

# THE FACTORS DETERMINING THE UNDER-UTILISATION OF MATERNITY OBSTETRIC UNITS WITHIN THE SEDIBENG DISTRICT

by

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## DECLARATION

I declare that **THE FACTORS DETERMINING THE UNDER-UTILISATION OF MATERNITY OBSTETRIC UNITS WITHIN THE SEDIBENG DISTRICT** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references and that this work has not been submitted before for any other degree at any other institution.

SIGNATURE

(Raisibe Olgar Mthethwa)

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## ABSTRACT

This descriptive quantitative survey attempted to identify reasons why pregnant women who have been screened as low-risk pregnancies failed to utilise MOUs for the delivery of their babies. The objective of the study was to investigate the factors determining the under-utilisation of Sharpville MOU in Emfuleni sub-district.

The research population comprised all postnatal mothers residing in Sharpeville who delivered their babies at hospital and who were screened as low-risk pregnancies; the accessible convenience sample consisted of all postnatal mothers who attended Sharpeville Clinic for their six weeks follow-up postnatal care from 5 December 2005 till 6 January 2006 and who were willing to complete questionnaires.

Data was collected by means of a structured questionnaire and analysed using the SPSS computer program.

Major factors drawn from the study that influence their decision on place of delivery were nurses' attitudes, lack of doctors, transport, privacy and resources.

## KEY TERMS

High-risk pregnancy, low-risk pregnancy, maternity obstetric units, quality-nursing care, under-utilisation.

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## *Dedication*

*I dedicate this dissertation to:*

- *My husband, Maxwell Mthethwa, for his understanding and support.*
- *My daughter, Kagiso Nomalungelo Precious who had to live without her mother for such a long time.*
- *Emfuleni sub-district management for allowing me to undertake this study in their community.*
- *The women of Sharpeville area who took part in this study.*

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## List of abbreviations

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ANC	African National Congress
AIDS	Acquired Immune Deficiency Syndrome
BBA	Birth Before Arrival
CHC	Community Health Centre
CHCW	Community Health Care Workers
CPD	Cephalic Pelvic Disproportion
CPMNSR	Cape Peninsula Maternity and Neonatal Service Region
CPS	Community Perinatal Service
C/S	Caesarean Section
DHIS	District Health Information System
DHS	District Health System
EDD	Estimated Date of Delivery
HBM	Health Belief Model
HIV	Human Immune Deficiency Virus
ICM	International Confederation of Midwives
LNMP	Last Normal Menstrual Period
MCH	Mother and Child Health
MCHW	Mother Child Women's Health
MMR	Maternal Mortality Rate
MOHCW	Ministry of Health and Child Welfare of South Africa
MOU	Midwifery Obstetric Unit
NCCEMD	National Committee for Confidential Enquiries into Maternal Deaths
NGO	Non-government Organisation
NHP	National Health Plan
NHS	National Health System
PEP	Perinatal Education Programme
PHAC	Primary Health Advisory Council
PHC	Primary Health Care
PMNSR	Peninsula Maternity and Neonatal Service Region
PMTCT	Prevention of Mother-to-Child Transmission
PNC	Postnatal Care
PNS	Peninsula Neonatal Services
RDP	Reconstruction and Development Program
RH	Reproductive Health
SA	South Africa
SANC	South African Nursing Council
SPSS	Statistical Package for Social Sciences
TB	Tuberculosis
UK	United Kingdom
UNICEF	United Nations Children's Fund
WHO	World Health Organization
WHP	Women's Health Project

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# **CHAPTER 1**

## **Orientation to the study**

### **1.1 INTRODUCTION**

This chapter is an introduction to the study. It outlines the study, describes the background to the problem, formulates the problem statement and discusses the purpose and significance of the study.

The research objectives are stated and the research design and methodology, population, sample, setting, data collection and analysis, validity and reliability as well as ethical issues pertaining to the study are discussed.

According to Pretorius and Greeff (2004:73), "African women of reproductive age have the highest death risk from maternal causes of any women in the world. The life time chance of maternal death is 1 in 21 in Africa as compared to 1 in 54 in Asia, which ranks second." According to Mudokwenyu-Rawdon (2001:1), the African continent "accounts for 30% of all maternal deaths in the world as against 18% of births".

### **1.2 BACKGROUND TO THE STUDY**

Reproductive health services are among the most essential components of a comprehensive health approach targeted to reduce maternal and child mortality. The concept of reproductive health is centred on human needs and development. The World Health Organization (WHO 2000:23) defines reproductive health as "a state of complete physical, mental, and social well being and not merely the absence of disease or infirmity in all matters relating to the reproductive system". Complicated relationships and slowly evolving events of phenomena produce gaps in understanding the full scope of issues impacting on reproductive health (Mudokwenyu-Rawdon 2001:1). The present study was initiated by the realisation that such an apparent gap in knowledge existed in explaining the observed disparity between the number of pregnant women who attended antenatal clinics and screened as low-risk pregnancies in Emfuleni sub-district clinics and those who delivered their babies at midwifery obstetric units (MOUs) as

opposed to those who delivered their babies at hospitals in spite of attending and receiving antenatal care. Although 91% of pregnant women in Gauteng Province attended antenatal care clinics, deliveries at MOUs ranged from 26% to 67% in different districts throughout the province (Department of Health [DOH] 2002-2004:5). A survey in South Africa (SA) in 1995 found that three in every 100 Africans had a family member who died during pregnancy or childbirth (DOH 2002-2004:5).

In SA, the Ministry of Health Care and Welfare (MOHCW) endorsed the definition of reproductive health (RH) from the 1994 International Conference on Population and Development in Cairo and reaffirmed at the 1995 Fourth World Conference on Women in Beijing, China (Mudokwenyu-Rawdon 2001:2).

The Department of Health (2003:102) described *reproductive health services* as “the constellation of services aimed at fostering sexual and reproductive health”. These include preventive and promotive services such as information, education, communication and counselling on sexually transmitted infections including HIV/AIDS, contraception, prenatal and postnatal care.

Women's health is an important contributing factor to the overall health of any nation (WHO 2000:24). In an effort to ensure access to health care services, the South African Government recommended building MOUs in provincial districts at primary level to ensure that women receive quality maternal care services at the primary health care (PHC) level close to where they live (WHO 2000:11). According to the Department of Health (2002-2004:5), between 1999 and 2001, 3 406 maternal deaths were reported in the SA and 669 maternal deaths recorded in Gauteng. In the Sedibeng District, there were 220 per 100 000 live births (DHIS Report 2001:5).

