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An exploration of the reasons for late presentation of pregnant women for antenatal care in Worcester, Cape Winelands District.

THARINE VAN ZYL

A mini-thesis submitted in partial fulfillment of the requirements for the degree of Master in Public Health at the School of Public Health, University of the Western Cape

Supervisor: Prof Lucia Knight

Co-Supervisor: Ms Jessica Dutton

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KEYWORDS

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DECLARATION

I declare that this thesis entitled "An exploration of the reasons for late presentation of pregnant women for antenatal care in Worcester, Cape Winelands District" is my own work. It has not been submitted for any degree or examination in any other university and that all the references I have used or quoted have been acknowledged.

Full name: Tharine van Zyl

Date: October 2018

Signed: 

LIST OF ABBREVIATIONS

ANC	Antenatal Care
ART	Antiretroviral Therapy
BANC	Basic Antenatal Care
BMREC	Bio-Medical Research Ethics Committee
DOH	Department of Health
FAMSA	Families South Africa
HIV	Human Immunodeficiency Virus
MMR	Maternal Mortality Ratio
MTCT	Mother-to-Child Transmission
PMTCT	Prevention of Mother-to-Child Transmission
TCA	Thematic Coding Analysis
TOP	Termination of Pregnancy

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ABSTRACT

Background: Antenatal Care (ANC) is a key strategy in achieving positive maternal health outcomes. ANC is an important entry point into formal health care services. ANC is very low in cost and among the most effective packages to promote and establish good health before childbirth and the early postnatal period; therefore, it is very feasible for the good results it is proven to have on maternal and child health. South Africa has had free ANC services since 1994. Despite these free services a lot of women still attend the ANC clinics late or do not attend follow-up visits, hindering the quality of care during pregnancy. The first ANC visit should be in the first trimester of pregnancy or as early as possible, because with the first visit underlying conditions must be identified and managed to promote maternal and foetal health. ANC initiation after 20 weeks may increase maternal, foetal and perinatal morbidity and mortality. In the Cape Winelands there are still 27.3% of women that attend ANC after 20 weeks gestation. This may hinder the quality of care during pregnancy and may lead to negative health outcomes for mother and or baby. The purpose of the study is to understand why some women still do not attend ANC before 20 weeks gestation even when it is available.

Methodology: A descriptive and exploratory qualitative study design was used to understand the details and complexity of ANC attendance by pregnant women from Worcester, South Africa. In-depth, semi-structured interviews were conducted in Afrikaans or English with 10 women that initiated ANC after 20 weeks gestation and two key informants who are health workers in the identified community. The interviews were recorded, transcribed and translated in either Afrikaans or English. Thematic Coding Analysis (TCA) using Manual Coding was used as the data analysis approach.

Results: The study findings suggest that there are a wide range of factors that contribute to late initiation of ANC. It is important to note that all of the participants in the study that attended ANC late had unplanned pregnancies. Most of the women in the study first had to accept that they were pregnant before they could initiate ANC, which in effect delayed ANC initiation. Other individual factors that contributed to late ANC initiation after 20 weeks were: not realising the importance of early ANC initiation; lack of partner, family and community support for the pregnant women; cost of transport to the health care facility and risk of safety during travel to the health care facility. There were also a few health system barriers that contributed to late ANC initiation including anticipated negative health care personnel attitude, long waiting times, unprofessional conduct from health care students and the long distances from the health care facilities.

Conclusion: Despite free ANC services, barriers to ANC initiation before 20 weeks gestation still exists. Many of the barriers have been articulated in previous research that focused on reasons for late ANC initiation. The fact that barriers remain suggests that the barriers are complex and addressing them will require tackling multiple contributing factors with emphasis on family planning and long waiting times at health care facilities.

CHAPTER 1 INTRODUCTION

This chapter introduces the study. The importance of Antenatal Care (ANC) and early initiation of ANC are discussed. The importance of early detection and treatment of Human Immunodeficiency Virus (HIV) during ANC is also discussed. The purpose of the study is to understand why some women still do not attend ANC before 20 weeks gestation even when it is available. This new understanding may be used to increase early utilisation of ANC in order to decrease unidentified maternal complications as well as maternal, foetal and perinatal morbidity and mortality.

1.1. ANC and the prevention of maternal and neonatal morbidity and mortality

Global maternal deaths during pregnancy and childbirth decreased by nearly 50% from 1990 to 2013, but still remain unacceptably high (Rurangirwa, Mogren, Nyirazinyoye, Ntaganira, & Krantz, 2017). In developing countries the leading cause of death among women of reproductive age result from complications during pregnancy and childbirth (Simkhada, Van Teijlingen, Porter, & Simkhada, 2008). ANC use increases the likelihood of a positive pregnancy outcome and lowers maternal and perinatal morbidity and mortality (De Vaal, 2011; Kufa, 2012; Myer & Harrison, 2003). Fourteen percent or 160 000 new-born lives could be saved in Africa if 90% of pregnant women attended ANC (PMNCH, 2006).

Late ANC and infrequent visits negatively affect the quality of maternal care received (Massyn et al., 2016). An estimated 25% of maternal deaths occur during pregnancy and between a third and a half of these deaths were caused by diseases directly related to inadequate care during pregnancy (PMNCH, 2006). Late initiation of ANC decreases the identification and management of sexual transmitted infections, HIV, malaria, anaemia and other possible complications during pregnancy (Birungi & Onyango, 2006). Haemorrhage, dystocia, eclampsia, sepsis and infections like HIV and tuberculosis are all complications that contribute to maternal mortality (Exavery et al., 2013). Haemorrhage and hypertensive disorders are the largest contributors of maternal mortality in developing countries (Exavery et al., 2013). Complications due to HIV infections followed by childbirth bleeding (obstetric haemorrhage) and complications of high blood pressure (hypertension) during pregnancy are the major causes of maternal death in South Africa (NCCEMD, 2012; NDOH, 2015).

It is estimated that 900 000 babies are stillborn during the last 12 weeks of pregnancy in sub-Saharan Africa. Causes of still birth include infections, such as syphilis and maternal complications during pregnancy and labour (PMNCH, 2006). Untreated syphilis can

contribute to an estimated 50% of adverse outcomes. Early identification of syphilis can reduce the adverse effects, therefore early ANC is very important (Hawkes, Gomez, & Broutet, 2013). If syphilis is undiagnosed, untreated or inadequately treated in a pregnant woman it can lead to Mother-to-Child Transmission (MTCT) of syphilis which can have adverse effects such as late foetal loss, stillbirth, low birth weight and neonatal death (Hawkes et al., 2013).

1.2. Importance of early and regular ANC

Worldwide 71% of women receive at least one ANC visit. In developed countries 97% of women attend one ANC visit compared to 69% in sub-Saharan Africa (Mrisho et al., 2009). Coverage of the recommended four ANC visits is only 44% (PMNCH, 2006). Inequity in ANC is prominent (PMNCH, 2006). 81% of middle to upper class women in Africa compared to 48% of poor women have access to ANC (PMNCH, 2006). Early ANC visits are a strong predictor of the total number of ANC visits that will be made by women (Hagey, Rulisa, & Pérez-Escamilla, 2014). Women who attend ANC earlier in their pregnancy are able to attend four or more ANC visits during its duration, which is positively correlated with an improvement in the quality of care (Afulani, 2015).

Given the positive impact it is proven to have on maternal and child health, ANC is very low in cost and among the most effective of public health packages (PMNCH, 2006). The goal of ANC is to prevent adverse health effects in both the woman and foetus to ensure a good start for the new born child (Gebremeskel, Dibaba, & Admassu, 2015). For women and babies to fully benefit from the lifesaving potential that ANC offers, pregnant women need to attend at least four ANC visits (PMNCH, 2006). Early execution of the first ANC visit enables women to receive the care that is required (Afulani, 2015; Exavery et al., 2013; Haddad, Makin, Pattinson, & Forsyth, 2015). ANC is an important entry point into the health system where health education on the detection of pregnancy complications can be provided, the necessary referral regarding pregnancy complications can be made, and a birth plan can be developed, which increases the likelihood of delivery in a health institution (Afulani, 2015; Hagey et al., 2014; Pell et al., 2013; PMNCH, 2006). Women who receive education on signs of pregnancy complication during their ANC visits have 50% lower odds of a stillbirth than those that did not receive information on the topic (Afulani, 2016).

The World Health Organisation's updated model recommends 'reduced but goal orientated clinic visits' that are 'focused ANC' (Patience, Sibiya, & Gwele, 2016; Pell et al., 2013). The WHO designed and tested the Focused Antenatal Care package which South Africa adapted

into the Basic Antenatal Care (BANC) package. South Africa implemented the BANC approach in 2008 to better suit the specific needs of maternal health in ANC within the context of the South African circumstances (Patience et al., 2016). ANC for pregnant women with no complications is recommended to be four visits (Exavery et al., 2013). The ANC package focuses on complications in pregnancy, conditions that worsen during pregnancy, like hypertension, and effects of unhealthy lifestyles; which influence the health of the mother and the baby (Okunlola, Ayinde, Owonikoko, & Omigbodun, 2006; PMNCH, 2006). All complications in pregnancy may not be identified during an ANC visit, however a pregnant woman could be educated to recognise and act on signs and symptoms that can be potentially dangerous during pregnancy (Simkhada et al., 2008). ANC utilisation can be grouped into three groups: any ANC; ANC initiation and adequate number of ANC visits (Exavery et al., 2013).

The first visit should be at 8-12 weeks gestation (definitely before 20 weeks gestation), the second visit at 24-26 weeks gestation, the third visit at 32 weeks gestation and the fourth visit at 36-38 weeks gestation (NDOH, 2015; PMNCH, 2006). Every visit includes a set of routine procedures that should be executed to determine and manage the maternal and foetal health and ensure, as much as possible, positive health outcomes (PMNCH, 2006). Skilled health care workers will also assist and promote the importance of breastfeeding, importance of postnatal care, birth spacing and treating women with parasitic disease which will improve maternal nutrition (Elder, Kies & de Beyer, 1996; PMNCH, 2006).

1.3. Context

The study setting is a rural South African town, Worcester, in the Western Cape. Worcester is in the Breede Valley Sub-District and forms part of the Cape Winelands District. The region's industry includes wine farms and tourism. Worcester has a disproportion of wealth and public health challenges (Department of Treasury, 2015).

Breede Valley has a low-birth-weight (weight under 2500g) rate of 19% for 2015; this is much higher than the average of 15% for the Cape Winelands District (Department of Treasury, 2015). The neonatal death rate of 6.8 children per 1000 live births in Breede Valley for 2015 is above the province's 2019 target of six per 1000 live births (Department of Treasury, 2015). Women who receive adequate ANC and initiate ANC early are less likely to have neonatal deaths, stillbirths and low-birth-weight infants and therefore have better neonatal outcomes (De Vaal, 2011; Joshi, Torvaldsen, Hodgson, & Hayen, 2014; PMNCH, 2006).

Almost a third of pregnant women in South Africa are HIV positive (Solarin & Black, 2013) and is therefore the most common underlying condition (that contributes to about 42% of maternal deaths) associated with Maternal Mortality. Prevention of Mother-to-Child Transmission (PMTCT) during ANC is therefore crucial (Kufa, 2012; NCCEMD, 2012). ANC includes HIV testing that is an entry point for HIV PMTCT services (Gupta et al., 2014). Early initiation of ANC is important as it enables early detection of HIV and initiation of Antiretroviral Therapy (ART) (Floridia et al., 2014; Haddad et al., 2015; Solarin & Black, 2013). Early ANC visits will decrease the South African MTCT of HIV to below the current rate of 1.5% (Massyn et al., 2016).

South Africa has high maternal and perinatal mortality rates when compared to other middle-income countries (Muhwava, Morojele, & London, 2016). Sustainable Development Goal Five states that the Maternal Mortality Ratio (MMR) should be under 70 per 100 000 live births by 2030 (United Nations, 2016). The institutional MMR was at 176.22/100000 and 151.77/100000 live births in 2008-2010 and 2005-2007 respectively (NCCEMD, 2012). The latest statistics suggest an MMR for 2015/2016 of 119.1 per 100 000 live births (Massyn et al., 2016). Over 90% of South African women have access to free ANC, but only 63.2% of pregnant women attend ANC at least once during their pregnancy (Muhwava et al., 2016). The early ANC booking rate in 2015 and 2016 in South Africa was 61.2% and 67.7%, respectively, in the Western Cape, hence a staggering 38.8% of South African pregnant women attend ANC late (Massyn et al., 2016). The mean gestational age of women attending the first ANC visit in South Africa is five months (Kisuule et al., 2013; Myer & Harrison, 2003). Infrequent ANC, poor ANC and delay in seeking medical care are avoidable factors that increase the mortality risk (NCCEMD, 2012).

1.4. Rationale for research study

Across sub-Saharan Africa women attend late for their first ANC visit, although the first ANC visit is recommended in most countries' guidelines within 16 weeks gestation (Muhwava et al., 2016). Little is known about the ANC use and health seeking behaviour of women in this region (Myer & Harrison, 2003). The risk of maternal mortality is higher in sub-Saharan countries in part due to a higher prevalence of HIV, other infections, poverty, inaccessible ANC clinics, poor maternal nutritional status and higher fertility rates (Nikiéma, Beninguisse, & Haggerty, 2009; Rurangirwa, Mogren, Ntaganira, & Krantz, 2017).

In South Africa, ANC has been available to the public sector as a free service since 1994 provided by the Department of Health (DOH) (Myer & Harrison, 2003; NDOH, 2015).

Despite these free services, many women only attend the ANC clinics after 20 weeks gestation or do not attend follow-up visits (Myer & Harrison, 2003). The South African target for a first ANC booking before 20 weeks gestation was 60% for 2016 and has risen to 80% for 2019/2020 (Massyn et al., 2016). In the Cape Winelands 27.3% of women attend ANC after 20 weeks gestation, thus the target of 80% ANC attendance before 20 weeks has not been accomplished (Massyn, Peer, Padarath, Barron & Day, 2015). ANC attendance is important because 60% of maternal mortality is caused by factors that can be detected and addressed during pregnancy (Hagey et al., 2014). Pregnancy and ANC is an important focus for the South African DOH, because the first 1000 days (the days from conception until the child turns two years of age) of a child's life is one of the main priorities as 80% of the brain grows during this time frame (Western Cape Department of Health, 2015; United Nations, 2016).

1.5. Purpose

The purpose of the study is to understand why some women still do not attend ANC before 20 weeks gestation even when it is available. This new understanding can be used to inform the District manager and health care personnel on improved distribution of resources and implementation of programmes that can be adopted to increase early utilisation of ANC in order to decrease unidentified maternal complications as well as maternal, foetal and perinatal morbidity and mortality. The development of programmes must increase knowledge and enhance behavioural changes in pregnant women with regards to early utilisation of ANC in Breede Valley Sub-District, Worcester. The findings can also be used in other communities that are similar to Breede Valley Sub-District to increase utilisation of early ANC.

1.6. Summary

Complications during pregnancy and child birth are the leading cause of death in women of reproductive age. In using ANC, complications during pregnancy can be addressed, lowering maternal and perinatal morbidity and mortality. The ANC utilisation in developing countries is much less than in developed countries and inequity in developing countries also influence ANC attendance negatively. More information is needed on women's health seeking behaviour and the use of ANC in sub-Saharan Africa.

Early initiation of ANC should be at 8-12 weeks but definitely before 20 weeks gestation. Most countries in sub-Sahara recommend that the first ANC visit should be before 16 weeks, however women in South Africa with free ANC services, attend their first ANC visit on

average at five months gestation. Sub-Saharan countries have a high MMR due to various complications during pregnancy and therefore early ANC is of utmost importance to prevent, identify and manage these complications to prevent adverse health outcomes.

Twenty five percent of maternal deaths are directly caused by inadequate ANC. A great number of late foetal loss, stillbirths, low birth weight babies and neonatal deaths are caused by undiagnosed, untreated or inadequately treated syphilis that could have been prevented with the early use of ANC. HIV infections, obstetric haemorrhage and hypertension are the leading causes of maternal death in South Africa. HIV infections are very prominent in South Africa as a third of pregnant women are positive. HIV causes 42% in maternal deaths and 1.5% of children in South Africa get HIV through MTCT. Early initiation of ART during early initiation of ANC can prevent these deaths and lower the rate of HIV MTCT. Early ANC attendance is important for preventing, diagnosing and treating complications during pregnancy to prevent maternal and child morbidity and mortality.

This chapter introduced the study. The importance of ANC and early initiation of ANC were discussed to strengthen the importance of the purpose of the study. The next chapter will review the literature on the barriers to early initiation of ANC.

1.7. Outline of the thesis

Chapter 1 introduces the study and includes the formulation of the problem statement and rationale to the research study.

Chapter 2 focuses on reviewing the relevant literature on early Antenatal Care (ANC) utilisation in African countries and in particular South Africa.

Chapter 3 provides the aim and objectives of the study and explains the research design and methodology used to understand why some women still do not attend ANC before 20 weeks gestation even when it is available.

Chapter 4 presents the findings of the study.

Chapter 5 discusses and interprets the findings of the study.

Chapter 6 draws conclusions and makes recommendations for increasing early utilisation of ANC.

CHAPTER 2 LITERATURE REVIEW

The literature review focuses mainly on early Antenatal Care (ANC) utilisation in African countries and in particular South Africa. Some factors that promote or inhibit early utilisation of ANC are discussed, namely: unplanned or unconfirmed pregnancies; misconceptions about the purpose of early ANC attendance; various social, economic and cultural barriers; health system barriers and Human Immunodeficiency Virus (HIV) stigma.

2.1. The occurrence of late ANC utilisation in Africa

South Africa has had free ANC services since 1994 (Myer & Harrison, 2003). ANC consultations increased by 15% in South Africa after the introduction of free services (PMNCH, 2006). Despite these services being free, 38.8% of South African women still attend the ANC clinics late or some do not attend follow-up visits, therefore hindering the quality of care during pregnancy (De Vaal, 2011; Haddad et al., 2015; Massyn et al., 2016; Myer & Harrison, 2003; Solarin & Black, 2013).

Many other African countries also experience late ANC bookings. In Uganda, 79% of women attend their ANC visit late, with the reasons for coming late remaining undocumented (Kisuule et al., 2013). The average gestational age of women attending the first ANC visit in Uganda was at 27.9 weeks gestation, which is higher than the mean gestation age of 5 months reported in studies from Kenya and South Africa (Kisuule et al., 2013; Myer & Harrison, 2003). A cohort study in Rwanda showed that only 5% of women attended ANC within the first trimester of pregnancy and 48% of women attended their first ANC in their third trimester of pregnancy (Geertruyden et al., 2005). Forty five percent of women in Ghana started ANC after their first trimester (Afulani, 2015).

A study in Tanzania showed that 43% of women attended four or more ANC visits, but only 15% of women attended the first ANC visit within the first trimester of pregnancy with a median gestational age at the first ANC visit of 5.4 months (Exavery et al., 2013). Another study done in Tanzania reported that 18.5% of women attended their first ANC within the first trimester whereas the rest (81.5%) delayed ANC initiation (Exavery et al., 2013). In Ethiopia, women who attended their first ANC visit within the first trimester was 11%, whilst 16% in Nigeria and 55% in Ghana (Pell et al., 2013). ANC is available free of charge for women in Malawi, but still 50% of pregnant women attend ANC after five months gestational age (Mkandawire, 2015).

2.2. Reasons for late ANC bookings

2.2.1. Late bookings due to unconfirmed or unplanned pregnancy

Often, the reason for women to visit the health care facility for the first time is to receive a confirmation of pregnancy (Abrahams, Jewkes, & Mvo, 2001). Planned pregnancies are a contributing factor to early ANC attendance compared to unintendedpregnancies (Muhwava et al., 2016). An unintended pregnancy refers to a pregnancy that is mistimed, unplanned or unwanted at the time of conception, whereas intended pregnancies are pregnancies where the women wanted to get pregnant or planned the pregnancy (Finer & Zolna; 2006). A South African study found that wanted pregnancy was associated with increased odds of early ANC initiation compared to unwanted pregnancy (OR = 1.8, 95% CI, 1.1–3.0) (Muhwava et al., 2016). Women that wanted to delay having a child or who did not want a child have a higher likelihood of booking late (Sinyange, Sitali, Jacobs, Musonda, & Michelo, 2016). Some women included in a study in Cape Town, South Africa, that had unwanted or unplanned pregnancies were not motivated to visit the clinic and therefore did not attend ANC early (Abrahams et al., 2001).

