CHALLENGES FACING REFUGEE WOMEN WHILE ACCESSING ANTENATAL CARE IN PUBLIC HEALTH INSTITUTIONS IN DURBAN SOUTH AFRICA

By

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AUTHOR’S DECLARATION

I hereby declare that:

The research reported in this dissertation, except where otherwise indicated, is my original work, and I am the sole owner of this dissertation.

This dissertation does not contain other person’s data unless specifically acknowledged.

Where other written sources have been quoted, words have been rewritten and fully referenced. When their exact words have been used, their writing has been placed under quotation marks, and referenced.

This dissertation has not been submitted to any other institution for higher degree purposes.
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<tr>
<td>ANOVA</td>
<td>Analysis of variance</td>
</tr>
<tr>
<td>BREC</td>
<td>Biomedical Research Committee</td>
</tr>
<tr>
<td>CI</td>
<td>Confidence intervals</td>
</tr>
<tr>
<td>CEMACH</td>
<td>Confidential Enquiry into Maternal and Child Health</td>
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<tr>
<td>DAC</td>
<td>Disparities in Antenatal care</td>
</tr>
<tr>
<td>DHA</td>
<td>Department of Home Affairs</td>
</tr>
<tr>
<td>DRC</td>
<td>Democratic Republic of Congo</td>
</tr>
<tr>
<td>EDD</td>
<td>Expected date of delivery</td>
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<tr>
<td>HB</td>
<td>Haemoglobin</td>
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<tr>
<td>HCW</td>
<td>Health Care Worker</td>
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<tr>
<td>HIV</td>
<td>Human Immunodeficiency virus</td>
</tr>
<tr>
<td>ID</td>
<td>Identity Document</td>
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<tr>
<td>IDI</td>
<td>In-depth Interview</td>
</tr>
<tr>
<td>LNMP</td>
<td>Last normal menstruation period</td>
</tr>
<tr>
<td>MUAC</td>
<td>measurement of mid upper arm circumference</td>
</tr>
<tr>
<td>NCCEMD</td>
<td>The national committee of confidential enquiries into maternal death</td>
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<tr>
<td>ORs</td>
<td>Odds ratios</td>
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<tr>
<td>RPR</td>
<td>Rapid Plasma Reagin</td>
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<tr>
<td>Rh</td>
<td>Rhesus</td>
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<tr>
<td>RCOG</td>
<td>Royal College of Obstetrics and Gynaecology</td>
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<tr>
<td>SA</td>
<td>South Africa</td>
</tr>
<tr>
<td>Acronym</td>
<td>Full Form</td>
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<td>---------</td>
<td>-----------------------------------------------</td>
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<tr>
<td>SADC</td>
<td>Southern African Development Community</td>
</tr>
<tr>
<td>SCD</td>
<td>Sickle cell disease</td>
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<tr>
<td>SD</td>
<td>Standard deviation</td>
</tr>
<tr>
<td>SEM</td>
<td>Standard error of the mean</td>
</tr>
<tr>
<td>SFH</td>
<td>Symphysis fundal heights</td>
</tr>
<tr>
<td>TT</td>
<td>Tetanus toxoid</td>
</tr>
<tr>
<td>UK</td>
<td>United Kingdom</td>
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<tr>
<td>UNHCR</td>
<td>United Nations High Commissioner for Refugees</td>
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ABSTRACT

Background
Findings from international studies claim that pregnant refugee women are at increased risk of obstetric complications due to preexisting health conditions, nutritional deficiencies and increased vulnerability to infectious diseases. All these factors are related to their poor socio-economic status, poor living conditions, limited access to essential reproductive health services and substandard antenatal care. A recent report estimated a total number of recognized refugees in South Africa reaching approximately 1 per 1000 and there are no formal published studies but newspaper reports of healthcare services in South Africa not being responsive to refugees’ needs, particularly when pregnant. This study will provide a South African perspective to the current status of the antenatal care services received by pregnant refugee women in an urban District. The quality of antenatal service rendered to refugees will be compared to that received by the local South African women to establish if refugees are indeed vulnerable to substandard care.

Methods:
Through administering a questionnaire to women who delivered in the past 6 months, we estimated the percentage of refugees who sought antenatal care at 4 primary health care clinics (Lancers Road, Overport, Sydenham and Clare Estate) in Durban and explored the quality of antenatal care received. The questionnaire included demographic characteristics, medical history, obstetric history and experiences with accessing antenatal care at the clinic. Using a maternity chart audit, we further conducted a quantitative comparative assessment of antenatal care received by refugees and South African women as prescribed by the National Maternity Guidelines. Health care workers who provided antenatal services at the selected clinics were also invited to participate in in-depth interviews. These health care workers were asked to share their experiences with providing antenatal care to refugees.
Results:
Among 200 women sequentially enrolled 39% (78/200) were refugees and 61% (122/200) South Africans. The majority among the refugees were from Zimbabwe (24.4%) and Malawi (11.5%). The remaining refugees primarily came from the Democratic Republic of the Congo (29.5%), Rwanda (5.1%), Burundi (14.1%) and Somalia (1.5%) following war and political conflict in their countries. Refugee antenatal attendees tended to be older than their South African counterparts and significantly more likely to be married. While the majority (81%) of the South African antenatal attendees understood IsiZulu, a language spoken by all health workers at the 4 clinics, only 27% of refugee antenatal attendees understood IsiZulu (p<0.0001). A review of the medical records of 68 participants (45.6% refugees and 54.4% SA citizens), an average of 70% of women had a complete history taken, and a lower but not statistically significant proportion of refugees had a complete history taken (62.5% vs 77.4% p=0.18) when compared to their SA counterparts. Generally, antenatal services rendered were similar in both groups of participants and overall provision of health information, planning and advising pregnant women were substandard for all antenatal attendees. In comparison to South African women, refugees were not advised on maintaining their general health (p=0.018), purpose of laboratory investigations (p=0.025) and indications for treatment with accompanying dosing instructions (p=0.014). In addition, refugees were uninformed of the expected labour process or identifying labour signs (p=0.03); and were not advised on infant feeding options (p=0.003) and contraception (p<0.0001). Health care workers also expressed that the most significant challenge while providing antenatal care to refugees was the language barrier. All health care workers interviewed mentioned that they were frustrated when obtaining history of a refugee. Refugees elaborated on the language-barrier, expressed client dissatisfaction and perceived intimidation when accessing antenatal care.
**Conclusion:** Disparities in antenatal care were noted when procedures involved verbal communication between pregnant refugees and the Health Care Worker. It has been clearly demonstrated that while there were no disparities in the antenatal management of refugees when compared to their SA counterparts, inadequate history taking and relevant health information and education not being provided because of the language barrier, would need to be addressed to prevent adverse pregnancy outcomes among refugees.
CHAPTER 1
INTRODUCTION

Worldwide, it is estimated that the majority of displaced populations are women (UNHCR, 2010). Prior to receiving humanitarian protection from a host country, refugees have already endured prolonged periods of deprivation, abuse, loss and separation from family members resulting in increased rates of post-traumatic stress and depression among refugees (Gagnon et al., 2004, Pavlish et al., 2010). In addition, refugees are faced with poor health conditions such as malnourishment, anaemia, and infectious diseases such as sexually transmitted infections and HIV/AIDS (Blood et al., 2009; Carolan, 2010a; Jamieson et al., 2000; Kahlera et al., 1996; (Hotez, 2008, Rogo et al., 2006). African women refugees in particular are vulnerable to poorer general health as result of substandard care and frequent unintended pregnancies (Haith-Cooper, 2012; Carolan 2010a). Pregnant refugee women are also more susceptible to obstetric complications, and severe acute maternal morbidity (Van Damme et al., 1998; Van Hanegem et al 2011; Rochat et al., 2011) that are associated with infectious diseases, and poor pre-existing health conditions such as malnourishment, anaemia, and numerous micronutrient deficiencies. (Correa-Velez Ryan 2012; Carolan, 2010a). Iron deficiency anaemia among refugee pregnant women is often associated with conditions varying from preeclampsia to low birth weight, and maternal death (Carolan, 2010a).

Due to volatile political and economic conditions in SADC (Southern African Development Community) and non-SADC countries in Africa, there has been an increase in the number of asylum seekers, refugees and immigrants in South Africa. ‘South Africa is likely to continue to be host to a constant influx of refugees and asylum seekers, due to the more favourable economy, political stability and geographical accessibility (Lawyers for Human Rights, 2012).’
Early reports in South Africa have underlined concerns that health care needs for refugee women, particularly when pregnant, are not met (Amisi, 2006; Apalata et al., 2008; Solomon, 1996). And it is well established that adequate antenatal care offers an opportunity for the early diagnosis and treatment for obstetric complications and hence a reduction in maternal morbidity and mortality (Openshaw, Bomela, and Pretlove, 2011, (Correa-Velez and Ryan, 2012). While studies have explored the quality of antenatal care for refugees in developed countries (McCarthy, 2013; Haith-Cooper, 2012; Carolan, 2010a; Carolan, 2010b), there are no studies in South Africa that explored the quality of care provided to refugee pregnant women. Limited financial resources and limited health literacy are among the many challenges faced by refugees when seeking health services in a foreign country (Carolan, 2010a; Stapleton et al., 2013). More specifically, the language barrier between antenatal attendees and service providers pose significant communication difficulties in ensuring refugee women receive adequate reproductive health services (Carolan, 2010a; Carolan, 2010b; (Correa-Velez and Ryan, 2012, Pavlish et al., 2010, Straus et al., 2009).

Using the South African Maternity Care guidelines (NDoH, 2007), this study was designed to examine disparities in the quality of antenatal care received by refugee pregnant women and local South African pregnant women attending the same primary health care facilities in Durban, South Africa.

1.2. HYPOTHESIS

Antenatal care services at public healthcare facilities in Durban are not responsive to the perceived needs of refugee women.
1.3. AIM OF THE STUDY

The overall aim of this study was to explore disparities in antenatal services received by refugees at South African public health facilities and highlight challenges faced by refugees while accessing antenatal care.

1.4. SPECIFIC OBJECTIVES

- To determine the proportion of pregnant women seeking antenatal care in Durban who are refugees and compare the quality of antenatal services received by refugee women and local South African women.
- To examine perceptions of refugee women concerning healthcare services at the public health facilities.
- To describe views of healthcare providers in respect of healthcare services rendered to refugees.
CHAPTER 2

LITERATURE REVIEW

2.1. DEFINITIONS

Refugees can be defined as ‘men, women, and children who have left everything behind – their homes, their jobs, friends and families – to avoid war, persecution, and human right abuse’ (Ascoly, van Halsema and Keysers, 2001).

According to South Africa law, asylum-seekers are people that have asked to be allowed to remain in the host country because they claim they would be in serious danger in their own country. They may have been illegal entrants, or have come with a visa. If they do not claim asylum immediately on arrival, their claims are likely to be viewed with scepticism, and they are more likely to be kept in detention while their claims are assessed. Asylum-seekers whose claims are accepted get refugee status, which allows them to work or get benefits like SA citizens (Government Gazette, 1997; Government Gazette, 2001). The UNHCR similarly defines an asylum seeker as a person who has fled his own country and seeks refuge in another country.

Immigrants are people who seek residency in another country or region to which they are not natives of. Immigration is a result of a number of factors, including economic and/or political reasons, family re-unification, natural disasters or the wish to change one's surroundings voluntarily (UNHCR, 2002).

This study focusses on refugee women who are in possession of documentation as an asylum seeker or a refugee.
2.2. SOUTH AFRICA, A HUB OF REFUGEES IN SUB-SAHARAN AFRICA

The number of refugees entering South African borders is increasing on a daily basis. A recent report from the United Nations High Commissioner for Refugees (UNHCR) estimated a total number of refugees reaching 0.96 per 1000 South-Africans (UNHCR, 2010). Whilst the number of formally recognized refugees and asylum seekers reached 47,974 and 309,794 in 2009 respectively, the number of so called “illegal refugees” and other immigrants still remains a matter of uncertainty (Amisi, 2006; Apalata et al., 2008; UNHCR, 2010).

Since 1990, South Africa has become a new destination for refugees from the rest of Africa. According to the South African government, there were nearly 160,000 refugee claims between 1994 and 2004 (South African Department of Home Affairs, 2004). Of the 160,000 claims, the majority (74%) were from African countries. The country received 45,673 new applications in 2007 alone, according to the South African Department of Home Affairs (DHA) (South African Department of Home Affairs, 2007). Most of South Africa’s refugees come from countries like the Democratic Republic of Congo, Burundi, Rwanda, Angola and Somalia (South African Department of Home Affairs, 2004). Apalata et al (2008) reported that 40% of refugees in South Africa are females of reproductive age, living in urban areas such as Durban, Cape Town, Pretoria and Johannesburg, and are unemployed. According to this survey, more than 80% of refugees in Durban are women and are from the French speaking Grate Lake Region (DRC, Rwanda and Burundi), Somalia and Angola. The grate lake region of Africa includes Uganda, Western Tanzania, Rwanda, Burundi, and the north-eastern part of Democratic Republic of the Congo.
Asylum seekers from Somalia, Democratic Republic of the Congo, and Angola had high rates of acceptance as refugees in South Africa. Unlike other African countries, South Africa does not have refugee camps (South African Department of Home Affairs, 2004). Asylum seekers and refugees live in informal settlements in urban regions and survive largely without financial and social assistance from the government (South African Department of Home Affairs, 2004). Relocation from one country to another requires extensive adjustment and can result in family and social disruption as well as major health challenges (Pavlish et al., 2010).

2.3. HEALTHCARE CHALLENGES AMONG REFUGEE WOMEN

Among refugees who are affected by war and armed conflicts, women and children are particularly vulnerable (UNHCR, 2010; (Correa-Velez and Ryan, 2012). African refugee women are particularly vulnerable to poorer general health as a result of substandard care and frequent unintended pregnancies (Carolan, 2010a; Carolan, 2010b).

It is suggested that an appropriate package of antenatal and maternity care is important to meet the needs of socially disadvantaged women (Ukoko, 2005). It is well established that pre-existing health related conditions of refugees play a major role in their conditions within a host country and in their health seeking behaviour – pregnant women and children being the most disadvantaged. For example, the London-based charity’s "State of the World’s Mothers" compared 176 countries in terms of maternal health, child mortality, education and levels of women’s income and political status (State of the World’s Mothers, 2013). At the end of the project, the group urgently called for major investments to close the "startling disparities" in maternal health between the developed and developing world and for a push to fight inequality and malnutrition (State of the World’s Mothers, 2013). The report found that a woman in the Congo has a one in 30 chance of dying from maternal causes while in Finland the risk is one in 12,200. The report highlighted the lack of education, underrepresentation in
politics and limited access to good quality maternal and child care as reasons for poor maternal and child survival. The report blamed the high infant death rate in sub-Saharan Africa on the poor health of mothers. It also highlighted the increasing number of teenage pregnancies, the low use of contraception, poor access to satisfactory healthcare and a dearth of skilled health workers (State of the World’s Mothers, 2013). Citing evidence from a comprehensive review on immigrants’ health, studies claim that health differs between immigrants and the citizens in the United States (Pavlish et al., 2010).