Pattinson and Moodley (2002:31) found that the primary obstetric causes of deaths were pregnancy-related hypertension, sepsis, haemorrhage and complications of abortion. These major causes of maternal mortalities could be better handled if the women's choice of delivery place were appropriate and adhered to, decreasing the number of normal hospital births, so that hospitals can concentrate on patients who are at high risk.

In SA, a national health system was developed for the following purposes (Van Rensburg 2004:267):

- To render a health service to the largest part of the population in the most economical way, taking into account the availability of personnel, funds and facilities.
- To render community services within an easily accessible distance of residential areas.
- To keep people healthy and to improve the standard of health of the community (the services must therefore be preventive and promotive).
- To encourage self-help; the community must accept responsibility for its own health.

The National Health System is governed by a PHC approach. The tenets of the maternal and child health policy include (Van Rensburg 2004:267):

- Reduction in maternal mortality.
- Mothers and children should be treated with dignity and respect; and sensitivity to their cultural and social context promoted.
- Promotion of intersectoral collaboration in all areas of development; in particular, education, welfare, nutritional law, with health services playing a coordinating role in relevant areas.
- Strengthening health promotion activities, including health education programmes.
- Promoting universal literacy among women.
- Facilitation of the health services activities of local, provincial and national levels, the private sector and non-governmental organisations (NGOs), for the benefit of mother and child health services (MCH).
- Promotion and encouragement of essential maternal and child health research by organisations and institutions.
- Promotion of family planning.

The national health plan (applied in obstetrical services) is structured on the following levels (DOH 2002-2004:12-13):

## **Clinic**

This is a unit that functions only on weekdays during working hours. Antenatal care is one of a number of activities in the clinic.

### *Functions*

- Antenatal care for low and intermediate risk women is provided and routine blood testing is also provided.
- Postnatal checks, which include contraception, are one of the services rendered.
- Problem cases are referred to the hospital.
- Emergencies can also be managed at clinic level.

## **Community health centre**

This is a 24-hour comprehensive obstetric unit run by midwives who are advanced midwives. When standing alone as a midwifery service, it might be called a midwife obstetric unit (MOU) (the Sedibeng Clinic falls within this sector).

### *Functions*

- Antenatal care for low and intermediate risk women. A site routine blood testing is also performed at this health centre.
- Common problems of pregnancy are also treated.
- A 24-hour labour and delivery service for low-risk women is rendered.
- Postnatal check-ups as well as contraceptive services.
- Problem cases are referred to a hospital.
- Emergencies are managed at this clinic.
- Vacuum extraction.

## **Level 1: District level**

District level consists of community hospitals, situated in the community. All community level services, both public and private, fall under the district health authority. General practitioners mainly render all the services at these hospitals. Usually there is a secondary hospital to which patients are referred from the district hospital at which more specialised services are available; managed by the Provincial Department of Health. Specialists from provincial hospitals visit them regularly (Van Rensburg 2004:268).

### *Functions*

- Antenatal care for high-risk women, which also includes routine blood testing.
- Antenatal ultrasound service.
- Treatment of pregnancy problems, including admission to hospital.
- Twenty-four hour labour and delivery service for intermediate and high-risk women.
- Vacuum extraction, caesarean section and manual removal of the placenta.
- Regional and general anaesthesia.
- Blood transfusion.
- Essential special investigations.
- Postnatal care including complications and postoperative care.
- Postpartum sterilisation.
- Referral centre for clinics and community health centres in the district.
- Referral of complicated problems to level 2 or level 3 hospitals.
- Counselling and support.
- Genetic screening and counselling services.

## **Level 2: Regional level**

This may be called a regional hospital, as it is the base hospital for a health region, which includes a number of districts.

### *Functions*

- All level 1 functions.
- Management of severely ill pregnant women.
- Specialist supervision of the care of pregnant women.
- Prenatal diagnosis; for example, genetic amniocentesis.
- Multidisciplinary care: other specialties, physiotherapy, etc.
- Referral centre for level 1 hospitals in the region.
- Supervision and support for level 1 hospitals.

### **Level 3: Central or tertiary level**

This may be called a central or tertiary hospital.

These hospitals provide specialist and super specialist (tertiary) care managed by the Provincial Department of Health. The hospitals should also:

- support midwives in primary health care through efficient referral and consultation systems
- conduct and support research
- play a role in both basic and continuing education and training of midwives and other categories of health care workers (Van Rensburg 2004:268)

### *Functions*

- All level 1 and level 2 functions.
- Specialist combined clinics; for example, cardiac and diabetic pregnancy clinics.
- Management of extremely ill or difficult obstetric patients.
- Supervision and support for level 1 and level 2 hospitals.
- Responsibility for policy and protocols in the regions served.

### **1.2.1 The health system structure in Sedibeng district**

The study was conducted in the Sedibeng district in Gauteng Province. The structure of Sedibeng district originated from Gauteng Province in region B. The district is divided into three sub-districts, namely Emfuleni (where the study was conducted), Lesedi and Midvaal

The district has three regional hospitals, two of them are at level 1 (Kopanong and Heidelberg hospitals), and one at level 2 (Sebokeng Hospital), which is a referral centre for the community under study. Clinics, MOU services, community health centres (CHCs) and two level 1 hospitals refer their clients to Sebokeng Hospital as level 2 hospital (Regional Hospital).

Sedibeng district has four CHCs, all in Emfuleni sub-district, namely Sharpeville, where the context of the study was selected, Boipatong, Johan Heyns and Levai Mbatha. The Johan Heyns and Levai Mbatha CHCs are run by Gauteng Province. The services include 24-hour MOU services rendered by provincial staff. In the Sharpeville and Boipatong CHCs, the local authority staff render PHC services and provincial staff the 24-hour MOU services.

In Sedibeng district, 10 mobile clinics and 33 fixed clinics belong to the local authority municipality and only 7 clinics belong to the province. The study took place in Emfuleni sub-district at Sharpeville CHC (DHIS Report 2001:2)

#### **1.2.1.1 Population of Sedibeng district**

According to the District Health Information System Report (2006:1), 83% of the population of Sedibeng is concentrated in Emfuleni, containing the highest concentration of urban areas. Therefore Emfuleni sub-district, where the study was conducted, has a population of 762 210 of which 79% are adults, 45% are females, 34% are males and only 21% are children. Emfuleni sub-district is a semi-urban area, surrounded by rural areas. It is further divided into East and West areas. It also has ten informal settlements with growing Reconstruction and Development Programme (RDP) houses in Muvhango with 18 extensions and Tshepiso in Sharpeville, Johan Deo,

Boitumelo, Kanana, Mpho and Mphonyana and Evaton West areas. Ninety percent of people in this sub-district are Blacks.

