriate and useful for thoroughly understanding the issues surrounding the maternal deaths of women in Qaukeni in the OR Tambo district. The researcher was also interested in investigating the full nature of the phenomenon (Polit & Beck 2010). In this study, the researcher combined explorative, contextual and descriptive research designs, which enabled her to get a detailed picture of how women experienced maternal deaths; their perceptions, attitudes and knowledge of the phenomenon.

## 3.4. POPULATION

The population of the study consisted of all women of child-bearing age from 18 to 45 years who were multiparous. The target population was pregnant women residing at Qaukeni Sub-District of OR Tambo.

### 3.4.1. Sampling and sampling procedure

A sample is defined as a subset of the target population. The researcher may decide to select a small portion of this population from which to collect data. The selection method is called sampling (Parahoo 2006). Non-probability purposive sampling was used for this study. Qualitative sampling aimed at acquiring an understanding of the problem through the careful and purposeful selection of participants who had experiences of the phenomenon (Botma *et al.* 2010).

A group of women of child-bearing age (18 to 45 years) were invited to attend three focus group discussions arranged for the study in St Elizabeth's and Holy cross gateway clinics. The researcher selected a sample of women who had experiences of maternal deaths at Qaukeni Sub-District in OR Tambo District Municipality. Participants were consciously selected because of their knowledge of the phenomenon under study. The researcher was interested in their perceptions knowledge and attitudes towards maternal deaths.

In this study, the researcher identified a few people who had the required characteristics. They then helped her to identify more people who possessed the desired characteristics such as age, women of child bearing age and multi parity. The process continued until the researcher was satisfied that the sample was sufficiently large and themes began repeating, in other words, until saturation. The final sample for the study consisted of 21 participants.

#### 3.4.1.1. Inclusion sampling criteria

Participants were included according to the following:

- They had to be women of child-bearing age who were multiparous.
- Women within the age group of 18 to 45 years.
- Women who had experiences of maternal death amongst friends or relatives.

#### 3.4.1.2. Exclusion Sampling Criteria

Exclusion criteria refer to factors which preclude participants from taking part (Burns & Grove 2011). The exclusive criteria for this study were:

- All pregnant women who were multiparous but mentally challenged.
- Nulliparous women.

### 3.5. DATA COLLECTION PROCEDURES

Data collection was done through in-depth interviews in focus group discussions. In-depth interviews in qualitative research enabled the researcher to probe deeply for answers, and to explore participants' knowledge and experiences regarding maternal deaths (Brink, Van De Walt & van Rensburg 2013). An experienced research assistant took field notes during and after interviews to describe all the responses of the participants during interviews.

During in-depth interviews, the interviewer asked broad questions, and then posed additional probing questions until the researcher was satisfied with the answers (Brink et al 2013). A tape recorder was used to ensure that no responses were missed.

The following broad questions were asked to get the desired information:

- What are the causes of maternal deaths?
- What do you understand by maternal deaths?

Interviews were conducted in focus groups using in depth interviews. A quiet room was secured for the interviews, so that participants would feel free to speak and would not be disturbed. The sitting of participants was properly arranged so that the researcher could observe participants verbal cues and maintain eye contact with each one for enhanced rapport. The researcher introduced herself, the research assistant, the topic, and the purpose of the study.

Ground rules were set such as anonymity, the signing of consent forms, confidentiality, having mobile phones on silent, and the fact that each participant would have an equal chance to speak without being interrupted. The broad research question used to guide the interview was 'What are the perceptions, knowledge and attitudes of women concerning maternal deaths at Qaukeni Sub-District?' The interviews took 45 – 60 minutes per focus group.

### 3.6. TRUSTWORTHINESS

In this study, trustworthiness was ensured by credibility, transferability, dependability, and conformability of the findings, according to the guidelines given by Lincoln & Guba (1985) research process. To ensure trustworthiness the researcher checked every step of the research process. Trustworthiness is said to have been satisfied if the following can be satisfied; Credibility, dependability or auditability, conformability and transferability which is also known as fittingness (Rees 2011).

#### 3.6.1. Credibility

Credibility has been ensured by the availability of the researcher during data collection. The researcher explained to the participants the aim of the research and their role during interviews. Same research questions were asked to different focus groups and individual participants to address credibility. Furthermore, the researcher listened to audio tapes of the interviews and compared transcribed and translated data for accuracy and completeness (Brink et al 2013).

#### 3.6.2. Transferability

The transferability of this study refers to whether the findings may be applied in other settings which have similar rates of maternal death (Brink et al 2013). The study could be applied to all women of child bearing age from 18-45 years having the same problem. A

thick data base that could be accessed, used and followed by others was kept by the researcher to ensure transferability.

### 3.6.3. Dependability

In this study the researcher ensured that the research process was logical and clearly documented. The research process was audited to show dependability, peers followed the same procedure used by the researcher Van der Walt & Rensburg (2012) and checked whether findings were consistent and acceptable. Dependability was ensured by conducting a pilot study from one of the focus group and one individual. Brink et al (2013) states that all qualitative studies require an audit of the process and procedures used by the researcher to determine whether they are trustworthy.

### 3.6.4. Confirmability

The confirmability of the study was ensured by the co-coder decisions based on the data scripts. The tape recorder helped to ensure that the data was correctly interpreted and reflected the data obtained from the participants. This therefore guaranteed that the findings and themes of the researcher were supported by data and that there is internal agreement between the investigators and the actual evidence (Brink et al 2013)

## 3.7. ETHICAL CONSIDERATIONS

### 3.7.1 Informed Consent

The researcher explained all the information regarding the study before the participants were allowed to participate, and each signed an informed consent form. Participation was entirely voluntarily (Burns & Grove 2011). .

### 3.7. 2. Approval by the institution

Permission to conduct the study was sought and obtained from the Research Ethics Committee at the University of Fort Hare, from the Provincial Department of Health, the OR Tambo District and the health care facility managers where the study was conducted.

### 3.7.3. The right to self-determination

This right was observed through the respect given to each participant, in that participants took part by their own choice, were given sufficient information about the study and were free to do things independently and to withdraw at any time (Burns & Grove 2011).

### 3.7.4. Anonymity

No names were attached to the participants ~ instead, numbers were used to enable the sampling procedure (Burns & Grove 2011).

### 3.7.5. Confidentiality

Data collected from the participants was protected from being disclosed to other people (Burns & Grove 2017). The data collected was kept under lock and key and only the researcher and research team had access to it (Burns & Grove 2017). .

### 3.7.6. The right to privacy

In this study the privacy of the participants was maintained by obtaining a signed informed consent letter from each one regarding participation in the study, and by keeping the information private, available only to the research team and the participant.(Burns & Grove 2017). The research interviews were conducted in a private room where privacy was maintained during the interviews. The researcher made the research participants aware of the fact that the interview would be tape recorded and that names would not be attached to the interviews (Burns & Grove 2017).

## 3.8. DATA ANALYSIS

Data analyses involves analysing the data, and includes the process of transcribing and translating the data, then categorising, ordering, organising and manipulating the data into themes (Burns & Grove 2011). Data analysis started immediately after the researcher received the narratives from the participants. According to (Botma, Greeff, Mulaudzi & Wright 2010), data analysis may be done simultaneously with data gathering. In this case, it was done both during and after data collection.

Data was analysed according to its thematic content. Themes and sub-themes were formed based on the information provided by the participants. The recorded information was transcribed for easier analysis. The data gathered was summarised, interpreted and meanings were attached to it. All the points that were captured as notes constituted the basis of the final interpretation (Joubert 2014).

Video-taped interviews were transcribed and translated, and the information sorted into categories and sub-categories. Later themes were formed. Creswell (2017) summarises the steps of analysis (1990) in this fashion:

Creswell (2017) summarises Tech's steps of analysis (1990) in this fashion:

- Getting a sense of the data by reading through all the transcriptions carefully and jotting down ideas.
- Picking out the most interesting interview and considering its content, categorising topics as major, unique and 'leftovers'; abbreviating the topics as codes and writing the codes next to the appropriate segments of the text, and then trying out this preliminary organising scheme to see whether new categories and codes emerge.
- Finding the most descriptive wording for the topics and turning them into categories; grouping topics that relate to each other in order to reduce the total list of categories.
- Making a final decision on the abbreviation of each category and placing codes in an alphabetic manner.
- Assembling the data belonging to each category in one place and performing a preliminary analysis.