Reports have indicated that refugee pregnant women are more susceptible to obstetric complications and severe acute maternal morbidity (Van Damme et al., 1998; Van Hanegem et al 2011; Rochat et al., 2011). In addition to the above, infectious diseases, poor pre-existing health conditions such as malnourishment, anaemia, and numerous micronutrient deficiencies have been associated with poor pregnancy outcomes among refugees (Carolan, 2010a; Correa-Velez and Ryan, 2012). Iron deficiency anaemia among refugee pregnant women is common and often associated with obstetric conditions ranging from preeclampsia to low birth weight, as well as increased risk of maternal deaths. Sickle cell disease (SCD), a genetically inherited haemoglobinopathy is particularly problematic and is associated with severe anaemia among African women in general (Carolan, 2010a).

The sixth report of the Confidential Enquiry into Maternal Deaths (CEMACH) in the United Kingdom pointed that risk of dying when pregnant was significantly observed among migrants and newly-arrived refugees (RCOG Press, 2004) due to communication problems, refugee status, limited access to health care services and substandard antenatal care. This same report added that poverty, social exclusion and poor access to reproductive health services are major risk factors associated with the maternal death (RCOG Press, 2004).
In 2001, the National Sentinel Caesarean Section Audit in England reported 60% and 19% increased risk of caesarean section and other obstetrical complications among refugee women from Africa and the Caribbean respectively.

The risk of maternal death among refugee women appear to be mainly related to their pre-existing health related problems and their ‘health-seeking behaviour’. Language barrier and inadequate translation services are among the commonly encountered communication problems. According to the sixth CEMACH report in United Kingdom, 10 out of 14 pregnant women who died between year 2000-2002 were classified as refugees or asylum seekers in UK and more than half of whom could not speak English (RCOG Press, 2004). This report underlined a lack of concern by healthcare providers for less articulate women (women with poor communication skills) from poor social circumstances. Late booking for antenatal care and the limited number of antenatal visits by refugees and asylum seekers have been attributed to their poor socio-economic status and xenophobic attitude from unsympathetic and disrespectful health care providers (Carolan, 2010b; Apalata et al., 2008; Ameh and van den Broek, 2008). Limited access to antenatal care has been commonly reported among sub-Saharan refugees whilst neonatal morbidity has significantly increased among this group (Carolan, 2010a).

Maternal and child health programs in South Africa are located within the framework of general development policy, which targets meeting basic needs of rural and urban communities. In accordance with these policies, free health care services for pregnant women and children under the age of 6 years in public health facilities in South Africa were introduced in 1998 (Lawyers of Human Rights, 2012). Refugees enjoy these rights as outlined in South African constitution except the right to vote (Black SASH, 2010; Lawyers of Human Rights, 2012). Other rights are: full legal protection of the Bill of Rights of the Constitution; not to be forcibly deported from the Country except as provided for under its international
and national obligations, seek for employment, get self-employed, and enter into contracts and leases, acquire movable and immovable property, access primary, access secondary and tertiary education; and an identity and travel document.

In reality, however refugees face difficulties in exercising these rights (UNDPA, 2012). Delay in determining refugee status is one of the main challenges faced by asylum seekers in South Africa (Lawyers of Human Rights, 2012). According to the South African Policy document published in the Government Gazette in 1998 and revised in 2001 ‘refugees have the same rights to access healthcare services as South African citizens (Crush and TawodZera, 2012; Lawyers of Human Rights, 2012). However, numerous reports highlighted concerns that refugees have unmet healthcare rights and needs while attending public hospitals and clinics (South African Department of Home Affairs, 2004; Apalata et al., 2008; Crush and TawodZera, 2012; Lawyers of Human Rights, 2012), particularly when pregnant (UNHCR, 2011; Solomon 1996). Participants in these studies claimed that health education during antenatal visits and counselling were conducted in isiZulu (a language that they cannot understand). Some reported not being aware of any HIV/AIDS related health services while attending public healthcare facilities (Apalata et al., 2008).

2.4. SOUTH AFRICAN MATERNAL AND CHILD HEALTH SERVICES

The South African government gazette notice 657 of 1994 stated that “as from 1st June 1994”, free health services must be provided to:

- Pregnant women during pregnancy; until 42 days after the pregnancy has terminated, or if a complication have developed as a result of the pregnancy, until the patient has been cured or the conditions as a result of the complication has stabilised;
- Children under the age of 6 years; and

- Non-citizens of South Africa who are in the group mentioned in par (a) and (b), and who incidentally develop a health problem whilst in South Africa.

2.4.1. History Taking

A complete and relevant history is taken and this includes: current pregnancy, previous pregnancies, any complications and outcomes, medical conditions including psychiatric problems, previous operations, family and genetic disorders, allergies, use of medications, use of alcohol, tobacco and other substances, as well as family and social circumstances.

2.4.2. Antenatal care in public health institutions in South Africa

According to the South African Maternity Care Guidelines (NDoH, 2007), the objective of antenatal care is to ensure the best possible pregnancy outcome for women and their babies. This may be achieved by:

- Screening for pregnancy problems.

- Assessment of pregnancy risks.

- Treatment of problems that may arise during antenatal period.

- Giving medication that may improve pregnancy outcome.

- Provision of information to pregnant women.

- Physical and psychological preparation for child birth and parenthood.

In addition, all pregnant women presenting at a health care facility should receive an antenatal card. This is a principal record of the pregnancy and must be completed at each
antenatal visit and retained by the mother until delivery, after which it will be kept at a place of confinement or final referral. The format of antenatal cards (Figures 1 and 2) currently varies between health care providers but most are adequate for essential antenatal care.

**Summary of Basic Antenatal Care**

A summary of procedures for basic antenatal care is shown in Table 1. The health care professional asks about general well-being, foetal movements, danger symptoms and any problems. He/she checks the blood pressure, heart rate and colour of mucus of membranes, measures the SFH in cm and thereafter plots the SFH value on the graph against the gestational age and compare with the 10th, 50th, and 90th centiles for gestational age and also with previous measurements. The HCW palpates carefully for breech presentation at 38 weeks, tests the urine for protein, glucose, blood and ketones, repeats HIV test at 32 weeks for all women who tested negative at initial testing, repeats blood tests: Haemoglobin at 32 and 38 weeks, and also RPR at \( \pm 36 \) weeks if the test was negative before 20 weeks of pregnancy. Furthermore, the information for danger signs in pregnancy should be repeated, and delivery and transport plans reviewed, as well as feeding and contraception choices at 32 and 38 weeks.
Figure 1 Antenatal Record: Section for 1st Antenatal Visit
Figure 2 Antenatal Record: Section for Follow up Visits

| Visit | Height (cm) | Weight (kg) | Date | Reason for Visit | Urine Dipstick | N.B.T | F.M. | F.H. | C.P. | Hand | Palpation | Abdominal Cough | Abdominal Tone | Braxton | E.S.T. | L.U.T. | Mass | Weight |
|-------|-------------|-------------|------|------------------|----------------|-------|------|------|------|------|-----------|----------------|---------------|---------|-------|------|------|-------|-------|-------|

Recording of Antenatal Attendances
2.5. RISK ASSESSMENT AND SCREENING FOR PROBLEMS DURING PREGNANCY

Women who present to primary healthcare clinics and confirmed pregnant are issued with an antenatal card (Figure 1) in which all procedures and clinical findings are recorded. The researcher audited the antenatal card as part of the quantitative assessment of antenatal care rendered to refugees and local South African women. The following procedures at the relevant antenatal visits were reviewed:

2.5.1. Physical examination

A general examination is completed including measurement of weight, height, heart rate, colour of mucus membranes, blood pressure, oedema and palpation for lymph nodes.

The examination of pregnancy includes inspection and palpation of the pregnant uterus, with the measurement of the Symphysis-fundal height (SFH) in centimetre. Foetal heart is listened from 26 weeks of gestation. Estimation of gestational age, last menstrual period, SFH measurement, palpation and ultrasound are also requested during the first antenatal visit.

2.5.2. Screening Tests

Syphilis serology: non-specific test (RPR) is performed using a rapid card test; Rhesus (Rh) blood group using also a rapid card test; Haemoglobin (Hb) level using portable haemoglobin meter or copper sulphate screening method; Human Immune-deficiency virus (HIV) serology using a rapid test kit. This must follow National guideline on routine counselling and voluntary testing; urine dipstick testing for protein and glucose. All the above tests are performed by midwives or appropriately trained auxiliary staff at the clinic “on site”, with the results available to the pregnant women before they complete the first visit.
2.5.3. Prophylaxis and Management of Complications in Pregnancy

2.5.3.1. Medications and vaccines

The following are given to all pregnant women: Ferrous sulphate tablets 200mg daily to prevent anaemia; Calcium tablets 100mg daily to prevent complication of pre-eclampsia; Folic acids tablets 5mg daily, Tetanus toxoid (TT) immunization to prevent neonatal tetanus: First pregnancy: TT1 at first antenatal visit, TT2 four weeks later and TT3 six months later. Later pregnancies: Two TT boosters, one in each pregnancy at the first visit, for the two subsequent pregnancies at least one year apart. A total of five properly spaced doses of TT provide lifelong protection against tetanus. If in a subsequent pregnancy, there is no record of previous immunization, it is treated as for the first pregnancy.

2.5.3.2. Provision of Information to Pregnant Women

Certain essential information is provided to all pregnant women, verbally and in the form of written or illustrated cards or pamphlets. This includes:

- **Danger signs and symptoms in pregnancy:** Severe headache, Abdominal pain (not discomfort), Drainage of liquor from the vagina, Vaginal bleeding, Reduced foetal movements. A woman that experiences any of these symptoms should report immediately to her clinic or hospital with her antenatal card.

- **Self-care in pregnancy:** Diet and exercise, Personal hygiene and breast care, Use of medications, Abuse of alcohol, tobacco and recreational drugs.

- **A delivery plan:** At the end of the first visit all pregnant women are given a provisional delivery plan. The expected date of delivery, based on the best estimate of gestational age, expected site of delivery whether community health centre or hospital, the expected mode of delivery, whether vaginal or caesarean section, who will deliver the baby, whether midwife or doctor, Pain relievers option including non-
pharmacological methods, a transport plan for emergency or delivery, including important contact numbers.

- **New-born and infant care**: Plans for infant feeding and techniques, whether breast or formula, Details of follow up care: immunisation and where this can be obtained.

- **Future pregnancy and consultation**: Information on genetic disorders and birth defects, contraception that will be used after the pregnancy.
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<td>Haemoglobin test</td>
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<td></td>
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<tr>
<td>Ion and folate supplements given</td>
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<td>x</td>
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<td>Uterus measured for growth</td>
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<tr>
<td>Advice on lactation and contraception</td>
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<tr>
<td>Detection of breech and referral</td>
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<tr>
<td>Reminder to bring card when in labour</td>
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<tr>
<td>Given follow up visit for 41 weeks</td>
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CHAPTER 3

RATIONALE FOR THE STUDY

Findings from international studies claim that pregnant refugee women are at increased risk of obstetric complications due to preexisting health conditions, nutritional deficiencies and increased vulnerability to infectious diseases. All these factors are related to their poor socio-economic status, poor living conditions, limited access to essential reproductive health services and substandard antenatal care. This study will provide a South African perspective to the current status of the antenatal care services received by pregnant refugee women in an urban District. My study will compare the quality of antenatal service rendered to refugees and local South African women. In the event of disparities, this study will further explore reasons for the disparities in the antenatal service to inform a quality improvement plan that may be necessary for better reproductive health services for refugees.

3.1. METHODOLOGY

3.1.1. Study settings

3.1.1.1. The EThekwini municipality

The name Durban or “City of Durban” has come to be associated more broadly with the local government area officially known as the eThekwini Municipality (KZN DoH, 2008). According to statistics SA 2011, the EThekwini municipality has a population of 3,442,361, located on the eastern seaboard in the province of KwaZulu Natal (Figure 3). It encompasses sophisticated industrial sections, large and small-scale businesses, as well as large tracts of rural land (Statistics South Africa, 2011).
The eThekwini Municipality Area consists of 2297km², of which 36% is rural and a further 29% is peri-urban (Figure 3). The municipal area stretches from Umkomaas in the south, including some tribal area in Umbumbulu, to Tongaat in the north, moving inland to Ndwedwe, and ends at Cato Ridge in the west (KZN DoH, 2008).

The municipal area includes the city of Durban which is famous for being the busiest container port in Africa. It is also seen as one of the major centres of tourism because of the city's warm subtropical climate and extensive beaches (Statistics South Africa, 2011). The city has established, and maintains world-class infrastructure to support growth. Industrial development and modernisation have resulted in the development of a modern freeway system with fast access inland, a large rail network and an international airport. The Durban harbour is Africa’s premier port and a vital economy in the South African economic engine (Statistics South Africa, 2011).

Figure 3 Map of EThekwini District and EThekwini Municipality
Since the end of apartheid, new opportunity have arisen for foreign immigrants, including informal cross border traders, unskilled labourers, domestic workers, refugees and asylum seekers. However, the economic boom enjoyed at the port of Durban also attracted internal migrants and led to a major influx of labourers from rural KwaZulu-Natal and other South African provinces to Durban. Those internal migrant workers in non-management positions are mainly from rural KwaZulu-Natal residing in townships such as Umali and KwaMashu, or in the various hostels closer to the harbor. Foreign workers, particularly from Mozambique, Zimbabwe, Tanzania, Congo DRC, Burundi, etc. also look for employment at the harbor. They live a group of 5 to 10 refugees in order to afford renting a 1-2 bedroom flat in Durban. Alternatively, they rent shacks in the townships or rooms in run-down apartment blocks near the harbor or even sleep in parks such as Albert Park where labor brokers come to recruit them when work is available.

Furthermore, the eThekwini municipality in KwaZulu-Natal has numerous farms of different sizes with different specialties located in the outer Durban region, Amanzimtoti, Umkomaas, Umali, Chatsworth, Pinetown, Hillcrest, Cato Ridge, Mpumalanga, Kwamashu, Inanda, Verulam, Umhlanga and Tongaat. It is therefore evident that as for the ports communities, commercial farms in KwaZulu-Natal employ a significant number of migrant workers, both international and local migrants. International migrants are mainly workers from other Southern African countries, mainly from Mozambique, Zimbabwe and Lesotho.

3.1.1.2. Clinical study settings

The study sites were four primary health clinics (Lancers Road, Overport, Sydenham and Clare Estate) situated in central Durban, with Addington Hospital as their referral hospital.
These are government clinics that provide antenatal care in addition to all other general health services (Figure 4).

3.1.1.2.1. Sydenham Clinic

Sydenham is a suburb of Durban with a catchment population of over 30000. The Sydenham municipal clinic is located at Rippon Road; surrounded by Sydenham heights flats and easy to catch a public transport from the central Durban. The clinic has 11 staff members in total, of which 2 professional nurses are allocated for antenatal care. The rest of the staff comprises of 2 Operational managers, 3 senior professional nurses, 2 enrolled nurses, 2 enrolled nurse assistants, 1 counsellor and 1 clerk.