The age distribution in Emfuleni is as follows (DHIS Report 2006:1):

- Children below one year: 14 020; below 5 years: 68 587.
- Females between 15 and 29: 271 782, and males: 210 400.
- Females between 30 to 50 are 135 793, and males 149 477.
- Adults above 45 years of age: 86 639 females and 84198 males.

#### **1.2.1.2 Socio-economic status**

The Sedibeng district has the highest unemployment rate in Gauteng Province, with 106 798 listed as unemployed (34,5% unemployment rate) (DHIS Report 2006:3). Emfuleni sub-district has limited economic resources with a large number of industries closed down. The Sedibeng district has the highest percentage of households with an income of less than R19 200,00 per annum (63-72%) (DHIS Report 2006:3).

#### **1.2.1.3 Educational level**

According to the 2001 census, the literacy level in the Sedibeng district indicated that 3,4% of the population had tertiary education and 38% had an educational level up to primary school or lower (DHIS Report 2006:2)

#### **1.2.1.4 Sanitation**

With regard to water supply in Sedibeng, 99% of households in Emfuleni sub-district have access to water piped and 1% are without access to portable water (DHIS Report 2006:3).

Of the households in the Emfuleni sub-districts, 86,15% have access to flush toilets; 11,79% have pit and bucket toilets, and 2,06% have no sanitation services (DHIS Report 2006:3).



Eighty-six percent of households in the Emfuleni sub-district use electricity as their main source of energy for lighting (DHIS Report 2006:4).

#### **1.2.1.5 Transport**

With regard to roads and transport in Sedibeng district, 78% of the community of Emfuleni sub-district rely on public transport during the day such as buses, taxis, and trains. This type of transport is not available after hours, especially from 19:00. Ambulances are the only means of transport for maternity cases after hours from home to MOUs or to hospitals. Only a few roads are tarred. Therefore, in townships like the Sharpeville area, many streets are not convenient for a car or any transport. This negatively affects access to ambulance services in time (DHIS Report 2006:4).

According to South African Police Service (SAPS) report on Sedibeng District Council Municipality (2004:8), Sharpeville was one of the areas in Sedibeng with a 73% incidence of crime; hence taxis in this area do not operate after hours. This has a negative impact on transport for maternity cases.

#### **1.2.2 Health care services in South Africa prior to 1994**

Through its apartheid policies, the previous South African government developed a health care system sustained by the promulgation of legislation based on race and the creation of institutions and statutory bodies for the control of the health care professions and facilities. These institutions and facilities were built and managed specifically to sustain racial segregation and discrimination in health care (ANC 1994b:7). These policies consequently severely hampered health care services, rendering them inefficient, fragmented, ineffective, uncoordinated and under-resourced. Because of these problems, maternity health care services to pregnant women were not always up to standard (Adar 2000:2; ANC 1994b:9; Health Systems Trust Update 1996:9).

The fragmentation of Health Services in SA resulted in vast discrepancies. Maternity obstetric services in the Vaal Region prior to 1994 were provided only at hospitals. The majority of the population utilising the public facilities were Blacks – the reason given was that it was affordable. Babies used to be delivered at home, on public transport

and on the way to hospital. The distance from the hospital to the residential area is 25 kilometres. This gave rise to a high incidence of perinatal and postnatal mortality.

In the Sedibeng district, Sebokeng Hospital was the only public hospital rendering maternity obstetric services to about 337 743 females between 15 and 39 years old within a catchment population of 762 210 (DHIS Report 2006:1).

The Sharpeville community was deprived of maternity obstetric services. The women were forced to deliver at a hospital, situated at a distance of approximately 25 kilometres from their homes. The clinics available to the community were governed/managed by the local municipality. These clinics only rendered TB, family planning, well baby immunisation and minor ailments services. The clinics were too small and did not accommodate antenatal and postnatal services. The PHC package had not yet been implemented.

### **1.2.3 Health care services in South Africa post-1994**

The WHO and the United Nations Children's Fund (UNICEF) (WHO & UNICEF1990:25) declared "Health for all by the year 2000". This goal could not be reached in SA due to the fragmentation of health care services. After 1994, the Department of Health in SA was faced with the challenge to form a single national health system based on a PHC approach, adopted in general by the WHO member countries in 1978 at the Alma Ata Conference. At that time, reproductive health services were the most important component of a comprehensive health approach targeted to reduce maternal and child mortality, where maternity care was needed as a priority for most community programmes (Fraser, Cooper & Nolte 2006:8). In accordance with the 1994 Constitution, the transformation of certain responsibilities for health services to provincial and municipal level was proposed. Decentralisation, in which decision-making power is transferred to lower levels, was seen as a mechanism that would allow the unification of the previously fragmented services, redress historical inequities, improve efficiency and promote accountability. The establishment of a district health system to effect the decentralised management of health services was adopted. District health systems were seen as the cornerstone for strengthening PHC services. The guiding principle for the development of the district health system was to overcome fragmentation and to provide integrated comprehensive health care services that are

equitable, accessible, efficient and effective. It was expected that this would be achieved through decentralisation of authority to the district level where community participation would play an integral role in decision-making (DOH 1997:5).

Since the population of the community under study is predominantly young, improving the health of women and children was identified as a health priority. Within this “new” health system, the government determined a programme to be put in place in order to improve maternal health through access to quality antenatal care, delivery, postnatal and reproductive services for all women (ANC 1994a:46).

In the national strategy for primary health care in South Africa, the provision of MCH includes the following objectives (DOH 1997:107): To promote:

- safe pregnancy, labour, pre- and post-natal care of women of child-bearing age
- safe contraception, child spacing, and fertility counselling for men, women and adolescents

According to Mashazi (2000:2), women are highly vulnerable during pregnancy and childbirth. They are particularly vulnerable in Black townships with a high proliferation of informal settlements. These areas are characterised by poor sanitation, chronic malnutrition, multiple pregnancies, with minimal child spacing and long-term breastfeeding. Such characteristics exist most acutely, in fact, where one is unlikely to find centrally situated maternity services because of limited health resources, such as a shortage of staff and facilities to provide a full maternity service, or an MOU.

The community under study (Sedibeng) did not previously have a maternity unit. This gave rise to a high incidence of perinatal and postnatal mortality during 1998 (DOH 2000:3). Out of 6 450 births, 277 were stillbirths, 6 173 live births, 345 early neonatal deaths and 27 maternal deaths (Sedibeng District MCH Annual Report 2000:5).