Studies show that women with unplanned pregnancies are more than four times more likely to book late compared to woman with planned pregnancies (Banda, Michelo, & Hazemba, 2012; Exavery et al., 2013; Gebremeskel et al., 2015; Jeremiah, Orazulike, & Korubo, 2015). Negative feelings and attitudes toward one's pregnancy lead to women booking late and having fewer ANC visits (Delgado-Rodriguez, Gomez-Olmedo, Bueno-Cavanillas, & Galvez-Vargas, 1997). Being a teenager and/or unmarried can be factors that contribute to women denying and hiding their pregnancy and delaying ANC. Women have hid their pregnancy to avoid exclusion from school, being abandoned by their partner, and experiencing stigmatisation and gossip (Chisholm, 1989; Pell et al., 2013). Poor utilisation of ANC and delivery care are some of the adverse outcomes resulting from unwanted and unplanned pregnancies (Exavery et al., 2013). The use of family planning may have a positive effect on the use of ANC, because women that plan to get pregnant confirm pregnancy earlier after conception which may lead to earlier ANC visits (Delgado-Rodriguez et al., 1997; Simkhada et al., 2008).

2.2.2. Late bookings due to unconfirmed pregnancy

Women sometimes recognise pregnancy late after conception (Gross, Alba, Glass, Schellenberg, & Obrist, 2012; Haddrill, Jones, Mitchell, & Anumba, 2014; Myer & Harrison,

2003). Delayed confirmation of pregnancy of women seeking health care at a health care facility delays the initiation of ANC (Pell et al., 2013). Expensive ($2) pregnancy tests in Kenya and Malawi are a barrier in confirming pregnancies and therefore health care personnel advise women to return for ANC after palpitation could confirm the pregnancy which delays the initiation of ANC (Pell et al., 2013). African women on the contraceptive injection, Depo Provera, booked late, because they associated their amenorrhea with Depo Provera and not a possible pregnancy (Abrahams et al., 2001). In Malawi, and to a lesser extend in Ghana, women also linked amenorrhea to injectable contraceptives and not to pregnancy, which in some instances led to delayed ANC initiation (Pell et al., 2013). Women that formed part of a study conducted in South Africa, realised late that they were pregnant and waited until two or three missed periods before concluding that they were pregnant, resulting in late bookings (Abrahams et al., 2001).

2.2.3. Late bookings due to lack of knowledge and information on optimal time to book for ANC

Women attended their first ANC visit late due to lack of information and knowledge regarding the optimal gestational time to book for ANC (Kisuule et al., 2013). Women also received wrong information on timing of first ANC attendance from other people (Kisuule et al., 2013). Women that knew to attend ANC on time were informed during previous attendance of ANC.

2.3. Misconceptions about the value and purpose of attending ANC

Misconceptions regarding the purpose of ANC, rather than financial and physical constraints, are shown to be barriers to women booking early for ANC (Ndidi, Oseremen, & Ebeigbe, 2010). Cultural beliefs and ideas about pregnancy influence ANC initiation (Kisuule et al., 2013). Some women attended ANC late because their perception of ANC was that it was only of value if they were sick, needed an ANC book or were near delivery (Abrahams et al., 2001; Okunlola et al., 2006).

Women that had higher parity tended to attend ANC late for the first ANC visit (Kisuule et al., 2013; Simkhada et al., 2008). Older respondents explained that they started ANC late and did not attend the recommended four visits because they believed their pregnancy was normal and they avoided long distance travelling to the clinic (Sialubanje, Massar, Hamer, & Ruiter, 2014).

Pregnancy is sometimes seen as a natural occurrence in life that does not warrant medical attention (Abrahams et al. 2001; Haddrill et al., 2014; Myer & Harrison, 2003; Ndidi et al., 2010; PMNCH, 2006). Women that had a symptomatic medical problem during pregnancy were usually the ones that booked early for ANC (Abrahams et al., 2001; Okunlola et al., 2006). Women sometimes do not know what danger signs during pregnancy need medical attention and would therefore not attend the ANC clinic despite experiencing problematic symptoms (Ndidi et al., 2010; PMNCH, 2006). A fifth of women in a study conducted in an urban area in South Africa said that they would have attended ANC earlier if they felt sick (Solarin & Black, 2013).

2.4. Social, economic, and cultural barriers to ANC attendance

Late ANC initiation cannot be attributed to a single cause, as there are multiple factors which contribute to late ANC (Mandoreba & Mokwena, 2016; Pell et al., 2013). Some of these factors will be addressed in the following sections.

2.4.1. Age and religion

Women between the ages of 20-34 years were more likely to book early compared to women younger than 20 years and women above 35 years of age (Chisholm, 1989; Sinyange et al., 2016). Younger women may have attended ANC late because they may not have known the importance of ANC and may have hid their pregnancies to avoid stigma of teenage pregnancy (Pell et al., 2013; Sinyange et al., 2016). Older women that have been through the pregnancy experience may be less concerned with receiving assistance in monitoring their pregnancy, and only attended ANC later to receive an ANC card (Pell et al., 2013). Older women also attended ANC late due to shame for conceiving at an older age (Sinyange et al., 2016).

A study by Muhwava et al. (2016) found that highly religious women were more likely to book late. The highly religious women may book late because they may have believed that through their religion their child would have a positive health outcome, without needing healthcare interventions (Muhwava et al., 2016).

2.4.2. Low education a barrier to the use of ANC

Women's knowledge about the importance of ANC influenced their use of ANC (Abrahams et al., 2001; Myer & Harrison, 2003). A study in Nigeria by Ndidi et al. (2010) reported that although three quarters of women felt that ANC before three weeks was important (due to knowledge obtained from education programmes); three quarters of the study population still

attended ANC in their second trimester, which indicates ineffective ANC health education programmes (Ndidi et al., 2010). A study in Ethiopia indicates that women who received correct information about the recommended timing of the first ANC visit were more likely to start ANC in a timely fashion (Gebremeskel et al., 2015).

Women's education is a dominant factor in using ANC; late ANC bookings are more prominent in women with no education (Ochako, Fotso, Ikamari, & Khasakhala, 2011; Simkhada et al., 2008; Sinyange et al., 2016). Women with higher education and more exposure to television have a higher likelihood of attending ANC early (Sinyange et al., 2016). A study in Malawi suggests that even minor progress in schooling of women may be advantageous for utilisation of ANC services (Mkandawire, 2015). Radio programmes in Malawi make use of the Information-Motivational-Behavioural Skills Model on safe motherhood programmes to motivate mothers to attend ANC earlier (Mkandawire, 2015). Another study shows that women who had exposure to mass media on ANC were more likely to attend ANC (Simkhada et al., 2008).

2.4.3. Family and partner support

"The social, family, and community context and beliefs affect health during pregnancy either positively or negatively", (PMNCH, 2006:52). Family and community involvement are important in promoting attendance of ANC clinics by pregnant women (PMNCH, 2006).

A study in rural Western Cape, South Africa, found that an unstable or poor relationship with the unborn child's father and a partner with a low level of education were barriers to ANC access (Muhwava et al., 2016). Pregnant women miss their ANC visits due to having to look after another sick child at home (Abrahams et al., 2001; Gross et al., 2012). The lack of support creates a barrier for the woman to attend ANC because she cannot leave the children unattended (Abrahams et al., 2001). Support from family is an important predictor for using ANC as women who felt that they were not supported were twice as likely not to attend ANC (Simkhada et al., 2008). In the event where the unborn child's father was present the woman was three times more likely to attend ANC (Muhwava et al., 2016). This highlights the importance of involving the male partner in reproductive health, family planning and ANC (Muhwava et al., 2016)

2.4.4. Financial barriers hindering timely ANC

A study conducted in Ethiopia showed that pregnant women with a low household income were five times more likely to initiate ANC late compared to women with a high household

income, and nearly five times more likely to initiate ANC late where there was low household food security (Gebremeskel et al., 2015). This correlates with the findings in a study by Ochako et al. (2011) conducted in Kenya. Unemployed women were more likely to book late for ANC, because they could not always meet the costs for an ANC visit even when the ANC was free of charge (Chisholm, 1989; Muhwava et al., 2016). Working pregnant women do not get the time off from their employers to attend ANC or they do not take time off as this will result in them not receiving pay for the time they were not at work (Abrahams et al., 2001; Okunlola et al., 2006). Additionally, women have indirect costs when going for ANC, which includes additional procurement of food while waiting for attending ANC, new clothes and hairdresser expenses to look smart for the clinic visit (Pell et al., 2013).

Myer and Harrison (2003) found that physical access that include transport and transport costs were major barriers for women to access ANC. Women living in poverty cannot always afford the transport to get to a health care facility and dangers during the use of transportation can outweigh the benefits of ANC (Abrahams et al., 2001; Finlayson & Downe, 2013). Women compare the benefits of the ANC visit to transportation costs to the clinic before they make a decision (Abrahams et al., 2001). A study in urban South Africa found that transport was the main expense when attending ANC visits (Muhwava et al., 2016). A study done in Pretoria, South Africa, indicated that 19.1% of women reported transportation to ANC as difficult, but it did not have a significant impact on ANC presentation whereas a study done in Kenya indicated that early ANC attendance was significantly less likely if the pregnant women lived more than 10 km from the health care facility (Haddad et al., 2015; Jeremiah et al., 2015). Women from Kenya and Malawi reported that they would attend their first ANC visit later in order to decrease the amount of follow-up visits and by doing so reduce travelling cost to the health care facility (Pell et al., 2013).

Transport in rural areas is also not always available and the poor weather conditions can create an even greater barrier for the women to access the health care facility (Abrahams et al., 2001). According to Simkhada et al. (2008) eight studies show that residence was a statistically significant predictor of utilising ANC whereby rural women used ANC less than urban women. Free delivery of ANC is essential for maternal and child health (PMNCH, 2006). The researchers highlight the importance of satellite ANC sites and mobile ANC services to increase early and adequate ANC attendance (Muhwava et al., 2016).

2.5. Health system barriers to early ANC utilisation

Sixty percent of women who attended ANC late in an urban area of South Africa said that there were no clinic system barriers that prevented them from booking earlier, although a large proportion of women were unable to book a first ANC visit successfully at the clinic (Solarin & Black, 2013). A study by Haddad et al. (2015) showed that administrative personnel turned away approximately one in five women that wanted to make an ANC booking with instruction to return later. On average women returned more than two weeks later to initiate ANC (Haddad et al., 2015).

Long waiting times have a negative effect on ANC attendance, especially amongst paid workers (Abrahams et al., 2001; Solarin & Black, 2013). Working pregnant women will not be receiving pay for the time they were not at work, thus long waiting times have a direct influence on their financial situation (Abrahams et al., 2001; Okunlola et al., 2006).

A 2016 quantitative study conducted in Zimbabwe indicated that 93.3% of participants did not identify quality of care as a barrier for attending ANC late which contradicts a Zimbabwean study by Mathole et al. (2004) which found that poor quality of care had a negative effect on early ANC attendance (Mandoreba & Mokwena, 2016; Mathole, Lindmark, Majoko, & Ahlberg, 2004). A study in Kenya showed that women that had short birth spacing reported that they would attend their first ANC visit later to avoid chastisement from the health care personnel on their birth spacing (Pell et al., 2013). Some pregnant women in South African studies feel they are disrespected by the health care personnel and consequently avoid health care until labour (Abrahams et al., 2001; Ejigu, Woldie, & Kifle, 2013). Patients that did not understand the health care provider or deemed the information they received as insignificant contributed to their dissatisfaction of services received (Ejigu et al., 2013). The perspective of the pregnant women is very important because patients that are satisfied are more likely to use primary health care services (Ejigu et al., 2013).

2.6. HIV-related stigma as a barrier to ANC attendance

HIV-related stigma can be a barrier in accessing health care early in pregnancy (Haddad et al., 2015). Women feared that the community would assume their HIV status when they opted to test for HIV (Haddad et al., 2015). Women fear the shame they would experience from their community and partners if they were tested positive for HIV. Women also worried that they will have increased psychological distress and hastened death when a HIV positive result was disclosed to them, therefore some women delayed early ANC to delay HIV testing (Haddad et al., 2015; Pell et al., 2013). Malawian women also experienced HIV stigma in their country,

but knew the importance of attending ANC early and the importance of knowing their HIV status during pregnancy (Pell et al., 2013).

Maternal adherence to Antiretroviral Therapy (ART) is shown to be higher in sub-Saharan Africa when partners test together for HIV (Aluisio et al., 2012; Chandisarewa et al., 2007). Men do not always attend ANC with the women, because they were too busy, the pregnant partner was responsible for testing for the both of them, ANC were seen as forming part of the women's domain or the men felt they should only be involved indirectly to the pregnancy (Hagey et al., 2014; Katz et al., 2009). Rwanda requires that the woman's partner must attend the first ANC with them in order to test both partners for HIV to increase HIV Prevention of Mother-to-Child Transmission (PMTCT) coverage (Hagey et al., 2014). Health care personnel in Kenya and Malawi promoted partner involvement in ANC through incentivising and providing preferential treatment to the husband/partner that attended ANC with the pregnant woman (Pell et al., 2013).

2.7. Summary

In summary, this review has provided background information with an African focus and a South African focus on the utilisation and gaps on early ANC attendance. The occurrence of late ANC utilisation in Africa is very high. Many South African women still attend ANC visits late even when it is free. The literature review also emphasised the importance of early initiation of ANC for the health of the woman and child. The factors that influence the early use of ANC are also revised. The literature review identified individual factors, financial factors, societal factors and health facility factors as barriers to early initiation of ANC.

Many women with unwanted or unplanned pregnancies visit the ANC only after 20 weeks gestation. It can be said that with planned pregnancies the pregnancy is identified sooner and therefore ANC is initiated earlier (Delgado-Rodriguez et al., 1997). Women have a misconception of the value of early ANC, which leads to late ANC initiation and inaccurate perceived needs when attending ANC that could contribute to dissatisfaction of the services. Several women indicated that they were too lazy to attend ANC and did not need to attend, because they did not have any health problems (Myer & Harrison, 2003). The misconception of the purpose of ANC is shown to have a greater influence on early ANC utilisation than financial and physical barriers. The family and father's support can increase early ANC utilisation of the women. Education and knowledge are needed on the true value of early ANC for the health of the mother and unborn child.

Many women initiate ANC late because they fear losing their pay and the transportation costs to the health care facility are too expensive. ANC services that are brought to the patient or after hours' services can thus have major benefit for some women and can be explored further. Health system barriers including women feeling disrespected by health care providers and women perceiving health information as invaluable can negatively influence early ANC utilisation. HIV related stigma can also contribute to late ANC utilisation.

It is important to identify and acknowledge the barriers to early ANC for women which may include lack of education, transportation, fear of losing pay, feeling of being disrespected, receiving invaluable information at an ANC visit or HIV stigma. This information is important and can be used to address the barriers to early ANC to be able to increase early ANC attendance and thereby improve mother and child health.

CHAPTER 3 METHODOLOGY

This chapter presents the methodology used in the study. The chapter begins with the aim and objectives of the study. A description of the study design is provided, as well as details about sampling procedures, data collection and analysis, and rigour. Ethical considerations are also discussed.

3.1. Study aim and objectives

3.1.1. Aim

To explore the reasons for late presentation of pregnant women for Antenatal Care (ANC) in Worcester, Cape Winelands District.

3.1.2. Objectives

- To understand pregnant women's perceptions and/or experiences of ANC
- To explore the barriers experienced by pregnant women in accessing and utilising ANC services early
- To explore the factors that facilitates access to and utilisation of ANC services earlier
- To explore personnel's perceptions on barriers that result in pregnant women presenting late for ANC
- To describe the participants opinions on how to improve access to and utilisation of early ANC services in the district.

3.1.3. Study design

There is currently little known about the reasons why women attend ANC late even when it is available to them. Qualitative research was able to give rich textual description of how people experience this issue, by helping us to understand the complex reality from the participant's perspective (Mack, Woodsong, MacQueen, Guest, & Namey, 2005). A descriptive and exploratory qualitative study design was used to gain a better understanding of how individuals from Worcester interpret the importance of ANC care before 20 weeks gestation and to understand why certain women do not seek ANC before 20 weeks gestation when it is available. The qualitative approach has described the women's ANC-seeking behaviour and has explored the reasons for this behaviour. Qualitative methods helped in identifying factors,

such as social norms that may have influenced the issues being researched (Mack et al., 2005).

3.2. Sampling

This section will describe the site selected, study population and sample that was recruited for this study.

3.2.1. Site selection

This study is located in Worcester, within rural Western Cape. Worcester is situated in the Breede Valley Sub-District and forms part of the Cape Winelands District. The Breede Valley Sub-District is approximately 3015 km² in size (Breede Valley Municipality, 2012). The area stretches from the Du Toitskloof Mountains to the Kwadousberg Mountains. The towns in the municipal area include Touwsriver, De Doorns, Worcester, Rawsonville and rural areas in-between these towns (Breede Valley Municipality, 2012). The region depends primarily on wine farms and tourism and struggles with a disproportionate allocation of wealth, with large numbers of poor people as well as public health challenges (Department of Treasury, 2015).

Breede Valley Sub-District has the second largest population in the Cape Winelands District of about 174 198 people in 2015 (Department of Treasury, 2015). There are 17 public health care facilities in the Breede Valley which include six fixed clinics, nine mobile/satellite clinics, one community day centre and one regional hospital (Department of Treasury, 2015). The community day centre and regional hospital is situated in Worcester. Worcester has a population of 78 906 people (Statistics South Africa, 2011). Statistics South Africa (2011) reported that the average household size in Worcester was 3.7 people. Within Worcester the dominant language is Afrikaans, spoken by 90.2% of the population, followed by English, at 4.2%, and isiXhosa at 3.1% (Statistics South Africa, 2011).

The site selection consists of various neighbourhoods situated within Worcester. People living within the selected sites have access to public health services which provide maternal services free of charge. People from the formal and informal settlement areas of Worcester make use of the public health care facilities' ANC services. The formal and informal settlements in this area include: Roodewal, Esselen Park, Hex Park, Riverview and Avian Park (Breede Valley Municipality, 2012). Patients accessing the free services at public health care facilities are mainly from lower socio-economic backgrounds.

In this region 32.8% of people above 20 years of age finished their matric year in high school (Statistics South Africa, 2011). Women that are poor, uneducated and living in rural areas often do not go for ANC (Finlayson & Downe, 2013; PMNCH, 2006). The main forms of transport to health care facilities are public taxis, own transport, employer transport (patients working on farms) and walking by foot.

3.2.2. Study population

The research study has drawn on a study population of women of reproductive age that were between 19 and 44 years old. The women resided in the Worcester area within the Breede Valley Sub-District. The participants had either made use of, or were making use of ANC services at the public health care facilities in Worcester.

The health care personnel doing home visits and working with ANC patients in the Worcester community were interviewed as key informants. Interviews with the health care workers working at the public health care facilities were not conducted as ethical approval for these interviews was not sought from the facilities. The health care personnel doing home visits and working with ANC patients in the Worcester community were interviewed as key informants. The health care personnel are community health workers whom work for a non-profit organisation and live in the area where they conduct home visits. They do health-screenings and health education for pregnant women in their area. These health care workers have no tertiary education. They identify pregnant women in the community and refer them to the PHC unit and/or other support systems like non-profit organisation programmes on decreasing alcohol consumption during pregnancy. The key informants had first-hand knowledge about the community, the residence and the late ANC bookings which was investigated. Only two key-informants were interviewed as they provided sufficient insight on the nature and possible solutions for the problem (UCLA, 2014). The key informants' perceptions on barriers that result in pregnant women presenting late for ANC has contributed to rich information and improved the triangulation of the research (Cresswell & Miller, 2000).

3.2.3. Study sample

A non-probability sampling method was used to gain "information rich cases for in-depth study" (Patton, 2002:189). Purposive heterogeneous sampling was used to give detailed information on the ANC seeking behaviour of these women to enable detailed exploration and understanding of this research theme (Ritchie, Lewis, & Elam, 2003). Heterogeneous sampling was done to ensure variability within the primary data. Heterogeneous sampling

relied on the researcher's judgement to select participants with diverse characteristics. These diverse characteristics included women from different age groups and women living in different geographical areas within Worcester. Participants were directly sampled from the community and identified by the health care workers working within the community, the researcher going door to door in the various neighbourhoods and snowball sampling. Participants were selected according to the relevant inclusion criteria as stipulated below. Purposive sampling was done from the identified relevant participants.

The aim of qualitative research is to understand the issue, therefore samples need to be selected according to relevant criteria to ensure the inclusion of relevant information (Ritchie et al., 2003). The inclusion criteria consisted of women between the age of 19 and 44 years that have not visited ANC before 20 weeks gestation. Women were 20+ weeks pregnant or their child was under six months of age to reduce recall bias. Female adolescents of reproductive age were not included in the study sample (15-18 years) to bypass ethical limitations and requirements for parental consent (WHO, 2009). The participants resided in Worcester and conducted their ANC visits at public health care facilities in Worcester. The researcher had access to this community and therefore selected this community for the study. The researcher works as a healthcare worker in the healthcare facilities and in the community and knows the community. None of the participants were direct clients/patients of the healthcare worker and the researcher associated herself with the University of study and not with her work employer. Participants spoke English or Afrikaans because these are the common languages spoken in Worcester and the researcher is conversant in both. Women who underwent a Termination of Pregnancy (TOP) or whose child died before or within six months after birth were excluded from the study because the research questions may be traumatic and the experience these women had may not reflect the issue that were explored in this study.