Antenatal visits and paediatric immunisation visits are scheduled every day at Sydenham clinic, although the majority of women first register for antenatal care on Tuesdays as suggested by health care workers. Patients have been made aware that they have to come for repeat antenatal visits only on Fridays. The distance between Sydenham Clinic and Clare Estate Clinic is 1 kilometre.

3.1.1.2.2. Clare Estate Clinic

Clare Estate clinic is located at Clare Road in a Durban Suburb and largely provide health services to residents of the Kennedy Road, Palmiet Road and Foreman Road Informal Settlements. The staff members at the clinic are comprised of 1 operational manager, 5 senior professional nurses, 1 professional nurse, 2 enrolled nurses, 1 enrolled nurse assistant, 2 counsellors and 1 clerk. Antenatal care clients are attended to on Wednesday while the paediatric immunization clinic is accessible every day. The distance between Clare Estate Clinic and Overport clinic is approximately 5 Kilometres.
3.1.1.2.3. Lancers road/ Overport Clinic

During the course of this study, the Overport clinic facility was undergoing refurbishment and the primary health care services were moved to the Lancers Road Clinic which is approximately 6 km away. Lancers Road Clinic is located in central town, adjacent to the market and taxi ranks. Lancers Road Clinic has a daily limit to its patient intake, and patients arriving after the daily limit is reached are told to return on another day.

Figure 4 Study sites - Four primary health care facilities in EThekwini Municipality and Addington Hospital, the referral facility for maternal delivery.

- : Addington hospital -  : Overport clinic -  : Lancers Rd Clinic -  : Sydenham Clinic
- : Clare estate clinic
3.3. STUDY DESIGN

This is an observational analytical cross sectional study that involved a qualitative and a quantitative component (Figure 5). Quantitative data were collected using a structured questionnaire and conducting a maternity chart audit. Qualitative data were collected during in-depth interviews with participants and nursing staff.

3.4. REGULATORY APPROVALS

Permission to conduct the study was obtained from the post graduate committee and the Biomedical Research Committee (BREC) of the College of Health Sciences at the University of KwaZulu-Natal (Ref No. BE 237/1).
Figure 5 Clinical Sites and Data Collection Strategy
3.5 STUDY POPULATION

Participants in the study belonged to 2 categories: women as health care users and nurses as health care providers.

Health Care Users: Women attending Sydenham, Clare-Estate and Lancers road/Overport clinics for the immunization of their children were screened for participation between 29 January and 15 June 2013.

Inclusion Criteria:

- Women delivered within the past six months at Addington Hospital. To avoid recall bias only women whose infants were 6 months old or younger were screened for enrolment.

- Residing within 10 kilometres radius of Addington hospital and/or had sought antenatal care at any of the Sydenham, Clare Estate and Lancers or Overport Clinics. Participants were in possession of a maternity carrier card that had a record of her residential address and clinic she attended during her pregnancy.

Exclusion Criteria:

- Women aged less than 18 years old.

- Women who did not consent to participate in the study.

Health Care Providers: Health care workers who provided antenatal care in the selected clinics were also asked to participate in in-depth interviews following an informed consent. A total of 8 healthcare workers participated.
Sampling Strategy

The sampling was conducted by the researcher. To obtain a more complete overview of antenatal care, only women who had already delivered were eligible to participate. Women who delivered in the last 6 months and were currently attending the childhood immunization services at the selected clinics were provided with an overview of the study in a “Brief information leaflet” (Appendix 1).

3.5.1. Study recruitment procedures for the Quantitative Assessment

Women willing to participate in the study were asked to sign an Informed Consent (Appendix 2). The Informed Consent for participation in the study also allowed the investigator access to the participant’s medical (maternity) records (Appendix 3). For those who felt comfortable with IsiZulu, a Zulu informed consent was provided (Appendix 9). For French-speaking participants, the informed consent was translated to French. For refugees who could not communicate in English, isiZulu or French the researcher sought the assistance of an Interpreter. The 1st fifty (50) women in each of the primary health clinics who met the eligibility criteria and signed the Informed Consent participated in the quantitative assessment (Figure 6). Study participants identified themselves as South Africans or as non-South Africans. The South Africans produced an identity document while non-South Africans produced a paper that defined their refugee status.

3.5.2. Study recruitment procedures for the Qualitative Assessment

Refugee Women:
An additional 14 women who were refugees (Lancers Road clinic=4; Overport clinic=4; Clare Estate clinic=3 and Sydenham clinic =3) and agreed to participate in the qualitative assessment (In-depth interview) were selected and asked to sign an Informed Consent (Appendix 2).

During the qualitative phase of the study, eligible refugee women who consented to participate in in-depth interviews were recruited using a systematic random selection technique. Sampling started by selecting the first refugee woman from the clinic register at random and then every 2nd refugee woman in the clinic register was selected until the closure of the clinic for that particular day.

**Health Care Providers:**

Health care workers who provided antenatal or immunization care in the selected 4 study sites were also asked to participate in in-depth interviews following an informed consent (Appendix 6). A total of 8 healthcare workers participated (Figure 6).

### 3.6. DATA COLLECTION AND PROCESSING

#### 3.6.1. Quantitative data

**3.6.1.1. Structured Questionnaires**

Structured questionnaires (Appendix 3) were administered by the researcher and each questionnaire was administered for approximately 15 to 20 minutes. The questionnaire included the following sections: participants’ demographics information (Age, citizenship, country of birth, refugee status, marital status, language skills, education and socio-economic status)
- Medical and obstetric history (parity, gravidity, chronic medical conditions)
- Experience in receiving Antenatal Care (choice of antenatal clinic, reasons for choosing clinic, frequency of antenatal visits, time-duration between visits, category of health care worker providing antenatal care, waiting time before being attended to and client satisfaction with service provision).
- Communication and health information (recognize serious problems in pregnancy, information received about tests performed, prescribed treatment, signs of labour and labor process, breastfeeding, family planning and taking care of one’s health)

Written informed consent was obtained before commencing with the questionnaire. Confidentiality was maintained throughout the study by respecting the participants’ privacy and cultural norms. Sensitive questions were also avoided. Participant names were avoided in the questionnaires and each participant had a unique study identifier and a clinic or hospital registration number.

After establishing rapport, the most important aspect of the interview was asking questions in a standardized way. All respondents were given the same information and asked the same questions, under similar conditions. Interviewer read out questions at a reasonable pace. When a question was not understood, the interviewer was obliged to repeat the question in the same words, with the same emphasis and the same instructions. Before the interview was brought to an end, the interviewer politely thanked the respondent, explained that the interview was now completed, and asked if the respondent had any comments or questions. Participants were reassured that these findings will be reported with anonymity and accuracy.
3.6.1.2. Maternity Chart Audit

Maternity charts containing the antenatal record (Figures 1 and 2) of women participating in the structured interview were retrieved from the Addington Hospital Registry and the quality of maternity care (antenatal service) was assessed by extracting relevant data using a self-developed Antenatal Care Checklist (Appendix 4) guided by the South African Antenatal Care Guide (Table 1, NDoH, 2007). Permission to retrieve maternity records was obtained from the Addington hospital management.

The quality of antenatal care was determined by a score given for each aspect of antenatal care. Specific indicators that were used to assess quality of care are listed in Table 1. A score of one was given for each indicator and the total scores were categorised as substandard (<75%) or adequate (≥ 75%) quality of antenatal care (NDoH, 2007). Indicators included frequency of antenatal care visits, history taking, laboratory investigations performed, medications and vaccines given or administered and information given to participants during their antenatal attendance as well as general health information and specific pregnancy related information.

All data from structured interviews (questionnaires) and maternity chart audits were captured using Excel 2010 v14.0. Duplicate entries, out of range data or irrelevant information were removed. The final data sheet was imported into the statistical package (SPSS) version 21.0 (SPSS Inc.; Chicago, IL, USA) for analysis.

3.6.2. Qualitative data

3.6.2.1. In-depth Interviews (IDI) with refugees
Fourteen consenting refugee women (in possession of a refugee status document) (Lancers Road clinic=4; Overport clinic=4; Clare Estate clinic=3 and Sydenham clinic =3), were randomly selected from each of the 4 clinics and were interviewed using the IDI Guide (Appendix 5). Briefly, the IDI was structured to obtain clients’ satisfaction with the health service, her understanding of the health information, her perception of health care worker attitude to her as a refugee and communication with the health care worker.

The researcher was trained on issues such as language nuances during interviews, comprehension and approach to the topic, recording interviews and taking notes, reflecting content and feelings, asking appropriate follow up questions and remaining non-judgmental.

For refugees who were French speaking a BREC approved translated informed consent was administered. (Appendix 8). For a handful of participants who spoke Swahili and who consented, the English consent form was translated and informed consent was obtained verbally by the researcher. Interviews were recorded using a voice-recorder, and notes prepared immediately after the clinic visit. The duration of each in-depth interview was 15 to 20 minutes.

3.6.2.2. In-depth interviews (IDI) with Health Care Providers

All nurses and counsellors working in the antenatal clinics at the 4 facilities were approached to participate in the interview. Interested staff members were asked to provide an Informed Consent for participation (Appendix 6). Interviews with healthcare workers were conducted using a guide (Appendix 7). Briefly the IDI for health care workers (nurses) was structured to explore nurses involvement in antenatal activities, nurse perception of challenges that refugees face, difficulties in communication, how does a nurse attempt to address these difficulties, how do nurses attend to refugee clients’ needs and how does the service she provides to refugees compare with local South African antenatal care attendees.
Figure 6 Organogram of Data Collection
3.7. STATISTICAL ANALYSIS

3.7.1. Analysis of quantitative data

The questionnaire included demographic characteristics, medical history, obstetric history and experiences with accessing antenatal care at the clinic.

Data analysis was performed using the statistical package for the social sciences (SPSS) version 21.0 (SPSS Inc.; Chicago, IL, USA). Data were expressed as means ± standard error of the mean (SEM) or as means ± standard deviation (SD) for the continuous variables and proportions (percentages) for the categorical variables.

3.7.1.1 Outcome Measures:

Primary Outcome measures were proportion of refugees (%) seeking antenatal care, demographic characteristics of refugees, obstetric characteristics of refugees and quality of antenatal care received by refugees in comparison to South African antenatal attendees.

The Chi-square test was used to examine differences with categorical variables (for example demographic variables), and to compare differences in communication, information received and client satisfaction across refugee and non-refugee women. The Fisher’s exact test was performed when a sample size within a given category was less than 10.

All variables related to the information received during antenatal care, language used while providing care, clarity on tests performed, treatment given, waiting time, discussing some practical options (e.g. choice of a contraceptive method), etc. were used as indicators of quality care. In addition, measuring level of client satisfaction as expressed by the participants was another outcome variable for quality care.
Maternity charts for a subgroup of women enrolled in the quantitative component of this study were retrieved from the hospital registry and relevant data were extracted using a self-developed antenatal care checklist (South African Antenatal Care Guide, NDoH, 2007). A maternity chart audit was performed to assess the quality of antenatal care based on the Maternity Guidelines. Any investigation, antenatal nutritional supplements and health advice as prescribed in the Maternity Guidelines but not recorded in the maternity chart (for example Haemoglobin test) was an indication of substandard quality care.

Student’s t-test was performed to assess differences between two means and analysis of variance (ANOVA) between groups. When data were not normally distributed, the Mann-Whitney U or Kristal-Wallis non-parametric tests were used. Unadjusted odds ratios (ORs) with 95% confidence intervals (CI) were calculated when necessary during univariate analysis. All tests were two-sided and a $P$ value of $<0.05$ was considered significant.

### 3.7.2. Analysis of qualitative data

Interviews with refugees and healthcare workers were recorded using a tape-recorder, transcribed, coded and analyzed. Data were generated as textual narrative from transcribed interviews and written descriptions of observations and reflections. A coding system of themes and sub-themes was used to recognize persistent words, phrases and observations and stored in an analytic file until analysis. The following critical information was elicited from the subgroup of refugee participants:

- Language barrier
- Quality of maternal care
- Quality of communication and skills of health care providers
- Attitude of health care providers towards antenatal care attendees.
Audio-taped interviews from both refugees and health care providers were transcribed after each session and translated into English then computerized for data analysis. The analysis involved the identification of recurrent patterns and themes. Codes were created and assigned to specific session so that the text can be easily and meaningful searched. Translated codes were imported and computerised into ATLAS.ti version 5.6.3 (Stanford) and themes were thereafter identified. The analysis involved the identification of recurrent patterns, themes and contradictions. Themes were guided by frequency of events and highlighted in different colour ink. Critical information regarding language barrier, quality of maternal care and attitude, skills and quality of communication of health care providers were elicited.
CHAPTER 4

RESULTS

4.1. THE PROPORTION OF PREGNANT WOMEN SEEKING ANTENATAL CARE IN DURBAN WHO ARE REFUGEES

Of the 200 study participants, 61% (n=122) were South African citizens and 39% (n=78) were refugees (non SA citizens) (Figure 7). Of the 39% (n=78) non-SA citizens interviewed, 51.1% were in South Africa for socio-economic reasons. The majority among these were from Zimbabwe (24.4%) and Malawi (11.5%). The others were from Mozambique, Uganda, Ghana, Kenya, Tanzania, Cameroon and Liberia (Figure 8). The remaining 48.9% of refugees came to South Africa following war and political conflicts in their countries. In this group, refugees primarily came from the Democratic Republic of the Congo (29.5%), Rwanda (5.1%), Burundi (14.1%) and Somalia (1.5%).
Figure 7 Proportion of Antenatal Attendees who are Refugees

Refugees
39 %
(n=78)

South Africans
61 %
(n=122)
Figure 8 Distribution of Refugees according to their Country of Origin
4.2. DEMOGRAPHICS CHARACTERISTICS

4.2.1. Refugee antenatal attendees

Demographic characteristics of the study participants are depicted in Table 2. The average age of the study population was 27.6 (±5.0) years ranging from 18 to 42 years. More refugees were in the older age category (>35) however the age distribution was not significantly different between the South African and non-South African (refugees) women (p = 0.08) (Table 2). More than half (57.7%) of the refugees were married, and marriage was significantly less common among the South African women (16.7%) ($\chi^2 = 48.22; P <0.0001$). South African women were more likely to be single (49.2% vs. 11.5%). The majority of refugees (92.3%) tended to be living in formal residence in the Central Business District [OR = 4.09 (1.6 – 10.3) 95% CI; $P = 0.001$] and were 4-times more likely to be self-employed ($P = 0.001$) when compared to their South African counterparts.