The situation caused concern and alarm to the National Department of Health, as this was also happening in other areas. The concern with the guidelines of the new National Health Plan (NHP) led to the introduction of a district health system policy document. This policy was introduced with the aim of addressing the imbalance and social injustices created by the previous government (ANC 1994a:4). Consequently, midwifery

obstetrical units were established in a significant number of needy areas. The area under study was among those who received accessible, available and affordable maternity services to improve the health of women and children (ANC 1994b:6).

However, even when centrally organised maternity care is available to childbearing women, some (including members of the community under study) still prefer to seek assistance from the traditional sector or a provincial hospital far from where they stay.

#### **1.2.4 The National Health Policy**

The introduction of the National Health Policy (NHP) brought about changes that necessitated the availability of MOUs in the previously disadvantaged communities. The community under study was one of the beneficiaries of the proposals (ANC 1994b:100). Maternity care forms an integral component of PHC. Within SA, the maternal and child health programme is allocated in general development policies, which are focused on meeting the basic needs of rural and urban communities, maximising human resources, potentially enlarging the economy and spreading its benefits, and democratising society and its institutions. To comply with these principles, the introduction of free health care services for pregnant women and children under the age of six years was introduced by the Minister of Health in July 1994 (ANC 1994b:4; Van Rensburg 2004:115).

A national strategy for maternity health care is included in the maternity care guidelines formulated by the National Department of Health. This provides for community participation, community empowerment to improve maternal health and the establishment of MOUs.

Legislation and policies were put in place to support the process of free maternal care, termination of unwanted pregnancy services and the protection of women. Active efforts were and must be made to improve the status of women in society, particularly in reproductive choice and education regarding choice of delivery place (DOH 2000:5).

In the RSA women and children receive priority health care. Pregnant women receive free health services up to six weeks' post-partum as well as children under the age of six years (ANC 1994b:100). In terms of this policy, "maternity cases, antenatal care,

deliveries and postnatal care and all children under six years will not be charged any fees” (DOH 2000:4). The ANC (1994b:46) set a target that 95% of pregnant women should receive antenatal care and that 75% of deliveries must be supervised and carried out under hygienic conditions. Furthermore, by the year 1999, either a nurse or a doctor should supervise 90% of deliveries.

According to the Sedibeng District MCH Annual Report (2000:2), 13 529 pregnant women attended antenatal clinics and were screened as low-risk pregnancies at clinics. Only 4 323 out of 13 529 pregnant women delivered at MOUs and 9 206 delivered at hospitals as self-referrals. This implies that 70% of the set goals were not reached.

### **1.2.5 Establishment of midwifery obstetric units (MOUs) in SA**

According to Searle (1965:100), midwifery practice in SA was initially a domiciliary service rendered in the nineteenth century at people’s homes and in the missionary ministries. It developed as state district midwifery services and as a “private practitioners” service. Maternity beds were only provided in general hospitals. In the middle of the nineteenth century only a few “emergency” midwifery cases were accommodated at hospitals.

MOU refers to a unit that caters for health needs of pregnant women during labour and post delivery of their newborn baby at primary health care centres (DOH 1995:3). Only pregnant women who are screened as low-risk pregnancies can deliver their babies at an MOU.

Nolte (in Fraser et al 2006:8) states that the MOUs in the RSA were initially established in 1980 when an organisation called Peninsula Maternity and Neonatal Services in Cape Town came into operation. The aim was to provide MOU services to the “low-risk” pregnant mothers residing in the townships within their reach. The units were staffed entirely by trained midwives, who assumed primary responsibility for antenatal, intra-partum and post-partum care. Medical care was easily available by means of the Obstetrical Flying Squad or ambulance service of the referral hospital.

After the success of the operation of an MOU in Cape Town, it was decided to extend this service to other provinces to relieve tertiary hospitals of the heavy load of uncomplicated deliveries.

In 1997, MOUs were opened in all nine provinces. Midwives allocated to those units were highly skilled and, in many instances, had completed an Advanced Midwifery course. The majority of staff, however, was re-deployed from academic hospitals (DOH 1995:7).

### **1.2.6 Introduction of MOUs in Gauteng Province**

The MOUs in Gauteng Province were introduced in five districts. The aim was to provide maternity health care services to pregnant women who were screened as low-risk pregnancies at PHC level within their reach and to refer those women who were screened as high-risk pregnancies to a hospital for further management and delivery (DOH 1995:3).

The MOU was established inside an existing local authority health centre, which offered ante- and postnatal, curative, immunisation and family-planning services under the local authority, while the MOU is under the jurisdiction of the provincial administration (DOH 1995:3).

Decentralisation of normal deliveries was introduced in 1995 through the system of MOU policy in Gauteng Province where the present study was undertaken. The Sharpeville MOU in Sedibeng district opened on 1 April 1996. This MOU structure was erected on the same premises as Sharpeville CHC, which belongs to the local municipality while the MOU belongs to the provincial authority. This could create a problem to pregnant women who were screened as low-risk pregnancies on their choice of place of delivery. The policy was supposed to have made services geographically accessible for all pregnant women in the area, and to absorb a significant patient load from hospital maternity obstetrical units (Nolte in Fraser et al 2006:8).

### **1.2.7 Implementation of Gauteng MOU policy in Sedibeng district**

Sedibeng district, as one of the Gauteng province districts, has two MOUs (Sharpeville and Boipatong), which were erected in 1996. These MOUs were newly built with modernised structures. Sharpeville MOU, the site selected for this study, comprises the following (DOH 1995:2):

- Nurses' station
- Patients' waiting room
- One admission room with two beds
- One room with three beds for progressing of patients
- One room with eight beds for postnatal care and one nursery for receiving babies
- Delivery room with two beds (labour ward)
- Kitchen
- Storeroom
- Toilets
- Ablution block

The staff establishment of Sharpeville MOU consists of 8 professional trained midwives, two are advanced midwifery trained nurses, 4 auxiliary nurses, 2 clerks, four general workers, 2 security officers and one driver. All nursing staff are South-Sotho speaking.

According to the Department of Health (1995:7), pregnant women should travel less than five kilometres to the antenatal, postnatal and delivery services at MOUs. However, even though the services in Emfuleni sub-district of Sedibeng district are centrally organised, maternity care is available and accessible to child-bearing age women, some women still prefer to seek assistance from traditional healers or a provincial hospital (level 3), which is approximately 25 kilometres away from their home. Furthermore, the policy emphasises that the pregnant women who have been screened as low-risk pregnancies in the antenatal clinics should be referred to deliver their babies at MOUs (DOH 1995:7).