Qualitative research usually has a small sample (Ritchie et al., 2003). The data collected is very rich in information and therefore the sample must stay small to be able to collect and analyse the data efficiently (Ritchie et al., 2003). Data was collected until saturation was reached (where no new information of value for the study was obtained from the participants interviews). A sample size of 10 participants was included in this study.

The personnel who had exposure to the provision of ANC within the community were approached to recruit participants and the researcher also recruited participants as she has exposure to this community on a daily basis. The researcher works as a healthcare worker in facilities and in the community and is therefore familiar with the layout of the community. The researcher recruited participants as a student and not by referring to herself as a

healthcare worker. The health care workers were given selection criteria to recruit appropriate candidates for the study. The health care workers were able to identify participants that received their first ANC after 20 weeks gestation and complied with the rest of the selection criteria. These women were contacted telephonically or through home visits and asked if they were willing to participate in the study. Following this, participants were asked if they would prefer to be interviewed immediately or per appointment at their home.

The key informants were purposively recruited. Key informants were visited by the researcher and contacted telephonically to confirm participation and to make an appointment for an individual interview at their home at a time and date that suited the participant. The two key informants who agreed to be interviewed were both health care personnel who were directly involved in ANC services in the Worcester community. The health care personnel had exposure to the ANC seeking patients on a daily basis and were able to give rich information on their experiences. These interviews insured triangulation of the study.

3.3. Data collection methods

The data collection methods that were used in this research study were semi-structured, in-depth individual interviews. Individual interviewing creates an environment for open in-depth discussions (UCLA, 2014). A qualitative approach is most revealing when the variables of greatest concern are unclear and it provides some structure to the interviewing process while being flexible enough to address the different aspects of late ANC initiation that may be important to the participants (Miles & Gilbert, 2005). (See Appendix 1-2 and 3-4 for interview guide for participants and key informants, respectively). Qualitative research methods were best suited for this type of study, because the study aimed to understand the reasons for late ANC bookings (Malterud, 2001). Qualitative research documents how people experience health and illness and the meanings they attribute to these experiences. They provide rich descriptions and contextually specific answers to "how" and "why" individuals or populations engage in specific behaviours (Robson & McCartan, 2011). Qualitative research is needed to understand public health problems by using verbal or non-numerical data (Baum, 1995; Robson & McCartan, 2011). The complex nature of most public health issues (e.g. why pregnant women present late for ANC although it is available free of charge) requires a deeper understanding of the problem that can be supplied by qualitative research (Jack, 2006). The strength of qualitative research is its ability to provide information on the human side of an issue in terms of behaviours, beliefs, opinions, emotions and individual relationships (Mack et al., 2005).

3.3.1. Individual interviews of participants and key informants

The participants and key informants were individually approached and informed on how they had been selected and on the purpose of the study. The participant information sheet (Appendix 5-6) or key informant information sheet (Appendix 7-8) and informed consent form (Appendix 9-10 and 11-12, respectively) were provided to all study particpants and explained to them. The participants and key informants agreed that they understood the purpose of the study and their rights and signed the consent form before the interview continued. The interview guide included eleven questions that sought to understand the participants' ANC background, their ANC history and their perceptions and feelings regarding ANC utilisation.

The interviews were conducted at the participants' and the key informants' homes at a date and time that were convenient for them. The private homes of the participants and key informants created an atmosphere where the participants and key informants could feel safe and comfortable, which enabled a more in-depth interview. The interviews were sometimes interrupted by visitors and family, which was not ideal due to the possibility of information being lost with the interruption. Audio recordings taken with a cell phone were of good quality and could be transcribed with good accuracy.

The participants and key informants were encouraged to ask questions when a question was not clear and also to answer questions as accurately and honestly as possible. During and after the interview the researcher asked participants and key informants to confirm the data that was collected. The research can be credible and believable only if the participants and key informants agree with the results collected from the data (Trochim, 2006).

The data was collected in April, 2018. The interviews for the participants and key informants were conducted by the Masters in Public Health student which have received qualitative research training. The interviews were about one hour long and were audio recorded with the permission of each participant and key informant. The interviews were conducted in English and Afrikaans depending on the participant's and key informants' preference. The recordings were transcribed in English or Afrikaans.

3.4. Data analysis

The in-depth interviews that were audio recorded were transcribed verbatim in the language of the participant's choice (English or Afrikaans). Before data analysis commenced the researcher acknowledged her preconceptions on the topic. The data analysis approach that

was used was the Thematic Coding Analysis (TCA) approach. TCA is an inductive process where the codes emerge from the data and not from preconceived categories (Robson & McCartan, 2011). TCA consists of five phases: familiarisation; coding; identifying themes; defining and naming themes; and integration and interpretation.

3.4.1. Phase 1: Familiarisation

The researcher familiarised herself with the data collected by listening to the audio recordings of the interviews three times, reading and re-reading the transcripts (Robson & McCartan, 2011). Familiarisation helped the researcher to gain an overview of data collected in order to list key ideas and recurrent themes (Pope, Ziebland, & Mays, 2000; Srivastava & Thomson, 2009).

3.4.2. Phase 2: Coding

Coding forms part of analysis by systematically organising data in meaningful groups (Robson & McCartan, 2011). According to Gibbs (2007) the following can be coded: behaviours; events; situations; symbols; interactions; restrictions; stigma and the researcher's role in the research process. The researcher listed and defined each code that was indicated in the data (Robson & McCartan, 2011). Coding was applied to all data in textual form by highlighting all the parts of the interview that were relevant to the topic, adding footnotes in the form of numerical codes supported by short textual descriptions to the transcripts and other documentations (Pope et al., 2000; Srivastava & Thomson, 2009). These footnotes that were recorded in the margin of the documents indicated the different themes. The codes were revised to identify overlaps. There was a colour line on the left border that indicated the document source or specific transcribed document the text was from. Examples of what was coded included the reasons for late initiation of ANC as experienced by the women (descriptive). Examples of the codes that were derived include partner support and feelings about getting pregnant.

3.4.3. Phase 3: Identifying themes

This step involves the identification of key issues, concepts and themes by which the data can be referenced (Pope et al., 2000; Srivastava & Thomson, 2009). After coding the researcher systematically went through the data thoroughly to identify themes and subthemes (Robson & McCartan, 2011). Prior issues and issues expressed by participants formed the basis of themes. The data was rearranged and grouped together according to the themes that emerge from the codes. The themes were named and defined. The transcribed in-depth interviews

were read again and all the codes were assigned to a theme. The process was revised and if adequate themes were identified and the codes were grouped in these themes the next transcript was to be coded. Copies were made of the data documents and transcripts to cut out codes, which were in the form of words or phrases. Codes were clusters together under themes and subthemes by cutting and pasting and colour coding (Robson & McCartan, 2011). This step was tentative and was refined at subsequent stages of analysis (Srivastava & Thomson, 2009).

3.4.4. Phase 4: Reviewing themes

The themes that were identified had to be refined. A thematic map was used to show how global themes from organising themes were formed out of codes (Robson & McCartan, 2011). The themes and subthemes that were identified were arranged in the map. Specific data that were recorded as themes in the margins of the documents were lifted from its original context and placed in these maps. The researcher integrated similar themes (Srivastava & Thomson, 2009).

3.4.5. Phase 5: Integrating and interpretation

Lastly the researcher integrated and interpreted the data to provide conclusions on the reasons for late initiation of ANC by pregnant women (Robson & McCartan, 2011). This step involved the analysis of the key characteristics as laid out in the thematic map. The research objectives and the themes that emerged from the data influenced the interpretation (Pope et al., 2000).

3.5. Rigour

Rigour ensures the quality of research findings in qualitative studies. Rigour in qualitative research refers to how accurately the study represents the participants' realities (Cresswell & Miller, 2000). In this study credibility, transferability, dependability and confirmability were used as criteria for rigour.

3.5.1. Credibility

Credibility is important as it ensures that the study measures what it was intended to (Shenton, 2004). Triangulation was used to increase the rigour of the study by deepening and widening the understanding on why women book late for their first ANC visit (Yeasmin & Rahman, 2012). Triangulation ensures the confirmation of findings by including different perspectives such as including information from key informants to be able to present the true

reality (Yeasmin & Rahman, 2012). Triangulation was achieved by interviewing the pregnant women attending ANC as well as the key informants.

Credibility was also obtained by only including participants and key informants whose participation was voluntary and gave informed consent. This method helped to ensure that an honest account of events from the participants was obtained (Shenton, 2004). The researcher also assured the participants that the conversations were confidential which helped to facilitate open and honest discussions on barriers to early ANC initiation.

A review of the literature on studies that sought to describe the barriers to early ANC initiation was conducted prior to data collection. The reading of literature before sampling and data collection was then used to determine whether the barriers to early ANC initiation by study participants were similar to previous research (Shenton, 2004).

3.5.2. Dependability

Dependability is ensuring that the findings of this qualitative study can be repeated if the study is to be repeated within the same group of participants, coders and context (Forero et al. 2018). Dependability was ensured by providing a rich description of the study methods.

3.5.3. Transferability

Transferability will be achieved by giving a rich description of the setting, the participants and the themes of the qualitative study (Cresswell & Miller, 2000; Trochim, 2006). A detailed description of the contextual information about the area where the research was undertaken may help the reader in determining if this study is transferable or applicable to other similar contexts (Cresswell & Miller, 2000; Trochim, 2006). The introduction and literature review section of this study provide detailed contextual information about the research site and the barriers to early ANC initiation which the reader can use to fully understand the research issue and whether it will be comparable to their own setting (Cresswell & Miller, 2000).

3.5.4. Confirmability

Confirmability is the confirmation that the findings of the studies are a reflection of the participants' experience and not that of the researcher's ideas. An audit trail was kept by the researcher which included the raw data, field notes, reflexive journal and data analysis. Through documenting and reviewing the accuracy of the research findings was ensured (Cresswell & Miller, 2000; Trochim, 2006). Documentation on the data collection process

and the researcher's response was documented in a reflective journal to ensure that as a dietitian the researcher's findings were not influenced by her background.

3.6. Ethical considerations

Ethics approval to conduct the research was sought from the Bio-Medical Research Ethics Committee (BMREC) of the University of the Western Cape. The study had to have independent ethical review clearance before data collection could start (Wassenaar, 2007).

A detailed information sheet was provided and if necessary, read to the research participants. (See Appendixes 5-6 and 7-8). The information sheet included clear and factual information about the study, the benefits and risks of participating, the assurance that participation is voluntary and that the participant may exit the study at any given time without any penalties. Informed consent had to be given and the informed consent sheet signed by the research participant before data collection could start (Wassenaar, 2007). (See Appendixes 9-10 and 11-12). All participants and key informants were adults and gave consent for participating in the research study. The interview questions were asked sensitively to prevent women from feeling victimised for their choice to seek ANC late. (See Appendixes 1-2 and 3-4).

The individual confidentiality was protected (Wassenaar, 2007). The identity and nature of the participants' contribution to the study remained anonymous. Anonymity was ensured by not including the names of the participants on the collected data, transcripts and thesis. The researcher used pseudonyms and identification keys to link the interviews to the participants' identities. The researcher alone had access to the pseudonyms and identification key to ensure that information provided by the participant cannot be linked, in any form or manner, to the participant, by any other person. The interview was conducted at the homes of the participants and key informants to ensure confidentiality during the interview process. The researcher was the only person that had access to the participant's voice recording(s) to prevent the identification of the participant by any other person and therefore to ensure confidentiality. The participant's voice recording(s), notes and written consent form(s) were kept in a password protected folder on the researcher's computer. All hardcopies with information regarding the identity of the participants were stored in a secure area that only the researcher had access to and/or hard copies was destroyed after it has been scanned and saved in the password protected folder of the researcher.

The researcher treated the research participants with fairness and equity. No harm was done to the research participants as a direct or indirect consequence of the research. The public health

care facilities within Worcester has social worker services and there are other social support services in Worcester like Families South Africa (FAMSA) – the researcher informed the participants of this and that if emotional stress or distress required it, a session can be arranged to talk to a social worker or counsellor for support. None of the women requested one of these additional services. These measures were implemented but there were still potential ethical risks, because the people participating in the study may have felt discomfort and distressed without receiving any personal gain when they were part of the study (WHO, 2009). The participants who seemed to experience discomfort in sharing their experience were reassured of confidentiality.

3.7. Summary

This chapter provided a detailed overview of the methodology used in the study. The aim and objectives for the study was stated. A descriptive and exploratory qualitative study design was used to get a better understanding on why women from Worcester do not seek ANC before 20 weeks gestation when it is available. The community that was selected was discussed. The study population included in the study was ten women from Worcester between the ages of 19 to 44 years that attended ANC services after 20 weeks gestation and the two key informants from the community. Semi-structured in-depth individual interviews were conducted with the participants and key informants to collect data. These interviews were audio recorded and transcribed verbatim in order to analyse it by coding it manually and by using the Thematic Coding Analysis approach. Rigour was obtained by: credibility, transferability, dependability and confirmability. Ethics approval was sought from the relevant committee before the study was conducted. Ethics was considered by: ensuring confidentiality of all participants; explaining the purpose, risks and benefits of the study; receiving consent from all participants and explaining to participants that they may exit the study at any given time.

CHAPTER 4 FINDINGS

This chapter presents the study findings with respect to the reasons for late initiation of Antenatal Care (ANC) attendance by pregnant women in Worcester. Several themes emerged from the semi-structured, in-depth, individual interviews regarding factors that influence the presentation of pregnant women for ANC in Worcester. The research analysis will be reported according to themes and subthemes.

Various themes emerged from the collected data. Social factors that include family, partner and community support influence timely ANC initiation. The results also show that economic barriers, work and employee ANC leave policies as well as exposure to violence influence timely ANC. Although the participants had different characteristics, the nature of the pregnancy indicates that all of the pregnancies in the sample were unintended. **Error! Bookmark not defined.**

The study participants demonstrated a lack of understanding with regards to the importance of early ANC initiation which indicates that ANC utilisation is not valued. On a positive note HIV Stigma did not influence ANC attendance and initiation of pregnant women. Unfortunately, it was found that the health system may be a barrier in seeking ANC.

The participant's quotes are presented in italics, some of which have been altered, without changing the meaning, for clarity of understanding. Pseudonyms have been used to keep with ethical requirements regarding confidentiality and anonymity.

4.1. Characteristics of the sample

This study took place within various neighbourhoods in Worcester, including Avian Park, Roodewal, Riverview, and Hexpark. The participants ranged from 20-33 years of age. The socio-economic background of the participants differs when referring to the interior and exterior housing conditions. Of the ten women interviewed, four were employed, including one participant that had her own business. Six participants were unemployed including one participant that stopped tertiary studies after getting pregnant. Half of the participants interviewed had already given birth. Eight of the participants are married or in a romantic relationship with the babies' fathers. See Table 1 on the following page for a summary of the participants' socio-demographic characteristics.

The two key informants included in the study are health care workers that live and work within Worcester.

4.2. Nature of the pregnancy

All of the women in the study had unplanned pregnancies. Some of the women did not know that they were pregnant and received confirmation later in their pregnancy. Two of the participants considered Termination of Pregnancy (TOP) but did not execute it. It can be derived from the results that most of the women that had unplanned, unconfirmed and/or unwanted pregnancies first had to accept the pregnancy before initiating ANC. The delay in accepting the pregnancy resulted in delayed ANC initiation after 20 weeks gestation.

Table 1: The socio-demographic characteristics of the study sample (n =10)

Theme	*Subtheme*	Amount
Language	*Afrikaans*	9
	English	1
Age	*19-21*	4
	22-30	3
	31-35	3
Participants per neighbourhood	*Roodewal*	4
	Avian Park	3
	Hexpark	2
	Riverview	1
Relationship status	*Married*	3
	Engaged	1
	Romantic relationship with father of the child	4
	No romantic relationship with father of the child	2
Who they live with	*Family*	5
	Family and partner	4
	Partner	1
	Alone	0
Pre or post-partum	*Pregnant*	5
	Already had child less than six months old	5
Employment	*Employed*	3
	Self employed	1
	Unemployed	6

4.2.1. Unwillingness to accept unplanned pregnancy

How a woman accepts or denies her pregnancy influences the timing of the first ANC visit. All women in this study that booked late for ANC had unplanned pregnancies as stated by the participants and had delayed booking while in the process of accepting their pregnancy status. Most women did experience signs of pregnancy such as amenorrhea, nausea and weight gain, but denied these symptoms as signs of pregnancy. Four women were on Depo Provera and denied being pregnant because they associated their amenorrhea to the use of the contraceptive.

Most women proceeded to deny their pregnancy and only after accepting their pregnancy did they initiate ANC. Some women, as well as their families, noticed changes to their body but the women did not relate these changes to pregnancy. Marlene, like others in the study, had no idea that they were pregnant because they were using a contraceptive.

> *My little boy actually told me I was pregnant. Then I went to the doctor. Then the doctor told me I am pregnant [short laugh]. I only really found out at about five months, because I was... I was on the injection. [Pause] And then I found out afterwards, but okay I got pregnant despite the injection. (Marlene 22 years #8)*

Family of some of the women could see that the women were pregnant because of the weight gain and growing abdomen. Despite these signs of pregnancy and family members' observations, some women continued denying the pregnancy.

Muriel was also on the contraceptive injection (Depo Provera) and was informed that she was pregnant when she went for her three-monthly renewal of the Depo Provera. She was in denial of her pregnancy for a long time.

> *...I was still unsure, is it or is it not. Before I went to the clinic, I was still very unsure. Because then I wanted to go and shout at the sister, because why? I did use the injection. How can I be pregnant? I can't believe it, really [short laugh]. It's true, I can't believe it. How can I get pregnant, but I used the injection...? I had really...it was too late now...it was really late...now with this one I was late. Because I was really shocked...I can't say I wasn't...I don't know how to say it... but we didn't plan for this one. (Muriel 27 years #6)*

It was difficult for Muriel to accept that she was pregnant and did not attend ANC after confirmation of pregnancy because she could not believe or accept it. She felt that the nursing

sister had failed her and wanted to blame her for the pregnancy. The Depo Provera is effective if it is administered on time. The four women in this study using the Depo Provera were all shocked that they were pregnant, although they did not receive their consecutive injections on time. The women did not realise the Depo Provera is less effective when it is not administered on a strict three-monthly basis.

One key informant felt that some of the women were making excuses for why they had not tested for pregnancy. She argued that the women knew their bodies were changing, but they did not think it was linked to a possible pregnancy.

But how can you tell me you didn't know you were pregnant? (Key Informant #1)

Women that had unplanned pregnancies and that were in denial of a pregnancy did not want to accept that the changes in their bodies were due to being pregnant. Therefore, they denied it rather than confirming it.

Family, friends and even health care personnel tried to convince these women that they were pregnant. They denied the possibility of being pregnant although all the signs of a pregnancy were there. Some women on Depo Provera shifted the blame of the pregnancy on to the contraceptive or health care personnel. These women did not realise that the ineffective contraceptive was due to postponed administration of the Depo Provera. Pregnancy confirmation tests were avoided to postpone the reality of a pregnancy. The women had a hard time accepting the pregnancy after it was confirmed. Usually only after accepting that they were pregnant did they make a first booking. The initiating of the first ANC may therefore be, in many cases, only after 20 weeks gestation.

4.2.2. Late pregnancy confirmation

Women first want to confirm a pregnancy before initiating ANC. None of the women in this study had planned to get pregnant and therefore some women only decided to test for pregnancy after signs of pregnancy were already present for a few months. Some women postponed confirmation of pregnancy at a health facility because self-bought home pregnancy tests showed a false negative. The women therefore did not realise they were pregnant. The women did not initiate ANC early because of late confirmation of pregnancy.

Some women also reported that they knew they were pregnant because they experienced similar signs as with their previous pregnancies. Although these women thought they were pregnant they did not formally confirm the pregnancy or initiate ANC early.

Some of the women did suspect that they were pregnant but rather than seeking ANC they bought their own home pregnancy tests. Sophie bought her own pregnancy tests after she did not get a period for two consecutive months. The tests showed that she was not pregnant.

> *I didn't actually know (I was pregnant). I didn't get sick (period) for two months and then I bought two tests. Then both of them worked and both showed I was negative (not pregnant). And then I continued and then I thought maybe it is normal, maybe stress or something. (Sophie 20 years #1)*

Signs of the pregnancy continued and Sophie decided to go to a private doctor. The doctor suggested that the amenorrhea was caused by stress. The women insisted that the doctor should do a sonar scan. The doctor confirmed a pregnancy of four months after the sonar scan. The doctor, as well as her mother, informed Sophie that she must attend ANC, but she postponed going until after 20 weeks gestation. She first had to accept the pregnancy before she could feel she could initiate ANC. Another participant had the same experience.