While the majority (81%) of the South African antenatal attendees understood IsiZulu, a language spoken by all health workers at the 4 clinics, 27% of refugee antenatal attendees understood IsiZulu ($p<0.0001$) and a larger proportion (75.6%) of refugee antenatal attendees understood English, the 2nd language for most health care providers at the Clinics (Table 2).
Table 2: Demographic characteristics of the study population (n = 200)

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<th>( P ) value</th>
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<td>20(25.6)</td>
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<td></td>
<td>6(75)</td>
</tr>
<tr>
<td><strong>Employment</strong></td>
<td></td>
<td></td>
<td></td>
<td>22.4</td>
<td>&lt; 0.0001</td>
</tr>
<tr>
<td>Employed</td>
<td>40(32.8)</td>
<td>24(30.8)</td>
<td></td>
<td></td>
<td>8(100)</td>
</tr>
<tr>
<td>Not employed</td>
<td>76(62.3)</td>
<td>32(41)</td>
<td></td>
<td></td>
<td>0(0)</td>
</tr>
<tr>
<td>Self employed</td>
<td>6(4.9)</td>
<td>22(28.2)</td>
<td></td>
<td></td>
<td>0(0)</td>
</tr>
<tr>
<td><strong>Residence</strong></td>
<td></td>
<td></td>
<td></td>
<td>9.9</td>
<td>0.001**</td>
</tr>
<tr>
<td>Informal</td>
<td>31(25.4)</td>
<td>6(7.7)</td>
<td></td>
<td></td>
<td>8(100)</td>
</tr>
<tr>
<td>Formal</td>
<td>91(74.6)</td>
<td>72(92.3)</td>
<td></td>
<td></td>
<td>0(0)</td>
</tr>
<tr>
<td><strong>Period of residency in the area</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 6 months</td>
<td>10(8.2)</td>
<td>12(15.4)</td>
<td>17.1</td>
<td>0.001</td>
<td>n/a</td>
</tr>
<tr>
<td>6-12 months</td>
<td>12(9.8)</td>
<td>22(28.2)</td>
<td></td>
<td></td>
<td>n/a</td>
</tr>
<tr>
<td>12-24 months</td>
<td>29(23.8)</td>
<td>17(21.8)</td>
<td></td>
<td></td>
<td>n/a</td>
</tr>
<tr>
<td>More than 24 months</td>
<td>71(58.2)</td>
<td>17(34.6)</td>
<td></td>
<td></td>
<td>n/a</td>
</tr>
<tr>
<td><strong>Language preferred by participants</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IsiZulu</td>
<td></td>
<td></td>
<td></td>
<td>70.18</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>understand verbal/written*</td>
<td>99 (81.1)</td>
<td>21(26.9)</td>
<td></td>
<td></td>
<td>n/a</td>
</tr>
<tr>
<td>- understand verbal only*</td>
<td>5(5.0)</td>
<td>8(38.1)</td>
<td></td>
<td></td>
<td>n/a</td>
</tr>
<tr>
<td>do not understand</td>
<td>23(18.9)</td>
<td>57(73.1)</td>
<td></td>
<td></td>
<td>n/a</td>
</tr>
<tr>
<td>English</td>
<td></td>
<td></td>
<td></td>
<td>5.098</td>
<td>0.165</td>
</tr>
<tr>
<td>understand verbal/written*</td>
<td>103 (84.4)</td>
<td>59 (75.6)</td>
<td></td>
<td></td>
<td>n/a</td>
</tr>
<tr>
<td>- understand verbal only*</td>
<td>18 (17.5)</td>
<td>15 (25.4)</td>
<td></td>
<td></td>
<td>n/a</td>
</tr>
<tr>
<td>do not understand</td>
<td>19 (15.6)</td>
<td>19 (24.4)</td>
<td></td>
<td></td>
<td>n/a</td>
</tr>
</tbody>
</table>

**Fisher's exact test  * subgroup
4.3. OBSTETRIC CHARACTERISTICS OF SOUTH AFRICANS AND REFUGEES SEEKING ANTENATAL CARE

The mean number of pregnancies in the total study population was $2.0 \pm 1.04$. There were no significant differences in number of pregnancies and number of live births between SA citizen and their refugee counterparts ($\chi^2 =1.09; P =0.53$) (Table 3). From the chart abstraction for 68 participants, the majority of SA (80.6%) and refugee (84.4%) antenatal attendees first sought antenatal care prior to 24 weeks gestation, and more specifically 8.3% SA and 3.1% refugees booked before 12 weeks of gestation (Table 3). This health seeking behaviour did not differ significantly between the study groups ($p=0.46$). Among the SA attendees, 33.3% attended the ANC clinic once and 63.9% SA attended ANC more than 2 visits, while 80.8% of refugees attended ANC more frequently (>2 visits).

Among the South Africans, 23.8% experienced a complication during pregnancy, and this did not differ significantly from the refugee population (24.4%) ($\chi^2=12.6; P =0.17$) (Table 3). Whilst 9.8% and 2.5% of SA citizens suffered from high blood pressure and anaemia respectively, similar proportions of refugees also reported having had high blood pressure (10.3%) and anaemia (2.6%) during pregnancy. Diabetes appeared to be more common among refugees (6.4% vs. 2.5%) and preeclampsia was reported among SA participants only (2.5% vs 0). Refugees did not differ significantly from their SA counterparts in their health seeking behaviour.
Table 3: Obstetric Characteristics of SA citizens and Refugees

<table>
<thead>
<tr>
<th>Variable factors</th>
<th>N</th>
<th>SA Citizen</th>
<th>Refugees/Immigrants</th>
<th>$\chi^2$</th>
<th>$P$ value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Pregnancies</td>
<td>200</td>
<td>n=122 (61%)</td>
<td>n=78 (39%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>One</td>
<td>43(35.2)</td>
<td>32(41.6)</td>
<td>1.098</td>
<td>0.53</td>
<td></td>
</tr>
<tr>
<td>Two</td>
<td>42(34.4)</td>
<td>23(29.9)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Three</td>
<td>21(17.2)</td>
<td>11(14.3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than Three</td>
<td>16(13.1)</td>
<td>11(14.3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of live birth</td>
<td>200</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One</td>
<td>48(39.3)</td>
<td>32(41.6)</td>
<td>0.38</td>
<td>0.97</td>
<td></td>
</tr>
<tr>
<td>Two</td>
<td>40(32.8)</td>
<td>23(29.9)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Three</td>
<td>19(15.6)</td>
<td>11(14.3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than three</td>
<td>15(12.3)</td>
<td>11(14.3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gestational age at booking</td>
<td>68*</td>
<td></td>
<td></td>
<td>3.57</td>
<td>0.46</td>
</tr>
<tr>
<td>Not recorded</td>
<td>4(11.1)</td>
<td>3(9.4)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Before 12 weeks</td>
<td>3(8.3)</td>
<td>1(3.1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-24 weeks</td>
<td>26(72.2)</td>
<td>26(81.3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25-34 weeks</td>
<td>2(5.6)</td>
<td>2(6.2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; 35</td>
<td>1(1.5)</td>
<td>0(0)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complications in pregnancy</td>
<td>199</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Blood pressure</td>
<td>12(9.8)</td>
<td>8(10.3)</td>
<td>12.6</td>
<td>0.17</td>
<td></td>
</tr>
<tr>
<td>Diabetes</td>
<td>3(2.5)</td>
<td>5(6.4)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heart problem</td>
<td>1(0.8)</td>
<td>0(0)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anaemia</td>
<td>9(7.4)</td>
<td>2(2.6)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eclampsia</td>
<td>3(2.5)</td>
<td>0(0)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No complication</td>
<td>93(76.2)</td>
<td>59(75.6)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tb skin</td>
<td>0(0)</td>
<td>1(1.3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fibroids</td>
<td>0(0)</td>
<td>1(1.3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baby cord around neck</td>
<td>0(0)</td>
<td>1(1.3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>0(0)</td>
<td>1(1.3)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Data obtained from Chart Abstraction
4.4. ANTENATAL SERVICES RECEIVED BY REFUGEE WOMEN IN COMPARISON TO SOUTH AFRICAN CITIZENS IN DURBAN

4.4.1. Maternity chart review (n=68)

The chart abstraction focused on documentation of history taking, physical examination, screening tests, planning and advice for patients, communication regarding danger signs in pregnancy, all investigations and medications and vaccines as prescribed by South African Antenatal Care Guidelines.

The average number of antenatal visits made by the study population was 4.1 with the standard error of the mean ($SEM \pm 0.27$). There was no significant difference in the frequency of antenatal visits between SA citizen and their refugee counterparts ($\chi^2 = 8.3; P = 0.16$).

A review of the medical records of 68 participants (45.6% refugees and 54.4 % SA citizens) revealed an average of 70% of women had a complete history taken, and a lower but not statistically significant proportion of refugees had a complete history taken (62.5% vs 77.4% $p=0.18$) when compared to their SA counterparts. Generally, antenatal services rendered were similar in both groups of participants, with non-significant differences noted in the provision of information on emergencies to antenatal attendees (16.8% vs. 21.6%) and planning with and advising women on the best and safest approach to the current pregnancy (41.9% vs 50.0 %) (Table 4). Overall, provision of health information, planning and advising pregnant women were substandard for all antenatal attendees.
Table 4: Antenatal Services Received by Refugees and SA citizens – Maternity Chart Review

<table>
<thead>
<tr>
<th></th>
<th>SA Citizen</th>
<th>Refugees</th>
<th>P value</th>
<th>95% CI</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n=37 (%)</td>
<td>n=31 (%)</td>
<td></td>
<td></td>
<td>N= 68</td>
</tr>
<tr>
<td><strong>History Taking</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current pregnancy</td>
<td>77.4%</td>
<td>62.5%</td>
<td>0.09</td>
<td>0.3(0.11-1.1)</td>
<td>70.0%</td>
</tr>
<tr>
<td>Last normal menstruation period</td>
<td>27(72.9)</td>
<td>20(64.5)</td>
<td>1.09</td>
<td>0.9(0.3-2.7)</td>
<td>51(75.0)</td>
</tr>
<tr>
<td>Previous pregnancy</td>
<td>31(83.8)</td>
<td>19(61.3)</td>
<td>0.53</td>
<td>0.3(0.09-0.9)</td>
<td>50(73.5)</td>
</tr>
<tr>
<td>Medical conditions</td>
<td>27(72.9)</td>
<td>19(61.3)</td>
<td>0.43</td>
<td>0.5(0.2-1.6)</td>
<td>46(67.6)</td>
</tr>
<tr>
<td>Family and medical disorders</td>
<td>32(86.5)</td>
<td>20(64.5)</td>
<td>0.04</td>
<td>0.2(0.08-0.9)</td>
<td>52(76.5)</td>
</tr>
<tr>
<td>Allergies</td>
<td>25(67.6)</td>
<td>14(45.2)</td>
<td>0.08</td>
<td>0.3(0.1-1.06)</td>
<td>39(57.3)</td>
</tr>
<tr>
<td>Current use of medications</td>
<td>30(81.1)</td>
<td>20(64.5)</td>
<td>0.16</td>
<td>0.4(0.1-1.2)</td>
<td>50(73.5)</td>
</tr>
<tr>
<td>Use of alcohol</td>
<td>29(78.4)</td>
<td>20(64.5)</td>
<td>0.27</td>
<td>0.5(0.17-14)</td>
<td>49(72.1)</td>
</tr>
<tr>
<td><strong>Physical examination</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>64.9%</td>
<td>72.3%</td>
<td></td>
<td></td>
<td>68.6%</td>
</tr>
<tr>
<td>Palpation</td>
<td>28(75.7)</td>
<td>23(74.2)</td>
<td>1</td>
<td>0.9(0.3-2.7)</td>
<td>51(75.0)</td>
</tr>
<tr>
<td>Blood pressure</td>
<td>29(78.4)</td>
<td>27(87.1)</td>
<td>0.27</td>
<td>0.8(0.5-6.8)</td>
<td>56(82.4)</td>
</tr>
<tr>
<td>Height</td>
<td>9(24.3)</td>
<td>12 (38.7)</td>
<td>0.29</td>
<td>1.9(0.6-5.5)</td>
<td>21(30.9)</td>
</tr>
<tr>
<td>Weight</td>
<td>26(70.3)</td>
<td>24 (77.4)</td>
<td>0.5</td>
<td>1.4(0.4-4.3)</td>
<td>50(73.5)</td>
</tr>
<tr>
<td>Uterus measured for foetal growth</td>
<td>28(75.7)</td>
<td>26(83.9)</td>
<td>0.5</td>
<td>0.6(0.4-5.6)</td>
<td>54(79.4)</td>
</tr>
<tr>
<td><strong>Investigations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>71.7%</td>
<td>79.6%</td>
<td></td>
<td></td>
<td>75.7%</td>
</tr>
<tr>
<td>Urine testing</td>
<td>30 (81.1)</td>
<td>28(90.3)</td>
<td>0.32</td>
<td>2.1(0.5-9.2)</td>
<td>58(85.3)</td>
</tr>
<tr>
<td>RPR</td>
<td>30(81.1)</td>
<td>25 (80.6)</td>
<td>1</td>
<td>1.2(0.3-4.2)</td>
<td>55(80.9)</td>
</tr>
<tr>
<td>Ultra sound</td>
<td>29(78.4)</td>
<td>22(70.9)</td>
<td>0.39</td>
<td>-</td>
<td>51(75.0)</td>
</tr>
<tr>
<td>Haemoglobin at 32 weeks</td>
<td>29(78.4)</td>
<td>26(83.9)</td>
<td>0.75</td>
<td>1.4(0.4-4.9)</td>
<td>55(80.9)</td>
</tr>
<tr>
<td>Haemoglobin at 38 weeks</td>
<td>21(56.8)</td>
<td>20(64.5)</td>
<td>0.62</td>
<td>1.3(0.5-3.6)</td>
<td>41(60.3)</td>
</tr>
<tr>
<td>HIV testing and counselling</td>
<td>20(54.1)</td>
<td>27(87.1)</td>
<td>0.24</td>
<td>-</td>
<td>47(69.1)</td>
</tr>
<tr>
<td><strong>Medication and vaccines</strong></td>
<td>77.5%</td>
<td>76.5%</td>
<td></td>
<td></td>
<td>77.0%</td>
</tr>
<tr>
<td>Ferrous sulphate</td>
<td>26(70.3)</td>
<td>24(64.9)</td>
<td>0.58</td>
<td>1.4(0.4-4.3)</td>
<td>50(73.5)</td>
</tr>
<tr>
<td>Folic acid given at all</td>
<td>28(75.7)</td>
<td>25(80.6)</td>
<td>0.91</td>
<td>-</td>
<td>53(77.9)</td>
</tr>
<tr>
<td>Tetanus toxoid given</td>
<td>32(86.5)</td>
<td>26(83.9)</td>
<td>1</td>
<td>0.8(0.2-3.1)</td>
<td>58(85.3)</td>
</tr>
<tr>
<td><strong>Information on Emergencies Given</strong></td>
<td>21.6%</td>
<td>16.8%</td>
<td></td>
<td></td>
<td>19.2%</td>
</tr>
<tr>
<td>Severe headache</td>
<td>8(21.6)</td>
<td>4(12.9)</td>
<td>0.52</td>
<td>0.5(0.14-1.99)</td>
<td>12(17.6)</td>
</tr>
<tr>
<td>Abdominal pain</td>
<td>8(21.6)</td>
<td>6(19.4)</td>
<td>1</td>
<td>0.8(0.26-2.84)</td>
<td>14(20.6)</td>
</tr>
<tr>
<td>Drainage of liquor</td>
<td>7(18.9)</td>
<td>4(12.9)</td>
<td>0.74</td>
<td>0.6(0.16-24)</td>
<td>11(16.2)</td>
</tr>
<tr>
<td>Vaginal bleeding</td>
<td>9(24.3)</td>
<td>5(16.1)</td>
<td>0.55</td>
<td>0.5(0.17-2)</td>
<td>14(20.6)</td>
</tr>
<tr>
<td>Reduced foetal movement</td>
<td>8(21.6)</td>
<td>7(22.6)</td>
<td>1</td>
<td>1.07(0.3-3.3)</td>
<td>15(22.1)</td>
</tr>
<tr>
<td><strong>Plan and advice</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>50.0%</td>
<td>41.9%</td>
<td></td>
<td></td>
<td>46.0%</td>
</tr>
<tr>
<td>Antenatal care</td>
<td>8(21.6)</td>
<td>4(12.9)</td>
<td>0.52</td>
<td>0.5(0.01-2.9)</td>
<td>12(17.6)</td>
</tr>
<tr>
<td>Transport</td>
<td>14 (37.8)</td>
<td>11(35.5)</td>
<td>0.8</td>
<td>0.8(0.3-2.2)</td>
<td>25(36.7)</td>
</tr>
<tr>
<td>Lactation</td>
<td>25(67.6)</td>
<td>17(54.8)</td>
<td>0.34</td>
<td>0.5(0.1-1.4)</td>
<td>42(61.8)</td>
</tr>
<tr>
<td>Contraception</td>
<td>27(72.9)</td>
<td>20(64.5)</td>
<td>0.4</td>
<td>0.5(0.2-1.7)</td>
<td>47(69.1)</td>
</tr>
</tbody>
</table>
4.4.2. Communication and health information- Questionnaire (n=200)

All participants (SA citizens and refugees) confirmed that the language used by HCWs while conducting health education was principally IsiZulu.