The transcriptions together with field notes were sent to ''an independent coder'' (Creswell 2017) for analysis. The coding process resulted in the emergence of themes. These were refined during the consensus discussion with the co-coder. The researcher and the co-coder agreed on the categories, subcategories and the themes identified in the transcriptions.

### 3.9. SUMMARY

Chapter three has introduced the qualitative, descriptive, and exploratory research method used to collect data on women's knowledge, perceptions and attitudes to the problem under investigation. The research design included the correct and most appropriate data collection and analysis methods. The study's trustworthiness was ensured through certain precautions taken as described, and all ethical considerations were observed, as described. The research design, research population, sample selection, criteria and reasons for using qualitative research were also explained in this chapter.

# CHAPTER 4: RESULTS

| THEMES | CATEGORIES | SUB-CATEGORIES |
|---|---|---|
| 1. Knowledge and understanding of pregnancy | 1.1 Common Physical changes that takes place in the body during pregnancy. | • Missed menstrual period<br>• Breast changes<br>• Weight Changes<br>• Skin changes<br>• Emotional symptoms<br>• Light headedness/dizzy<br>• Swollen feet |
| 2. Challenges encountered in pregnancy and in the facilities during delivery | 2.1 Problems related to the patients<br><br>2.2.Perceptions regarding teenage pregnancy<br><br>2.3. Expressed compromised service delivery | • Nausea and vomiting<br>• Dizziness<br>• Loss of appetite<br><br>• Unexpected pregnancy<br>• Severe labour pains<br><br>• Delays in assisting patients in labour.<br>• Lack of responsibility of nurses and doctors.<br>• Nurses having artificial nails in labour ward.<br>• Doctors misidentifying patients.<br>• Nurses swearing patients |
| 3. Maternal deaths experiences | 3.1 Causes of maternal deaths<br><br>3.2 Traditional and Cultural influences<br><br>3.3 Negative implications regarding unplanned pregnancy | • Home deliveries<br>• Excessive bleeding during and after delivery<br>• High blood pressure<br>• Lack of skills in traditional birth attendants<br>• Non-adherence to anti-retroviral treatment<br>• Infection<br>• Prolonged labour<br>• Clinics are too far and delayed ambulance<br><br>• Muti<br>• Mbelekisane<br>• Gwarugwaru<br><br>• Rejection<br>• Abortion<br>• Lack of support<br>• |
| **THEMES** | **CATEGORIES** | **SUB-CATEGORIES** |
| 4. Perceptions of health care services. | 4.1 Provision of care<br><br>4.2 Human and physical resources | • Promptness of care<br><br>• Competency of care<br>• Shortage of nurses<br>• Electricity outages in hospitals<br>• Limited food in hospitals<br>• Nurse –patient communication and relationship<br>• Male nurse proposing love to a woman in labour |

| | | |
|---|---|---|
| | | • Medico- legal hazards |
| 5. Participants recommendations for an effective and efficient health care services. | 5.1 Suggestions from participants | • More nurses to be employed by the Department of Health.<br>• Building of more clinics<br>• Clinics in rural areas to have ARVs in stock<br>• Waiting times to be reduced<br>• Older nurses to be replaced by younger nurses |
| 6. Impact of maternal death to the family and community. | 6.1 Emotional impact to the family<br><br>6.2 Emotional impact to the community | • Siblings' difficulty with adjustment during grieving period<br><br>• Community adjustment |

## 4.1. OVERVIEW OF RESULTS

Chapter three focused on the methodology, while Chapter four presents the results of the study. Five main themes emerged from data analysis namely (i) knowledge and understanding of pregnancy, (2) challenges encountered in pregnancy and in the facilities during pregnancy, (3) maternal deaths experiences (4) perceptions of health care services, (5) participants recommendations for an effective and efficient service and (6) impact of maternal deaths to the family and the community. Themes were further classified into categories and sub categories as indicated in the table below.

**Table 4.1:** Themes, categories and sub-categories of the perceptions, knowledge and attitudes of women towards maternal deaths

## 4.2. THEME 1: KNOWLEDGE AND UNDERSTANDING OF PREGNANCY

Findings indicated that participants had different perceptions about pregnancy and causes of maternal deaths, with some showing ignorance of what pregnancy is.

### 4.2.1 CATEGORY 1: Common physical changes that take place in the body during pregnancy.

This category was divided into five sub-categories. During the interview, participants highlighted the physical signs and symptoms of pregnancy such as missed menstruation, vomiting and not liking certain foods, dizziness, swelling of the feet, eyes becoming white, changes in colour and size of the breasts and pimples on the face.

#### 4.2.1.1. Missed menstrual period

Participants stated that a woman is pregnant when she has missed the menstrual period.

'*When I am pregnant I only know it when I have missed my month of menstruation, a month, then it happens that I wait for the upcoming month and there is no menstruation. Then I go for check-up and it is then that I know*.'

'*Pregnancy we can say when you see yourself having missed the menstruation period, you first look at the week as against your usual time of menstruation then if you miss a month you will begin to see signs of pregnancy like nausea and vomiting, then you are sure that something is happening in your body*.'

Another participant further explained that pregnancy occurs when a woman has '*slept with a man without using a condom misses a period and then she becomes pregnant*.'

One participant had this to say: '*It means when one is not using a condom then she becomes pregnant when she sees herself having missed menstruation then the woman is pregnant*.'

#### 4.2.1.2. Breast changes and swollen feet.

A participant explained that she might not know that she is pregnant but someone looking at her may observe signs and symptoms of pregnancy, such as changes in the size of the breasts.

The participant had this to say: ''*This person will be seeing pimples on my face or my breasts being full and big in size whilst I may not be knowing that I am pregnant*.''

Another participant stated, ''*When one is pregnant there will be changes in size and colour of the breasts, and swelling of feet*.''

#### 4.2.1.3. Skin changes

A participant explained that she might not know that she is pregnant but someone looking at her may observe signs and symptoms of pregnancy, such as pimples on the face.

#### 4.2.1.4. Light headedness/Dizziness

Dizziness was highlighted as another sign of pregnancy by participants.

## 4.3. THEME 2: CHALLENGES ENCOUNTERED IN PREGNANCY AND IN THE FACILITIES DURING DELIVERY.

This theme is supported by three categories and ten sub-categories.

### 4.3.1. CATEGORY 1. Problems related to patients

This category is supported by three sub-categories:

#### 4.3.1.1. Nausea and vomiting

Participants mentioned that some people vomit when pregnant and thought that vomiting is a sign and symptom of pregnancy.

'*A pregnant person vomits; she vomits when she has eaten something or she may dislike some food stuffs*.'

#### 4.3.1.2. Dizziness

One of the challenges experienced by participants is dizziness in pregnancy, a participant said: ''*I noticed that a pregnant person falls sick most of the time. You have things which you did not have when you were not pregnant, like dizziness."*

#### 4.3.1.3. Loss of appetite.

'*When one is pregnant there are things she dislikes, there are things, let me make an example about me, when I am pregnant there are foods and people I dislike.*

#### 4.3.1.4. CATEGORY 2. Challenges encountered in pregnancy

#### 4.3.1.4.1. Unexpected pregnancy

Teenage pregnancy was viewed as a particular challenge experienced in the community. Teenagers fell pregnant, and because their condition was unexpected in the family and might incur parental disapproval, they kept it hidden, thus losing out on essential antenatal care.

#### 4.3.1.4.2. Severe labour pains

When a participant was asked to say more about teenage pregnancies, she highlighted that the labour pains can be unbearable – and that teenagers rush into things that are meant for adults.

### 4.3.2. CATEGORY 3. Expressed compromised service delivery

This category is supported by five sub-categories.