A pregnancy should first be confirmed before ANC will be initiated. The women in this study did not plan a pregnancy and therefore did not necessarily correlate the signs of pregnancy to being pregnant. Some women made use of home pregnancy tests that gave a false negative result. Late confirmation of pregnancy contributed to the initiation of ANC after 20 weeks gestation.

4.2.3. Unwanted pregnancy

Women that have unwanted pregnancies may consider TOP. Women that intend to terminate their pregnancy do not initiate ANC because they are not concerned with the child's health as they do not plan to continue with the pregnancy. Women that had TOPs were not included in this study, but women that considered TOP but did not receive an abortion were included. Women that considered TOP but did not execute it successfully first had to abandon the idea of a TOP before the first ANC visit could be initiated.

Two participants had initially considered abortion. Petronella was a married woman that already had five children when she found out she was pregnant again. She did not plan the pregnancy, but she and her husband also did not use contraceptives. Her husband was very upset when he found out she was pregnant. He did not support her during the pregnancy. She also referred to the financial burden of having another child as she can only receive a government child grand for four children. She drank pills that she had at home to try and abort the child, but it was unsuccessful. She went to the clinic when she was already 26

weeks pregnant. The sister at the clinic explained that she cannot get an abortion in the third trimester at a public health care facility because she was too far along with the pregnancy.

> *I didn't actually want the baby, because I drank pills. I did try to get rid of the baby myself; I wanted to go for an abortion.... The sister that talked to me (said) I was too far with the pregnancy (to get an abortion). (Petronella 33 years #2)*

Women considering a TOP will not initiate ANC because they are not planning to have the child. Most women struggle with accepting the outcome of the pregnancy when a TOP is not an option. ANC initiation only happens after realising that the TOP is not a viable option at such a late stage in the pregnancy.

Rachel, another participant, was a young woman with a child from a previous teenage pregnancy. She was pregnant for the second time. She lived in an informal house next to her parents' house. She stopped getting her period and realised that she was pregnant, but did not confirm her pregnancy with a test or a health care visit. She was contemplating whether to keep the child or to abort the child.

> *I wanted to abort ...but then I decided I can't. Because this was my second child and I was still young...And afterwards I decided I am not going to (abort) anymore and then I started loving (the child) and then I kept my child. (Rachel 20 years #10)*

Rachel did decide to keep the child, but to not tell her parents about the pregnancy. She told her parents that she was pregnant at seven months gestation and attended her first ANC at eight months. Rachel needed time to decide on the outcome of the pregnancy to not abort the child, which may have contributed to postponing ANC initiation. She was also scared that she will be rejected by family when disclosing the pregnancy to the family which also influenced the delay in ANC initiation.

Women who decided to continue with the pregnancy after considering a TOP, booked late for their first ANC visit. As the above quote demonstrates the role of family support also influence ANC initiation, which will be discussed further in this chapter.

4.3. Value of ANC

Women in the study demonstrated a lack of understanding with regards to the importance of early ANC initiation and therefore do not value and utilise the service. Some women did not know the value of initiating ANC before 20 weeks gestation and therefore they did not attend

ANC within this time frame. Some women only recognise the value of ANC when they develop complications during pregnancy and only then they attend ANC.

4.3.1. Low knowledge about optimal ANC timing

The younger women in their first pregnancy were not aware of the optimal timing for ANC initiation. The women were only formally informed on this topic after they had contact with a health care worker during their pregnancy. The younger women were advised by their mothers to initiate ANC after they disclosed that they were pregnant. The mothers' advice appears to have not been valued as the women did not follow the advice.

One of the participants did not attend ANC visits although her mother had advised her to go to the clinic for her first ANC visit. She also did not take the health care provider's advice to initiate ANC as soon as possible after the pregnancy was confirmed by a sonar scan. Only after she had contact with a health care worker due to a near miscarriage did she initiate ANC.

> *...I started getting contractions in my fifth month. My mom took me to the hospital... I almost had a miscarriage... From the hospital they referred me to my first ANC visit at the clinic. My mother did advise me (to attend ANC when I found out I was pregnant), but I didn't go. (Sophie 20 years #1)*

Although her mother did tell her to initiate ANC early, she did not value the advice as she was not informed on the value of timely ANC initiation. Sophie did value the advice from the health care worker but only after having complications with the pregnancy.

Like Sophie some women do not realise the importance of early ANC and only initiate ANC after 20 weeks when they have developed pregnancy complications. Women do not always value the advice from family; therefore formal channels educating women on optimal ANC timing are important. Formal educational sessions or informative posters on optimal ANC initiation timing are not present at health care facilities or schools. Women value the advice of health care workers and may initiate ANC earlier if they receive education on the importance of optimal ANC timing from them.

4.3.2. Misconception about the value/purpose of ANC

Knowledge on the purpose and the importance of ANC is important to ensure timely ANC initiation. People value health services and interventions more if they understand the importance it has in their health outcomes. Some of the women were of opinion that ANC

initiation before 20 weeks gestation was not of value to them or their health, while others had a misconception of the purpose of ANC.

In asking one of the participants whether it would have made a difference for her to attend ANC earlier she stated that it would not have made a difference to her or her child's health outcomes.

> *It's only the amount; you have to attend more visits. But it didn't actually make a difference for me [that I initiated ANC late]. (Hester 21 years #4)*

Hester felt that if she had attended ANC before 20 weeks, she would have had to attend more ANC appointments than would have been necessary. This was therefore one of the reasons she initiated ANC after 20 weeks gestation.

Some women that were pregnant before and initiated ANC early with their first pregnancy may argue that they have the necessary information for their pregnancy and do not need to initiate ANC before 20 weeks with the following pregnancies. One of the participants stated that she had booked timely for ANC with her first pregnancy, because she did not have enough knowledge on important health information for her first pregnancy.

> *No, then I had booked earlier, because I was too dumb. (Muriel 27 years #6)*

Muriel was unsure what to expect from the first pregnancy and thought it was necessary to book early. She had a hard time to accept this pregnancy but also felt that she had the necessary health information with this pregnancy and therefore did not need to book before 20 weeks gestation.

Amy also felt that she was going to have to attend more ANC visits if she attended ANC early and that it would have been unnecessary. She also felt she had enough experience from her previous pregnancies. She felt that buying and using the supplements that the ANC clinic provided was adequate to postpone ANC initiation for six months.

> *For me it's the same. Hum, they want you to come early but you just being there longer, sitting longer. So, I prefer, hum going later. Whereas I would buy my medication... at the pharmacy. Hum, my tablets and whatever that I needed, I bought that and then I said: "Okay I will go and book at a certain time." I think I went to book [short laugh] at six months. I am not even sure. (Amy 33 years #7)*

The value of ANC initiation before 20 weeks was not enough for Amy when she had to compare it to the long waiting time when attending ANC at the clinic. She therefore decided that she had enough knowledge on ANC from her previous pregnancies and 'treated' herself up until 6 months.

Some of the women did not perceive early initiation of ANC before 20 weeks gestation as valuable. They felt that they had enough knowledge and information on pregnancy to attend ANC after 20 weeks gestation and that if they attended before 20 weeks it would lead to more follow-ups that would have been a waste of time. Women also indicated that they want to minimise ANC visits to avoid long waiting times at the clinic. Waiting times will be discussed further under health system barriers. The understanding of the value and importance of early ANC among women is therefore important to promote ANC initiation before 20 weeks gestation.

4.3.3. Understanding importance of ANC

Understanding the importance of ANC will help to facilitate access to ANC services. People need to understand the importance of a service before it can be valued. Most of the women experienced the ANC visits as a source of information and education on infant feeding especially breastfeeding, healthy maternal nutrition, birth preparedness and family planning options.

One of the women that had initiated her ANC visit late with their first pregnancy stated that if she initiated ANC before 20 weeks gestation, she would have had more important health information on ANC.

> *…if I attended ANC earlier I may have understood more of the pregnancy… (Emma 21 years #3)*

Women like Emma understood the importance of ANC only after her first visit. She felt that she had received valuable information late in the pregnancy and that she needed this information before she got pregnant.

ANC services were also seen by most as an important entry point to detect and treat antenatal complications, although they still attended their first ANC visit late.

> *So, it is better to go earlier to the clinic than them finding out later that there is something wrong with the pregnancy and that. (Ann 31 years #5)*

Although Ann stated that early initiation of ANC is important, she either did not value or did not truly understood the importance of early initiation of ANC.

The true understanding and comprehension of the importance of ANC may facilitate ANC initiation before 20 weeks. Some women state that after understanding the importance of early initiation of ANC they saw the value of early ANC initiation and would attend ANC earlier in the future. Other women stated that they knew the importance of ANC and still did not attend ANC before 20 weeks.

4.4. Individual characteristics – Age

Age may have an influence on when women tend to initiate ANC. Younger women that had unplanned pregnancies tend to hide their pregnancies in fear of how the family will react. While hiding the pregnancy, they do not attend ANC in fear that the family will find out that they utilised ANC.

Some of the women in the study that were between 19 and 20 years of age when they got pregnant had a hard time to disclose their pregnancies to their families.

> *I was afraid to tell my mother again, I am young that is why I went later. When I told them, I was seven months [pregnant]. Then I only got a booking at the hospital when I was eight months. That is why I booked at eight months. I wasn't worried about people. I was only worried about what my mom was going to say and how she was going to react on it. (Rachel 20 years #10)*

Rachel was afraid to tell her mother that she was pregnant. This prevented her from early ANC initiation because she was scared that her mother would find out that she went to the clinic for an ANC visit. Women like Rachel feared that other patients at the clinic were going to see them at the ANC clinic and tell their parents; therefore they did not initiate ANC before they disclosed the pregnancy to their parents.

Younger women feel that by getting pregnant at a young age they have disappointed the family. They feel ashamed and are scared of being rejected by their family and try to hide the pregnancy for as long as possible. They only attend ANC after disclosing their pregnancies to their family, which delays the booking process until post 20 weeks gestation.

4.5. Social factors

Family, partner and community support for pregnant women can help facilitate timely ANC initiation. The support from family and the partner can help women with unplanned pregnancies to accept the pregnancy, which will assist in initiating ANC before 20 weeks gestation. Family responsibilities are a barrier for ANC initiation as well as a lack of community support in assisting with these family responsibilities. Support for pregnant women is an important component that can improve the likelihood of ANC initiation before 20 weeks gestation.

4.5.1. Family and partner support

Women who are not supported during pregnancy are more likely to initiate ANC late. Family and partner support during pregnancy is important to motivate and drive women to care for them and their child's health. Some women did not get the emotional support they needed from the partner or family, which contributed to late ANC initiation.

Ann was in a relationship with the unborn child's father when she disclosed that she was pregnant with his child. The father did not want the child and suggested an abortion. Ann did not agree to get an abortion and ended the relationship with the father while continuing with the pregnancy.

> *And then the young one's father...I send him away myself when we found out I was pregnant. Then he wanted me to get rid of the child...I can't do that... He did in the middle of the pregnancy, then he wanted to say sorry and all that. But I can't, because I will always look at him that way and I'm not up for that. (Ann 31 years #5)*

The emotional toll on Ann due to the break-up, and the realisation that she would care for the child on her own were contributing barriers to late ANC initiation. She did not receive the necessary support from her partner to motivate her to attend ANC.

In contrast, Sophie's boyfriend was very excited when he found out that she was pregnant with his child. She was a younger working woman living with her parents. She was scared that if she tells her parents, especially her mother, that she will be rejected by the family.

> *I kept it (the pregnancy) to myself; I was too scared to talk. Then the thing started to build up, that stress and that. Because then I had to go tell my mom. And my mother always said if I am pregnant she is going to throw me out and that, but then it wasn't like that. (Sophie 20 years #1)*

She did not initiate ANC until after telling her mother that she was pregnant. Women postpone disclosing their pregnancy to family when they feel it will not be supported, which then leads to late ANC initiation. Although she was not rejected by her mother after disclosing her pregnancy, her fear of being rejected indicates that she thought she will not be supported by her mother.

Women need emotional support during pregnancy to be able to accept and celebrate a pregnancy, whereafter the health of the mother and child will be valued. The support will motivate the women to book for ANC early.

4.5.2. Social support and competing priorities

A community that supports pregnant women can contribute to ANC initiation before 20 weeks. A supportive community can assist women in overcoming certain barriers that prevent women from attending ANC. Moving and living in a different town from where some of the women grew up, had a negative influence on the support they received from the community which contributed to late ANC initiation.

Ann moved from Bellville to Worcester with her mother and brothers. She felt that she did not receive the same support from the community as when she was in Bellville. She had to look after her grandfather and could not find someone from the community to look after him while she had to attend her first ANC visit. She missed her first ANC visit and only attended the visit months later after her grandfather had passed away.

> *...with my last one, because like I told them here at the clinic; my grandfather he stayed here with us. I actually had to go the month of December... yes... the month of December. The fifth of December I had to go. Hum, to go and book but it is then that my grandfather got sick. He had dementia and here wasn't someone to look after him, because my mother works. The children are in school and my brothers at work. So here isn't someone to look after him... Look we're not actually from Worcester and the people here...they are for themselves. They are not people that will help you out of their own; like in the case of my grandfather. (Ann 31 years #5)*

Ann booked her first ANC appointment at about 28 weeks gestation, but due to family responsibilities she could not attend that appointment. In January, she tried to make a new appointment for her first ANC visit after her grandfather died. The clinic was fully booked and she could only get an appointment for February when she was already 38 weeks pregnant.

Pregnant women that do not have the proper support from the community experience even more barriers in attending ANC. A supportive community can temporarily assist women with family responsibilities or even transport issues to facilitate early initiation of ANC.

4.6. Economic barriers

Unemployment remains one of South Africa's biggest challenges. Some of the participants do not work and may only depend on a government child support grant to the value of about $27 (R410) per month per child. The women preferred going to the public health care facilities by taxi, but the financial funds were not always available. The participants found it difficult to walk to the public health care facilities due to health issues, the distance and/or the possible violence they may encounter on the road. If money were not available for taxi services, some women were not able to attend clinic visits.

Muriel explained that the clinic was too far from her home to walk and that she would attend ANC faithfully if she had the financial means.

> *It's very far (the clinic). I have always taken the taxi to get there. The money... to get it. Who is going to give you taxi money? I will go with the taxi anytime but the cents (money) aren't always there. (Muriel 27 years #6)*

Key informant two also stated that some women did not attend ANC clinic visits due to not having enough money for the taxi fair to the clinic and back home.

The ANC services and any necessary treatment at the public health care facilities are free of charge, but additional costs like transport from home to the public health care facilities are at the patient's own expense. Additional expenses like transport to the clinic therefore demonstrate to be a barrier to initiating ANC before 20 weeks gestation.

4.7. Work

Employee policies on leave for ANC attendance are important to facilitate timely ANC attendance. Some women struggle to get paid leave to attend ANC visits and therefore postpone initiation of ANC. Other women also feel responsible for their work duties and feel uncomfortable to take off a whole day with paid leave to attend ANC and therefore may also postpone ANC initiation.

The participants that were shift workers struggled to get an appointment at the clinic that suited them. The women felt that they could not ask for an alternative date or negotiate

another date than the date they received at the public health care facility. Hester, a 21-year-old shift worker, felt that access to initiating ANC can be improved if an appointment date can be given that suited the pregnant women.

> *It is because I was working therefore I booked late, because it's our shifts. It worked the same as the nurses. So, to get a date on your day off is difficult...then you actually sign away all your leave (to attend ANC visits). They give you a date to come, now you have to cancel your date, because your day off does not fall on that day. (Hester 21 years #4)*

Key informant one supported the view that women working shift-work had trouble attending clinic visits and felt that the clinic should have done more to accommodate this. Not being able to choose an ANC appointment date that suited them made it difficult to adhere to the first ANC appointment, because they either cannot get that date off from work or they need to take an unpaid day or a leave day.

Marlene who is a teacher stated that although she received sick leave to attend ANC visits she postponed her ANC visits because she did not want to 'disturb' the children by leaving them with another teacher.

> *The thing is at the clinic you don't know how long you sit. And I start eleven o'clock. Eleven o'clock until before six I work. So that time, I didn't want, I couldn't take off; because I work with children. So, I can't decide okay now I am going to the clinic this day, but I don't know at what time I will get to work. So, hum now it is difficult because I also don't want to disturb the children. Especially if there are other teachers coming or something like that, they get a little disturbed. So, I did decide that I had to take a day off to go to the clinic. My boss said it is fine I can go, because she understood. (Marlene 22 years #8)*

She weighed up the anticipated long waiting times at the ANC clinic to the wellbeing of the school children and decided to postpone the initiation of ANC to benefit the school children. She felt responsible for the wellbeing of the children in the class and felt that if she attended ANC it would disrupt them.

Unpaid leave for attending ANC and work ethic were barriers that prevented early initiation of ANC which need to be addressed. Key informants have suggested that women should also get ANC appointments that suit them and long waiting times at the ANC clinic should be prevented to facilitate early ANC initiation before 20 weeks gestation.

4.8. Violence

Avian Park and Roodewal are two of the neighbourhoods in Worcester that have a very high rate of gangster violence that includes gun violence. People living in certain areas within these neighbourhoods have to walk alternative routes to the clinic that are safer while others still have to walk through dangerous areas to get to the clinic. Alternative routes caused the people to walk further to the public health care facilities. Women that want to initiate ANC weigh up the benefits of attending ANC to the distance they have to walk and the possible dangers they may encounter on the way to the clinic.

Muriel found it hard to walk long distances due to discomfort caused by the pregnancy. She lives in Roodewal and due to the presence of gangster violence; she had to take a much longer detour to the clinic to avoid potential harm.

> *And we are living in Roodewal flats, now we have to walk a detour to the hospital. (Muriel 27 years #6)*

As stated previously she does not have the financial means to take a taxi to the clinic and therefore she does not always commit to her ANC appointments.

Outside of these neighbourhoods, gangster territory also stretches to other parts of Worcester that include walking routes to the public health care facilities. This gangster territory prevents people from attending their ANC clinics. Both of the key informants stated that violence was a big barrier that contributes to late ANC initiation.

> *A lot of the time it is the violence that prevents them from getting there (to the clinic). Like in Avian Park it is the violence that results in them not getting there (to the clinic). Okay some can walk there, but now they may not walk in the territory of the Byters gangsters, because they live in the same territory of the JCY gangsters. On this side the Byters (gangsters) live and on the other side the JCY's (gangsters). (Key Informant #1)*

Although the women attending the clinic do not belong to a gang, the gangsters are still very territorial. The gangsters may hurt people entering their territory that live in the rival gangsters' territory. The possible dangers due to gangster violence therefore outweigh the benefits of attending ANC visits. The key informants noted that mobile health care services are rendered within neighbourhoods for certain health services like immunisations. They

suggested that these mobile services should include ANC to increase ANC initiation and adherence to follow-up appointments.

Violence has a direct impact on preventing ANC attendance before 20 weeks gestation as many women living in certain areas within Worcester find it too dangerous to attend ANC. Some women exposed to the dangers of violence may take alternative routes to the clinic that are safer, but then the distance to the nearest clinic becomes a barrier for accessing ANC. It has been suggested by key informants that mobile ANC services within neighbourhoods in Worcester may help facilitate ANC initiation before 20 weeks gestation.

4.9. Health system barriers

The health system should encourage timely ANC initiation but it can also be a barrier for some women seeking ANC. The women in the study did not experience the health care personnel as rude, although they anticipated it. One participant did experience rude behaviour from support health care personnel which influenced her ANC seeking behaviour negatively. A really big barrier that was identified by the study participants were the long waiting times at the health care facilities. Waiting times need to be addressed to improve ANC initiation. The last health care barrier that was identified were the practices of nursing students that were slow, unprofessional and made some of the women feel uncomfortable.

4.9.1. Personnel attitude and behaviour

The attitude and behaviour of health care providers are important to ensure that women are not affraid to attend ANC visits. The health care support personnel also have an important role in ensuring that women have a positive experience when visiting a health care facility.

Most of the participants went for their first ANC visit with the expectation that they were going to be scolded by the public health care facilities' personnel, because they attended their first ANC visit late.

> *I thought they were going to scold me and... But they didn't scold me. They were very considerate. I was concerned that they were going to ask why I am late, but then it wasn't. (Rachel 20 years #10)*

Rachel had a good first ANC visit experience at the clinic. Although the health care personnel did not scold the women for attending their first ANC visits after 20 weeks the expectation of this contributed to the participants postponing the first ANC visit even more.

It was good to note that the rudeness that was experienced was not from health care personnel, but rather the supporting personnel at the clinic.