More than half (>58%) of women in each group reported that they were not told how to recognize serious problems in pregnancy. As compared to their South African counterparts, significantly higher proportion of refugees reported that they did not receive enough information about labour (24.4% vs 39.2% p=0.03), on how to look after their own health during pregnancy (26.1% vs 44.6%, $p = 0.018$), information on laboratory tests performed on them (31.9% vs 43.2% $P = 0.025$), and information on any given treatment (31.1% vs 45.9%, $P = 0.014$) during pregnancy (Table 5).
Table 5: Communication and health information SA citizens and Refugees (N=200)

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>SA Citizen</th>
<th>Refugees/Immigrants</th>
<th>$\chi^2$</th>
<th>$P$ value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Told how to recognize serious problems in pregnancy</strong></td>
<td>193*</td>
<td>122 (61%)</td>
<td>78 (39%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>70</td>
<td>(58.8)</td>
<td>44 (59.5)</td>
<td>0.31</td>
<td>0.86</td>
</tr>
<tr>
<td>Yes</td>
<td>46</td>
<td>(38.7)</td>
<td>29 (39.2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unsure</td>
<td>3</td>
<td>(2.5)</td>
<td>1 (1.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Information received about labour</strong></td>
<td>193*</td>
<td></td>
<td></td>
<td>10.68</td>
<td>0.03*</td>
</tr>
<tr>
<td>Not enough</td>
<td>29</td>
<td>(24.4)</td>
<td>29 (39.2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enough</td>
<td>75</td>
<td>(63.1)</td>
<td>30 (40.6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No information was received</td>
<td>12</td>
<td>(10.1)</td>
<td>14 (18.9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do not remember</td>
<td>3</td>
<td>(2.5)</td>
<td>1 (1.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Information received about breastfeeding</strong></td>
<td>193*</td>
<td></td>
<td></td>
<td>16.03</td>
<td>0.003*</td>
</tr>
<tr>
<td>Not enough</td>
<td>23</td>
<td>(19.3)</td>
<td>32 (43.2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enough</td>
<td>85</td>
<td>(71.4)</td>
<td>34 (45.9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No information was received</td>
<td>10</td>
<td>(8.4)</td>
<td>7 (9.5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do not remember</td>
<td>1</td>
<td>(0.8)</td>
<td>1 (1.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Information received about family planning</strong></td>
<td>193*</td>
<td></td>
<td></td>
<td>7.73</td>
<td>0.102</td>
</tr>
<tr>
<td>Not enough</td>
<td>25</td>
<td>(21)</td>
<td>27 (36.5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enough</td>
<td>81</td>
<td>(68.1)</td>
<td>38 (51.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No information was received</td>
<td>12</td>
<td>(10.1)</td>
<td>7 (9.5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do not remember</td>
<td>1</td>
<td>(0.8)</td>
<td>2 (2.7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Information received about looking after own health</strong></td>
<td>193*</td>
<td></td>
<td></td>
<td>11.86</td>
<td>0.018*</td>
</tr>
<tr>
<td>Not enough</td>
<td>31</td>
<td>(26.1)</td>
<td>33 (44.6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enough</td>
<td>77</td>
<td>(64.7)</td>
<td>32 (43.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No information was received</td>
<td>10</td>
<td>(8.4)</td>
<td>9 (12.2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do not remember</td>
<td>1</td>
<td>(0.8)</td>
<td>0 (0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Information received about tests done</strong></td>
<td>193*</td>
<td></td>
<td></td>
<td>11.16</td>
<td>0.025*</td>
</tr>
<tr>
<td>Not enough</td>
<td>38</td>
<td>(31.9)</td>
<td>32 (43.2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enough</td>
<td>72</td>
<td>(60.5)</td>
<td>31 (41.9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No information was received</td>
<td>8</td>
<td>(6.7)</td>
<td>10 (13.5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do not remember</td>
<td>1</td>
<td>(0.8)</td>
<td>1 (1.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Information received about any prescribed treatment</strong></td>
<td>193*</td>
<td></td>
<td></td>
<td>12.57</td>
<td>0.014*</td>
</tr>
<tr>
<td>Not enough</td>
<td>37</td>
<td>(31.1)</td>
<td>34 (45.9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enough</td>
<td>73</td>
<td>(61.3)</td>
<td>28 (37.9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No information was received</td>
<td>8</td>
<td>(6.7)</td>
<td>8 (10.8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do not remember</td>
<td>1</td>
<td>(0.8)</td>
<td>4 (5.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>* No Response to above questions</td>
<td>7</td>
<td>(3.5%)</td>
<td>3 (2.5)</td>
<td>0.32</td>
<td>0.438</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>(5.1)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4.4.3. Client satisfaction – Antenatal Care (n=200)

In general, refugees were more dissatisfied than SA citizens \( (P < 0.0001) \) about the quality of care received (Table 6). There was no significant difference between SA citizens and refugees with regard to the frequency of antenatal check-ups \( (P = 0.54) \), time-duration between consecutive visits \( (P = 0.28) \), the category of Health Care Workers (HCW) who attended to the participants during antenatal appointments \( (P = 0.28) \) as well as waiting time before being attended to on the day of appointment \( (P = 0.134) \) (Table 6).

More SA citizens (65.5%) as compared to 48% of refugees reported that the consultation time with the medical doctors was about right \( (P = 0.05) \) (Table 6). In addition, when asked whether participants preferred to be seen or examined by which category of Health Care Worker (HCW), 53.3% of refugees preferred mainly to be examined by doctors. Although 34.5% of SA citizens wanted to be seen by doctors, the rest had no preference (31.9%) or would prefer a combination of different HCWs (22.7%) as compared to refugees \( (P = 0.025) \) (Table 6).

When asked if they would return to the clinic in a subsequent pregnancy, 55.4% of refugees as compared to 75.6% of SA citizens \( (P < 0.013) \) manifested the intention to come back to the same healthcare facility (Table 6). In addition, 39.2% of refugees as compared to 21.8% South African women reported that they will never recommend the health clinic that they attended during pregnancy to someone else \( (P < 0.005) \). Reasons for not recommending the clinic varied between refugees and South Africans. The commonest reasons given by refugees were staff attitude (13.5% refugees vs. 0.8% South African women) and being insulted or neglected (13.5% refugees vs. 1.7% South African women) (Table 6).
Table 6: Client Satisfaction with Antenatal Clinic Services

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>SA Citizens</th>
<th>Refugees</th>
<th>$\chi^2$</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Who attended to you</strong></td>
<td>192*</td>
<td>11(9.4)</td>
<td>8(10.7)</td>
<td>2.55</td>
<td>0.28</td>
</tr>
<tr>
<td>A doctor</td>
<td></td>
<td>11(9.4)</td>
<td>8(10.7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A nurse/ a midwife</td>
<td></td>
<td>108(90.6)</td>
<td>67(89.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Waiting time</strong></td>
<td>194*</td>
<td>3(2.5)</td>
<td>0(0)</td>
<td>7.03</td>
<td>0.134</td>
</tr>
<tr>
<td>less than 2 hour</td>
<td></td>
<td>3(2.5)</td>
<td>0(0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 to 6 hours</td>
<td></td>
<td>93(78.2)</td>
<td>53(70.6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;6 to 8 hour</td>
<td></td>
<td>20(16.8)</td>
<td>21(28)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; 8 hour</td>
<td></td>
<td>3(2.5)</td>
<td>1(1.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Time spent with Health care worker</strong></td>
<td>194*</td>
<td>4(3.4)</td>
<td>3(4)</td>
<td>5.96</td>
<td>0.05</td>
</tr>
<tr>
<td>A lot more time</td>
<td></td>
<td>4(3.4)</td>
<td>3(4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A little time</td>
<td></td>
<td>37(31.1)</td>
<td>36(48)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>time was about right</td>
<td></td>
<td>78(65.5)</td>
<td>36(48)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Preference to be attended to by</strong></td>
<td>194*</td>
<td>11.16</td>
<td>0.025</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A doctor</td>
<td></td>
<td>41(34.5)</td>
<td>40(53.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A nurse</td>
<td></td>
<td>13(11)</td>
<td>9(12)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A combination</td>
<td></td>
<td>27(22.7)</td>
<td>13(17.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No preference</td>
<td></td>
<td>38(31.9)</td>
<td>13(17.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>If pregnant again, will come back to this facility</strong></td>
<td>193*</td>
<td>10.78</td>
<td>0.013</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td>90 (75.6)</td>
<td>41 (55.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td></td>
<td>23 (19.3)</td>
<td>29 (39.2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do not know</td>
<td></td>
<td>6 (5)</td>
<td>4 (5.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Can this facility be recommended for antenatal care</strong></td>
<td>193*</td>
<td>10.41</td>
<td>0.005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td>88 (73.9)</td>
<td>38 (51.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td></td>
<td>26 (21.8)</td>
<td>29 (39.2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do not know</td>
<td></td>
<td>5 (4.2)</td>
<td>7 (9.5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Reasons why this facility cannot be recommended</strong></td>
<td>192*</td>
<td>38.07</td>
<td>&lt; 0.0001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No good service</td>
<td></td>
<td>8 (6.8)</td>
<td>4 (5.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insulted/neglected</td>
<td></td>
<td>2 (1.7)</td>
<td>10 (13.5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waking up 4am to go to the clinic</td>
<td></td>
<td>3 (2.5)</td>
<td>2 (2.7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refuse to speak English with me</td>
<td></td>
<td>5 (4.2)</td>
<td>5 (6.8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff attitude toward me</td>
<td></td>
<td>1 (0.8)</td>
<td>10 (13.5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abstain</td>
<td></td>
<td>3 (2.5)</td>
<td>0 (0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No privacy while taking ARVs</td>
<td></td>
<td>2 (1.7)</td>
<td>0 (0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>General level of satisfaction</strong></td>
<td>193*</td>
<td>18.22</td>
<td>&lt; 0.0001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very satisfied</td>
<td></td>
<td>36 (30.2)</td>
<td>7 (9.5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfied</td>
<td></td>
<td>60 (50.4)</td>
<td>35 (47.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not satisfied</td>
<td></td>
<td>23 (19.3)</td>
<td>32 (43.2)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*No responses for 6 to 8 participants for above questions
Irrespective of the country of origin, 41.3% of refugees “equally disagreed” that HCWs were friendly to them, 54.7% “equally disagreed” that HCWs were trying so hard to communicate with them and 56% “equally disagreed” that HCWs were willing to provide them with the best possible care respectively (Table 7).

Among the refugees, 44% disagreed that nurses were careless, 48% disagreed that nurses were xenophobic, and 52% disagreed that they did not dislike the facilities because of difficulty in communicating with HCWs. The vast majority of refugees (73.3%) disagreed that the waiting time was too long and unacceptable to them ($P = 0.004$) irrespective of the country of origin (Table 7).
<table>
<thead>
<tr>
<th>Variables of interest</th>
<th>Refugees</th>
<th>$\chi^2$</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factors that make refugees like the facility</strong></td>
<td>N=75 (39%)</td>
<td>23.59</td>
<td>0.79</td>
</tr>
<tr>
<td>HCWs are friendly</td>
<td></td>
<td>25.52</td>
<td>0.7</td>
</tr>
<tr>
<td>Disagree</td>
<td>31(41.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agree</td>
<td>33(44)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly agree</td>
<td>10(13.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCWs try to understand us</td>
<td></td>
<td>28.85</td>
<td>0.53</td>
</tr>
<tr>
<td>Disagree</td>
<td>41(54.7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agree</td>
<td>18(24)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly agree</td>
<td>11(14.7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>We attend this facility because we live in the area</td>
<td></td>
<td>30.31</td>
<td>0.45</td>
</tr>
<tr>
<td>Disagree</td>
<td>3(4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agree</td>
<td>43(57.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly agree</td>
<td>27(36)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCWs provide the best possible care</td>
<td></td>
<td>32.43</td>
<td>0.79</td>
</tr>
<tr>
<td>Disagree</td>
<td>42(56)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agree</td>
<td>20(26.7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly agree</td>
<td>11(14.7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Factors that make refugees dislike the facility</strong></td>
<td></td>
<td>44.75</td>
<td>0.28</td>
</tr>
<tr>
<td>HCWs are very careless</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disagree</td>
<td>33(44)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agree</td>
<td>19(25.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly agree</td>
<td>14(18.7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCWs are xenophobic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disagree</td>
<td>36(48)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agree</td>
<td>23(30.7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly agree</td>
<td>11(14.7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waiting time is too long (not acceptable)</td>
<td></td>
<td>54.14</td>
<td>0.004</td>
</tr>
<tr>
<td>Disagree</td>
<td>55(73.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agree</td>
<td>12(16)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly agree</td>
<td>4(5.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dislike this facility because we cannot communicate</td>
<td></td>
<td>40.57</td>
<td>0.094</td>
</tr>
<tr>
<td>Disagree</td>
<td>39(52)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agree</td>
<td>18(24)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly agree</td>
<td>11(14.7)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4.5. QUALITATIVE ENQUIRY: Health Services received by Refugees (In-depth interviews)

Fourteen additional refugee women consented to in depth interviews. After establishing rapport, the researcher would ask the participant to elaborate the health care services received during the last pregnancy. The most recurring category that was mentioned during the interview was the language barrier and challenges with informal interpreters. Other themes included refugees would prefer to be examined by doctors than nurses, rejecting administered medication for fear of being poisoned by health care workers, confirmed not receiving enough information and refugees could wait for a long time before being attended to either because of health care workers not acknowledging refugee identity or could not find an interpreter.