#### 4.3.2.1. Delays in assisting patients in labour

The participant explained about the conduct of nurses working on night duty. She stated: ‘‘*Sister, if you have arrived during the night, nurses have a tendency of locking themselves up in the rooms exactly when you feel that the labour pain is strong and you need help because the situation needs a nurse. Then you will raise your voice and some nurses do come, some don't*.’’

In addition to that, one participant indicated that she was sent to and from the labour ward by nurses, and as a result she nearly delivered her baby in the waiting room. She might have been delivering a breech baby, and nurses were all far away.

Another respondent raised the issue of lack of timeous and early diagnosis of women in labour. She said. ‘‘*Even if you are going to deliver through an operation, nurses do not quickly observe that, until you are in labour for days in succession, and eventually you are going to deliver through an operation. The nurse does not see that and continues to do vaginal examination; she does not see that you are supposed to be having an operation*.’’

#### 4.3.2.2. Lack of responsibility of nurses

Participants were asked whether they were ill-treated by health professionals and how that ill treatment, if any, might contribute to maternal deaths.

A participant had this to say:

‘‘*Another cause of death when you give birth is the lack of care in hospitals. Nurses are sitting there and do not care for you, or they will say 'Get on the bed', then they will instruct you to push. It was my first time to give birth to a baby, I don't know how to push a baby and how do I go about it. There goes a nurse to another room leaving me*

*behind pushing the baby and she stayed there. The birth process is continuing or perhaps I am tired that can cause me to die or I had a very long labour without care, I am supposed to deliver but they don't care for me and I am tired*.''

#### 4.3.2.3. Nurses having artificial nails in labour ward.

Experiences were shared pertaining to the pain and torment endured by patients when nurses wore artificial nails in the labour wards:

''*Nurses must stop putting artificial nails on, because they are required to clean the patients and wear gloves, but these gloves are torn because of the long nails*.''

A participant also shared that she felt pains for a month after a vaginal examination conducted by a nurse wearing long, artificial nails:

''*The nurse asked, 'Do you want to be helped?' Then you say, yes, while crying due to pains and the nurse will insert fingers the way she feels like doing it, and you tolerate the pain with eyes closed, crying and tolerating the help from artificial nails*.''

One participant highlighted that her episiotomy was not done well: ''*the people who do suturing are doing it badly. As a result, some people are encountering problems emanating from suturing, or if an episiotomy has been done, it is not done properly. The cut is enlarged and suturing is done badly. I am referring to a 'home girl' who stays next to my home that was not sutured properly and could not walk for a period of a month. She felt pains when walking and had a yellow vaginal discharge and the suture line did not heal.*''

#### 4.3.2.4. Doctors misidentifying patients.

A doctor was reported as having called a patient a 'chocolate':

''*Nursing care might not be there, like when we lost my aunt who was taken to hospital. The doctor said, 'Huh! You have brought me this chocolate, what I am going to do with this chocolate?' You see the doctor labels you as a chocolate when you are sick and wheeled by a wheel*.''

#### 4.3.2.5. Nurses swearing to patients.

Some nurses swore at patients, and one was reported to have said, ''*open your thighs! You enjoyed it when you opened up for the coming of the baby*.''

Participants narrated how many nurses behave uncaringly in labour wards. One said:

''*Then you will raise your voice and some nurses do come and some don't. You would say, 'Nurse, I need to give birth', then the nurse would insult you saying, you are nagging us by your noise, what do you know about giving birth? What I say happened to me*. The day nurses said this patient should have delivered yesterday.''

### 4.3. THEME 3: MATERNAL DEATHS EXPERIENCES

This theme is supported by 3 categories and 16 sub-categories.

#### 4.3.1 CATEGORY 1. Causes of maternal deaths

The findings indicated that clients do not attend the antenatal care clinic when pregnant because of various reasons such as fear of their pregnancy being detected by parents and school teachers, or myths such as the possibility of being bewitched by girls with whom they share a boyfriend. Another reason cited was that clinics are very far and they do not have money for transport that could be other reasons for home delivery.

##### 4.3.1.1. Home delivery

Home delivery was mentioned as one of the contributory factors for maternal deaths, due to the limited knowledge and skill of the people who assist with deliveries at home.

One participant said, ''*There is no one to assess a person who is in labour like a doctor.*''

Another participant cited that even if there were helpers, they were not the same as health professionals in the hospital, because they do not know what to do when the baby has an abnormal presentation.

One said, '*When you deliver at home there is nobody to take care of you, unlike in the hospital where the patient is cleaned and given vitamins, you are cleaned and remain clean. For example when you have delivered at home the baby is just put there without being checked*.'

##### 4.3.1.2. Excessive bleeding

Heavy bleeding was cited as another cause of maternal death at home, putting the lives of women in danger when health professionals are absent**.** When asked how

bleeding could cause death, a participant said, **''***The reason might be heavy bleeding at home and not being in hospital where there are no nurses who could assist the woman, death could be caused by bleeding*.''

The participants thought that delivering without Nevirapine may contribute to bleeding. When asked what causes the death of a pregnant woman when there was no Nevirapine, a participant had this to say: ''*The reason might be heavy bleeding at home and not being in hospital where there are nurses who could assist the woman; death could be caused by bleeding*''.

#### 4.3.1.3. High blood pressure

Participants cited that there is a tendency among pregnant women to default on taking treatment. When asked what happens when a person does not take her treatment, one participant said, ''the *woman may have elevated blood pressure, eyes not seeing well and swollen*.''

#### 4.3.1.4. Lack of skill in traditional birth attendants

One of the challenges of home deliveries mentioned was the limited skills of traditional birth attendants, especially when women had complicated deliveries. This lack of skill on the part of the birth attendant could lead to the death of the woman in labour.

A participant in focus group one stated the following:

''*The helpers can just be there but when the baby comes in a complicated way, maybe showing feet first or any other abnormal way, or showing an arm, they don't know what to do. So because the person with home delivery has a problem, that may lead to death. When they rush her to the hospital it will be late already*.''

Helpers at home were described as being unable to cut the umbilical cord. In addition, a participant indicated that home deliveries occur as a result of teenagers wanting to hide their pregnancies. She said, ''*Those who are schooling hide themselves from parents, will deliver alone, strangle the baby where she delivered and will come home without the baby and no one will know that she fell pregnant*.''

The participant further stated that some home deliveries took place amongst those who were not schooling because they were too lazy to travel.

#### 4.3.1.5. Non –adherence to anti-retroviral treatment

It was highlighted by participants that sometimes the cause of death is the negligence of women themselves. It was pointed out that some women do not take care of themselves.

''*Women do not care for themselves. For example, she is taking ARVs in her pregnancy and does not take treatment, saying the treatment is delaying her. Then the unborn child is infected. When giving birth she dies, leaving the child alive*.''

Another participant confirmed that women were sometimes contributors to their own deaths. One said, ''*I can say death is caused by not following clinic instructions, because when you go to the clinic for the first time you are given instructions as to how to take your treatment. Even if you have high blood pressure, you are given information on how to take your treatment, and you need to take it exactly the way you were told. Some people default treatment for some days without taking their treatment and forget*.''

#### 4.3.1.6. Infection

Infection was cited as another cause of maternal death in home deliveries. A participant in focus group 2 said, '*Infection inside the womb could be the cause, because in the hospital the woman is cleaned before discharge. I don't see anyone who can think or who can do the cleaning of the private parts at home, and infection will form inside*.'

#### 4.3.1.7. Prolonged labour

A participant said she came to the hospital with labour pains:

''*When I arrived in hospital I don't know whether labour pains stopped or what happened. I stayed more than a week and when I went to check up I heard that the mouth of the womb was still closed and I thought that I might die there, and I requested a Caesarean section*.''

#### 4.3.1.8. Clinics are too far

Participants indicated that clinics are too far apart in rural areas and it is difficult to reach the clinic during the night. Also, there are no means of communication to assist the woman in labour. A participant said:

''*Another cause of maternal death is that clinics are too far and you will find that it is the rural areas and it is during the night. So if you deliver at home assisted by old aged people, then you die or the baby dies*.''