> *Because they (personnel drawing the patient files) don't know how to work or talk to patients. A lot of the time I say they are only there for the money. (Hester 21 years #4)*

Hester had an unpleasant encounter with a clerk during a previous clinic visit before she was pregnant. She reported the encounter to the operational manager of the clinic. The unpleasant encounter with the clerk, lead to her avoiding the clinic. This contributed to her attending the clinic after 20 weeks gestation.

The problem exists that despite only a few of the participants experienced rude personnel at the clinic, they anticipated and had an initial fear that the personnel would be rude, which may be a barrier to attending ANC timely. Support health care personnel should also be attentive on how they treat patients as this may also influence ANC attendance.

4.9.2. Waiting times

Long waiting times may influence ANC attendance negatively. Waiting times are a big problem at the public health care facilities in Worcester. The women find it uncomfortable and frustrating to wait long hours in a queue before they are attended to. Some women feel that the benefits of early initiation of ANC are not justified by the amount of time they have to wait for ANC services.

Although the patients receive appointment dates with time of appointment, the patients are not helped on that specified time.

> *So, you get a time but it doesn't actually stick to that time. That's why I either came late or whatever, because you sit there for the whole day and it's, it's...Frustrating, because you have other things to do as well. And you just come there to fetch a packet of tablets or just for a normal check-up. And they don't do the whole check-up... (Amy 33 years #7)*

The frustration of having to wait the whole day at the ANC clinic escalates in women initiating ANC late.

One of the participants explained that she did not want to make a booking early because she would have had to attend more visits resulting in increased waiting times.

Ah, and I don't want to sit there so long for so many months. [Laughing]... Sit there whole day. It's too bad. (Amy 33 years #7)

Key informant one confirmed that some of the pregnant women book late due to the long waiting times. Women would rather initiate ANC late to prevent long waiting times with each ANC follow-up.

Marlene raised the issue of the impact of the long waiting times on her work. She suggested that people that work should rather seek private care than using the public health care facilities, because the private care does not have long waiting times.

At the clinic you must just sit and sit. You don't know until when you will sit. So, you must be strong if you go to the clinic...you must take the whole day off (from work). (Marlene 22 years #8)

Working women that do not have the money to pay for private care still need to make use of public health care facilities. Working women that have to wait the whole day for ANC care may initiate ANC late to prevent losing pay due to the long waiting times at ANC that prevents them from returning to work.

The public health care facilities do not adhere to the appointment times given to the women. The long waiting times result in pregnant women feeling frustrated, which in effect contributes to the women postponing their first ANC visit. Some working women also postpone their first ANC visit to reduce the number of total ANC visits and therefore reduce the total time they have to take off from work. Long waiting times have a negative outcome for timely ANC initiation.

4.9.3. Nursing students

The training of new health care providers including nurses is important to ensure adequate health services in the future. It is also important that health care students be professional in the presence of a patient and that patients should be considered in practical sessions. It has been stated that students must practice professionalism to ensure the trust and comfort of their patience. A number of the women complained about the nursing students that attended to them.

Some of the public health care facilities facilitate nursing students during certain times of the year, in order for students to attend their practical at the ANC clinic. Most of the women did

not mind that the students were there to receive training but felt that the students were unprofessional and working too slow during the consultation.

> *At the clinic it was very slow for me, because it was students that helped me. And they had their own time. And it took long and I got a bit mad because they are busy with their own chit-chats while they must help us...but they had their own time. Afterwards I went to the sister again and she helped me further. (Emma 21 years # 3)*

Some women did not only complain about the increase in waiting time due to the students being present but also complained that the students were unprofessional. The women felt exposed during their ANC visit and stated that the person attending to them should be professional and considerate of the situation. The women also felt that attending the clinic and seeking health care is an important and serious matter which was not represented in the students' behaviour.

Muriel did not want to be treated by a student as she did not trust them and it seemed that she was sceptical of their practices.

> *The students they take pliers, I don't know why, but I am just very cautious for the ovary that's all. I don't want to bleed like I bled before. (Muriel 27 years #6)*

It is very important that patients be able to trust the services that they receive at the clinic. If patients do not trust the health care services at the clinic, they will share this experience with other people and this may contribute to a lack of trust in the public health ANC services.

Marlene also explained that the students were making her feel uncomfortable and lead to a bad experience at the ANC clinic.

> *I didn't know that there were so many students that feel you and all that. And so that wasn't nice, because all the students feel you. They make sure of hum...Sisters make sure whether the students are working correctly and all that. So that wasn't nice for me. (Marlene 22 years #8)*

It is important that patient's comfort should not be dismissed for the sake of training. Women having bad experiences due to a couple of students touching them at the same time may lead to women not attending and postponing ANC visits when they know students are present at the clinic.

Most women complained about the increase in waiting time and also the increase in time during a consultation when students were present at the ANC clinic. It is important that students and practicing health care personnel work in a timely manner themselves to avoid long waiting times as this creates a barrier to ANC initiation before 20 weeks gestation. The students should also be professional when assisting with a patient and students should not attend to patients without supervision. Professionalism is an important factor that encourages trust between patients and the students. If the patients do not trust the students, they may lapse their ANC appointment when the students are present at the clinic and may therefore not initiate ANC within 20 weeks gestation. Students and graduated health care providers should always place the interest of the patient first, before training by ensuring the patient is comfortable and have a positive experience. Women that feel disrespected or uncomfortable may share their experiences with others and this may lead to other women postponing ANC initiation.

4.10. HIV stigma

In South Africa almost a third of all pregnant women are HIV positive. HIV testing is a routine test that is done in South Africa with the first ANC visit. HIV testing during pregnancy is important to Prevent Mother-to-Child Transmission (PMTCT) of HIV as it enables early detection of HIV and initiation of Antiretroviral Therapy (ART).

HIV testing was not experienced as an invasive test that was done during the first ANC visit. The women did not link the test to stigma that prevented them from attending the first ANC visit due to being scared of being tested for HIV. Amy stated that the HIV test was just one of the 'normal' tests that were done at an ANC visit.

> *Hum. They do the finger pricks, the HIV test, the... all the funny diseases tests that's what they do. The diabetes test that they do and the normal urine. And then they fill in all your information and stuff like that. That is just the normal. (Amy 33 years #7)*

Amy like the other women did not show any fear for being tested for HIV. She did not highlight the HIV test as a special test. The women perceived the HIV test as just one of the many tests that need to be done routinely with the first ANC visit.

One may think that HIV testing may be a barrier to ANC initiation when referring to some literature that was discussed in the literature review, but none of the participants indicated that they experienced the routine test as a negative incident or barrier to initiating ANC.

4.11. Summary of the study findings

In summary the study findings suggest that there are a wide range of factors that contribute to late initiation of ANC. In order to facilitate ANC initiation before 20 weeks gestation a lot of barriers need to be acknowledged and addressed.

The nature of the pregnancy had a big influence on the timing of ANC initiation in this study. It is important to note that all of the participants in the study that attended ANC late had unplanned pregnancies as were stated by the participants. A lot of the women did not realise that they were pregnant and two participants considered an abortion which they did not execute. Most of the women in the study first had to accept that they were pregnant before they could initiate ANC, which in effect delayed ANC initiation.

Not all women realised the importance of early ANC initiation. Some women felt that if they attended ANC earlier, they had to attend more visits which they felt was unnecessary. Some of the younger women did not know that they had to initiate ANC within 20 weeks gestation. Education and advocacy on the importance of timely ANC initiation is important in facilitating ANC before 20 weeks gestation.

Support for the pregnant women was also shown to be of importance. The women that were not supported by the unborn child's father, family and the community also contributed to late ANC initiation. The women that were below 20 years of age delayed disclosing their pregnancy to their parents out of fear of being rejected. They booked late for ANC, because they only booked after telling their parents they were pregnant. Women that had responsibilities and other priorities at home and did not receive support from the community postponed their first ANC visit. The results highlight the importance of support from the partner, family and community in facilitating the initiation of ANC before 20 weeks gestation in pregnant women.

The study found that the public health care facilities are far, in distance, from where the women are living. The women could not always walk to the public health care facilities due to long distances or gangster violence. Although there are taxis to drive them to the clinic the women did not always have the financial capacity to pay for the use of a taxi.

There were a few health system barriers that contributed to late ANC initiation. Most of the women reported that the personnel were courteous, although they anticipated that the personnel were going to be rude because they attended ANC late. The waiting time at the clinic was one of the main reasons for attending ANC late as it was a great frustration for

almost all the women. The influence of long waiting times on missing work and therefore not getting paid also showed to be a barrier.

Some of the women complained about the unprofessionalism and increase in waiting time when students attended to them at the public health care facility. Some women also had lack of trust in the students' practices. Students need to be trained and educated to ensure professionalism and respect to ensure that women do not avoid ANC initiation due to students' behaviours.

HIV testing is important in PMTCT. It was good to note that HIV testing at the first ANC was seen as a routine procedure without stigma.

The reason for late ANC initiation was not due to one factor, but a complex combination of a few factors. In the next chapter the findings will be discussed further.

CHAPTER 5 DISCUSSION

5.1. Introduction

This study sought to explore the reasons for late presentation of pregnant women for Antenatal Care (ANC) in Worcester in the Cape Winelands District. The South African maternal and perinatal mortality rates are high when compared to other middle-income countries (Muhwava et al., 2016). Early ANC initiation is important because maternal and perinatal mortality are less likely to occur when contributing factors are detected and addressed during pregnancy (De Vaal, 2011; Hagey et al., 2014). The barriers contributing to late ANC initiation and the factors that facilitate timely ANC initiation identified in our study will be discussed in this chapter.

This chapter will be organised according to the main themes and subthemes, with key findings under each theme being discussed in comparison to the literature and existing research. The chapter will focus on the nature of the pregnancy, value of ANC, social factors, age, economic factors, violence, health system barriers and HIV stigma.

5.2. Nature of the pregnancy

In this study an unplanned or planned pregnancy was established on the basis of the participants' explanation and opinion of the nature of their pregnancies. The nature of the pregnancy influenced the timely initiation of ANC. It is notable that all of the women in our study had unplanned pregnancies and initiated ANC after 20 weeks gestation, which emphasises the importance of family planning. Despite being on Depo Provera, a few of the women fell pregnant. This may indicate that they did not receive this contraceptive at a strict three-monthly interval as prescribed for effectiveness which may emphasize the need for quality family planning to ensure that women fully understand the reproductive system and receive quality counselling about contraceptives. Women that did not plan their pregnancy had a hard time accepting the pregnancy, which was a barrier to initiating ANC before 20 weeks gestation. Planned pregnancy is a facilitating factor in initiating ANC before 20 weeks gestation. Muhwava et al. (2016) found that planned pregnancy increases the odds of early ANC attendance while those women that have unplanned pregnancies are often not motivated to attend the clinic and therefore postpone ANC initiation (Abrahams et al., 2001).

It was interesting to note that in our study we identified a potentially unique finding where a few of the women that did their own home-bought pregnancy tests showed a false negative for pregnancy. Although these women suspected that they were pregnant, these tests contributed

to the denial of the pregnancy and misled them into thinking they were not pregnant. This may have contributed to women initiating ANC after 20 weeks gestation. This indicates that access to quality self-testing pregnancy kits as well as the ability to use them is important to identify pregnancy at an earlier stage of pregnancy. This may promote and contribute to timely initiation of ANC.

In general, once the women in our study were sure that they were pregnant they first had to accept the reality of their situation before they could initiate ANC. Our study's findings suggest unplanned pregnancy acts as a barrier to initiating ANC and is supported by research by Delgado-Rodriguez and colleagues (1997) who found that women with unplanned pregnancies were in denial and postponed the confirmation of their pregnancies. Some of the women in this study were in denial that they were pregnant as they stated "I can't believe I am pregnant". Some of the women could not believe that they were pregnant because they were on contraceptives; which indicate that poor counselling about contraceptives especially around Depo Provera may contribute to the disbelieve on getting pregnant while on a contraceptive.

5.3. Value of ANC

The true value and purpose of ANC needed to be understood by the women in our study in order to facilitate initiation of ANC before 20 weeks gestation. Some women perceived early initiation of ANC as unimportant because they did not fully understand the importance of timely ANC attendance. In addition, denial of an unplanned pregnancy may have hindered timely initiation despite the women realising the true value of early ANC initiation.

In our study we found that some women felt that it was only necessary to seek health care or to initiate ANC after complications were experienced during the pregnancy. Other research reported similar conclusions that some women believe that ANC is only of value when they have complications (Abrahams et al., 2001). The lack of correct information and knowledge for timely ANC booking is a barrier for initiating ANC before 20 weeks gestation (Kisuule et al., 2013). However, women do not always know that they are experiencing complications and therefore would not initiate ANC (Ndidi et al., 2010; PMNCH, 2006). The delay in seeking health care may be detrimental to the health of the women and the unborn child.

Older participants that had attended ANC with previous pregnancies in our study felt that timely ANC initiation contributed to more follow-ups than they perceived to be necessary. Other research showed one of the factors that significantly facilitated early ANC access was null parity (Okunlola et al., 2006) and that women with higher parity tend to postpone ANC

initiation (Kisuule et al., 2013). The results in our study showed that some of the women felt that they had enough experience and information on pregnancy and perceived ANC initiation before 20 weeks gestation not being of value for them.

These women in our study may not truly understand the value of ANC which is likely a reflection on ineffective ANC health education programmes (Ndidi et al., 2010). ANC health education programmes are important to inform women of the value and purpose of ANC initiation before 20 weeks gestation (Myer & Harrison, 2003). Quality health education is needed to provide the necassary knowledge that will empower women to better both their child's health outcomes as well as their own by attending timely ANC.

5.4. Individual characteristics – Age

The results suggest that age may play a role in the initiation of ANC, such as the stigma around age appropriateness when pregnant. The younger women in our study postponed disclosing the pregnancy to their family which in effect delayed ANC. The stigma younger women experience when pregnant can lead to women hiding their pregnancy from family and friends and therefore postponing ANC initiation (Sinyange et al., 2016). The importance of support for these women is discussed further in the following section.

Some of the older women in our study felt that they were pregnant before and therefore did not need to attend ANC before 20 weeks gestation, as they had all the relevant information that they needed. As stated by Pell et al. (2013) older women that had previous ANC experiences only attended ANC later in their pregnancy to receive an ANC card before giving birth. The perceived importance of ANC initiation before 20 weeks was discussed in the section on the value of ANC. Sinyange et al. (2016) also referred to women of an older age that felt ashamed for getting pregnant at an advanced age and therefore may have postponed ANC initiation. In our study the oldest participant was 35 years old and therefore this finding could not be supported in the study.

Women of different ages have different barriers to initiating ANC. The improvement of access to early ANC initiation should therefore be approached differently per age group.

5.5. Social factors

In our study, the researchers identified three forms of support as reported by the women that had the potential to affect the timing of ANC initiation. These were partner, family and community support for the pregnant women which will be discussed further below. Women

need support from their partners, family and the community to enable an increase in facilitating early ANC initiation.

The women in our study that did not receive emotional or financial support from their partners indicated that this impeded early ANC initiation. A study by Muhwava et al. (2016) that was also done in a rural area within the Western Cape in South Africa supports the notion that low levels of support from the partner during pregnancy is a barrier to ANC, but support from the partner increased ANC attendance by three times in their study. Other studies also found that social support from partners improved the adherence of women in accessing preventative and treatment services (Medley, Garcia-moreno, Mcgill, & Maman, 2004; Skovdal, Campbell, Nyamukapa, & Gregson, 2011). The inclusion of male partners in reproductive health, including ANC, is therefore of utmost importance to increase early ANC initiation.

The women in our study also needed support from the family, especially the younger participants. Some of the younger women in the study were still dependant on their families for basic needs like housing and food. These younger women also confessed that they feared being abandoned by the family when disclosing the pregnancy. Therefore, younger women or women dependant on their families may postpone disclosing their pregnancy for fear of the consequences. In effect the women will also postpone the initiation of ANC until revealing the pregnancy to the family to avoid the family from finding out that they attended ANC. Simkhada et al. (2008) stated that women that did not feel that the family supported them were twice as likely not to attend ANC.

It was found in our study that women that had to look after family members at home could not leave the family members alone while attending their ANC visits. Without an alternative caregiver for the family members in need of assistance, the women perceive it as impossible to attend ANC visits. Therefore, women who have the sole responsibility of caregiving within their home missed ANC visits. This was also found in another research study (Abrahams et al., 2001). Family and community support can therefore help facilitate ANC attendance before 20 weeks gestation for women in these circumstances (PMNCH, 2006).

5.6. Distance to ANC services exacerbated by economic and violence barriers

It is of great value and of essential need that maternal and child health is free of charge (PMNCH, 2006). ANC services are free of charge in South Africa since 1994 but the women in our study did not always have the financial means to pay for the additional costs associated with receiving health care services. The additional costs particularly transport, and that the

public health care facilities are not accessible by foot due to distance and violence, were shown to be a great barrier in initiating ANC before 20 weeks. As other studies show, additional costs to attend ANC were contributing factors in impeding early ANC initiation although ANC services may be free of charge (Chisholm, 1989; Mrisho et al., 2009; Muhwava et al., 2016). It was reported that the South African unemployment rate of 2015 was very high at 25% (Department of Treasury, 2015). Breede Valley has 43 832 households of which 13.7% earned an income of less than $26 (R400) per month in 2015 (Department of Treasury, 2015). The high unemployment rate in Worcester were identified as a barrier to initiating ANC within 20 weeks gestation, because the transport cost to get to the public health care facility cannot be covered.

Although the women in our study did not explicitly state that they delay ANC initiation in order to reduce the amount of follow-ups to reduce the transport costs, this was found in a study by Pell et al. (2013) in Kenya and Malawi. This study also found that additional costs such as procurement of food and money spent on physical appearance (new clothes and hair) contributed to an increase in expenses (Pell et al., 2013). The women in our study did not mention other financial barriers, such as extra expenses for food or childcare that prevented them from attending ANC therefore this study only considers the financial barrier relating to transport in analysing financial barriers to care.

Gangster violence experienced within Worcester was also of high concern for these women and prevented the women from walking to the health care facilities in order to avoid harm. This was an impediment to timely ANC initiation. The women in our study have demonstrated, as past research shows, the threat of violence sometimes outweighs the benefit of attending ANC (Abrahams et al., 2001; Myer & Harrison, 2003). The rate of violence that was reported within the Worcester community was high and supports the women's claims (Department of Treasury, 2015).

5.7. Work and waiting time

The women in our study received appointment dates and specific times from the public health care facilities but the health care facilities did not adhere to these times and women ended up waiting for hours to receive ANC services. Some of the working women, especially shift workers, did not receive paid leave to attend ANC visits. Similar findings were demonstrated in another South African study done by Abrahams et al. (2001). Long waiting times for ANC at the public health care facilities prevented the women from returning to work, which in effect caused the women to lose a whole day of work and pay. Some of the working women

in our study explained that they postponed ANC initiation to avoid missing work and not getting paid. Other studies also found that long wait times had financial implications for women missing work, which negatively influences their motivation to initiate ANC before 20 weeks gestation (Okunlola et al., 2006; Pell et al., 2013; Solarin & Black, 2013).

Both employed and unemployed women from our study stated that they delayed ANC initiation to reduce follow-ups to avoid long waiting times, similar findings have been made in other studies (Pell et al., 2013; Solarin & Black, 2013). The long waiting times at the public health care facilities prevented women returning to work but were also a great frustration for the unemployed women. Some working women that received paid leave also felt that due to the long waiting times they could not leave their work responsibilities to initiate ANC and therefore postponed care. Unpaid leave for attending ANC, work ethic and long waiting times at public health care facilities were all contributing factors that delayed ANC initiation before 20 weeks gestation.

5.8. Rude personnel and nursing students

The services that a pregnant woman receives for ANC, is of great importance to ensure better health outcomes for mother and child. Women should feel comfortable and empowered when they receive ANC. Women should not experience anticipation of chastisement or feel demeaned by health facility personnel that include health care personnel, health care students and support personnel. Women from our study anticipated being scolded and demeaned by health care personnel for various reasons that included coming late for ANC initiation, being young and having children with short spacing. Fortunately, the women did not experience the disrespect from the health care personnel in the public health care facilities as anticipated, but the initial anticipation of such bad experiences remained a concern. The problem is that women that feel that the health care personnel will disrespect them may postpone and even avoid health care till labour (Abrahams et al., 2001; Ejigu et al., 2013). Therefore, although disrespect from health care personnel was not experienced by the women in this study the reason behind the expectation to be treated rudely must be identified and addressed to facilitate early ANC initiation.