4.5.1. Challenges with the language

Most women required an interpreter either in English or IsiZulu. Much of the communication in the clinics is conducted in IsiZulu and the majority of refugees do not speak or understand IsiZulu (Table 2). Participants from Eritrea, Somalia and Malawi could only speak their native languages. In order to conduct interviews, the researcher looked for an interpreter who knows those languages and could speak English. During the in-depth interviews one participant from Burundi highlighted her concern with the language barrier. She apparently enrolled to study English three times, however she remained challenged with the language: “I have learned English three times but do not get it.” The latter statement serves as additional evidence that foreigners see the need to learn the local language because of communication barriers when seeking public service in South Africa.
4.5.2. Challenges in using an informal interpreter

Women prefer to choose a translator who is a woman in order to be comfortable while giving information on history and current pregnancy to the health care worker. When asked if she was comfortable speaking in the presence of a third person in the room, a refugee woman responded: “Eish! What can I do? Eish, what could I do? Even for some kind of exams then I had no choice than to call her to enter the room with me.” This interpreter was a male patient who came for consultation at the primary health care clinic and the participant asked for assistance.

Another participant said: “How will you explain, first I was going with someone I was not used to and on top of that he was a man. I had no choice. I was selecting what to say.”

Finding an interpreter became the women’s responsibility and after finding an interpreter, usually common among the vendors outside the clinic, often resulted in the women denied entry back into the clinic or the interpreter refused entry into the clinic: “...Sometimes we faced refusal to let him/her (the interpreter) to enter...” When it’s time for consultation, participants are taken out of the queue and asked to find an interpreter. Most often, they will not find an interpreter willing to assist a stranger. If the pregnant refugees are unable to find an interpreter they would leave the clinic and not return for antenatal care until an interpreter is available.

4.6. QUALITATIVE ENQUIRY. Health care providers attitude to refugees (In-depth interviews)

Health care workers expressed that the most significant challenge while providing antenatal care to refugees was the language barrier. All health care workers interviewed mentioned
that they were frustrated when obtaining history of a refugee; and when asked how they deal with such cases they responded:

“You know when someone does not know the language...” “....Others they keep quiet.”

“Some you talk to them and they just smile at you then I know this one does not understand English.”

“Uh language barrier most of the time. Because with the antenatal, you need to take the history first of all when they come for the first time and there is no prior history it’s very important for antenatal so the history you don’t get exactly if we don’t understand each other its quite difficult to find exactly what we want previous pregnancy, medical history ... so most of them they don’t” ....and most of time me I live that page blank.”

Half of health care workers also admitted to not attending to refugees if there is a language barrier resulting in the refugee patient not returning for her next visit.

“Usually I just postponed the session and ask her to bring a husband or somebody who can understand English.”

“Eh at the moment the... the e... the ....you know our language we have to send them to call the interpreter. “

“On their side I don’t know what is happening to them because they don’t come for the next visit after they have given birth.”

When asked in what language the health education is conducted this is one of the responses:

“.... Eh... It’s in English, we believe that most of them understand English...There are two sessions... There is a session for Zulu and a session for English. With the foreigner we include them in English.”
Half of health care workers admitted to recording incorrect information as a result of the language barrier.

“Laugh...its wrong information plea (admitting that the refugees don’t get adequate care because history taken is often incorrect).....You give wrong information “...Uhhh, because if you are asking her how many babies? She will say no. “Then when is your last period? She will say 4, yabona (meaning do you see how serious the problem is).”

4.7 Personal Observation: Isolated Case

From my personal observation while I was collecting the data, on the 8th April 2013, a refugee woman from the DR of Congo brought her baby for a six week immunization and postnatal visit. This participant could neither speak English or Zulu. She had woken up at 4 AM so that she may be among the first in the queue. She intended returning home at 9 AM because she had left her other child in the care of a neighbor. This participant was number six on the queue. At all previous antenatal visits, she was accompanied by her husband who served as an interpreter. At this particular visit, the husband was unavailable. At 8AM, she was next to be seen by the HCW. Around 10h30, the participant remained at the same position in the queue. When approached by the author, the participant explained that she has been attempting to enter the consultation room however at every attempt she is told to go back outside. The author observed her 6th attempted entry only to hear the HCW shouting “go, go, and go, away!! I will call you when I want to” “don’t come to disturb me again if I didn’t call you...”

When approached by the author, the HCW replied: “this people (meaning refugees) they come to the clinic without knowing what to say and they expect us to attend to them.”
The participant was grateful for me intervening and remarked: “my sister today was my blessed day to find you here. You have no idea how stressful I became when it is my next appointment or my baby’s appointment. We are used to this kind of treatment...What you can do. If you didn’t intervene I would have waited until it’s time for the clinic to close then she will call me.”
CHAPTER 5

DISCUSSION

The study examined healthcare disparities between pregnant refugees (n=78) and SA citizens (n=122) who sought antenatal care in 4 primary healthcare clinics in e-EThekweni municipality, KwaZulu-Natal. Using structured interviews, it emerged that approximately half of all refugees interviewed were in SA because of socioeconomic challenges in countries like Zimbabwe and Malawi, and the other half escaped war and political conflicts in countries such as DRC and Burundi. Refugees and SA citizens had similar demographic (age and level of education) and obstetrical profiles (number of previous pregnancies, number of live births, rates of pregnancy-associated complications). Review of the antenatal records of 68 selected participants comprising refugees and SA citizens suggested that there were no significant differences in the frequency of antenatal attendance. Although a lower but not statistically significant proportion of refugees had a complete history taken when compared to their SA counterparts, there were no disparities in the provision of the antenatal package of care as prescribed by the South African Department of Health.

Major disparities were noted in the communication and provision of information to refugees when compared to their SA counterparts. A significantly higher proportion of refugees reported that they did not receive adequate information related to labour, care during pregnancy, information on laboratory tests performed on them, information on any given treatment during pregnancy and breastfeeding.
Waiting time at the facility and consultation time with HCWs

Refugees tended to wait much longer (> 4 hours) than their SA counterparts. The latter perceived the consultation time with HCWs during their visits as acceptable and sufficient while refugees reportedly had very short consultations with HCWs. From the HCWs’ perspective, the language barrier was a key underlying reason for a short consultation with refugees. HCWs would either postpone the consultation until a translator is available or request refugees to bring along a translator. HCW would also avoid contact because they had nothing to offer due to lack of communication. Many refugees reported that they preferred being examined by doctors rather than by nurses.

Language barrier

This is the most critical challenge faced by refugees when accessing or planning to access healthcare services during their antenatal visits. Language barrier was also stated by nurses and other healthcare workers as a major challenge when managing refugees in the clinics, particularly those coming from the Grate Lake Region. The study has shown that while more than 70% of refugees did not understand isiZulu, this language was however the most used during healthcare educational sessions. As a result, refugees who were interviewed claimed not being offered any information on how to take care of their health during pregnancy. Although, the health care worker did mention that they sometimes offered educational sessions in English. The frequency of the sessions could not be confirmed. Refugees also did not recall receiving information about their laboratory test and imaging test results or any given treatment during pregnancy.

While conducting in-depth interviews, women expressed their frustration at finding a suitable interpreter. In some instances, women who failed at obtaining an interpreter will persist in accessing antenatal care, however in most instances such women will surrender and
not seek antenatal care until delivery. Similar frustrations were highlighted in a study that was carried out among Somalia immigrants in America. In this study, immigrants were also required to have an interpreter, and as a result, the quality of healthcare rendered was a major concern (Pavlish et al., 2010, Straus et al., 2009). In many cases, interpreters being themselves refugees who had no formal English training could also convey incorrect or inadequate messages. Another study of Somalia women’s experiences of child birth in the United Kingdom reported the lack of good interpreters and notably a lack of what was described in the content when translated by available interpreters (Straus et al., 2009). As opposed to the above described studies, a study conducted in Australia on the development of the best practices model for refugee maternity care reported that most women who required an interpreter while attending maternity care were provided with interpreters who were fluent in the language (Correa-Velez and Ryan, 2012). However, some participants in this study cited difficulties negotiating certain health care services even when professional interpreters were available because of sometimes poor quality in interpretation and cases of unprofessional conduct (Paula et al., 2012).

Among the recommendations of the Confidential Enquiry into Maternal Deaths in South Africa Saving Mothers Report 2008) highlighted community education as a key to prevent maternal deaths. Our study has clearly demonstrated that while there were no disparities in the antenatal management of refugees when compared to their SA counterparts, inadequate history taking and relevant health information and education not being provided because of the language barrier, would certainly need to be addressed to prevent obstetric complications and maternal deaths among refugees. Health care workers when interviewed in our study admitted to recording incorrect information while obtaining obstetric history.
Limited access to health services and late antenatal attendance among sub Saharan refugee women who have resettled in developed countries were widely reported in the African literature (Carolan, 2010a). Barriers to access health services reported among these Sub Saharan population in this view were also similar to those reported among refugees’ elsewhere (Carolan, 2010a; Carolan, 2010b; (Correa-Velez and Ryan, 2012).

Studies conducted in Australia had similar findings regarding the lack of transportation fee to attend clinics by refugees as well as other logistical-associated challenges (Carolan, 2010a; Stapleton et al., 2013; (Correa-Velez and Ryan, 2012). Our study is the first for sub Saharan refugees settling in South Africa.

**Attitude of Health Care Workers**

Poor health care services due to discrimination were a major concern of refugees. Previous studies reported that unsympathetic health care staff may hinder the provision of antenatal care services (Carolan, 2010a; Carolan, 2010b). Hence the need for enhancing the midwifery training curriculum with improving women's overall maternity experience, specifically regarding client satisfaction, communication with patients, and helping to ensure an environment conducive to informed decision-making, particularly for women from minority ethnic groups (Stapleton et al., 2013).

Refugees in our study reported that they were insulted or neglected by nurses. An article published in the Mail and Guardian stated how refugees, asylum seekers and undocumented migrants face hostility and violence from the local communities and discrimination by government institutions (Mail & Guardian, 2012). The article cites the Human Rights Watch
that reported refugees facing discrimination in public health facilities (Mail & Guardian, 2012). Discrimination in our study was manifested in a very negative attitude among health care workers towards refugees as HCWs refused to communicate in English knowing that the refugees could not communicate in isiZulu. All instructions or information were mostly given in Zulu and rarely in English, yet it is well known that the quality and accessibility of information, especially in relation to diagnostic tests and procedures that are of considerable importance in antenatal care and ensuring a safe pregnancy and childbirth.

Our findings are different from findings obtained during a case study of Somalia refugee women’ experiences of maternity care in West London. In this study refugees expressed more positive experiences even though the language barrier was still a problem (Bulman and McCourt 2002). Another study reported among other challenges faced by refugees the fact that health care workers make them feel like they were offering refugees a “favour” or “a privilege” by providing them with health care services, therefore become entitled to affect their human rights (Lawyers of Human Rights, 2013). Refugees are faced with poor health care services due to the attitude of staff towards them.

According to the South African guideline on ‘maternity danger’, signs and symptoms must be explained to pregnant women. Our study confirmed that they were the least recorded elements explained to the pregnant women as also reported by another research team (NDoH, 2007).
CHAPTER 6

CONCLUSIONS

This study provided insight into challenges faced by refugees while attending antenatal care in Durban, South Africa. It has clearly demonstrated that while there were no disparities in the antenatal management of refugees when compared to their SA counterparts, inadequate history taking and relevant health information and education not being provided because of the language barrier, would need to be addressed to prevent obstetric complications and maternal deaths among refugees. Health care workers when interviewed admitted to recording incorrect information while taking history.

6.1. Limitations of the study

The study has several limitations:

- The study has introduced potential biases such as social desirability of respondents, self-reporting and the personal experiences of the researcher.
- Study findings may not be generalizable to all antenatal clinics in South Africa due to the small sample size.
- Although the researcher was fluent in isiZulu, English, French and Swahili there were instances where refugees did not understand any of these languages. Having an interpreter to assist the researcher would have introduced a bias to the findings.
- Full disclosure of challenges faced by health care providers while attending to refugees may be limited because of fear of health care workers jeopardising their jobs.
• The study was not able to assess the pregnancy outcomes among antenatal attendees interviewed.

• Maternity records were accessible for only a third of the study population due to poor maintenance and storage of maternity records at the health institutions.

• Recruiting women from the child immunisation clinic would have unfortunately excluded women with poor birth outcomes such as still births, early neonatal deaths and maternal deaths.

6.2 Recommendations

• Trained interpreters should be identified among existing Health Care Workers to assist with history taking, education and provision of information to patients who do not understand the local language.

• Pamphlets on health care services should be written in more than one language and in languages common to that region.

• Health care staff should be trained on cultural diversity (and how to work in multicultural environment) and on Bathopele principles (KZN DoH, 2013). A course in cultural diversity may assist clinical staff in understanding and developing tolerance toward refugees.

• Health association bodies (i.e. South African Nursing Council) may be encouraged to promote training and registration of foreign nurses in order to address this issue.
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APPENDICES

Appendix 1: Brief Information Leaflet
Appendix 2: Informed Consent for Women
Appendix 3: Structured Questionnaire
Appendix 4: Maternity care check list
Appendix 5: Guide for In-depth interviews - Women
Appendix 6: Informed Consent - Health Care Workers
Appendix 7: Guide for In-depth Interviews – Health Care Workers
Appendix 8: French translation
Appendix 9: Zulu translation
Appendix 1: Brief information leaflet

DISPARITY IN ANTENATAL CARE (DAC study)

You are being asked to take part in a research study called Challenges facing immigrant and refugee women while accessing antenatal care in public health institutions in Durban, South Africa (DAC study). To join the study is voluntary. The purpose of this study is to learn more about immigrant and refugee women when receiving antenatal care in public health institutions in Durban. We would like to answer the following questions:

1. How many Immigrant/Refugee women attend the antenatal clinics?

2. Do pregnant women (local South African and Immigrant/Refugee) receive antenatal care according to our local policy?

3. What are some of your experiences (good and bad) while attending the antenatal clinic?

Every effort will be taken to protect your identity as participant in this study. You will not be identified in any report or publication of this study or its results.
Appendix 2: Informed consent for women

Consent from version date: V1.0 dated 16 October, 2012

Title of the study: Challenges facing immigrant and refugee women while accessing antenatal care in public health institutions in Durban, South Africa (DAC study)

Principal investigator: Mgrs. Edith Tuyisenge Kibiribiri

Supervisor: Prof D. Moodley

Information Sheet and Consent to Participate in Research

Date: __________________________

Good day,

My name is Edith from University of KwaZulu Natal, Department of Obstetrics and Gynaecology, my e-mail is 205520506@ukzn.ac.za, and my cell number is 0724404092.

You are being invited to consider participating in a study that involves research: Challenges facing immigrant and refugee women while accessing antenatal care in public health institutions in Durban, South Africa (DAC study). The aim and purpose of this research is to learn more about challenges facing immigrant and refugee women while accessing antenatal care in public health institutions in Durban, South Africa. You are being asked to be in the study because you are a client who receives health care services at Addington Hospital, Sydenham, Overport, Clare Estate and Lancers Clinics.