#### 4.3.1.9. Delayed ambulance

*'In some areas there are no phones, you call the ambulance and it does not arrive during the night. Even when she has arrived in the hospital, the women do not get quick attention and stays for a long time until the baby comes, maybe coming in a wrong way ~ then the woman dies*.''

### *4.3.2.* CATEGORY 2: Traditional and cultural influences

Participants explained the causes of consulting the traditional healers during pregnancy and the influences of their beliefs in relationships with other young women.

#### 4.3.2.1. Muti

*The participant had this to say:" It happens to us, who get pregnant and attend the traditional healers, when you share a boyfriend with other girls, or you are bewitched, and when you are in labour you eventually die.*

#### 4.3.2.2. Mbelekisane

*Mbelekisane* is also ingested for assisting with quick expulsion of the foetus during labour. *Mbelekisane* makes the baby to be quickly expelled. When you have already delivered the baby, *Mbelekisane* as a traditional medicine has caused the baby to have a green colour on the buttocks which you may think is caused by veggies, yet it is the traditional medicine.''

When participants were asked how *Mbelekisane* could be a danger, a participant said: ''*It is wrong these days, especially when you use Mbelekisane alone and you don't go to the clinic, while you don't know the position of the baby in the womb*.''

#### 4.3.2.3. Gwarugwaru

The use of herbal medication was mentioned as a possible cause of danger to pregnant women. A medication called *gwarugwaru* is ingested by pregnant women as a purgative when the woman feels dizzy. The idea is to remove bitterness from the gall, according to the interpretation people give to the dizziness.

A participant said, ''*a pregnant woman would complain of dizziness and would suspect something, and say, 'I have bitterness from the gall when I am asleep. I wish I could take a purgative*,' and she would drink *gwarugwaru*.

### 4.3.3. CATEGORY 3: Negative implications regarding unplanned pregnancy

#### 4.3.3.1. Rejection

Some pregnant women shared their experiences of rejection by their spouses when they were pregnant. One participant stated, ''*in my first pregnancy the problem I saw was the rejection by my husband whom I loved so much. I would be excited just by seeing him, even if he has said nothing to me, but if I have seen him with another girlfriend I will cry at home the whole night. That is one reason that made me to see that pregnancy has problems because I just wanted to see him, even if he has not said a word. I wanted to commit abortion when I saw that he does not really love me, and I preferred to do abortion for his child because he does not love me and I love him*.''

When participants were asked about the impact of not being loved by a fiancé, the response was, ''*it affects the baby because of stress and you don't know that … you want to get rid of the baby, because you continue to think of someone who does not care for you*.''

#### 4.3.3.2. Abortion

Another respondent shared how she was ill-treated by the father of the child, from the time she told him that she was pregnant until the pregnancy was far advanced.

''*I told him and he said, 'You say you missed the menstrual period? Chase it and you will eventually catch it.' I realised that this was ill-treatment, and he ended up giving me money to do abortion because he did not want the baby*.''

#### 4.3.3.3. Lack of support

The scenario portrayed the extent of abuse women and children are subjected to. A participant had this to say: ''*Yes, I agree he has not yet phoned me and has not spoken to me up to now, and the child is four years now; he has never done anything for him. When the child wants to go to the father's place he goes and comes back with nothing*.''

### 4. 4. THEME 4: PERCEPTIONS OF HEALTH CARE SERVICES

Two categories emerged here:

#### 4.4.1. CATEGORY1: Provision of care

This category is supported by one sub-category.

#### 4.4.2. Promptness of care

Younger nurses were perceived to be more caring than older nurses, and male nurses were viewed as more caring than female nurses.

''*Young nurses are caring, together with student nurses. I don't know whether it is because the students are not full-time workers, but they care*.''

#### 4.4.3. CATEGORY 2: Human and physical resources

This category is supported by seven sub-categories.

#### 4.4.3.1. Shortage of nurses

Resources are enablers for rendering effective quality services in hospitals and clinics. The shortage of nurses was highlighted by participants as another contributory factor to maternal deaths. Here is what a participant had to say:

''*What I have observed is the shortage of nurses, they are few, and yes there is a shortage of nurses. Now when there is one nurse she is expected to go to the dispensary or to go and attend babies that side, meanwhile there are also pregnant women this side. The nurse has to attend to the number of patients outside. I see the shortage of nurses*.''

#### 4.4.3.2. Electricity outages

Electricity outage was also mentioned as another factor that could predispose women to maternal deaths. When the researcher enquired how electricity outages predispose women to maternal death, this is what the participant said:

Respondent: ‘’*It does happen sister when doing suturing and the electricity goes off, now the doctor does suturing quickly without noticing that some items used were not all taken out. I think some do not get care from theatre and there are things that are forgotten like the pair of scissors or they become slow in doing operations and the person dies*.’

#### 4.4.3.3 Limited food in the hospitals

When participants were asked about the care for pregnant women in the clinics and hospitals, they were strongly critical.

One participant stated that there was no care in the clinic or hospital, and she would not advise families and friends to use clinics and hospitals because relatives are always asked to bring food for the sick family members.

She said this had happened to her recently. When asked about how often it was necessary to bring food for the sick relative, she said, ‘’*I am not sure because I rarely come this side, I think she was admitted for four days. If there is food it is very little and maybe of this amount [pointing at the tip of her finger]. Food is not enough and when you take treatment you need a full plate of food, you can't take pills when the stomach is not full. I cannot say they must go to the clinics or hospital. I would encourage relatives and other people to stay at home*.’’

#### 4.4.3.4. Competency of care

Participants said that they were attended by health professionals whom they perceived to be student doctors because of a general shortage of doctors in the hospitals. They said that student doctors made mistakes when they were left to conduct Caesarean sections without the supervision of experienced personnel. A participant said:

‘’*Another thing, sister, sorry ~ there are those doctors whom I don't know whether they are still on training. When a pregnant woman is in labour and has to be taken to theatre for Caesarean section, then the operation will be done by a student doctor. There is*

*someone in the location who was wrongly cut and wrongly sutured and was buried two weeks ago*.''

The participant further stated, ''*When the doctor examined her body he enquired from her father about the person who did the suturing, and the answer was that the father was referred to a student doctor*.''

#### 4.4.3.5. Nurse patient communication and relationship

Participants felt that nurses who are old are stubborn and unhelpful, and had negative attitudes to patients.

One participant stated: ''*there are too many old-aged nurses and they must be reduced through retirement, to bring in young nurses. Older nurses are stubborn. Old nurses have a negative impact in the hospitals*.''

Another said, ''*the older nurse will ask you, 'You say you have come to deliver the baby?' Then she will ask you about the number of your pregnancies, then you start counting and say I have two and this is the third one, then the nurse says, 'You are an old woman of my age, see – you will go home straight after delivery.' Hey, you ask yourself why it will be like that because with the previous pregnancies I slept in hospital after delivery. Why now when I have come to deliver the third baby I am told that I am an old woman, when I saw myself that I am not of the same age with this mother who says this*.''

#### 4.4.3.6. Male nurse proposing love to a woman in labour

The conduct of both nurses and doctors was cited as unethical. Participants had this to say:

''*A male nurse inserted fingers in my vagina only to find out that he is fallen for me. He wanted me to have love affair with him after delivery, which is not good*.''

#### 4.4.3.7. Medico-legal hazards

The respondents also cited mistakes made by nurses and doctors such as leaving a pair of scissors in the womb during an operation. This is what one said:

''*Pertaining to the pair of scissors, it happens that a pair of scissors may be left in the womb and after a long time you feel that something happened in your womb when you*

*were giving birth, and it is only then that you are taken for another operation, after you have already delivered*.''

One said, ''*It happens frequently because they [doctors and nurses] do the operations in a hurry – just the way the nurses are behaving when they are conducting deliveries, and that is how the pair of scissors is left. The outcome is seen on the legs that stop functioning, which ends up making the patient using a wheel chair or crutches*.''