Another problem that was identified in our study was that women did not feel respected by some of the support personnel at the health care facilities and of more concern the nursing students that attended to them during the ANC health consultation. The barriers of ANC initiation that the students contributed to also included unprofessionalism and lack of bedside manners. The women in our study did not trust the students with their health care and felt that

their unprofessional behaviour caused discomfort. The poor professional behaviour and interpersonal skills of the students towards the patients lead to negative feelings which contributed to a lack of trust in the student nurses. A study by Mukumbang (2014) reported that patients found that some nursing students were incompetent to perform certain health procedures especially when it involved invasive nursing procedures leading to mistrust in the health care services provided by nursing students. The nursing students' experience with patients is important to improve the nurse-patient relationship and trust before the nurses start practicing as professional health care providers (Kulkarni, 2009). The Mukumbang (2014) study that looked at patient's experience with nursing students in a hospital, found that 25.4% of patients indicated that students behaved badly toward patients during their clinical practice.

5.9. HIV stigma

Complications due to HIV infections during pregnancy is a major cause of maternal death in South Africa (NCCEMD, 2012; NDOH, 2015). Adherence to Antiretroviral Treatment (ART) is important to Prevent Mother-To-Child Transmission (PMTCT) of HIV. It is known that there is a lot of stigma behind testing positive for HIV. It has been found that women resisted initiating ANC early because they were scared that if they agreed to take an HIV test the community would assume they were HIV positive (Haddad et al., 2015). In South Africa a third of women are HIV positive and HIV testing are done routinely with every ANC visit. The women in our study did not find the HIV test as invasive and rather experienced it as just one of the routine procedures conducted during an ANC visit. This finding was of great value, but more in-depth research on this topic may be needed to be able to conclude that HIV stigma is not as prominent as in past studies.

5.10. Limitations

The exclusion of the health care workers working within the public health care facilities was limiting as these individuals facilitate ANC. The involvement of health care workers from the various public health care facilities may increase the advocacy and implementation of suggestions and recommendations to decrease barriers of early ANC initiation.

The study attempted to provide a rich description of the study population and site; the transferability of the study to other contexts and settings cannot always be guaranteed. The sample size was small and this means that the results cannot be generalised to the wider population.

The interviewing may have been susceptible to bias as some participants may want to please the researcher by saying what they felt the researcher may want to hear. This may have happened due to an authorisation relationship between the researcher and participant.

The women that were interviewed may have experienced recall bias from when they attended their first ANC visit.

The teenage-pregnancy-delivery-rate of women under 18 years of age living in Breede Valley Sub-District is at 6.6% (Breede Valley Municipality, 2017). Teenage pregnancies are therefore of great concern but due to ethical implications women younger than 18 years of age were not included in this study. Therefore, the research excluded a significant portion of the possible study population.

The research was only focused on women that predominantly make use of public health care facilities, therefore the population group that mainly make use of private health care facilities were excluded from the study.

5.11. Summary

The findings of the study were discussed in this chapter. Similarities were drawn between the research findings and the literature. Differences with the barriers in initiating ANC within 20 weeks gestation compared to the literature were also discussed. The study did not find that the fear of HIV stigma when testing for HIV with an ANC visit were a barrier to initiate ANC as suggested by other literature studies. The role that non-acceptance of the pregnancy plays in being a barrier in initiating ANC before 20 weeks gestation was highlighted, where applicable, throughout the discussion. None of the study participants had planned pregnancies, which in effect affected the acceptance of the pregnancy. Except for the acceptance of the pregnancy which could be seen as one of the main barriers in initiating ANC before 20 weeks there were also other barriers that can be highlighted. Reasons for late bookings are complex and include factors such as denial, concealment and economic disadvantage, but as this study shows, alongside previous research, there are additional factors that complicate the reasons to why women initiate ANC late (Haddrill et al. 2014). The final chapter will conclude the research as a whole and provide recommendations.

CHAPTER 6 CONCLUSIONS AND RECOMMENDATIONS

6.1. Conclusions

This qualitative study aimed to explore the reasons for late presentation of pregnant women for Antenatal Care (ANC) in Worcester, Cape Winelands District. This chapter sets out the overall study conclusions and recommendations about what needs to be done to address identified barriers that hinder ANC initiation before 20 weeks gestation.

ANC attendance lowers maternal and perinatal morbidity and mortality (De Vaal, 2011; Kufa, 2012; Myer & Harrison, 2003). Complications that can be detected and addressed during pregnancy go undetected in the absence of ANC and this has been stated to cause 60% of maternal deaths (Hagey et al., 2014). The greatest underlying condition that contributes to 42% of maternal deaths in South Africa is HIV as almost a third of pregnant women in South Africa are HIV positive (Solarin & Black, 2013). The Prevention of Mother-to-Child Transmission (PMTCT) during pregnancy emphasise the importance of early ANC seeking behaviour as it is an entry point for HIV PMTCT services (Kufa, 2012; NCCEMD, 2012). Over 90% of South African women have access to free ANC, but only 63.2% of pregnant women attend ANC at least once during their pregnancy (Muhwava et al., 2016).

Across sub-Saharan Africa women attend late for their first ANC visit (Muhwava et al., 2016). The purpose of the study was to understand why some women still do not attend ANC before 20 weeks gestation even when it is available free of charge. Despite these free ANC services to improve access, many barriers to early ANC initiation remain. Many of the findings of this study have been articulated in similar research regarding the barriers to early ANC initiation. The reality is that these barriers still remain which shows that the barriers to early ANC initiation are varied and complex. Addressing these barriers will require more than simply providing free ANC services, but tackling social, cultural and economic constraints. Factors that can aid timely ANC includes quality family planning, quality health care education, primary education, access to-and education on quality self-testing pregnancy kits, support during pregnancy, less violence, supportive work environments and quality health care services. These factors need to be implemented and strengthened for better ANC outcomes.

The findings of this study bear significance. There is very little data on adherence on ANC use and health seeking behaviour of women in this region (Myer & Harrison, 2003). Therefore, the findings of this study will add to the body of knowledge that can identify and

address barriers in early ANC initiation to increase the adherence which will benefit the health of women and children.

6.2. Recommendations

Based on the findings of the study the following recommendations are made:

6.2.1. Women's perceived needs of ANC

The importance of ANC should not only be taught to women, but the services must also improve the relevance of ANC by meeting the woman's perceived needs (Abrahams et al., 2001). Patients' perception of care and health beliefs need to be taken in consideration when plans are developed to improve ANC. Adequate utilisation of ANC can only be improved if the women's overall status needs, which include social, political and economic factors, are considered.

6.2.2. Health education

All of the women in the study had unplanned pregnancies, therefore more information on ANC needs to be communicated to women even before they plan to get pregnant to ensure that women comprehend and understand the importance of ANC. Clear messages on the importance and timing of initiation of ANC must be aimed at and communicated to the women and the whole community. Community leaders should be approached to participate in mediation with religious leaders regarding the importance of early ANC initiation. Health education on the timing and importance of ANC must be communicated in communities that influence pregnant women's decisions to attend ANC (Kisuule et al., 2013). Community based health education programmes are suggested to correct misconceptions of ANC (Ndidi et al., 2010). More focus need to be given to the women's, partner's and community's perception on the importance of ANC to be able to increase utilisation of ANC (Muhwava et al., 2016).

Women with multiparity tend to delay ANC initiation (Kisuule et al., 2013), because similar to the findings in this study, the women felt they already knew the necessary information needed for the pregnancy. Education on early ANC initiation with every pregnancy should therefore also be focused on women of multiparity to ensure that women initiate ANC early with each pregnancy. This education can be given at the ANC visit with the first pregnancy.

Education on the importance of early recognition of pregnancy should also be promoted to encourage women to seek ANC earlier, avoid alcohol use and to avoid other lifestyle choices

that may be harmful to the foetus and mother. Options for an unwanted pregnancy, specifically a Termination of Pregnancy (TOP), need to be communicated to women in this community. Education and information on TOP services should be made more available to women so that women can receive the necessary counselling and treatment when considering TOP's. Health education on family planning and ANC also need to be promoted and form part of education at schools.

6.2.3. Family planning

All of the women in this study became pregnant unintentionally, therefore, although a positive attitude for ANC must be advocated, the proper utilisation of family planning services must be encouraged. Advocacy, education and information on family planning for men and women are of most importance to prevent unplanned pregnancies and in effect prevent delayed ANC initiation. Greater emphasis needs to be placed on family planning and the use of contraceptives. It is important that family planning programmes and ANC services are connected to prevent unplanned pregnancies (Delgado-Rodriguez et al., 1997). Family planning can facilitate timely ANC initiation in that women that plan pregnancies can confirm and accept the pregnancy faster (Delgado-Rodriguez et al., 1997; Simkhada et al., 2008). A South African study suggests an increase in contraceptive use and a decrease in unplanned pregnancies could result in a decrease in late ANC attendance which could lead to better maternal and infant outcomes (Haddad et al., 2015).

6.2.4. Support

Education for the women, partners, families and communities on the importance of early ANC initiation and the role they can fulfil in supporting the women to initiate an ANC can help facilitate early initiation of ANC. Support from the community can assist pregnant women with family responsibilities like looking after children or sick family members while the pregnant women attend their ANC visits.

Crèche facilities should be considered to support women attending ANC in order to increase attendance of ANC clinics. Crèches at health care facilities are therefore suggested to make ANC more accessible for these mothers.

6.2.5. Health care system

Community health workers identify all pregnant women in the area and give support visits where they can to advocate and support healthy interventions and practices, but the women must still attend ANC at public health care facilities that are potentially far distances away

and travel to these public health care facilities has financial and safety implications. Satellite ANC sites and mobile clinics for ANC services can be used in the communities that struggle to get to the clinic due to various barriers. Satellite ANC sites and mobile ANC services within the Worcester neighbourhoods will reduce the financial burden and will reduce the risk of harm through violence which will help facilitate early ANC initiation.

The appointment system at the public health care facilities should be re-evaluated and adjusted to ensure that women receive ANC services within a reasonable time of their appointment. The waiting time at the health care facilities can be evaluated and adjusted quarterly to ensure that appointment times are adhered to.

Preconceived notions about rude personnel, the professionalism of the nursing students and the professionalism of the support personnel need to be addressed. ANC should be a positive experience for pregnant women to ensure that they will initiate ANC timely and adhere to their follow ups. Nursing students should receive a formal introduction course from the health care facilities on being courteous and professional towards patients and personnel before they may practice in the health care facilities. The nursing students must have supervision from a qualified professional at all times when patients are present and the professional nurse must monitor the time the student spends per patient at the ANC unit. Students must take responsibility for their patients to get connected to their patients and to better understand the needs of the patients to gain the patients' trust (Mukumbang, 2014).

The support personnel can also receive continued training on professional etiquette when working with patients. (Ritchie et al., 2003)

6.2.6. Work

According to legislation in section 22, of the Basic Conditions of Employment Act (1997) workers may take the number of days they would normally work in a 6-week period for sick leave on full pay in a 3-year period. However, during the first 6 months of employment, workers are only entitled to 1 day of paid sick leave for every 26 days worked (Basic Conditions of Employment Act; 1997). The Department of Labour does not stipulate any special leave for ANC visits for women that are pregnant. Policies on paid leave for attending ANC visits should be compiled and implemented to help facilitate early ANC initiation for working women.

6.3. Recommendations for further research

In order to address and to better understand the barriers to adherence of late ANC initiation, further research in the following areas will be needed:

- Consulting pregnant women on what information they are interested in and they will find of value.
- Research should be conducted on how waiting times at ANC within the public health care facilities of Worcester could be improved.
- The attitude of nursing students towards patients.
- Perceived attitudes of health care personnel by patients making use of public health care facilities in Worcester.
- Various support systems available for women in the Breede Valley Sub-District and how this influence ANC attendance.
- The accuracy of home pregnancy tests used by women in Worcester.

REFERENCES

Abrahams, N., Jewkes, R., & Mvo, Z. (2001). Health care-seeking practices of pregnant women and the role of the midwife in Cape Town, South Africa. *Journal of Midwifery and Women's Health*, *46*(4), 240–247. https://doi.org/10.1016/S1526-9523(01)00138-6

Afulani, P. A. (2015). Rural/urban and socioeconomic differentials in quality of antenatal care in Ghana. *PLoS ONE*, 1–28. https://doi.org/10.1371/journal.pone.0117996

Afulani, P. A. (2016). Determinants of stillbirths in Ghana: does quality of antenatal care matter? *BMC Pregnancy and Childbirth*, *16*(1), 132. https://doi.org/10.1186/s12884-016-0925-9

Aluisio, A., Richardson, B. A., Bosire, R., John-Stewart, G., Mbori-Ngacha, D., & Farquhar, C. (2012). Male Antenatal Attendance and HIV Testing Are Associated with Decreased Infant HIV Infection and Increased HIV Free Survival. *Journal of Acquired Immune Deficiency Syndrome.*, *56*(1), 76–82. https://doi.org/10.1097/QAI.0b013e3181fdb4c4.

Banda, I., Michelo, C., & Hazemba, A. (2012). Factors Associated with late Antenatal Care Attendance in Selected Rural and Urban Communities of the Copperbelt Province of Zambia. *Medical Journal of Zambia*, *39*(3), 29–36.

Basic Conditions of Employment Act (1997). Republic of South Africa. [Downloaded: 04/03/19 07:08 PM]

Baum, F. (1995). Researching Public Health: Behaind the Qualitative-Quantitative Methodological Debate. *Science and Medicine*, *40*(4), 459–468.

Birungi, H., & Onyango, W. (2006). Acceptability and Sustainability of the WHO Focused Antenatal Care package in Kenya. *Population Council Frontiers in Reproductive Health*, (June), 17.

Breede Valley Municipality. (2012). *3rd Generation Integrated Development Plan 2012 - 2017*. Retrieved from https://www.westerncape.gov.za/text/2012/11/breede-valley-idp-2012-2017.pdf [Downloaded: 20/08/18 09:05 PM]

Breede Valley Municipality. (2017). *Socio Economic Profile*. [Downloaded: 20/08/18 09:45 PM]

Chandisarewa, W., Stranix-Chibanda, L., Chirapa, E., Miller, A., Simoyi, M., Mahomva, A.,

Shetty, A. K. (2007). Routine offer of antenatal HIV testing ("opt-out" approach) to prevent mother-to-child transmission of HIV in urban Zimbabwe. *Bulletin of the World Health Organisation*, *85*(11), 843–850. https://doi.org/10.2471/BLT.

Chisholm, D. K. (1989). Factors associated with late booking for antenatal care in central Manchester. *Public Health*, *103*(6), 459–466. https://doi.org/10.1016/S0033-3506(89)80057-5

Cresswell, J. W., & Miller, D. L. (2000). Determining Validity in Qualitative Inquiry. *Theory into Practice*, *39*(3), 124–130.

De Vaal, S. J. (2011). *Late booking at the Michael Mapongwana antenatal clinic, Khayelitsha – understanding the reasons.* Doctoral Dissertation, Stellenbosch: University of Stellenbosch.

Delgado-Rodriguez, M., Gomez-Olmedo, M., Bueno-Cavanillas, A., & Galvez-Vargas, R. (1997). Unplanned pregnancy as a major determinant in inadequate use of prenatal care. *Preventive Medicine*, *26*(6), 834–838. https://doi.org/10.1006/pmed.1997.0217

Department of Treasury. (2015). Western Cape Government Provincial Treasury Socio-economic Profile Breede Valley Municipality 2015 Working Paper. *South Africa: Western Cape Government Provincial Treasury.* Retrieved from https://www.westerncape.gov.za/assets/departments/treasury/Documents/Socio-economic-profiles/2014/municipality/Eden-District/wc042_hessequa_seplg_2014.pdf [Downloaded: 08/06/18 07:15 PM]

Ejigu, T., Woldie, M., & Kifle, Y. (2013). Quality of antenatal care services at public health facilities of Bahir-Dar special zone, Northwest Ethiopia. *BMC Health Services Research*, *13*(1), 443. https://doi.org/10.1186/1472-6963-13-443

Elder, L.K., Kies, L & de Beyer, J. (1996). Chapter 3-Project preperation. *Incorporating Nutrition into Project Design.* World Bank.

Exavery, A., Kanté, A. M., Hingora, A., Mbaruku, G., Pemba, S., & Phillips, J. F. (2013). How mistimed and unwanted pregnancies affect timing of antenatal care initiation in three districts in Tanzania. *BMC Pregnancy and Childbirth*, *13*(1), 35. https://doi.org/10.1186/1471-2393-13-35

Finer, Lawrence B., & Zolna, Mia R. (2011). Unintended pregnancy in the United States:

Incidence and disparities, 2006. *NIH Public Helath Access, 84(5), 478–485.* https://doi:10.1016/j.contraception.2011.07.013.

Finlayson, K., & Downe, S. (2013). Why Do Women Not Use Antenatal Services in Low- and Middle-Income Countries? A Meta-Synthesis of Qualitative Studies. *PLoS Medicine, 10*(1), e1001373. https://doi.org/10.1371/journal.pmed.1001373

Floridia, M., Pinnetti, C., Ravizza, M., Frisina, V., Cetin, I., Fiscon, M., Tamburrini, E. (2014). Rate, Predictors, and Consequences of Late Antenatal Booking in a National Cohort Study of Pregnant Women With HIV in Italy. *HIV Clinical Trials, 15*(3), 104–115. https://doi.org/10.1310/hct1503-104

Forero, Roberto., Nahidi, Shizar., De Costa, Josephine., Mohsin, Mohammed., Fitzgerald, Gerry., Gibson, Nick., McCarthy, Sally., and Aboagye-Sarfo, Patrick (2018). Application of four-dimension criteria to assess rigour of qualitative research in emergency medicine. *BMC Health Services Research, 18 (120).* https://doi.org/10.1186/s12913-018-2915-2

Gebremeskel, F., Dibaba, Y., & Admassu, B. (2015). Timing of First Antenatal Care Attendance and Associated Factors among Pregnant Women in Arba Minch Town and Arba Minch District, Gamo Gofa Zone, South Ethiopia. *Journal of Environmental and Public Health, 2015*, 1–7. https://doi.org/10.1155/2015/971506

Geertruyden, J., Ntakirutimana, D., Erhart, A., Rwagacondo, C., Kabano, A., & D' Alessandro, U. (2005). Malaria infection among pregnant women attending antenatal clinics in six Rwandan districts. *Tropical Medicine & International Health, 10*(7), 681–688. https://doi:10.1111/j.1365-3156.2005.01431.x

Gibbs, G. R. (2007). Thematic coding and categorizing. *Analyzing Qualitative Data. London: Sage*, 38–56.

Gross, K., Alba, S., Glass, T. R., Schellenberg, J. A., & Obrist, B. (2012). Timing of antenatal care for adolescent and adult pregnant women in south-eastern Tanzania. *BMC Pregnancy and Childbirth, 12*. https://doi.org/10.1186/1471-2393-12-16

Gupta, S., Yamada, G., Mpembeni, R., Frumence, G., Callaghan-Koru, J. A., Stevenson, R., Baqui, A. H. (2014). Factors associated with four or more antenatal care visits and its decline among pregnant women in Tanzania between 1999 and 2010. *PLoS ONE, 9*(7), e101893. https://doi.org/10.1371/journal.pone.0101893

Haddad, D. N., Makin, J. D., Pattinson, R. C., & Forsyth, B. W. (2015). Barriers to early prenatal care in South Africa. *International Journal of Gynaecology and Obstetrics: The Official Organ of the International Federation of Gynaecology and Obstetrics*, *132*(1), 64–67. https://doi.org/10.1016/j.ijgo.2015.06.041

Haddrill, R., Jones, G. L., Mitchell, C. A., & Anumba, D. O. (2014). Understanding delayed access to antenatal care: a qualitative interview study. *BMC Pregnancy and Childbirth*, *14*(1), 207. https://doi.org/10.1186/1471-2393-14-207

Hagey, J., Rulisa, S., & Pérez-Escamilla, R. (2014). Barriers and solutions for timely initiation of antenatal care in Kigali, Rwanda: Health facility professionals' perspective. *Midwifery*, *30*(1), 96–102. https://doi.org/10.1016/j.midw.2013.01.016

Hawkes, S. J., Gomez, G. B., & Broutet, N. (2013). Early Antenatal Care: Does It Make a Difference to Outcomes of Pregnancy Associated with Syphilis? A Systematic Review and Meta-Analysis. *PLoS ONE*, *8*(2), e56713. https://doi.org/10.1371/journal.pone.0056713

Jack, S. M. (2006). Utility of Qualitative Research Findings in Evidence-Based Public Health Practice. *Public Health Nursing*, *23*(3), 277–283.