### **1.2.7.1 Screening of high-risk clients**

High-risk pregnant women have the right to deliver their babies at hospital, but those screened as low-risk pregnancies are encouraged to deliver their babies at the MOUs closest to their homes (DOH 1995:2). The criteria used to screen high-risk pregnancies include previous caesarean section; previous perinatal death; a parity greater than four; clients aged 15 years or younger; clients aged 35 years or older; primigravida; disorders such as anaemia; clients with a history of medical conditions such as hypertension, diabetes, cardiac disease and epilepsy; current pregnancy diagnosis such as multiple pregnancy, antepartum haemorrhage and breech presentation, and a history of intra-uterine death (DOH 1995:7).

Physical examination findings would include heart rate, over-weight and under-weight. Clients who presented with abnormal findings during abdominal assessment on gestation, position, lie, irregular foetal heart rate, vital signs recorded as follows: pale/blue mucous membranes, colour, blood pressure-above 120/80, blood in urine, +++ protein in urine, urine glucose +++, and signs and symptoms of complications in labour.

### **1.2.7.2 Screening of low-risk clients**

The criteria followed to screen low-risk pregnant clients would include checking of the history of previous pregnancy; medical conditions; previous operations; psychiatric problems; familial and genetic disorders; allergies; use of alcohol, tobacco and other substances, and family and social circumstances.

The general examination should include weight, height, heart rate, colour of the mucous membranes, blood pressure, urine testing, blood tests such as haemoglobin, and check for oedema. Systemic examination could include teeth, gums, breasts, thyroid, heart and lung examination. Clients should also be assessed for regular menstrual history; last normal menstrual period (LNMP); gestational age; weeks; headache; vaginal bleeding, reduced foetal movement, drainage of liquor and abnormal pain as five warning signs of pregnancy complications (DOH 1995:7). In the absence of any abnormal criteria mentioned, the client would be classified as a low-risk pregnancy.



To ensure that quality care is given at the MOU, the WHO's pillars of safe motherhood have been incorporated in practice.

### **1.2.7.3 Pillars of safe motherhood**

The Department of Health adopted the safe motherhood pillars proposed by the WHO (2000). The WHO (2000:23) defines safe motherhood as “the provision of high quality maternal health services during pregnancy, delivery and in the postpartum period to ensure the health of the mother and infant”. This means that women should have access to the information and care they need for safe pregnancy and childbirth. It also implies the reduction of high-risk and unwanted pregnancies and death due to obstetric complications. Women should be able to go through pregnancy and childbirth without danger to themselves and/or their babies.

Antenatal care refers to the care given to an expectant mother, from the time that conception is confirmed until the beginning of labour (Bennett & Brown 2001:207). Antenatal care entails the health care and education provided during pregnancy. It is aimed at ensuring that the mother and foetus are in good health and that problems are recognised early and treated appropriately or referred promptly for further management (WHO 2000:23). The following services are considered “pillars” of safe motherhood (WHO 2000; DOH 2002:5).

- *Choice on contraception* – to ensure that individuals and couples have the information and services to plan the timing, number and spacing of pregnancies.
- *Antenatal care* – the identification of risk factors and early diagnosis to prevent complications where possible and ensure that these are treated and managed appropriately. Health education should also be provided.
- *Clean and safe delivery* – to ensure that all health workers have the knowledge, skills and equipment to perform clean and safe delivery and provide postpartum care to mother and baby.
- *Essential obstetric care* – to ensure that essential care for high-risk pregnancies and complications is made available to all women who need it.
- *Choice on termination of pregnancy services* – to provide women who have unwanted pregnancies with a legal safe and acceptable choice.

#### **1.2.7.4 Antenatal care**

Furthermore, the WHO emphasises that during pregnancy a woman should receive adequate care to ensure the well being of both the baby and the mother is at optimal levels through providing adequate investigations and relevant prophylaxis and treatment. In Gauteng Province, the management of pregnancies and deliveries is protocol driven (Sheratt & Tjallinks in Fraser et al 2006:952).

A low-risk pregnant woman may have her entire pregnancy and delivery managed at the primary level of care within her reach. A high-risk pregnant woman should be referred to hospital for further antenatal care and delivery (DOH 1995:2).

##### **1.2.7.4.1 Antenatal programme for pregnant women with low-risk pregnancies in SA**

According to De Kock and Van der Walt (2004:9-13), pregnant women who screened as low-risk pregnancies should return for follow-up visits according to the set protocol of the antenatal clinic. All pregnant women should pay at least four to six visits to the antenatal care clinics during their pregnancy. The first visit should be prior to 16 weeks of gestation. The initial visit should take place as soon as possible after pregnancy has been confirmed. All pregnant women should be seen at 28, 34 and 40 weeks. If they have not given birth yet, they should be seen at 41 weeks. The well-being and growth of the foetus should be monitored continuously (De Kock & Van der Walt 2004:9-13).

The principle is that pregnant women should be seen at regular intervals and with a specific aim. Should a woman visit the clinic for the first time and no risk factors are detected, the next visit could be scheduled according to the clinic protocol and the woman's individual needs.

##### **1.2.7.5 Gauteng antenatal care protocols regarding antenatal care visits**

The protocols with regard to antenatal care visits are as follows (DOH 1995:3):

- First visit before the end of the fourth month of pregnancy (16 weeks). To screen and treat syphilis, screen for risk factors and medical conditions that can be best

addressed in early pregnancy, initiate prophylaxis where required for specific conditions such as anaemia or malaria and begin to develop the initial birth plan. A urine pregnancy test may be performed at this stage by a midwife if gestation is not clinically obvious, blood is taken for tests, full medical, family and obstetric history are obtained, alcohol and smoking habits also included in the history taking. A careful menstrual history should be obtained with particular reference to regularity of the cycle. The five warning signs of pregnancy complications should be explained to the patient, namely headache, vaginal bleeding, reduced foetal movements, drainage of liquor and abnormal pain. Finally, a risk assessment places the mother and a baby in a risk group, which will determine the further management of the pregnancy. All these assessments must be made at the first visit.

- Second visit: in the sixth or seventh month (24-28 weeks) and third visit during the eighth month (32-36 weeks). The duties of the midwife are to screen the high-risk cases and to further develop the individualised birth plan with the client.
- Fourth visit in the ninth month (36-39). The midwife should identify the foetal position (lie), presentation and update the individualised birth plan.

#### **1.2.7.6 Training of midwives for MOU**

In Gauteng Province MOUs are mainly run by midwives and therefore they must be adequately trained to practise this service according to SANC regulations R425 of 1985, as amended.