### 4.5. THEME 5: Participants recommendations for an effective and efficient health care services.

This theme is supported by one category and six sub-categories.

#### 4.5.1. CATEGORY1: Suggestions from participants

This category is supported by five sub-categories.

##### 4.5.1.1. Heath education

Health education generally was felt to be needed:

''*I wish that the Department can teach us as women about when to start at the clinic early so as to protect yourself and the baby. If we can have knowledge, maybe things can be better, because some people do not have knowledge*.''

Another participant stated that her wish was ''*to see the Department going to communities to do health education, because people do not go to hospitals. Health education should be about the importance of attending antenatal clinic by pregnant women*.''

Another said, ''*my wish is to see pregnant women being encouraged to take iron tablets to protect the unborn child*.''

##### 4.5.1.3. More nurses to be employed by the department of health.

More nurses need to be employed by the Department of Health:

''*My wish is that the Department of Health employs more nurses because they are scarce. One nurse may attend a patient while the other patient is in labour and is left unattended, since there is only one nurse*.''

#### 4.5.1.4. Building of more clinics

Participants mentioned the challenges of the scarcity of clinics in their areas:

''*It happens sometimes that we do not have money for transport to go and fetch treatment, but if there was a clinic in the area we could be assisted*.''

Another respondent said that often hospital was the last resort: ''*we do come to the hospital after we have tried enema. Yes, it will be the last resort, because the client will complain of hunger and there is no money for travelling long distances*.''

#### 4.5.1.5. Long waiting times

Participants highlighted the long times they were expected to wait when seeking assistance at clinics and hospitals:

''*You see, Sister, I arrived at five, I have been sitting here ever since. The nurses continue to tell us to move and follow the queue [laughing]. There is nothing that they are doing. I have been here long before, Sister; if there was something they were doing, I would be having my pills in my hand*.''

#### 4.5.1.6. Mobile clinics in rural areas to have ARVs in stock

Another participant highlighted that it would be good if mobile clinics in the rural areas had ARV treatments in stock when going to mobile clinic points.

### 4.6. THEME 6: Impact of maternal death to the family and community

This theme is supported by two categories and two sub-categories.

#### 4.6.1. CATEGORY1: Emotional impact to the family

This category is supported by one sub-category.

#### 4.6.1.2. Siblings' difficulties with adjustment during grieving period.

Participants highlighted that maternal deaths expose children to frustration when they are left with a father who may make things difficult by being irresponsible and failing to support them financially.

#### 4.6.1.3. CATEGORY 2: Emotional impact to the community

A sense of psychological pain was expressed by participants due to the loss of a woman in the community who left young children behind.

''*It is painful when you see the children of the deceased, the woman leaving young kids, it is painful*.''

#### 4.6.1.4. Community adjustment

Maternal deaths are sometimes perceived as a great loss, robbing the community of women who bring hope to other people.

A participant stated: ''*It is not nice to lose a person that you are used to, or maybe someone who has been doing good things in the location, for example, a ward counsellor*.''

### 4.7. SUMMARY

Pregnancy was perceived as a painful phenomenon when it occurred in the teenage years, as teenagers were ill-equipped to deal with it. Participants' negative attitudes towards hospitals and clinics seemed to be due to the behaviour of nurses who were perceived to be a contributory factor; they were seen as harsh. There were also too few of them to do an adequate job, and frequently left patients in labour to take care of themselves so that they could attend to other patients.

The implementation of corrective measures and consequence management might assist in improving the behaviour of health professionals and ensure improved compliance to the six priorities of the National Core Standards. There is a need for the Department of Health to enforce compliance to the Nurses' Ethical Code of conduct to enhance the values of the profession, and to instil accountability and responsibility amongst nurses. Nurses should be forbidden from wearing artificial nails on duty to prevent infection and promote health.

# CHAPTER 5: DISCUSSION OF THE FINDINGS

## 5.1. INTRODUCTION

In this chapter the nature of the problem which forms the basis of the study is presented and discussed in view of the findings. A summary of the data is presented and conclusions are drawn about the knowledge, perceptions and attitudes of women concerning maternal deaths at Qaukeni Sub-District.

Maternal deaths are a public health problem both locally and globally. A high number of maternal deaths have been recorded at Qaukeni, despite the strategies put in place by the World Health Organization for countries to follow. It is clear that women of child-bearing age and their families should be equipped with knowledge related to pregnancy, labour, delivery and the postpartum period in order to detect early pregnancies and labour-related problems, and thus prevent maternal deaths.

## 5.2. DISCUSSION

Chapter 4 presented the data revealed through interviews on the knowledge, perceptions and attitudes of women concerning maternal deaths. Participants perceived maternal deaths as a painful occurrence in the community, and one that could be avoided. Knowledge about the signs and symptoms of pregnancy needs to be more clearly disseminated to women because knowledge of one's condition forms the basis of timeous antenatal care.

Most of the participants knew about some signs and symptoms of pregnancy; they mentioned missed menstruation, nausea and vomiting, dizziness, disliking certain foods, changes in the size and colour of the breasts. Some could further explain how conception takes place, stating that a woman carries a baby in her ''stomach'' after fertilisation of an egg by the sperm has happened. There were, however, those who did not know about pregnancy and associated pregnancy with sickness, protection of the baby or drowsiness.

It is quite alarming to realise that many women do not know when they are pregnant, apart from the odd sign or symptom which they often depend on others to detect. This could be the reason why so many do not attend antenatal care clinics or attend it late. Hadayat, Amasha, Manar & Heeba (2013) conducted an exploratory descriptive study about maternal awareness of the signs of both normal and abnormal pregnancies; some of the

findings of that study concur with those mentioned in this study, namely, nausea, vomiting and dizziness. This study concurs with the study done by Abdurashid, Ishaq, Ayele & Ashenafi (2018) in Eastern Ethiopia.

Knowledge about the discomforts of pregnancy is important to women of child-bearing age so that they may be able to manage the discomfort correctly and refrain from using home remedies that may have side effects detrimental to their own life or the life of their foetuses. Participants who did not know about signs and symptoms of pregnancy missed the danger signs of pregnancy resulting to delay in finding obstetric care (Abas & Fakhareen, 2017) in Bagdad city, (Fathy, 2017) in Egypt, (Nurgi,Tachbele, Dibekulu & Wondim, 2017) in Derbe Berham, Ethiopia, (Mahalugam & Venkateasam, 2014) in India.

In this study some participants who knew about physical signs and symptoms of pregnancy did not utilise their knowledge effectively and seek medical help instead cultural beliefs were a priority and use of home remedies, attending to Traditional Healers for the treatment of danger signs and that predisposed women to maternal deaths. This finding corresponds with a study done by Ettah (2017) in Egypt where participants preferred traditional remedies due to their cultural beliefs for the treatment of danger signs of pregnancy.

In this study, a participant explained how she manages dizziness by drinking a herbal medication called *gwarugwaru*, with which she believed would wash away the bile which she assumed was the cause of dizziness. Ignorance in this case clearly shows how important it is to attend an Antenatal Care clinic at an early stage, where the pregnant woman may be educated about early signs and symptoms of pregnancy, and what remedies to take when the need arises.

Knowledge of the causes of maternal mortality is key in order to prevent the deaths that are preventable, including those sustained during parturition. The findings in this study gave a clear picture of women's levels of knowledge about the causes of maternal deaths. Many had a good knowledge of the causes of maternal deaths and could mention home deliveries, bleeding, high blood pressure, lack of skill in traditional birth attendants, infection and non-adherence to anti-retroviral treatment. In this area, the findings are similar to those revealed in a study carried out in Northern Ethiopia by Azuh et al (2015), where participants could name some of the causes of maternal deaths, such as infection, high blood pressure and bleeding.

There were nevertheless a few participants who had limited information about the causes of maternal deaths. Some confusion of facts was picked up with regards to the taking of Nevirapine before delivery, where a participant cited that bleeding occurred as a result of not taking Nevirapine. Limited knowledge could be attributed to the fact that women have little knowledge about HIV/AIDS and the PMTCT programme.