Jeremiah, I., Orazulike, N., & Korubo, I. (2015). Factors Influencing Gestational Age at Booking at The University of Port Harcourt Teaching Hospital South-South Nigeria. *International Journal of tropical disease & Health*, *6*(2), 52–57. https://doi.org/10.9734/IJTDH/2015/13357

Joshi, C., Torvaldsen, S., Hodgson, R., & Hayen, A. (2014). Factors associated with the use and quality of antenatal care in Nepal: a population-based study using the demographic and health survey data. *BMC Pregnancy and Childbirth*, *14*(1), 94. https://doi.org/10.1186/1471-2393-14-94

Katz, D. A., Kiarie, J. N., John-Stewart, G. C., Richardson, B. A., John, F. N., & Farquhar, C. (2009). Male perspectives on incorporating men into antenatal HIV counseling and testing. *PLoS ONE*, *4*(11), e7602. https://doi.org/10.1371/journal.pone.0007602

Kisuule, I., Kaye, D. K., Najjuka, F., Ssematimba, S. K., Arinda, A., Nakitende, G., & Otim, L. (2013). Timing and reasons for coming late for the first antenatal care visit by pregnant women at Mulago hospital, Kampala Uganda. *BMC Pregnancy and Childbirth*, *13*(1), 121. https://doi.org/10.1186/1471-2393-13-121

Kufa, E. (2012). *The timing of first antenatal care visit and factors associated with access to care among antenatal care attendees at Chitungwiza municipal clinics, Zimbabwe*. Doctoral dissertation, University of the Western Cape.

Kulkarni, G. V. (2009). The Student-patient relationship: A student′s perspective on the grey areas. *Journal of Postgraduate Medicine, 55*(1), 72–72.

Mack, N., Woodsong, C., MacQueen, K., Guest, G., & Namey, E. (2005). *Qualitative Research Methods: A Data Collector's Field Guide*. North Carolina: Family Health international.

Malterud, K. (2001). Qualitative research: standards, challenges, and guidelines. *The Lancet, 358*(panel 2), 483–488. https://doi.org/10.1016/S0140-6736(01)05627-6

Mandoreba, T., & Mokwena, K. (2016). Factors associated with late antenatal booking in Harare, Zimbabwe. *PULA: Botswana Journal of African Studies*, *30*(1), 131–138.

Massyn, N., Peer, N., Padarath, A., Barron, P., Day, C., Trust, H. S., & Africa, S. (2016). *District Health Barometer 2015/16. Health Systems Trust.*

Massyn N, Peer N, Padarath A, Barron P, Day C, E. (2015). *District Health Barometer 2014/15. Health Systems Trust; October 2015* (Vol. 1). https://doi.org/10.1017/CBO9781107415324.004

Mathole, T., Lindmark, G., Majoko, F., & Ahlberg, B. M. (2004). A qualitative study of women's perspectives of antenatal care in a rural area of Zimbabwe. *Midwifery*, *20*(2), 122–132. https://doi.org/10.1016/j.midw.2003.10.003

Medley, A., Garcia-moreno, C., Mcgill, S., & Maman, S. (2004). Rates , barriers and outcomes of HIV serostatus disclosure among women in developing countries: implications for prevention of mother-to-child transmission programmes. *Bulletin of the World Health Organization*, *82*(4), 299–307.

Miles, J., & Gilbert, P. (2005). A handbook of research methods for clinical and health psychology. Oxford University Press on Demand.

Mkandawire, P. (2015). Gestational Age at First Antenatal Care Visit in Malawi. *Maternal and Child Health Journal*, *19*(11), 2366–2374. https://doi.org/10.1007/s10995-015-1754-6

Mrisho, M., Obrist, B., Schellenberg, J. A., Haws, R. A., Mushi, A. K., Mshinda, H., Schellenberg, D. (2009). The use of antenatal and postnatal care: perspectives and experiences of women and health care providers in rural southern Tanzania. *BMC Pregnancy and Childbirth*, *9*(1), 1–12. https://doi.org/10.1186/1471-2393-9-10

Muhwava, L. S., Morojele, N., & London, L. (2016). Psychosocial factors associated with early initiation and frequency of antenatal care (ANC) visits in a rural and urban setting in South Africa: a cross-sectional survey. *BMC Pregnancy and Childbirth*, *16*(1), 18. https://doi.org/10.1186/s12884-016-0807-1

Mukumbang, F. C., & Adejumo, O. (2014). Patients' experiences of being nursed by student nurses at a teaching hospital. *Curationis*, *37*(1), e1–e10. https://doi:10.4102/curationis.v37i1.1230

Myer, L., & Harrison, A. (2003). Why do womn seek antenatal care late? Perspectives from rural South Africa. *Journal of Midwifery and Women's Health*, *48*(4), 268–272. https://doi.org/10.1016/S1526-9523(02)00421-X

NCCEMD. (2012). Saving mothers 2008–2010: fifth report on the confidential enquiries into maternal deaths in South Africa. *Department of Health Republic of South Africa*, 1–365. https://doi.org/10.2337/dc14-S014

Ndidi, E. P., Oseremen, I. G., & Ebeigbe, P. N. (2010). Reasons given by pregnant women for late initiation of antenatal care in the Niger Delta, Nigeria. *Ghana Medical Journal* , *44*(2), 47–51. https://doi.org/10.4314/gmj.v44i2.68883

NDOH. (2015). Guidelines for Maternity Care in South Africa: A Manual for Clinics, Community Health Centres and District Hospitals. *National Department of Health Republic of South Africa* (Fourth). Pretoria.

Nikiéma, B., Beninguisse, G., & Haggerty, J. L. (2009). Providing information on pregnancy complications during antenatal visits: Unmet educational needs in sub-Saharan Africa. *Health Policy and Planning*, *24*(5), 367–376. https://doi.org/10.1093/heapol/czp017

Ochako, R., Fotso, J. C., Ikamari, L., & Khasakhala, A. (2011). Utilization of maternal health services among young women in Kenya : Insights from the Kenya Demographic and Health Survey , 2003. *BMC*, *11*(1), 4–9. https://doi.org/10.1186/1471

Okunlola, M. A., Ayinde, O. A., Owonikoko, K. M., & Omigbodun, A. O. (2006). Factors

influencing gestational age at antenatal booking at the University College Hospital, Ibadan, Nigeria. *Journal of Obstetrics and Gynaecology*, *26*(3), 195–197. https://doi.org/10.1080/01443610500508220

Patience, N. T. S., Sibiya, M. N., & Gwele, N. S. (2016). Evidence of application of the Basic Antenatal Care principles of good care and guidelines in pregnant women's antenatal care records. *African Journal of Primary Health Care & Family Medicine*, *8*(2), 1-6. http://dx.doi. org/10.4102/phcfm.v8i2.1016

Patton, M. Q. (2002). Top Ten Pieces of Advice to a Graduate Student Considering a Qualitative Dissertation. *Qualitative Research and Evaluation Methods*. Thousand Oaks: Sage Publications.

Pell, C., Meñaca, A., Were, F., Afrah, N. A., Chatio, S., Manda-Taylor, L., Pool, R. (2013). Factors Affecting Antenatal Care Attendance: Results from Qualitative Studies in Ghana, Kenya and Malawi. *PLoS ONE*, *8*(1), e53747. https://doi.org/10.1371/journal.pone.0053747

PMNCH. (2006). *Opportunities for Africa's Newborns, Practical data, policy and programmatic support for newborn care in Africa*. Geneva. https://doi.org/10.1016/S0140-6736(86)91254-7

Pope, C., Ziebland, S., & Mays, N. (2000). Analysing qualitative data. *Analysis*, *320*, 5–7. https://doi.org/10.1136/bmj.320.7227.114

Ritchie, J., Lewis, J., & Elam, G. (2003). Chapter 4-Designing and Selecting Samples. In J. Ritchie, J. Lewis, & G. Elam (Eds.), *Qualitative Research Practice - A Guide for Social Science Students and Researchers*, 199–218. London: SAGE publications Ltd.

Robson, C., & McCartan, K. (2011). *Real World Research*. West Sussex: John Wiley and Sons.

Rurangirwa, A. A., Mogren, I., Ntaganira, J., & Krantz, G. (2017). Intimate partner violence among pregnant women in Rwanda, its associated risk factors and relationship to ANC services attendance: a population-based study. *BMJ Open*, *7*(2), e013155. https://doi.org/10.1136/bmjopen-2016-013155

Rurangirwa, A. A., Mogren, I., Nyirazinyoye, L., Ntaganira, J., & Krantz, G. (2017). Determinants of poor utilization of antenatal care services among recently delivered

women in Rwanda; a population based study. *BMC Pregnancy and Childbirth*, *17*(1), 142. https://doi.org/10.1186/s12884-017-1328-2

Shenton, A. K. (2004). Strategies for Ensuring Trustworthiness in Qualitative Research Projects Strategies for ensuring trustworthiness in qualitative research projects. https://doi.org/10.3233/EFI-2004-22201

Sialubanje, C., Massar, K., Hamer, D. H., & Ruiter, R. A. C. (2014). Understanding the psychosocial and environmental factors and barriers affecting utilization of maternal healthcare services in Kalomo, Zambia: A qualitative study. *Health Education Research*, *29*(3), 521–532. https://doi.org/10.1093/her/cyu011

Simkhada, B., Van Teijlingen, E. R., Porter, M., & Simkhada, P. (2008). Factors affecting the utilization of antenatal care in developing countries: Systematic review of the literature. *Journal of Advanced Nursing*, *61*(3), 244–260. https://doi.org/10.1111/j.1365-2648.2007.04532.x

Sinyange, N., Sitali, L., Jacobs, C., Musonda, P., & Michelo, C. (2016). Factors associated with late antenatal care booking: population based observations from the 2007 Zambia demographic and health survey. *The Pan African Medical Journal*, *25*, 109. https://doi.org/10.11604/pamj.2016.25.109.6873

Skovdal, M., Campbell, C., Nyamukapa, C., & Gregson, S. (2011). When masculinity interferes with women ' s treatment of HIV infection : a qualitative study about adherence to antiretroviral therapy in Zimbabwe. *Journal of the International AIDS Society*, *14*(1), 1–7. https://doi.org/10.1186/1758-2652-14-29

Solarin, I., & Black, V. (2013). "They told me to come back": Women's antenatal care booking experience in inner-city johannesburg. *Maternal and Child Health Journal*, *17*(2), 359–367. https://doi.org/10.1007/s10995-012-1019-6

Srivastava, A., & Thomson, S. B. (2009). Framework Analysis: A Qualitative Methodology for Applied Policy Research. *JOAAG*, *4*(2), 72–79.

Statistics South Africa. (2011). My settlement: Worcester (Western Cape, South Africa). *Pretoria: Statistics South Africa*. Retrieved from http://www.statssa.gov.za/?page_id=4286&id=130 [Downloaded: 07/06/18 06:35 PM]

Trochim, W. M. K. (2006). Introduction to Design. *Research Methods Knowledge Base*.

UCLA Center for Health Policy research. (n.d.). *Section 4: Key informant Interviews*.

Wassenaar, D. R. (2007). Ch 4 – Ethical issues in social science research. In Terre Blanche, M. & Durrheim, K. (eds). *Research in Practice: Applied Methods for the Social Science*. Cape Town: UCT Press.

WHO. (2009). *Casebook on Ethical Issues in International Health Research*. (R. Cash, D. Wikler, A. Saxena, & A. Capron, Eds.), *WHO*. Geneva: WHO Press.

Yeasmin, S., & Rahman, K. . (2012). 'Triangulation' Research Method as the Tool of Social Science Research. *Bangladesh University of Professionals Journal*, *1*(1), 154–163. Retrieved from http://www.bup.edu.bd/journal/154-163.pdf

United Nations (UN). (2016). Sustainable developmental goals. [Online]. Available: http://www.un.org/sustainabledevelopment/health/ [Downloaded: 04/10/16 11:30 PM]

Western Cape Government (WCG): Department of Health (DOH). (2015). Western Government Introduces First 1000 Days Campaign. *South Africa: Western Cape Government*. [Online]. Available: https://www.westerncape.gov.za/news/western-government-introduces-first-1000-days-campaign [Downloaded: 04/11/16 08:03 PM]

Appendix 1

Semi-Structured Interview Guide – Pregnant women and mothers

Welcome participant; thank them. Explain the purpose of the study. Informed Consent form completed?

1. Can you tell me about how you found out you were pregnant?
2. How do (did) you feel about your pregnancy?
3. How have you experienced this pregnancy?
4. What did you think (know) about these clinic visits that you have to attend when you are pregnant, before the first time you came for it?
5. What did you expect to happen at your first pregnancy clinic (Antenatal Care) visit?
6. Can you tell me what you were told on your first pregnancy clinic (Antenatal Care) visit?
7. Can you tell me how your experience was at your first pregnancy clinic (Antenatal Care) visit?
8. Since your first time you visited the pregnancy clinic (Antenatal Care), how have your feelings changed about the pregnancy clinic (Antenatal Care)?
9. It is recommended that women should go to their first pregnancy clinic (Antenatal Care) visit as soon as they find out they are pregnant and ideally before 20 weeks since they fell pregnant. What do you think could be the advantages of coming to the clinic earlier for a pregnancy clinic (Antenatal Care) appointment?
10. Can you tell me about how things would have been different if you had come earlier?
    a. Would you come earlier next time?
11. Can you tell me about what you think would have helped you to come earlier?
    a. Support
    b. People (family/friends)

Appendix 2

Semi-Gestruktureerde Onderhoudgids – Swanger vroue en moeders

Verwelkom deelnemer; bedank hulle. Verduidelik die doel van die studie. Ingeligte toestemmingvorm voltooid?

1. Kan jy my vertel hoe jy uitgevind het dat jy swanger is?
2. Hoe voel / het jy gevoel oor jou swangerskap?
3. Hoe het jy hierdie swangerskap ervaar?
4. Wat het jy gedink (geweet) van hierdie swangerskapskliniekbesoeke wat jy moet bywoon wanneer jy swanger is, voordat jy die eerste keer daarvoor opgedaag het?
5. Wat het jy verwag gaan by jou eerste swangerskapskliniekbesoek (voorgeboortesorgbesoek) gebeur?
6. Kan jy my vertel wat met jou eerste swangerskapskliniekbesoek (voorgeboortesorgbesoek) aan jou vertel of meegedeel was?
7. Kan jy my vertel wat jou ervaring met jou eerste swangerskapskliniekbesoek (voorgeboortesorgbesoek) was?
8. Hoe het jou gevoelens teenoor die swangerskapskliniek (voorgeboortesorg) verander, sedert die eerste keer dat jy die swangerskapskliniek (voorgeboortesorg) besoek het?
9. Dit word aanbeveel dat vroue so gou moontlik nadat hul uitvind dat hul swanger is en idiaal voor 20 weke van hul swangerskap, die eerste keer na die swangerskapkliniek (voorgeboortesorg) moet gaan. Wat dink jy kan die voordeel wees om vroeër vir ‘n swangerskapskliniekafspraak (voorgeboortesorgafspraak) op te daag?
10. Kan jy my vertel hoe dinge anders sou wees as jy vroeër gekom het?
    a. Sal jy volgende keer vroeër kom?
11. Kan jy my vertel wat jy dink jy sou help om vroeër te kom?
    a. Ondersteuning
    b. Mense (familie/vriende)

Appendix 3

Semi-Structured Interview Guide – Key informants

Welcome participant; thank them. Explain the purpose of the study. Informed Consent form completed?

1. What is your role in the community?
2. What Antenatal Care services do you provide for the first time Antenatal Care bookers?
3. What is your experience with woman that came late for their first Antenatal Care visit?
4. What is your opinion on the quality of Antenatal Care services provided for first time bookers?
5. What is your opinion on the accessibility of Antenatal Care services provided for first time bookers?
6. What beliefs do the community have on Antenatal Care visits?
7. What challenges do you have with women that book visits late?
8. What is your view on the consequences of late Antenatal Care bookings?
9. Where do you think we can improve to ensure that woman book visits before 20 weeks gestation?

Appendix 4

Semi-Gestruktureerde Onderhoudgids – Sleutelinformante

Verwelkom deelnemer; bedank hulle. Verduidelik die doel van die studie. Ingeligte toestemmingvorm voltooid?

1. Wat is jou rol in die gemeenskap?
2. Watter voorgeboortesorgdienste voorsien jy aan die pasiënte wat vir die eerste keer voorgeboortesorg ontvang?
3. Wat is jou ervaring met vroue wat laat vir hul eerste voorgeboortesorg besoek opgedaag het?
4. Wat is jou mening oor die gehalte van voorgeboortesorgdienste wat aan eersteafspraak-pasiente voorsien word?
5. Wat is jou mening oor die toeganklikheid van voorgeboortesorgdienste wat aan eersteafspraak-pasiente voorsien word?
6. Watter oortuigings (in Engels: beliefs) het die gemeenskap oor voorgeboortesorgbesoeke?
7. Watter uitdagings het jy met vroue wat laat besoeke bespreek?
8. Wat is jou siening oor die gevolge van laat voorgeboortesorgafsprake?
9. Waar dink jy kan ons verbeter om te verseker dat vroue voor 20 weke gestasie besoeke bespreek?

UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa

Tel: +27 21-959 2809, Fax: 27 21-959 2872

E-mail: soph-comm@uwc.ac.za

Appendix 5

INFORMATION SHEET – Pregnant women and mothers

Project Title: An exploration of the reasons for late presentation of pregnant women for antenatal care in Worcester, Cape Winelands District.

What is this study about?

This is a research project being conducted by Tharine van Zyl at the University of the Western Cape. We are inviting you to participate in this research project because you are a woman that booked late for Antenatal Care services. The purpose of this research project is to understand why some women still do not attend Antenatal Care before 20 weeks gestation even when it is available. This new understanding can be used to inform the District manager and health care personnel on improved distribution of resources and implementation of programmes to increase early utilisation of Antenatal Care in order to decrease unidentified maternal complications as well as maternal, foetal and perinatal morbidity and mortality.

What will I be asked to do if I agree to participate?

You will be asked to read through a participation information sheet that will explain the research topic. You will be given a consent form that states that you give written consent to participate in the study. You may refuse to give consent and not to participate. You will not be penalised in any way if you refuse to participate. You will be asked to be part of a face-to-face individual interview with the researcher. The interview will be confidential. The interview will be done at a location that is convenient for you. You will be asked questions about your experience during pregnancy and Antenatal Care visits at the facility. The interview will be audio recorded to ensure that all information that you provide is captured.

Would my participation in this study be kept confidential?

I undertake to protect your identity and the nature of your contribution. To ensure your anonymity, your name will not be included on the collected data; a code will be placed on the transcribed interview and other collected data; through the use of identification key, I will be able to link your interview to your identity; and only I will have access to the identification key.

To ensure your confidentiality, I will be the only person that has access to your voice recording. Your identity will not be identified by others. Your voice recordings, notes and written consent forms will be kept in a password protected folder on my personal computer.

If a report or article about this research project is written, your identity will be protected.

In accordance with legal requirements and/or professional standards, we will disclose to the appropriate individuals and/or authorities information that comes to our attention concerning potential harm to you or others. In this event, we will inform you that we have to break confidentiality to fulfil our legal responsibility to report to the designated authorities.

What are the risks of this research?

There may be some risks from participating in this research study. Some of the questions concerning your pregnancy and Antenatal Care visit may upset you and lead to feeling discomfort. All human interactions and talking about self or others carry some amount of risks. We will nevertheless minimise such risks and act promptly to assist you if you experience any discomfort, psychological or otherwise during the process of your participation in this study. Where necessary, an appropriate referral will be made to a suitable professional for further assistance or intervention.

What are the benefits of this research?

This research is not designed to help you personally, but the results may help the investigator learn more about the reasons why women book late for their first Antenatal Care visit. It is hoped that this research will help identify ways to help pregnant women to book for Antenatal Care before 20 weeks gestation.

Do I have to be in this research and may I stop participating at any time?

Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If

you decide not to participate in this study or if you stop participating at any time, you will not be penalised or lose any benefits to which you otherwise qualify.

What if I have questions?

This research is being conducted by *Tharine van Zyl, School of Public Health at the University of the Western Cape*. If you have any questions about the research study itself, please contact Tharine van Zyl at:

Brewelskloof Hospital

7 Haarlem Street

Worcester

7625

+27 (0)84 608 3285

Tharine.dekock@gmail.com

Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

Prof Uta Lehmann

School of Public Health

Head of Department

University of the Western Cape

Private Bag X17

Bellville 7535

soph-comm@uwc.ac.za

Prof Anthea Rhoda

Dean of the Faculty of Community and Health Sciences

University of the Western Cape

Private Bag X17

Bellville 7535

chs-deansoffice@uwc.ac.za

This research has been approved by the University of the Western Cape's Research Ethics Committee. (REFERENCE NUMBER: BM17/9/15)

UNIVERSITEIT VAN DIE WESKAAPLAND

Privaatsak X 17, Bellville 7535, Suid-Afrika

Tel: +27 21-959 2809, Faks: 27 21-959 2872

E-pos: soph-comm@uwc.ac.za

Appendix 6

INLIGTINGSBLAD – Swanger vroue en moeders

Projektitel: ‘n Eksplorasie van die redes vir laat aanwesigheid van swanger vroue vir voorgeboortesorg in Worcester, Kaapse Wynland Distrik.