The study is expected to enrol 216 women who attend the primary health care in these 4 facilities. Therefore the 1st fifty (50) women in each of the 4 primary health clinics who meet the eligibility criteria and sign the Informed Consent will participate in the quantitative assessment (Structured Questionnaires – Appendix 3). An additional 4 women who are Immigrants/refugees per clinic who volunteer to participate in the qualitative assessment (In-depth interview) will be randomly selected and asked to sign an Informed Consent. Your participation in this study is limited to one interview that will last approximately 30-45 minutes. Your maternity file will be accessed from Addington Hospital. The study is funded by Medical Research Council.

You may not benefit personally from being in this research study. You may benefit from knowing that the information you share with us today will be used to make sure that challenges facing immigrant and refugee women while accessing antenatal care in public health institutions in Durban, South Africa are being addressed in the best possible way.
This study has been ethically reviewed approved by the UKZN Biomedical research Ethics Committee on 15 October 2012 with reference Number: BE237/11

In the event of any problems or concerns/questions you may contact the researcher at 0724404092 or the UKZN Biomedical Research Ethics Committee, contact details as follows:

BIOMEDICAL RESEARCH ETHICS ADMINISTRATION

Research Office, Westville Campus

Govan Mbeki Building, Private Bag X 54001, Durban, 4000, KwaZulu-Natal, SOUTH AFRICA

Tel: 27 31 2604769 - Fax: 27 31 2604609

Email: BREC@ukzn.ac.za

You may withdraw at any time from this study and this will not affect you on the treatment or other benefits that you receive from the clinic.

You will be receiving refreshments for taking part in this study. The cost for participation in this study includes only your time.

Every effort will be taken to protect your identity as participant in this study. You will not be identified in any report or publication of this study or its results. For the 4 women per clinic, Audiotapes will be transcribed and entered into a password-computer protected computer files. All computers will be in locked offices and portable copy of computer files will be kept in locked cabinets. No personally identifying information will appear on any transcript.

CONSENT

I ____________________ have been informed about the study entitled Challenges facing immigrant and refugee women while accessing antenatal care in public health institutions in Durban, South Africa (DAC study) by Edith

I understand the purpose of this study is to learn more about challenges facing immigrant and refugee women while accessing antenatal care in public health institutions in Durban, South Africa. I have been asked to be in the study because I am a client who receives/received health care services at Addington Hospital, Sydenham, Overport, Clare Estate and Lancers Clinics

I have been given an opportunity to answer questions about the study and have had answers to my satisfaction.

I declare that my participation in this study is entirely voluntary and that I may withdraw at any time without affecting any treatment or care that I would usually be entitled to.
I have been informed that there is no injury that may occur to me as a result of study-related procedures.

If I have any further questions/concerns or queries related to the study I understand that I may contact the researcher at 07244044092.

If I have any questions or concerns about my rights as a study participant, or if I am concerned about an aspect of the study or the researchers then I may contact:

**BIOMEDICAL RESEARCH ETHICS ADMINISTRATION**

**Research Office, Westville Campus, Govan Mbeki Building**, Private Bag X 54001, Durban

KwaZulu-Natal, SOUTH AFRICA

Tel: 27 31 2604769 - Fax: 27 31 2604609

Email: BREC@ukzn.ac.za

____________________  ______________________
Signature of Participant  Date

____________________  ______________________
Signature of Witness  Date
(Where applicable)

____________________  ______________________
Signature of Translator  Date
(Where applicable)
Appendix 3: Structured Questionnaire

DISPARITIES IN ANTENATAL CARE (DAC Study)
Nelson Mandela School of Medicine, University of KwaZulu Natal, Durban – South Africa

Structured Questionnaire (Lancers, Clare Estate, Sydenham and Overport clinic)

IDENTIFICATION
a) Study site: ..........................
b) Study No: ..........................
c) Clinic No: ..........................

Questionnaire version date: V1.0 dated 8 Feb, 2013

Thank you for taking time to participate in this research study and I would like to hear your opinion today. I would like to ask you few questions. Please remember there are no wrong or right answers to these questions. We are interested in all your opinions and thoughts.
A. DEMOGRAPHICS

Residence at this area (months): 1 = < 6  2 = 6-12  3 = 12-24  4 = > 24

Are you a South African Citizen?  1=Yes  2=No

Country of Birth:  1 = RSA  2 = DRC  3 = Burundi  4 = Zimbabwe
5 = Rwanda  6 = other

Age (years): ______

Marital status:  1 = single and living with partner  2 = married
3 = divorced  4 = widowed  5 = single

Understand language:  English  Speak  Read
Zulu  Speak  Read
French  Speak  Read

Other____________________________

Level of education:  1 = none  2 = primary  3 = secondary;  4 = tertiary

Race:  1 = Black  2 = Asian / Indian;  3 = White;  4 = Coloured

Employment:  1 = employed  2 = not employed  3 = self-employed

Type of Residence:  1 = informal  2 = formal

Piped Water:  1 = Yes  2 = No

Electricity:  1 = Yes  2 = No

Sanitation:  1 = Flushing Toilet  2 = Pit Latrine

PREGNANCY

How many pregnancies did you conceive in total? (read out the options):
1 = 1 only  2 = Two  3 = Three  4 = More than three

How many live births from these pregnancies? (read out the options):
1 = 1 only  2 = Two  3 = Three  4 = More than three

Have you ever suffered from one of the following conditions during pregnancy? (read out the options):
1 = High BP  2 = Diabetes  3 = Heart problem  4 = Anaemia
5=other □ (specify) ____________

Where did you attend the antenatal check-ups for your last pregnancy? (read out the options):

In this clinic □
In another clinic □ (specify) ____________

Do you like to come to this clinic? (read out the options): Yes □ No □

Please answer every question in Q6 & Q7

What sorts of things make it easy for you to like this clinic? (read out the options):

Sisters are friendly and address people with respect:

Strongly agree □ Agree □ Disagree □

Even though I speak a different language, sisters always try to understand and communicate with me or call for an interpreter to assist:

Strongly agree □ Agree □ Disagree □

I only come here because its near my residence and I cannot afford to go faraway:

Strongly agree □ Agree □ Disagree □

I only come here because I have no other options:

Strongly agree □ Agree □ Disagree □

I like coming here because they provide the best possible care:

Strongly agree □ Agree □ Disagree □

What sorts of things make it difficult for you to come here or make you dislike this clinic? (read out the options):

Sisters are careless about kinds of people like me:

Strongly agree □ Agree □ Disagree □

Workers in this clinic are xenophobic to foreigners and sometimes they even call us names:

Strongly agree □ Agree □ Disagree □

They don’t provide me with clear explanations about my condition or the condition of my baby:

Strongly agree □ Agree □ Disagree □

You can wait here for every long period of time before being attended to:

Strongly agree □ Agree □ Disagree □
I have difficulties in communicating with the staff here, and they don’t even try to understand me or call someone to translate:

Strongly agree □ Agree □ Disagree □

ANTENATAL CARE

Are you happy about the number of antenatal check-ups you have had, or would you prefer (read out the options):

More check-ups □
Fewer check-ups □
Number of check-ups was right (as expected) □

Has the time between check-ups been (read out the options):

Too short □
Too long □
About right (as expected) □

Who attended to you?
A doctor □
A nurse □
A midwife □

How long do you usually have to wait at the unit (clinic or hospital) before being seen for examination either by a doctor/sister/midwife? (read out the options):

Less than 2 h □
2 h to 4h □
4h to 6h □
6h to 8h □
> 8h □

How much time do you usually spend with the doctor/nurse/midwife who provides you antenatal care? (Read out the options):

A lot more time (more than expected) □
A little time (less than expected) □
Time was about right (as expected) □

If you had a choice, would you prefer to be attended by (read out the options):
A doctor □
A nurse □
A midwife □
A combination □
No preference □

QUALITY OF CARE

Was the information you received about looking after your own health while pregnant (read out the options):
Not enough □
As much as you wanted □
Too much □
No information received □
Don’t remember □

Was the information you received about tests (e.g. blood, urine, etc.) during this last pregnancy (read out the options):
Not enough □
As much as you wanted □
Too much □
No information received □
Don’t remember □

In what language was the information given? English □ Zulu □ Other____

Was the information you received about any treatment you might need during this past pregnancy (read out the options):
Not enough □
As much as you wanted □
Was an ultrasound scanning for pregnancy was done?

Yes ☐
No ☐

If Yes to Q16, what did they explain to you before starting? (read out the options):

I would need to lie down ☐
A machine would be used to check the baby ☐
No information received ☐
Don’t remember ☐

If Yes to Q16, what did they explain to you during or after an ultrasound machine was used? (read out the options):

Everything was okay ☐
They told me the sex of the baby ☐
They told me the position of the baby ☐
They told me nothing ☐

Was the information you received about labour (read out the options):

Not enough ☐
As much as you wanted ☐
Too much ☐
No information received ☐
Don’t remember ☐

Was the information you received about breastfeeding (read out the options):

Not enough ☐
As much as you wanted ☐
Too much ☐
No information received
Don’t remember

**Was the information you received about family planning (read out the options):**
Not enough
As much as you wanted
Too much
No information received
Don’t remember

**Were you given the contraception before being discharged from Hospital?**
1. Yes ☐ 2. No ☐

23. **Which contraceptive were you given?**

24. **Were you given an option?**
1. Yes ☐
2. No ☐

**Were you told how to recognize and proceed about some serious problems that can happen in pregnancy? (read out the problems):**

1 = no ☐
2 = yes ☐

Told how to recognize/proceed
Rupture of membrane ☐
Haemorrhage ☐
Premature contractions ☐
Dizziness and fainting ☐
Fever ☐
Other ☐ (specify)______________

**Were you worried about any of the following conditions? If ‘yes’, did the information given by the doctor / nurse reassured you? (read out the problems):**

1 = no ☐
2 = yes ☐

The position of your baby ☐
The size of your baby ☐
Whether your baby might be premature

A baby with abnormalities

Your own health

Other complications (specify)______________

Were you ever referred elsewhere?

Yes ☐
No ☐
Not applicable ☐

Where to___________________________ Why? ________________________________

If referred did you need assistance to go there?

Yes ☐
No ☐
Not applicable ☐

If referred were you

1. Given a note ☐
2. Given a verbal instruction ☐
3. Transported by medical team ☐
4. Used your own transport ☐
4. Not applicable ☐

In case you needed assistance, were you assisted to go there?

Yes ☐
No ☐
Not applicable ☐
In case you get pregnant again, will you come back to this unit /clinic / hospital for antenatal check-ups?

Yes □
No □
Don’t know □
If No, why? □ .................................................................

Would you recommend this unit /clinic /hospital to a relative or friend for antenatal check-ups?

Yes □
No □
Don’t know □

In general, how satisfied are you with the antenatal care you have received in this clinic/hospital?

Very satisfied □
Satisfied □
Not satisfied □

Do you have a South African Identity Document? Yes □ No □

Do you think having a South Africa Identity Document can improve your access to Antenatal care? Yes □ No □
Appendix 4: Maternity care chart audit

DISPARITIES IN ANTENATAL CARE

Nelson R Mandela School of Medicine, University of KwaZulu Natal

IDENTIFICATION

Study site: ……………………… Study No: ……………… Clinic No: ………………
Age…………………………

1. Gestational age at booking ________ Weeks

2. Gravity ☐ Parity ☐ Misc ☐

3. Was history taken for the following?

Current pregnancy Yes ☐ No ☐

Medical conditions, including psychiatric problems, and previous operations
Yes ☐ No ☐

Previous pregnancies, any complications and outcomes
Yes ☐ No ☐

Family and genetic disorders
Yes ☐ No ☐

Allergies
Yes ☐ No ☐

Use of medications
Yes ☐ No ☐

Use of alcohol, tobacco and other substances
Yes ☐ No ☐

4. Danger signs and symptoms in pregnancy

Information provided to all pregnant women

Severe headache Yes ☐ No ☐
Abdominal pain (not discomfort)  | Yes ☐  No ☐
Drainage of liquor from the vagina | Yes ☐  No ☐
Vaginal bleeding                | Yes ☐  No ☐
Reduced foetal movements       | Yes ☐  No ☐
Give follow up visit for 41 weeks | Yes ☐  No ☐

6. Antenatal record

<table>
<thead>
<tr>
<th>Antenatal care</th>
<th>Labour or + 36 weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Transport</td>
<td></td>
</tr>
</tbody>
</table>

6. Were the following performed?

<table>
<thead>
<tr>
<th>Visits</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Significant comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gestational age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical examination</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blood pressure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maternal height /weight</td>
<td></td>
<td></td>
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<td>Urine tested for Protein</td>
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<td>Detection of Breech presentation and referral</td>
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<td>CD4 done and recorded if HIV Positive</td>
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<td>Advice on lactation and contraception</td>
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Appendix 5: Guide for In-depth Interviews-Women

DISPARITIES IN ANTENATAL CARE (DAC Study)

Thank you for taking time to participate in this research study and I would like to hear your opinion today. I would like to ask you few questions about this research. Please remember there are no wrong or right answers to these questions. We are interested in all your opinions and thoughts.

QUALITY OF CARE – ANTENATAL

Think about the health services available to you for your last pregnancy. Were you satisfied with the health service?

If yes, please describe the positive points for each.

If no, what changes you would like to have/suggest to improve the health services?

Were you able to understand the health information given by health workers as well as those presented on posters, videos, etc.? What would you suggest are ways to improve health education?

Do you feel the nurses had any attitude towards you and your pregnancy? Did they comment in the fact that you were a refugee/immigrant? What did they say?

When you visited the health facility, was any one available to attend to you immediately?

Did you have any questions for the health care worker? Were you able to communicate in the local language? How did the health care worker respond to your questions?

Will you recommend the service/facility to others?

Is there anything else you would like to add?
Appendix 6: Informed consent for health care workers

Consent from version date: VLO dated 16 October, 2012

Title of the study: Challenges facing immigrant and refugee women while accessing antenatal care in public health institutions in Durban, South Africa (DAC study)

Principal investigator: Ms Edith Tuyisenge Kibiribiri

Supervisor: Prof D Moodley

Information Sheet and Consent to Participate in Research

Date: ________________________________

Good day,

My name is Edith from University of KwaZulu Natal, Department of Obstetrics and Gynaecology, my e-mail is 205520506@ukzn.ac.za, and my cell number is 0724404092.

You are being invited to consider participating in a study that involves research: Challenges facing immigrant and refugee women while accessing antenatal care in public health institutions in Durban, South Africa (DAC study). The aim and purpose of this research is to learn more about challenges facing immigrant and refugee women while accessing antenatal care in public health institutions in Durban, South Africa. You are being asked to be in the study because you are health care workers who provide such services at Sydenham, Overport, Clare Estate and Lancers Clinics.

Your participation in this study is limited to one interview that will last approximately 30-45 minutes.

You may not benefit personally from being in this research study. You may benefit from knowing that the information you share with us today will be used to make sure that challenges facing health immigrants while accessing antenatal care in public health institutions in Durban, South Africa are being addressed in the best possible way.