The findings in a study by the World Health Organization (2014) about the global causes of maternal deaths concur with the findings in this study; that haemorrhage, hypertension and sepsis are responsible for more than half of the maternal deaths globally. These findings are a cause for concern and more awareness on the phenomenon may yield better results for maternal health. More strategies and policies are needed to address pregnancy before 20 weeks.

Participants in this study cited women's non-compliance with nurses' instructions as one of the causes of their deaths. A study done by Titilayo in Nigeria (2015) concurs with the finding above; the Nigerian study revealed that women did not adhere to health-related safety measures which might have contributed to aseptic deliveries which would in turn promote the well-being of the mother and baby before and after delivery.

Without a collaborative effort on the part of clinicians and communities, the scourge of maternal deaths may continue to cause strain on the fiscus of the country, and the well-being of communities.

The researcher found that men still take almost no responsibility for preventing unwanted pregnancies. One participant explained how her fiancé refused the use of a condom, then forced her to have an abortion when pregnancy was the result. This finding concurs with a study done by Jogdand, Pravin & Jogdand (2013) in an urban slum area of South India, where all decisions were taken by men. Awareness programmes on maternal health that are inclusive of men may yield better results than focussing on women only, and may help reduce maternal deaths.

Learning refers to adapting to constantly changing environment (Cherry 2017).Empowering communities with health knowledge is paramount and a cost-effective way to reduce maternal mortality. The departmental plans must include awareness campaigns about the importance of Antenatal Care to reduce home deliveries and their many complications. In addition, the empowerment of traditional birth attendants may need attention, as they are still prevalent in under-resourced communities and are reported to have a lack of necessary

skills to deliver babies which present with complications. Adaptation to new information through assimilation and accommodation will enable women of child bearing age to adopt new behaviours that allow them to change the existing knowledge and that contributes to the reduction of maternal deaths.

It is alarming that there are still people who perceive maternal deaths as being caused by witchcraft. Participants clearly explained their belief that when two women share a boyfriend, it is likely that one or both will seek assistance from a traditional healer to use a *muti* to bewitch the other one and cause her to die while giving birth. These kinds of beliefs are contributing to delays by women in attending antenatal care; they are afraid of being seen by their counterparts, whom they believe will bewitch them.

Although some participants showed knowledge about the signs and symptoms of pregnancy and the causes of maternal deaths, their overall attitudes to clinics and hospitals were negative. This finding is in line with a study conducted in South India by Jogdand, Yerpude & Jogdand (2013), where participants were aware of the causes of maternal deaths but their attitude towards formal care restricted and delayed them from seeking professional help.

In this study, one of the contributory factors to the negative attitudes of women was the harsh behaviour of nurses, which kept them away from clinics. It was perceived to be very alarming that a male professional nurse could propose love to a pregnant woman in labour. Clearly, professionalism, accountability and responsibility are grossly compromised in some hospitals, with the nurses' Code of Ethics being completely ignored. The Code of Ethics states (2015), ''the nurse maintains a standard of personal conduct which reflects well on the profession and enhances public confidence.''(Guidelines for Good Practice in the Health Care Professions (2008).

Doctors are also expected to have respect for patients and to acknowledge their intrinsic worth and dignity according to the Guidelines for Good Practice in the Health Care Professions (2008) but a finding in this study was that a patient was deliberately misidentified as a ''chocolate''. She was literally dehumanised in this disrespectful terminology and her rights as a patient were violated. Ethics teaches that patients are to be addressed by their titles and names. This behaviour therefore calls for a continuous induction process and refresher course for health professionals working in stressed conditions. It also became clear that the end users of the health care system do not know their rights, that they have a right to complain, or where and who to complain to. Knowledge

about a formal complaints system might reduce the rate at which people are ill-treated by health professionals in the clinic or hospital setting.

Infection control and prevention is one of the six priorities of the National Core Standards, designed to improve the quality of health. Health professionals have a dress code prescribed by the health professions body, but this study reveals how participants were exposed to pain and the risk of infection due to vaginal examinations conducted by nurses who wore artificial nails on duty. Infection is known to be a cause of maternal deaths, making it quite astonishing that nurses are predisposing patients to infection, disregarding the training they obtained. The conduct of nurses in this regard contradicts the International Code of Nurses (2000), which states that ‘‘the nurse in providing care must ensure that the use of technology and scientific advances are compatible with the safety, dignity and rights of people.’’

Transformation is of paramount importance in nursing practice, to increase access to health care. Older nurses were portrayed as a hindrance, preventing participants from accessing health care services through their poor attitudes. Participants highlighted their preference for younger nurses over older nurses, and implied that they would be more willing to attend clinics if they knew they would not have to endure the verbal abuse with which many older nurses treat them. Despite the inappropriateness of one male nurse’s behaviour, male nurses were preferred by participants because they were perceived to be more caring than female nurses.

More stringent measures against negative attitudes in health professionals ought to be enforced to clear the image of the health sector. The behaviour cited shows that a lot of work needs to be done to enforce the implementation of the six priorities of the National Core Standards. Participants perceived maternal deaths as a painful phenomenon that robbed siblings, the family and the community of their loved ones, sometimes leaving children with fathers who do not play their role of being a provider. The integration of the Health Department’s services with the services of other departments would assist vulnerable children in such situations.

### 5.3. LIMITATIONS

The main limitation of this study was that it was conducted at Qaukeni Sub-District only. Limited research literature was available relating to the perceptions, knowledge and attitudes of women concerning maternal deaths in South Africa. Another limitation was that

the study included multiparous women who had an experience of maternal deaths, and excluded nulliparous women due to their assumed lack of knowledge about the phenomenon under study.

There are many Departmental Health facilities but due to budget costs and time constraints, the study was confined to Qaukeni Sub-District. Therefore, results may not be generalised to all health facilities within the province.

## 5.4. IMPLICATIONS FOR PRACTICE

Implications refer to the effects or consequences that may happen in the future, according to Merriam Webster dictionary (2011). In this study, responses were sought and given to questions relating to the knowledge, perceptions and attitudes of women of child-bearing age concerning maternal deaths. Responses were given in focus group discussions, where participants were interviewed to explore their knowledge, perceptions and attitudes towards maternal deaths according to their lived experiences. The practical contribution of this research is that it provides much needed empirical data on women's knowledge, perceptions and attitudes towards maternal deaths and the causes of maternal deaths at Qaukeni Sub-District.

This information is important because there is limited research concerning this topic in South Africa. The findings of the research will allow policy makers to design and institute more focused and relevant initiatives, tools and intervention strategies.

Another implication for practice is the great need to instill a sense of responsibility in women of child bearing age in relation to the importance of attending antenatal clinic and ensure that the new information acquired is utilized optimally to prevent further maternal deaths.

## 5.5. FUTURE RESEARCH

The study investigated the knowledge, perceptions and attitudes of women concerning maternal deaths at Qaukeni Sub-District.

This study was exploratory in nature, and raises opportunities for further research in the area of theory development and concept validation. There are opportunities to refine and elaborate on the findings of this research, which contains some limitations of size and scope. These may act as a cue for further research.

The study was limited to one sub-district in OR Tambo District Municipality, out of five possible sub-districts. The study focused on Xhosa-speaking women only and did not include women of other races who speak other languages and possibly hold different beliefs and perceptions. It also focused on women from rural areas only and did not include women from urban settings or from informal settlements. Only women in the age group of 18-45 were included.

All of these limitations leave scope for further research. Future research could investigate the knowledge, perceptions and attitudes of women of other race groups, different levels of education and different localities. It could also focus on only older women, or only the very young.

In addition, the study was limited by the very small body of literature available in South Africa on the knowledge, perceptions and attitudes of women concerning maternal deaths.