Waaroor gaan die studie?

Hierdie is n navorsingsprojek wat deur Tharine van Zyl uitgevoer word by die Univesiteit van die Weskaapland. Ons nooi jou uit om deel te neem aan hierdie navorsingsprojek omdat jy ‘n vrou is wat laat vir haar eerste voorgeboortesorgbesoek bespreek het. Die doel van hierdie navorsingsprojek is om te verstaan hoekom sekere vroue steeds nie voorgeboortesorg voor 20 weke gestasie besoek nie, ten spyte daarvan dat die diens beskikbaar is. Hierdie nuwe kennis kan gebruik word om die distriksbestuurder en gesondheidspersoneel oor verbeterde verspreiding van hulpbronne en implementering van programme in te lig om die gebruik van voorgeboortesorg te verhoog sodat ongeïdentifiseerde voorgeboortekomplikasies asook swangerskap-, fetus- en nageboortemorbiditeit en –mortaliteit verlaag kan word.

Wat sal daar van my gevra word om te doen as ek instem om deel te neem?

Jy sal gevra word om deur ‘n deelnameinligtingsbladsy te lees wat aan jou die navorsingsonderwerp sal verduidelik. Jy sal ‘n toestemmingsvorm ontvang wat aandui dat jy geskrewe toestemming gee om aan die studie deel te neem. Jy mag weier om toestemming te gee en nie aan die studie deel te neem nie. Jy sal nie op enige manier gepenaliseer word as jy weier om deel te neem nie. Jy sal gevra word om deel te wees van ‘n aangesig-tot-aangesig onderhoud met die navorser. Die onderhoud sal konfidensieel wees. Die onderhoud sal by ‘n plek gedoen word wat vir jou gemaklik is. Jy sal vrae gevra word oor jou ervarings tydens swangerskap en voorgeboorte besoeke by die fasiliteit. Die onderhoud sal deur klankopname opgeneem word om te verseker dat die inligting wat jy verskaf vasgevang is.

Sal my deelname aan hierdie studie konfidensieel gehou word?

Ek onderneem om jou identiteit en die aard van jou bydrae te beskerm. Om jou anonimiteit te verseker, sal jou naam nie op die versamelde data ingesluit word nie; ‘n kode sal op die getranskripeerde onderhoud en ander versamelde data verskyn; deur die gebruik van ‘n identifikasiesleutelkodering, sal ek instaat wees om jou onderhoud met jou identiteit te koppel; en slegs ek sal oor toegang tot jou identifikasiesleutel beskik.

Om jou konfidensialiteit te verseker, sal ek die enigste persoon wees wat oor toegang tot jou stemopname beskik. Jou identiteit sal nie deur ander geïdentifiseer word nie. Jou stem opname, notas en getekende toestemmingsvorm sal in ‘n wagwoordbeskermde leêr op my persoonlike rekenaar gestoor word.

As ‘n verlsag of artikel oor die navorsingsprojek geskryf word sal jou identiteit beskerm word.

In ooreestemming met wetlike voorskrifte en/of professionele standaarde, sal ons inligting wat onder ons aandag kom aan die toepaslikke individue en/of owerhede openbaar wat potensiële skade aan jou of ander mag bring. In hierdie omstandighede sal ons jou inlig dat ons konfidensialiteit moet breek om ons wetlike verantwoordelikhede na te kom deur aan die aangewese owerhede te rapporteer.

Wat is die risikos met hierdie navorsing?

Daar mag sekere risikos wees deur aan hierdie navorsingstudie deel te neem. Sommige vrae wat verband hou met jou swangerskap en voorgeboortesorg besoek mag jou onstel en lei to ‘n gevoel van ongemak. Alle menslike interaksie en gesprekke oor jouself of ander behels ‘n mate van risiko. Ons sal nietemin sulke risikos minimaliseer en sal stiptelik optree om jou by te staan as jy enige ongemak, sielkundig of andersyds, tydens die proses van deelname aan die studie ervaar. Waar nodig sal ‘n toepaslike verwysing aan ‘n geskikte professionele persoon gemaak word vir verdere bystand en ingryping.

Wat is die voordele van die navorsing?

Die navorsing is nie bedoel om jou persoonlik te help nie, maar die resultate mag die navorser help om meer te leer oor die redes hoekom vroue laat vir hul eerste voorgeboortebesoek bespreek. Daar word gehoop dat die navorsing sal help om maniere te identifiseer om swanger vroue te help om voor 20 weke gestasie vir voorgeboortesorg te bespreek.

Moet ek deel wees van hierdie navorsing en mag ek my deelname stop op enige gegewe tyd?

Jou deelname aan hierdie navorsing is heeltemal vrywillig. Jy mag kies om glad nie deel te neem nie. As jy besluit om aan die navorsing deel te neem, mag jy enige gegewe tyd jou deelname stop. As jy besluit om nie aan die navorsing deel te neem nie of as jy op enige gegewe tyd deelname staak sal jy nie gepenaliseer word of uitmis op enige voordele waarvoor jy andersins kwalifiseer nie.

Wat as ek vrae het?

Die navorsing word deur *Tharine van Zyl, Skool van Publieke Gesondheid by die Universiteit van die Weskaapland* uitgevoer. As jy enige vrae het oor die navorsingstudie, kontak gerus vir Tharine van Zyl by:

Brewelskloof Hospitaal

Haarlemstraat 7

Worcester

7625

+27 (0)84 608 3285

Tharine.dekock@gmail.com

As jy enige vrae rakende die studie en jou regte as navorsingsdeelnemer het of as jy enige probleme wat jy in die studie ervaar het, wil rapporteer, kontak gerus:

Prof Uta Lehmann

Skool van Publieke Gesondheid

Hoof van Departement

Universiteit van die Weskaapland

Privaatsak X17

Bellville 7535

soph-comm@uwc.ac.za

Prof Anthea Rhoda

Dekaan van die Fakulteit van Gemeenskap en Gesondheidswetenskappe

Universiteit van die Weskaapland

Privaatsak X17

Bellville 7535

chs-deansoffice@uwc.ac.za

Hierdie navorsing is goedgekeer deur die Universiteit van die Weskaapland se Navorsingsetiekkommitee. (VERWYSINGSNOMMER: BM17/9/15)

UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa

Tel: +27 21-959 2809, Fax: 27 21-959 2872

E-mail: soph-comm@uwc.ac.za

Appendix 7

INFORMATION SHEET – Key informants

Project Title: An exploration of the reasons for late presentation of pregnant women for antenatal care in Worcester, Cape Winelands District.

What is this study about?

This is a research project being conducted by Tharine van Zyl at the University of the Western Cape. We are inviting you to participate in this research project because you are a health care provider that works with women that booked late for their first Antenatal Care visit. The purpose of this research project is to understand why some women still do not attend Antenatal Care before 20 weeks gestation even when it is available. This new understanding can be used to inform the District manager and health care personnel on improved distribution of resources and implementation of programmes to increase early utilisation of Antenatal Care in order to decrease unidentified maternal complications as well as maternal, foetal and perinatal morbidity and mortality.

What will I be asked to do if I agree to participate?

You will be asked to read through a participation information sheet that will explain the research topic. You will be given a consent form that states that you give written consent to participate in the study. You may refuse to give consent and not to participate. You will not be penalised in any way if you refuse to participate. You will be asked to be part of a face-to-face individual interview with the researcher. The interview will be confidential. The interview will be done at a location that is convenient for you. You will be asked questions about your work experience with women booking late for Antenatal Care visits. The interview will be audio recorded to ensure that all information that you provide is captured.

Would my participation in this study be kept confidential?

I undertake to protect your identity and the nature of your contribution. To ensure your anonymity, your name will not be included on the collected data; a code will be placed on the transcribed interview and other collected data; through the use of an identification key, I will be able to link your interview to your identity; and only I will have access to the identification key.

To ensure your confidentiality, I will be the only person that has access to your voice recording. Your identity will not be identified by others. Your voice recordings, notes and written consent forms will be kept in a password protected folder on my personal computer.

If a report or article about this research project is written, your identity will be protected.

In accordance with legal requirements and/or professional standards, we will disclose to the appropriate individuals and/or authorities information that comes to our attention concerning potential harm to you or others. In this event, we will inform you that we have to break confidentiality to fulfil our legal responsibility to report to the designated authorities.

What are the risks of this research?

There may be some risks from participating in this research study. Some of the questions concerning late Antenatal Care bookings may upset you and lead to feeling discomfort. All human interactions and talking about others carry some amount of risks. We will nevertheless minimise such risks and act promptly to assist you if you experience any discomfort, psychological or otherwise during the process of your participation in this study. Where necessary, an appropriate referral will be made to a suitable professional for further assistance or intervention.

What are the benefits of this research?

This research is not designed to help you personally, but the results may help the investigator learn more about the reasons why women book late for their first Antenatal Care visit. It is hoped that this research will help identify ways to help pregnant women to book for Antenatal Care before 20 weeks gestation.

Do I have to be in this research and may I stop participating at any time?

Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If

you decide not to participate in this study or if you stop participating at any time, you will not be penalised or lose any benefits to which you otherwise qualify.

What if I have questions?

This research is being conducted by *Tharine van Zyl, School of Public Health at the University of the Western Cape.* If you have any questions about the research study itself, please contact Tharine van Zyl at:

Brewelskloof Hospital

7 Haarlem Street

Worcester

7625

+27 (0)84 608 3285

Tharine.dekock@gmail.com

Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

Prof Uta Lehmann

School of Public Health

Head of Department

University of the Western Cape

Private Bag X17

Bellville 7535

soph-comm@uwc.ac.za

Prof Anthea Rhoda

Dean of the Faculty of Community and Health Sciences

University of the Western Cape

Private Bag X17

Bellville 7535

chs-deansoffice@uwc.ac.za

This research has been approved by the University of the Western Cape's Research Ethics Committee. (REFERENCE NUMBER: BM17/9/15)

UNIVERSITEIT VAN DIE WESKAAPLAND

Privaatsak X 17, Bellville 7535, Suid-Afrika

Tel: +27 21-959 2809, Faks: 27 21-959 2872

E-pos: soph-comm@uwc.ac.za

Appendix 8

INLIGTINGSBLAD – Sleutelinformante

Projektitel: 'n Eksplorasie van die redes vir laat aanwesigheid van swanger vroue vir voorgeboortesorg in Worcester, Kaapse Wynland Distrik.

Waaroor gaan die studie?

Hierdie is n navorsingsprojek wat deur Tharine van Zyl uitgevoer word by die Univesiteit van die Weskaapland. Ons nooi jou uit om deel te neem aan hierdie navorsingsprojek omdat jy 'n gesondheidswerker is wat werk met swanger vroue wat laat boek vir hul eerste voorgeboortebesoek. Die doel van hierdie navorsingsprojek is om te verstaan hoekom sekere vroue steeds nie voorgeboortesorg voor 20 weke gestasie besoek nie, ten spyte daarvan dat die diens beskikbaar is. Hierdie nuwe kennis kan gebruik word om die distriksbestuurder en gesondheidspersoneel oor verbeterde verspreiding van hulpbronne en implementering van programme in te lig om die gebruik van voorgeboortesorg te verhoog sodat ongeïdentifiseerde voorgeboortekomplikasies asook swangerskap-, fetus- en nageboortemorbiditeit en -mortaliteit verlaag kan word.

Wat sal daar van my gevra word om te doen as ek instem om deel te neem?

Jy sal gevra word om deur 'n deelnameinligtingsbladsy te lees wat aan jou die navorsingsonderwerp sal verduidelik. Jy sal 'n toestemmingsvorm ontvang wat aandui dat jy geskrewe toestemming gee om aan die studie deel te neem. Jy mag weier om toestemming te gee en nie aan die studie deel te neem nie. Jy sal nie op enige manier gepenaliseer word as jy weier om deel te neem nie. Jy sal gevra word om deel te wees van 'n aangesig-tot-aangesig onderhoud met die navorser. Die onderhoud sal konfidensieel wees. Die onderhoud sal by 'n plek gedoen word wat vir jou gemaklik is. Jy sal vrae gevra word oor jou werkservarings met vroue wat laat hul eerste voorgeboortebesoeke na kom. Die onderhoud sal deur klankopname opgeneem word om te verseker dat die inligting wat jy verskaf, vasgevang is.

Sal my deelname aan hierdie studie konfidensieel gehou word?

Ek onderneem om jou identiteit en die aard van jou bydrae te beskerm. Om jou anonimiteit te verseker, sal jou naam nie op die versamelde data ingesluit word nie; ‘n kode sal op die getranskripeerde onderhoud en ander versamelde data verskyn; deur die gebruik van ‘n identifikasiesleutelkodering, sal ek instaat wees om jou onderhoud met jou identiteit te koppel; en slegs ek sal oor toegang tot jou identifikasiesleutel beskik. Om jou konfidensialiteit te verseker, sal ek die enigste persoon wees wat oor toegang tot jou stemopname beskik. Jou identiteit sal nie deur ander geïdentifiseer word nie. Jou stemopname, notas en getekende toestemmingsvorm sal in ‘n wagwoord-beskermde leêr op my persoonlike rekenaar gestoor word.

As ‘n verlsag of artikel oor die navorsingsprojek geskryf word, sal jou identiteit beskerm word.

In ooreenstemming met wetlike voorskrigte en/of professionele standaarde, sal ons inligting wat onder ons aandag kom aan die toepaslike individue en/of owerhede openbaar wat potensiële skade aan jou of ander mag bring. In hierdie omstandighede, sal ons jou inlig dat ons konfidensialiteit moet breek om ons wetlike verantwoordelikhede na te kom deur aan die aangewese owerhede te rapporteer.

Wat is die risikos met hierdie navorsing?

Daar mag sekere risikos wees deur aan hierdie navorsingstudie deel te neem. Sommige vrae wat verband hou met laat voorgeboortesorgbesoeke mag jou onstel en lei to ‘n gevoel van ongemak. Alle menslike interaksie en gesprekke oor jouself of ander behels ‘n mate van risiko. Ons sal nietemin sulke risikos minimaliseer en sal stiptelik optree om jou by te staan as jy enige ongemak, sielkundig of andersyds, tydens die proses van deelname aan die studie ervaar. Waar nodig, sal ‘n toepaslike verwysing aan ‘n geskikte proffesionele persoon gemaak word vir verdere bystand en ingryping.

Wat is die voordele van die navorsing?

Die navorsing is nie bedoel om jou persoonlik te help nie, maar die resultate mag die navorser help om meer te leer oor die redes hoekom vroue laat vir hul eerste voorgeboortebesoek bespreek. Daar word gehoop dat die navorsing sal help om maniere te identifiseer om swanger vroue te help om voor 20 weke gestasie vir voorgeboortesorg te bespreek.

Moet ek deel wees van hierdie navorsing en mag ek my deelname stop op enige gegewe tyd?

Jou deelname aan hierdie navorsing is heeltemal vrywillig. Jy mag kies om glad nie deel te neem nie. As jy besluit om aan die navorsing deel te neem, mag jy enige gegewe tyd jou deelname stop. As jy besluit om nie aan die navorsing deel te neem nie of as jy op enige gegewe tyd deelname staak, sal jy nie gepenaliseer word of uitmis op enige voordele waarvoor jy andersins kwalifiseer nie.

Wat as ek vrae het?

Die navorsing word deur *Tharine van Zyl, Skool van Publieke Gesondheid by die Universiteit van die Weskaapland* uitgevoer. As jy enige vrae het oor die navorsingstudie, kontak gerus vir Tharine van Zyl by:

Brewelskloof Hospitaal

Haarlemstraart 7

Worcester

7625

+27 (0)84 608 3285

Tharine.dekock@gmail.com

As jy enige vrae rakende die studie en jou regte as navorsingsdeelnemer het of as jy enige probleme wat jy in die studie ervaar het wil rapporteer, kontak asseblief:

Prof Uta Lehmann

Skool van Publieke Gesondheid

Hoof van Departement

Universiteit van die Weskaapland

Privaatsak X17

Bellville 7535

soph-comm@uwc.ac.za

Prof Anthea Rhoda

Dekaan van die Fakulteit van Gemeenskap en Gesondheidswetenskappe

Universiteit van die Weskaapland

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chs-deansoffice@uwc.ac.za

Hierdie navorsing is goedgekeer deur die Universiteit van die Weskaapland se Navorsingsetiekkommitee. (VERWYSINGSNOMMER: BM17/9/15)

UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa

Tel: +27 21-959 2809, Fax: 27 21-959 2872

E-mail: soph-comm@uwc.ac.za

Appendix 9

CONSENT FORM- Pregnant women or mothers

Title of Research Project: ***An exploration of the reasons for late presentation of pregnant women for antenatal care in Worcester, Cape Winelands District.***

The study has been described to me in language that I understand. My questions about the study have been answered. I understand what my participation will involve and I agree to participate of my own choice and free will. I understand that my identity will not be disclosed to anyone. I understand that I may withdraw from the study at any time without giving a reason and without fear of negative consequences or loss of benefits.

This research project involves making audio recording of you. The interview will be audio recorded to ensure that all information that you provide is captured and can be transcribed.

___ I agree to be audio recorded during my participation in this study.

___ I do not agree to be audio recorded during my participation in this study.

Participant's name……..

Participant's signature…….

Date……

UNIVERSITEIT VAN DIE WESKAAPLAND

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E-pos: soph-comm@uwc.ac.za

Appendix 10

TOESTEMMINGSVORM- Swanger vroue en moeders

Titel van die Navorsingsprojek: ***'n Eksplorasie van die redes vir laat aanwesigheid van swanger vroue vir voorgeboortesorg in Worcester, Kaapse Wynland Distrik.***

Die studie was aan my beskryf in 'n taal wat ek verstaan. My vrae oor die studie was beantwoord. Ek verstaan wat my deelname gaan behels en ek stem in om deel te neem uit eie keuse en vrye wil. Ek verstaan dat my identiteit nie tot enige iemand openbaar sal word nie. Ek verstaan dat ek ten enige gegewe tyd van die studie mag onttrek sonder om 'n rede te verskaf en sonder vrees vir negatiewe gevolge of verlore voordele.

Die navorsingsprojek sluit bandopnames van jou in. Die onderhoud sal bandopname insluit om te verseker dat alle inligting wat jy verskaf vasgevang en getranskripeer kan word.

___ Ek stem in om bandopgeneem te word tydens my deelname aan die studie.

___ Ek stem nie in om bandopgeneem te word tydens my deelname aan die studie nie.

Deelnemer se naam……..

Deelnemer se handtekening……

Datum……

UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa

Tel: +27 21-959 2809, Fax: 27 21-959 2872

E-mail: soph-comm@uwc.ac.za

Appendix 11

CONSENT FORM- Key informant

Title of Research Project: ***An exploration of the reasons for late presentation of pregnant women for antenatal care in Worcester, Cape Winelands District.***

The study has been described to me in language that I understand. My questions about the study have been answered. I understand what my participation will involve and I agree to participate of my own choice and free will. I understand that my identity will not be disclosed to anyone. I understand that I may withdraw from the study at any time without giving a reason and without fear of negative consequences or loss of benefits.

This research project involves making audio recording of you. The interview will be audio recorded to ensure that all information that you provide is captured and can be transcribed.

___ I agree to be audio recorded during my participation in this study.

___ I do not agree to be audio recorded during my participation in this study.

Participant's name……..

Participant's signature…….

Date……

UNIVERSITEIT VAN DIE WESKAAPLAND

Privaatsak X 17, Bellville 7535, Suid-Afrika

Tel: +27 21-959 2809, Faks: 27 21-959 2872

E-pos: soph-comm@uwc.ac.za

Appendix 12

TOESTEMMINGSVORM- Sleutelinformante

Titel van die Navorsingsprojek: *'n Eksplorasie van die redes vir laat aanwesigheid van swanger vroue vir voorgeboortesorg in Worcester, Kaapse Wynland Distrik.*

Die studie was aan my beskryf in 'n taal wat ek verstaan. My vrae oor die studie was beantwoord. Ek verstaan wat my deelname gaan behels en ek stem in om deel te neem uit eie keuse en vrye wil. Ek verstaan dat my identiteit nie tot enige iemand openbaar sal word nie. Ek verstaan dat ek ten enige gegewe tyd van die studie mag onttrek sonder om 'n rede te verskaf en sonder vrees vir negatiewe gevolge of verlore voordele.

Die navorsingsprojek sluit bandopnames van jou in. Die onderhoud sal bandopname insluit om te verseker dat alle inligting wat jy verskaf vasgevang en getranskripeer kan word.

___ Ek stem in om bandopgeneem te word tydens my deelname aan die studie.

___ Ek stem nie in om bandopgeneem te word tydens my deelname aan die studie nie.

Deelnemer se naam……..

Deelnemer se handtekening……

Datum……