This study has been ethically reviewed and temporally approved by the UKZN Biomedical research Ethics Committee on 15 October 2012 with reference Number: BE237/11.
In the event of any problems or concerns/questions you may contact the researcher at 0724404092 or the UKZN Biomedical Research Ethics Committee, contact details as follows:

**BIOMEDICAL RESEARCH ETHICS ADMINISTRATION**

Research Office, Westville Campus, Govan Mbeki Building, Private Bag X 54001, Durban
KwaZulu-Natal, SOUTH AFRICA

Tel: 27 31 2604769 - Fax: 27 31 2604609

Email: BREC@ukzn.ac.za

You may withdraw at any time from this study.

You will be receiving refreshments for taking part in this study. The cost for participation in this study includes only your time.

Every effort will be taken to protect your identity as participant in this study. You will not be identified in any report or publication of this study or its results. All computers will be in locked offices and portable copy of computer files will be kept in locked cabinets. No personally identifying information will appear on any transcript.

----------------------------------------------------------------------------------

**CONSENT (Edit as required)**

I ________________ have been informed about the study entitled Challenges facing immigrant and refugee women while accessing antenatal care in public health institutions in Durban, South Africa (DAC study) by Edith.

I understand the purpose of this study is to learn more about challenges facing immigrant and refugee women while accessing antenatal care in public health institutions in Durban, South Africa. I have been given an opportunity to answer questions about the study and have had answers to my satisfaction.

I declare that my participation in this study is entirely voluntary and that I may withdraw at any time.

I have been informed that there are no risk that may occurs to me as a result of study-related procedures.

If I have any further questions/concerns or queries related to the study I understand that I may contact the researcher at 07244040492.

If I have any questions or concerns about my rights as a study participant, or if I am concerned about an aspect of the study or the researchers then I may contact:
BIOMEDICAL RESEARCH ETHICS ADMINISTRATION

Research Office, Westville Campus, Govan Mbeki Building, Private Bag X 54001, Durban
KwaZulu-Natal, SOUTH AFRICA

Tel: 27 31 2604769 - Fax: 27 31 2604609

Email: BREC@ukzn.ac.za

____________________  ____________________
Signature of Participant               Date

____________________  ____________________
Signature of Witness                   Date
(Where applicable)

____________________  ____________________
Signature of Translator               Date
(Where applicable)
Appendix 7: Guide for In-depth Interviews with Health Care Workers

Thank you for taking time to participate in this research study and I would like to hear your opinion today. I would like to ask you few questions. Please remember there are no wrong or right answers to these questions. We are interested in all your opinions and thoughts.

List all antenatal activities that you are involved in:

Do refugees/immigrants attend antenatal care services? Describe challenges associated with you providing antenatal care to this subgroup of women.

Note: Refugees/immigrants are women who were not born in South Africa and intend living in South Africa temporarily or permanently. These women have relocated from their “home” countries because of political or socio-economic reasons.

Describe any difficulties these clients may have in receiving antenatal care at your clinic?

Do you find it difficult to communicate with these clients? How do you address this difficulty?

How do feel about male partners accompanying refugee antenatal clients to the clinic?

Are you aware of any traditional beliefs of refugees/immigrants that affect their health, and how do you attend to the client’s needs.

Do you think that refugees receive adequate antenatal care at your clinic? How would you compare the services you provide to refugees with services you provide to the local antenatal attendees? What would you suggest to improve your services?
Appendix 8: Information et consentement pour les femmes

Accord de la date de la version: VI.O daté du 16 octobre 2012

Titre de l’étude: Défis auxquels les immigrées et réfugiées sont confrontées lors de l’accès aux soins prénatals dans les instituts médicaux publics de Durban, Afrique du Sud (étude DAC)

Chercheuse principale: Mme Edith Tuyisenge Kibiribiri

Superviseur: Prof. D. Moodley

Fiche d’Information et de Consentement pour Participer à l’Etude

Date: __________________________

Bonjour,

Mon nom est Edith de l’Université du KwaZulu Natal, Département de Gynécologie-Obstétrique, mon courriel est 205520506@ukzn.ac.za, et mon numéro de portable est le04092.

Vous êtes invitée à participer à l’étude suivante: Défis auxquels les immigrées sont confrontées lors de l’accès aux soins prénatals dans les instituts médicaux publics de Durban, Afrique du Sud (étude DAC). Le but de cette étude est d’apprendre à mieux connaitre les défis auxquels les immigrées et réfugiées sont confrontées lors de l’accès aux soins prénatals dans les instituts médicaux publics de Durban, Afrique du Sud. Nous vous demandons de participer à cette étude car vous êtes une cliente qui reçoit des soins à l’Hôpital d’Addington, les cliniques Sydenham, Overport, Clare Estate et Lancers.

L’étude devrait comporter 216 femmes qui reçoivent des soins dans ces 4 instituts. Les cinquante 1ère (50) femmes, dans chacun des 4 instituts médicaux, qui répondront aux critères d’égibilité et qui signeront la Fiche d’Information et de Consentement participeront donc à l’évaluation quantitative (Questionnaires Structurés – Annexe 3). 4 femmes supplémentaires par clinique, qui sont des Immigrées/réfugiées et qui se portent volontaire pour participer à l’évaluation qualitative (entretien approfondi) seront sélectionnées au hasard et devront signer une Fiche d’Information et de Consentement. Votre participation à cette étude se limitera à un entretien qui durera environ 30-45 minutes. Votre dossier de maternité sera consulté depuis l’Hôpital d’Addington. L’étude est financée par le Conseil de la Recherche Médicale.
Il se peut que la participation à cette étude ne vous apporte rien. Mais sachez que les informations que vous allez partager avec nous aujourd’hui seront utilisées de sorte à s’assurer que les défis auxquels les immigrées et réfugiées sont confrontés lors de l’accès aux soins prénataux dans les instituts médicaux publics de Durban, Afrique du Sud, sont abordés efficacement.

Cette étude a été examinée et approuvée d’un point de vue éthique par le Comité de Déontologie de la recherche Biomédicale de l’UKZN le 15 octobre 2012 sous le numéro de référence suivant: BE237/11

En cas de problème ou de souci/questions, veuillez contacter le chercheur au 0724404092 ou le Comité de Déontologie de la Recherche Biomédicale de l’UKZN à l’adresse suivante:

BIOMEDICAL RESEARCH ETHICS ADMINISTRATION

Research Office, Westville Campus

Govan Mbeki Building, Private Bag X 54001, Durban, 4000, KwaZulu-Natal, SOUTH AFRICA

Tél: 27 31 2604769 - Fax: 27 31 2604609

Courriel: BREC@ukzn.ac.za

Vous pouvez vous retirer de cette étude à n’importe quel moment, sans risque pour les soins ou autres bénéfices que vous recevez de la clinique.

Vous recevrez des rafraîchissements lors de cette étude. La participation à cette étude est gratuite.

Toutes les mesures nécessaires seront prises pour protéger votre identité lors de cette étude. Votre identité n’apparaîtra sur aucun rapport ou publication concernant cette étude ou ces résultats. Pour les 4 femmes par clinique, les cassettes audio seront copiées dans des fichiers informatiques protégés. Tous les ordinateurs seront dans des bureaux fermant à clé et les fichiers informatiques portables seront gardés dans des armoires fermant à clé. Aucune information personnelle n’apparaîtra dans aucune transcription.

ACCORD

Je soussigné ___________________ déclare avoir été informé par Edith sur l’étude intitulée.

Je comprend que le but de cette étude est d’en savoir plus sur les défis auxquels les immigrées et réfugiées sont confrontés lors de l’accès aux soins prénataux dans les instituts médicaux publics de Durban, Afrique du Sud. On m’a demandé de participer à l’étude car je
suis une cliente qui reçois reçu des soins médicaux à l’Hôpital d’Addington, les cliniques Sydenham, Overport et Lancers.

On m’a donné l’opportunité de poser des questions concernant l’étude, et je suis satisfaite des réponses obtenues.

Je déclare que ma participation à cette étude est entièrement volontaire et que je peux me désister à n’importe quel moment sans que mes traitements ou soins n’en soient affectés.

On m’a informé que ma participation à cette étude ne me fais courir aucun risque physique.

Si j’ai des questions/soucis concernant l’étude, je sais que je peux contacter la chercheuse au 07244044092.

Si j’ai des questions ou des soucis concernant mes droits en tant que participante à l’étude, ou si je suis inquiète par rapport à un aspect de l’étude ou des chercheurs, je pourrais contacter:

**BIOMEDICAL RESEARCH ETHICS ADMINISTRATION**

*Research Office, Westville Campus, Govan Mbeki Building, Private Bag X 54001, Durban*

KwaZulu-Natal, SOUTH AFRICA

Tél: 27 31 2604769 - Fax: 27 31 2604609

Courriel: [BREC@ukzn.ac.za](mailto:BREC@ukzn.ac.za)

_________________   ___________________
Signature de la Participante          Date

_________________   ___________________
Signature du Témoin                Date

(Au cas échéant)

_________________   ___________________
Signature de Traducteur          Date

(Au cas échéant)
Appendix 9: I-UKZN BIOMEDICAL RESEARCH ETHICS COMMITTEE

ISICELO SOKUTHOLA IMVUME YE-ETHICS

Ngayocwaningo nabahlanganyeli abangabantu (Ezokwelashwa kwabantu)

(Appendix: 9) ISIJOBELELO 2: IFOMU LEMVUME LABESIFAZANE

Consent from version date: VLO lomhla ka-16 Oktobha, 2012

Isihloko socwaningo: IziNgqinamba ezikhungethe abesifazane bokufika kuleli nababalekele izimpi ngenkathi benakekelwa bekhulelewe ezikhungweni zompakhathi zezempilo eThekwini, eNingizimu Afrika (Ucwaningo lwe-DAC)

Umcwaningi onkhulu: Nkk. Edith Tuyisenge Kibiribiri

Osuphavayiza: Solwazi D. Moodley

Ikhasi nemvume enolwazi yokuhlanganyela ocwaningweni

Usuku: __________________________

Sawubona,

Igama lami ngu-Edith ovela eYunivesithi yaKwaZulu-Natal, uMnyango wezokuBelethisa neziFo zabesiFazane, i-imyeli yami ithi 205520506@ukzn.ac.za, kanti inombolo yami yamakhalekhukhwini ithi 0724404092.


Kulindeleke ukuthi ucwaningo lubhalise abesifazane abangama-216 abathola usizo lokunakekelwa ngokwezempilo kulezi zikhungo ezi-4. Ngakho-ke abesifazane bokuqala kwabangamashumi amahlanu (50) entholampilo ngamunye kweyi-4 abahlangabezanayo


Lolu cwaningo lubuyekeziwe ngokwemigomo lwagunyazwa yi-UKZN Biomedical research Ethics Committee mhla ziyi-15 kuMfumfu 2012 ngale nombolo yereferensi: BE237/11

Uma kwenzeka uba nezinkinga noma okukuhazathayo/ imibuzo ungathintana nomcwaningi lapha 0724404092 noma i- UKZN Biomedical Research Ethics Committee, imininingwane yile elandelayo:

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Research Office, Westville Campus

Govan Mbeki Building, Private Bag X 54001, Durban, 4000, KwaZulu-Natal, SOUTH AFRICA

Ucingo: 27 31 2604769 - Ifeksi: 27 31 2604609

I-imeyili: BREC@ukzn.ac.za

Ungahoxa noma nini kulolu cwaningo futhi lokhu ngeke kukuthikameze ekwelashweni noma kunoma yimiphi imihlomolo oyitholayo entholampilo.

Uzothola okokubamba umoya ngokubamba iqhaza kulolu cwaningo. Inani lokuba yingxenye yalolu cwaningo libandakanya isikhathi sakho kuphela.

IMVUME

Mina _________________ ngazisiwe ngocwaningo olunesihloko esithi IziNgqinamba ezikhungethe abesifazane bokufika kuleli nababalekele izimpi ngenkathi bethola usizo bekhulelewe ezikhungweni zomphakathi zezempilo eThekwini, eNingizimu Afrika (Ucwaningo lwe-Iwe-DAC) olwenziwa ngu-Edith.

Ngiyaqonda ukuthi inhloso yalolu cwaningo wukufunda kabanzi ngezingqinamba ezikhungethe abesifazane bokufika kuleli kanye nababalekele izimpi ngenkathi bethola usizo bekhulelewe ezikhungweni zomphakathi zezempilo eThekwini, eNingizimu Afrika. Ngiceliwe ukuba ngibe yingxenye yocwaningo ngoba ngiyikhasimende elithola/elathola usizo lokunakekelwa ngokwezempilo eAddington Hospital, eSydenham, eOverport, Clare Estate and Lancers Clinics.

Ngiye nganikezwa ithuba lokubuza imibuzo ngocwaningo futhi imibuzo yami iphendulwe ngendlela enganelisayo.

Ngiyavuma ukuthi ukuhlwanganyela kwami kulolu cwaningo kungukuzithandela kwami futhi ngingayeka noma nini futhi lokhu ngeke kube nomthelela ekwelashweni kwami noma kokunye ukunakekelwa kwami engivame ukuba nelungelo lokukuthola.

Ngazisiwe ukuthi ngeke kube nokulima okuzokwenzeka kimi ngenxa yezinqubo eziphathelene nocwaningo.

Uma nginonoma yimiphi eminye imibuzo/ukukhathazeka noma imibuzo ephathelene nocwaningo ngiyaqonda ukuthi ngingathinta umcwaningi ku-07244044092.

Uma nginemibuzo noma ukukhathazeka mayelana namalungelo ami njengomhlanganyeli, noma uma nginokukhathazeka mayelana nengxenye yalolu cwaningo noma ngabadacwaningi ngingathintana ne-:

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Research Office, Westville Campus, Govan Mbeki Building, Private Bag X 54001, Durban

KwaZulu-Natal, SOUTH AFRICA

Ucingo: 27 31 2604769 - Ifeksi: 27 31 2604609

I-imeyili: BREC@ukzn.ac.za

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Appendix 10: Copy of Antenatal card
ACTIVE MANAGEMENT OF THE THIRD STAGE OF LABOUR

The active method of delivery of the placenta should always be used, to reduce the risk of excessive postpartum bleeding.

There are three key steps:
1. Administration of oxytocin
2. Clamping and cutting of the umbilical cord
3. Controlled traction of the cord until the placenta is delivered

Procedure:
- Immediately after delivery of the infant, ensure by abdominal palpation that there is no previously undiagnosed second twin.
- If there is no second twin, give 10 international units of oxytocin intramuscularly.
- Clamp and divide the cord. Keep a clamp on the cord close to the vulva to assist with tension.
- Put the left hand on the mother’s abdomen over the uterus and apply tension to the cord, but do not pull on the cord.
- Do not massage or squeeze the uterus, but await a uterine contraction.
- When the uterus is felt to contract, keep steady tension on the umbilical cord with the right hand, while pushing the uterus upwards with the left hand.
- Deliver the placenta by applying continuous gentle traction on the cord while supporting the uterus with the left hand.
- Examine the placenta for completeness and any abnormalities.