## 5.6 RECOMMENDATIONS

- Outreach services should be intensified, especially in hard-to-reach areas, to render antenatal care services to clients who are far from clinics in order to reduce the numbers of un-booked and emergency cases that sometimes end up as maternal deaths.
- The induction of health professionals should be strictly prioritised and corrective measures should be implemented to restore the image of the profession.
- Further investigation should be done into the nature of herbal medications such as *mbelekisane* and *gwarugwaru* to understand their effects in pregnancy.
- Aspects of the consumer experience should be improved. These include how to lodge a complaint, the principles of customer care, the application of the Batho Pele principles, patients' rights, better and more plentiful resources such as food in hospitals, more human resources, more clinics, more fully-fledged outreach teams and stronger awareness campaigns on health-related matters. All of these would encourage greater utilisation of our clinics and hospitals in remote rural areas.
- Patients ought to be given a choice of whether to be attended by male or female nurse in the labour ward.
- The nursing curriculum in training colleges could be revised and amended to align with the latest developments in the profession to better equip nurses to make early diagnoses of complications in pregnancy.

- The Department needs to go back to basics by enforcing the dress code and the professionalism of health professionals, to restore the dignity of the profession.
- The empowerment of traditional birth attendants would greatly assist the situation of pregnant women, by reducing their limitations and improving their performance.

## 5.7. CONCLUSION

This study investigated the knowledge, perceptions and attitudes of women concerning maternal deaths. Maternal mortality continues to be a public health problem at Qaukeni Sub-District and has negatively impacted on the life expectancy of women in the community.

The researcher in this study identified a number of contributory factors to the death of women. The findings were that some participants knew about pregnancy and the causes of maternal deaths, while others were ignorant or vague about the signs of pregnancy. Some showed minimal knowledge about the causes of maternal deaths. Non-attendance of antenatal care was attributed to the absence of clinics in some areas, predisposing women to home deliveries, with all of their risks.

Pregnancy was perceived as a painful phenomenon when it occurred in the teenage years, as teenagers were ill-equipped to deal with it. Participants' negative attitudes towards hospitals and clinics seemed to be due to the behavior of nurses who were perceived to be a contributory factor; they were seen as harsh. There were also too few of them to do an adequate job, and frequently left patients in labour to take care of themselves so that they could attend to other patients.

The implementation of corrective measures and consequence management might assist in improving the behaviour of health professionals and ensure improved compliance to the six priorities of the National Core Standards. There is a need for the Department of Health to enforce compliance to the Nurses' Ethical Code of conduct to enhance the values of the profession, and to instill accountability and responsibility amongst nurses. Nurses should be forbidden from wearing artificial nails on duty to prevent infection and promote health.

Other findings were that deliveries were often done by traditional birth attendants in home deliveries. There was a lack of skill and an inability to assist in complicated deliveries. It also transpired from the interviews that some clients had limited knowledge related to health issues and many had not heard of the Prevention of Mother to Child Transmission programme (PMTCT). Health promotion programmes should be preceded by community dialogues or surveys in order to assess knowledge on health-related matters and identify

the gaps in health care services. This might enable the drafting of an informed and objective health promotion plan to improve maternal health.

Non-attendance at clinics for antenatal care was ascribed to the long distances, the shortage of clinics, nurses and doctors, and the low socio-economic status of participants. Better provision of these resources might improve the well-being of women of child-bearing age.

The findings from this study may help the Department to revisit some of its strategies and draw up comprehensive interventions to reduce maternal mortality and improve maternal health.

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## 7. APPENDICES

Appendix A: Ethical clearance from the University of Fort Hare

B; Permission the Eastern Cape Province of Health

C: Approval from the District

D: Permission from clinics

E: Research informed consent

F: Interview guide in Xhosa

G: Interview guide in English

H: Letter from the Co- coder

I : Letter from the Editor

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# ETHICAL CLEARANCE CERTIFICATE
# REC-270710-028-RA Level 01

Certificate Reference Number: GOO111SMAYO 1

Project title: Perception, knowledge and attitudes of women towards maternal deaths at Qaukeni Sub- District.

Nature of Project: Masters

Principal Researcher: Nomahlubi Dorcas Mayekiso

Supervisor: Prof T.D Goon
Co-supervisor: Dr N. M. Vellem

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

Please note that the UREC must be informed immediately of

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

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

Special conditions: Research that includes children as per the official regulations of the act must take the following into account:

Note: The UREC is aware of the provisions of s71 of the National Health Act 61 of 2003 and that matters pertaining to obtaining the Minister's consent are under discussion and remain unresolved. Nonetheless, as was decided at a meeting between the National Health Research Ethics Committee and stakeholders on 6 June 2013, university ethics committees may continue to grant ethical clearance for research involving children without the Minister's consent, provided that the prescripts of the previous rules have been met. This certificate is granted in terms of this agreement.

The UREC retains the right to

Withdraw or amend this Ethical Clearance Certificate if any
unethical principle or practices are revealed or suspected or
Relevant information has been withheld or misrepresented
Regulatory changes of whatsoever nature so require
The conditions contained in the Certificate have not been adhered to

- Request access to any information or data at any time during the course or after completion of the project.

- In addition to the need to comply with the highest level of ethical conduct principle investigators must report back annually as an evaluation and monitoring mechanism on the progress being made by the research. Such a report must be sent to the Dean of Research's office

The Ethics Committee wished you well in your research.

Yours sincerely

Profe
Dean

21 June 2016

Eastern Cape Department of
Health

Enquir1es: Madoda Xokwe Tel No: 040 608 0830

Date: 05 July 2016 043 642 1409 e-m ail address:

Fax No:

madoda.xokwe@echealth.gov.za

Dear Mrs. D. Mayekiso

**Re: Perceptions, Knowledge and Attitudes of Women towards Maternal Deaths at Qaukeni Sub-district (EC_2016RP35_46)**

The Department of Health would like to inform you that your application for conducting a research on the abovementioned topic has been approved based on the following conditions:

1. During your study, you will follow the submitted protocol with ethical approval and can only deviate from it after having a written approval from the Department of Health in writing.
2. You are advised to ensure, observe and respect the rights and culture of your research participants and maintain confidentiality of their identities and shall remove or not collect any information which can be used to link the participants.
3, The Department of Health expects you to provide a progress on your study every 3 months (from date you received this letter) in writing.
4. At the end of your study, you will be expected to send a full written report with your findings and implementable recommendations to the Epidemiological Research & Surveillance Management. You may be invited to the department to

come and present your research findings with your implementable recommendations.

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

Your compliance in this regard will be highly appreciated.

Province of the
EASTERN CAPE
HEALTH

Qaukeni Sub-District • Lusikisiki • Eastern Cape
Private Bag X1058 • Lusikisiki • 4820 • REPUBLIC OF SOUTH AFRICA
Tel.: +27 (0)39 253 1782 • Fax: +27 (0)39 253 1519 • Website: www.echealth.gov.za

Enquiries: Mrs. Mayekiso Date: 10/06/2017

| | |
|---|---|
| **TO** | **DISTRICT MANAGER (OR TAMBO)** |
| **FROM** | **MRS. N. D. MAYEKISO (SUB-DISTRICT MANAGER)** |
| **DATE** | **10 JUNE 2017** |
| **SUBJECT** | **REQUEST FOR PERMISSION TO CONDUCT RESEARCH ON PERCEPTIONS, KNOWLEDGE AND ATTITUDES OF WOMEN TOWARDS MATERNAL DEATHS AT QAUKENI SUB-DISTRICT.** |

**Purpose**

To seek approval to conduct empirical research study on Perceptions, knowledge and attitudes of women towards maternal deaths at Qaukeni Sub-District in OR Tambo.

**Background**

I am a registered student for Master's Degree in Public Health (Aselph) in the school of health sciences at the University of Fort Hare.
My supervisor is Professor Goon and my co-supervisor is Dr Vellem.

One of the requirements of this degree is that students should conduct a research study in the department where the student is working. The title of the research is **Perceptions, knowledge and attitudes of women towards maternal deaths at**

**Qaukeni Sub-District.** The goal of the study is to explore the perceptions, knowledge and attitudes of women of child-bearing age concerning maternal deaths in Qaukeni Sub-District in order to institute intervention strategies.