- ***Legal aspects affecting the practice of midwifery***

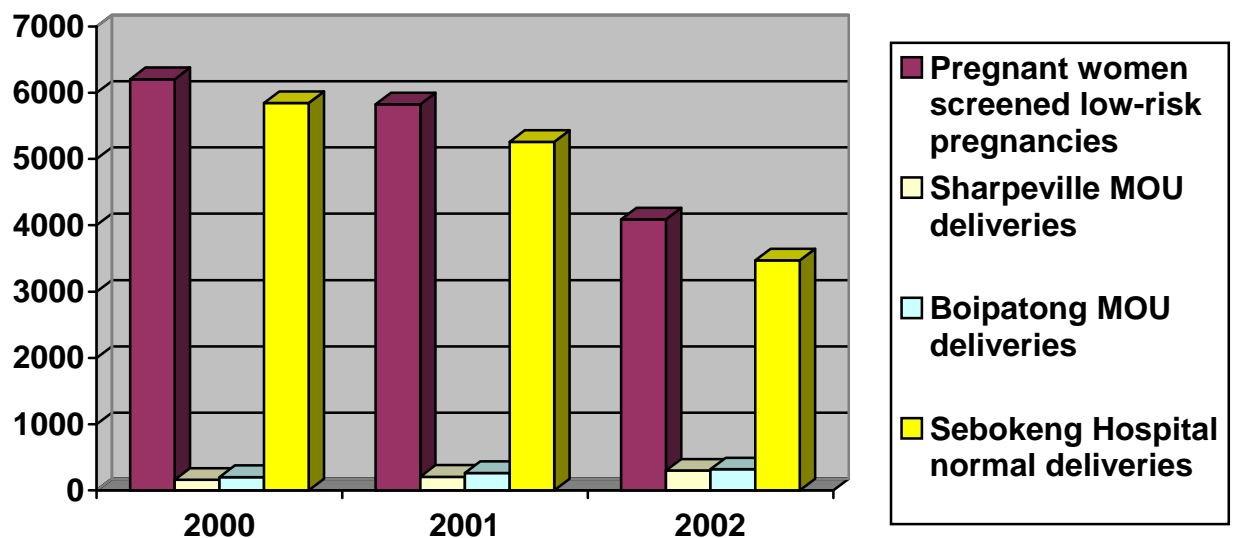
Midwifery is an autonomous, self-regulating profession that bases its practice on scientific principles. Midwifery is practised within a legal framework. In the RSA, the Nursing Act (50 of 1978) as amended, governs the practice of midwifery. In terms of this Act, the registered midwife/accoucheur is an independent practitioner, which means that the midwife is accountable for his/her acts and omissions (R387 of 15 February 1985, as amended). In chapter 2, No 3 of this Regulation, midwives are authorized to carry out acts in respect of diagnosing, treatment, care, prescribing, collaborating,

referral, coordinating and patient advocacy. In midwifery, the scope of practice for midwives clearly defines the course of the daily professional activities of the midwife (Government Notice R2598 of 30 November 1984, as amended).

Midwifery practice is based on a scientific process of assessment, planning, implementation, evaluation, education, counselling, and fulfilling an advocacy role (De Kock & Van der Walt 2004:1-4).

While working as an interviewer at the Sharpeville clinic, the researcher observed that many patients screened as low-risk and scheduled to deliver their babies at the MOU, opted to deliver their babies at a level 3 hospital.

Figure 1.1 shows the number of women who attended antenatal care clinics, screened as low-risk pregnancies and opted for hospital deliveries as compared to MOU delivery.



**Figure 1.1**  
**Number of women who attended antenatal care clinic**

Although the majority of pregnant women (6 206) attended antenatal clinics in the year 2000 in Emfuleni sub-district, only 358 delivered at MOUs. In 2001, 5 828 pregnant women attended antenatal clinics but 568 pregnant women opted for MOU delivery. Out of 4 089 pregnant women who attended antenatal clinics, only 616 delivered their babies at MOUs in the year 2002. These confirmed that pregnant women attended

antenatal care clinics in large numbers but only a few opted for MOU delivery (Sedibeng District Annual Report 2002:4).

**Table 1.1 Disparity between antenatal care clinic attendance and deliveries at Sharpeville MOU in one year (from April 2003 to March 2004)**

Month	April 2003	May 2003	June 2003	July 2003	Aug 2003	Sept 2003	Oct 2003	Nov 2003	Dec 2003	Jan 2004	Feb 2004	March 2004
ANC	219	253	189	207	196	237	284	280	265	275	308	345
Deliveries	62	69	68	71	72	70	66	48	58	61	63	62

**Total antenatal care clinic attendance = 3 058**

**Total deliveries at MOUs = 770**

**Difference = 2 288**

According to the Department of Health (1995:2), each MOU is required to have 150 deliveries or more per month. Therefore in a year, each MOU is required to have 1 800 deliveries or more.

Table 1.1 above indicates that from April 2003 to March 2004 out of 3 058 pregnant women who attended the antenatal clinic and were screened as low-risk pregnancies at Sharpeville CHC, the majority (2 288) opted to deliver their babies at a hospital. Only 770 patients delivered at Sharpeville MOU. There is increasing demand from the national and provincial health authorities to decentralise the health services to patients in the reproductive phase of their lives.

According to the MOU records, 74,8% of pregnant women screened as low-risk, delivered their babies at hospitals, thus leaving the MOU under-utilised. Against this background, the researcher considered it necessary to carry out a study to investigate the factors that influence the under-utilisation of the MOU at Emfuleni sub-district in Sedibeng district.

### **1.3 PROBLEM STATEMENT**

According to Burns and Grove (2003:103), the research topic identifies the area of concern with the aim to gain a better understanding of the problem. In this study, the

area of concern was the under-utilisation of MOUs within Emfuleni sub-district in the Sedibeng district of Gauteng Province by the pregnant women who were screened as low-risk pregnancies.

Antenatal and delivery services are available at Sharpeville Clinic, including the MOU, to all pregnant women who are screened as low-risk patients. Two thousand two hundred and eighty eight (2 288) pregnant women who attended the antenatal clinic in the year from April 2003 to March 2004 at Sharpeville CHC (Local Municipality Clinic) and screened as low-risk pregnancies opted to deliver their babies at hospital, which is 25 kilometres away from their homes. This stimulated the researcher to investigate the under-utilisation of the Sharpeville MOU.

#### **1.4 SIGNIFICANCE OF THE STUDY**

This study will provide information to the midwives working at the MOU and to the management at Gauteng Health Department.