The specific objectives of the study are as follows:

- **T**o explore the knowledge of women about causes of maternal deaths at Qaukeni Sub-District.
- To determine the perceptions and attitudes of women concerning maternal deaths at Qaukeni Sub-District

**1. Data Collection Method**

In depth interviews, direct observation of the participants will be done by the researcher and one experienced research assistant will take field notes during and after interviews to describe all the responses of the participants during interviews. During in-depth interview, the interviewer will ask broad questions, and then pose additional probes until the researcher is satisfied with the answer. A tape recorder will also be used to collect data during interviews to ensure that no responses will be missed.

**2. Personnel Implications**

The target group of the study will be women of child-bearing age from 18-45 years, the multiparous pregnant women excluding the nulliparous. Two facilities will be visited and the explanation about the study will be done to the facility Manager. The respondents will at least take about 10-15 minutes or less depending on data saturation.

**3. Benefits to the Department**

It is expected that the findings from this study might help in informing public health policy in designing strategies to prevent maternal deaths in Qaukeni Sub-District. .

**4. Recommendations**

Based on the above information, it is therefore recommended that the Superintendent General grant an approval to Mrs N.D. Mayekiso to conduct the research on perceptions, knowledge and attitudes of women towards maternal deaths at Qaukeni Sub-District.

Yours in Health service

_____ _____

**MRS. N.D. MAYEKISO** **DATE**
**SUB-DISTRCT MANAGER**

_____

_____

**MRS NTSHANGA** **DATE**

**DISTRICT MANAGER**

University of Fort Hare
Together in Excellence

**Ethics Research Confidentiality and Informed Consent Form**

**Please note:**

**This form is to be completed by the researcher(s) as well as by the interviewee before the commencement of the research. Copies of the signed form must be filed and kept on record**

**(To be adapted for individual circumstances/needs)**

I Nomahlubi Dorcas Mayekiso is asking people from your clinics to answer some questions, which we hope will benefit your community and possibly other communities in the future.

Nomahlubi Dorcas Mayekiso is conducting research regarding **Perceptions, knowledge and attitudes of women towards maternal deaths at Qaukeni Sub-District.** We are interested in finding out more about intervention strategies. are carrying out this research to help informing public policy in designing strategies to prevent maternal deaths. (*Adapt for individual projects*)

Please understand that you are not being forced to take part in this study and the choice whether to participate or not is yours alone. However, we would really appreciate it if you do share your thoughts with us. If you choose not take part in answering these questions, you will not be affected in any way. If you agree to participate, you may stop me at any time and tell me that you don't want to go on with the interview. If you do this there will also be no penalties and you will NOT be prejudiced in ANY way. Confidentiality will be observed professionally.

I will not be recording your name anywhere on the questionnaire and no one will be able to link you to the answers you give. Only the researchers will have access to the unlinked information. The information will remain confidential and there will be no "come-backs" from the answers you give.

The interview will last around (45-60) minutes *(this is to be tested through a pilot).* I will be asking you questions and ask that you are as open and honest as possible in answering these questions. Some questions may be of a personal and/or sensitive nature. I will be asking some questions that you may not have thought about before, and which also involve thinking about the past or the future. We know that you cannot be absolutely certain about the answers to these questions but we ask that you try to think about these questions. When it comes to answering questions there are no right and wrong answers. When we ask questions about the

future we are not interested in what you think the best thing would be to do, but what you think would actually happen. (*Adapt for individual circumstances*)If possible, our

organization would like to come back to this area once we have completed our study to inform you and your community of what the results are and discuss our findings and proposals around the research and what this means for people in this area.

**INFORMED CONSENT**

I hereby agree to participate in research regarding perceptions, knowledge and attitudes towards maternal deaths at Qaukeni Sub-District. I understand that I am participating freely and without being forced in any way to do so. I also understand that I can stop this interview at any point should I not want to continue and that this decision will not in any way affect me negatively.

I understand that this is a research project whose purpose is not necessarily to benefit me personally.

I have received the telephone number of a person to contact should I need to speak about any issues which may arise in this interview.

I understand that this consent form will not be linked to the questionnaire, and that my answers will remain confidential.

I understand that if at all possible, feedback will be given to my community on the results of the completed research.

……..

**Signature of participant** **Date:**……..

I hereby agree to the tape recording of my participation in the study

……..

**Signature of participant** **Date:**……..

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**Albertina Sisulu Executive Leadership Programme in Health**

## ISIKHOKELO SEMIBUZO

## UMBUZO ONGUNDOQO

Luthini ulwazi, uluvo nemvakalelo yabafazi malunga nokusweleka kwabafazi abamithiyo, bebeleka, nabasebebelekile apha e Qaukeni?

## ISIQINGATHA SEMIBUZO

ULWAZI

- Wazi ntoni malunga nokukhulelwa okanye ukumitha?
- Ngxaki zini enihlangabezana nazo apha ekumitheni?
- Ucinga ukuba yintoni unobangela wokusweleka kwabafazi abamithiyo bebeleka, nabasebebelekile?
- Ninqwenela ukwenzelwa ntoni ngamanesi okanye lisebe lezempilo?

ULUVO

- Ithini imiphumela yokusweleka kwabafazi bemithi/bebeleka kusapho nasekuhlaleni?
- Uva njani malunga nesi sehlo sokusweleka kwabafazi abamithiyo, ababelekayo, nasebebelekile?

IMVAKALELO

- Injani inkathalo kwii kliniki nezibhedlela?
- Ungalucebisa na usapho lwakho nezihlobo ngokusetyenziswa komtholampilo kwindawo yakho?

University of Fort Hare
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**Albertina Sisulu Executive Leadership Programme in Health**

## INTERVIEW GUIDE

## MAIN QUESTION

What is the knowledge, perception and attitudes of women towards maternal deaths at Qaukeni?

## SUB-QUESTIONS

KNOWLEDGE

- What do you know about pregnancy?
- What problems do you encounter that are related to pregnancy?
- What do you think are the causes of maternal deaths?
- What do you want nurses/department of health to do for you?

PERCEPTIONS

- What is the impact of maternal mortality in the family and community?
- What is your reaction towards maternal deaths?

ATTITUDES

- What is your view of health facilities regarding care at the clinics/hospital?
- Would you recommend the use of health facilities to your relatives and friends in your area?

m

# ProsePerfect

**Editing Proofreading Writing**

Janemqamelo@gmail.com ph (071) 217 7489

54 Blakeway Road Mthatha 5100


6 June 2018

**Letter of Confirmation**

This serves to inform the reader that I, Jane Mqamelo, ID number 611120 0014 081, edited and proofread the dissertation entitled:

**PERCEPTIONS, KNOWLEDGE AND ATTITUDES OF WOMEN TOWARDS MATERNAL DEATHS AT QAUKENI SUB-DISTRICT IN OR TAMBO HEALTH DISTRICT IN EASTERN CAPE PROVINCE, SOUTH AFRICA**

**By**

**NOMAHLUBI DORCAS MAYEKISO**

submitted to the Faculty of Health Sciences in partial fulfilment of the requirements for a Masters in Public Heath at Fort Hare University.

Yours faithfully

Jane Mqamelo

FACULTY HEALTH SCIENCES

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*Date : 26/09/2018*

University of Fort Hare
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**REGARDING: Co-coding of analyzed data.**

This is to confirm that I, Dr. Daphne Murray co-coded and analysed data for MPH Student Nomahlubi, Dorcas Mayekiso Student No: 201415887.The processes that I embarked on are as follows:

I read her methodology chapter to understand the approach and the design of choice for the study so as to understand the objectives and the questions the participants had to answer. I thereafter read how she delineated the meaning units from the data transcripts. I examined the analysed data to understand how segments of meaning units were clustered.Co-coded all data and presented themes, categories and sub-categories. I then made suggestions with regard to how the researcher and her supervisor could modify categorization of some information so as to come up with the final themes, categories and sub-categories where applicable.

I do have experience in qualitative data analysis and have been utilized by the Faculty of Health Science to co-code analyzed qualitative data for several studies and projects.

Dr.D.Murray DMurray .....

Date: 26/09/2018 26/9/2018 .....