The findings will be used to make recommendations to encourage utilisation of MOUs, thus decreasing the load of normal deliveries at the referral hospital. Furthermore, it is envisaged that the results of the study will influence the redefinition of effective management and the utilisation of the specific MOUs (Sharpeville and Boipatong). Recommendations could be made to provide better care to the larger community of pregnant women in Sedibeng district. Lastly, recommendations could assist the National and Provincial Health Departments to achieve their goals of bringing obstetrical care to the community, to relieve the major hospitals of the heavy loads of normal uncomplicated deliveries.

#### **1.5 AIM AND PURPOSE OF THE STUDY**

The aim of the study was to propose strategies to improve the utilisation of the Sharpeville MOU in Emfuleni sub-district of Sedibeng district.

The purpose of the study was to investigate the factors determining the under utilisation of Sharpeville MOU, within the Sedibeng district.

## 1.6 RESEARCH OBJECTIVES

The objectives of this study were to

- describe the factors/reasons that influence pregnant women who were screened as low-risk pregnancies at Sharpeville CHC to deliver their babies at a hospital
- make recommendations to improve the utilisation of the Sharpeville MOU

## 1.7 RESEARCH QUESTION

To achieve the research objectives, the study attempted to answer the following question:

What are the factors that influence the choice of women who have been screened as low-risk pregnancies and who attended the Sharpeville CHC for antenatal care to deliver their babies at a hospital?

## 1.8 DEFINITION OF CONCEPTS

For the purpose of this study, the following key concepts are defined and classified as indicated below:

- **Antenatal care**

Antenatal care is the care given to pregnant women during the period between conception and the birth of the child (Vicars & Maputle in Fraser et al 2006:239).

- **Delivery**

Is a labour, purely in the physical sense, which may be described as the process by which the foetus, placenta and membranes are expelled through the birth canal (Fraser & Cooper 2004:436).

- **Maternal death**

Maternal death is the death of a woman while pregnant or within 42 days of delivery, miscarriage or termination of pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental cause (Fraser & Cooper 2004:1025).

- **Maternal mortality**

Maternal mortality describes death as a result of pregnancy or childbirth and includes the first six weeks of the puerperium. The maternal mortality rate is usually expressed per 10 000 or 100 000 childbirths and per time unit.

$$\text{Maternal mortality rate} = \frac{\text{maternal mortality} \times 10\,000 \text{ (or } 100\,000) \text{ per time unit}}{\text{Total births}}$$

(Nolte in Fraser et al 2006:968)

- **Reproductive health**

Reproductive health care is “the constellation of methods, techniques, and services that contribute to reproductive health and well-being by preventing and solving reproductive health problems. It also includes sexual health, the purpose of which is the enhancement of life and personal relations, and not merely counseling and care related to reproduction and sexually transmitted infections” (WHO 1998b:12).

- **Safe motherhood initiative**

Sherratt and Tjallinks (in Fraser et al 2006:952) define safe motherhood initiative as “the provision of high quality maternal health services during pregnancy, delivery and the postpartum period to ensure the health of the mother and the infant”.



- **Puerperium**

Fraser and Cooper (2004:1035) define puerperium as a period after childbirth where the uterus and other organs and structures affected by the pregnancy return to their non-gravid state. It starts immediately after delivery of the placenta and membranes and continues for 6 to 8 weeks.

- **Postpartum care**

A period of not less than 10 and not more than 28 days after the end of labour, during which the continued attendance of a midwife on the mother and baby is a statutory obligation (Fraser & Cooper 2004:1035).

- **Decentralisation**

The process of shifting responsibility, authority and accountability for planning management and the allocation of resources to those who are implementing policy at the lowest level, the transfer of appropriate authority from central government to provincial, regional district, health authority, local government and NGOs (DOH 1997:98).

- **Under-utilisation**

*Collins English Dictionary for Advanced Learners* (2001:1303) defines under-utilisation as “a means not used as much as it could or should be”. Under-utilisation refers to the services that are not effectively utilised or meet the requirements in terms of the MOU policy and guidelines.

- **Primary health care (PHC)**

PHC aims to promote health and prevent disease, using education as one of its main tools. It follows the approach that health is linked to a country's social, economic and political development. It sees health as dependent on the environment in which people live, the services which they have access to and the extent to which they are able to take responsibilities for their health (Van Rensburg 2004:413).

- **Accessibility**

Services must be geographically accessible, meaning that health services such as MOU services should be within a reasonable distance (the WHO suggest 5-10 km) and transport should be available. Accessibility should also address language barriers and “office hours’ service” (Dennill, King & Swanepoel, 2000:5, Janse Van Rensburg 2000:26; Nolan 2000: 24-25).

- **Affordability**

The level of health care offered should be aligned to what the community and the country can afford and too low budgets should not be allowed to derail the programme. No person should be denied health care because of an inability to pay and disparities should be identified and corrected (Barron 2000:8; Dennill et al 2000: 6; Pattinson & Moodley 2002:10).

- **Availability**

There should be sufficient and appropriate services to meet the particular health needs of each community. The adequacy of human resources relates not only to numbers of personnel, but also to their competence, range of skills, attitudes and system of support (Fransman 2002:40).

- **Effectiveness**

Services provided must do what they are intended to do for the specific community and must also be justifiable in terms of cost (Fransman 2002:40).

## **1.9 RESEARCH DESIGN AND METHODOLOGY**

Chapter 3 gives a detailed description of the research design, population and sampling design, context (setting), methods of data collection, data analysis process, ethical considerations and the establishment of validity and reliability.

The researcher adopted a quantitative approach. In quantitative research, numerical information is collected and analysed statistically (Polit & Hungler 2001:155).

### **1.9.1 Research design**

The researcher used a descriptive survey design in order to give a detailed description of the factors contributing to the under-utilisation of Sharpeville MOU, in Emfuleni sub-district of Sedibeng district.

A research design is the researcher's overall plan for obtaining answers to a research question or testing research hypothesis (Burns & Grove 2003:195).

According to Brink (2006:111-112), a descriptive survey design may be utilised to study characteristics in a population for the purpose of investigating probable solutions for a research problem.

### **1.9.2 Population**

Brink (2006:123) describes a population as "the entire group of persons or objects that is of interest to the researcher, which also meets the criteria which the researcher is interested in studying".

The population for this study included all postnatal mothers, who visited the postnatal clinic for the six week follow-up examination, who attended the antenatal clinic at Sharpeville, were screened as low-risk pregnancies, booked for delivery at Sharpeville MOU but (subsequently) delivered their babies at a hospital.

### **1.9.3 Sampling design and sample size**

According to Brink (2006:124), a sample is "a part or fraction of a whole or subset of a larger set selected by the researcher to participate in a research study". The sample was drawn from the larger population. A non-probability sampling design, using a convenient sampling method was used to select the sample. The sample consisted of 100 clients.

#### **1.9.4 Context (setting)**

The study was conducted at the Sharpeville MOU. The map (see figure 1.2) indicates the location of Sharpeville area where the study was conducted and Sebokeng where the hospital is a referral centre in Emfuleni sub-district of Sedibeng district.

Sharpeville clinic was selected for this study for the following reasons:

- The clinic is at PHC level in Emfuleni sub-district.
- It is located in the same premises as the Sharpeville MOU, which is under-utilised.
- It is a PHC clinic rendering comprehensive primary health care services including antenatal care, postnatal care and six weeks postnatal care services.
- It is one of the clinics that has two different authorities on the same premises, where PHC staff are employed by the local authority and MOU staff employed by the Gauteng Provincial Health Department.
- The distance from the women's homes to the health care centre (PHC and MOU) is less than 5 kilometres, which is within walking distance (see figure 1.2 for the location of Sharpeville MOU).

#### **1.9.5 Data collection**

Data collection is a systematic way of gathering information relevant to the research purpose or questions (Burns & Grove 2005:42).

The researcher collected data from respondents during personal interviews, using a structured questionnaire. A structured questionnaire enables the investigator "to be consistent in asking questions and data yielded is easily analysed" (Polit & Hungler 2001:293) (see chapter 3, section 3.8).

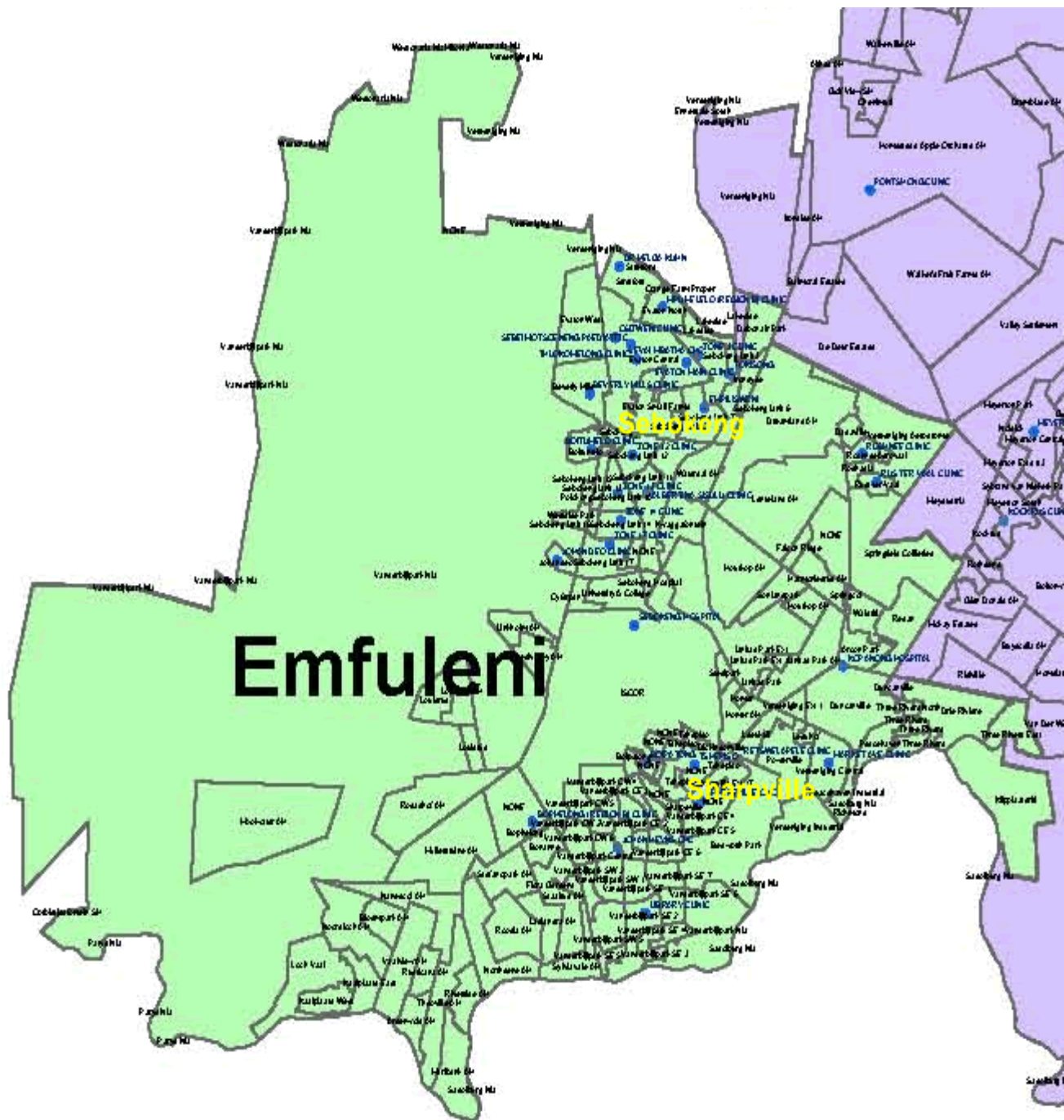


Figure 1.2

Sedibeng district map

Source: DHIS Report (2006:23)

### **1.9.6 Data analysis**

The SPSS computer program was used to analyse the data and descriptive statistics presented by means of frequencies and percentages to present the data. This was done with the help of a professional statistician from the University of South Africa (Unisa) (see chapter 3, section 3.9).

### **1.10 RELIABILITY AND VALIDITY**

According to Polit and Hungler (2001:353), validity refers to “the degree to which the instrument measures what it is supposed to measure”. The researcher focused on content validity, which is the degree to which the items in an instrument adequately represent the universe of the content. The structured questionnaire was given to the clinic staff experienced in Midwifery working at an MOU and to the staff with research experience to determine whether the items in the questionnaire were relevant and suitable to determine the factors that influence mothers to rather deliver their babies at a hospital.

A pre-test, which is a smaller version of the study, was carried out to obtain information to improve the questionnaire and to assess the feasibility of the study. The respondents in the pre-test were similar to those in the study and it was done under similar settings, but they were not included in the final study. Conducting a pre-test assisted the investigator to identify problems with the questionnaire. It also gave an estimate of the time to interview each individual, which was important in obtaining consent for participation (Polit & Hungler 2001:34).

### **1.11 ETHICAL CONSIDERATIONS**

Pera and Van Tonder (2005:4) define ethics as “a code of behaviour considered correct”. The following ethical principles were considered in this study: permission to conduct the study, respect for persons’ human dignity, confidentiality and anonymity, avoiding harm, justice and informed consent (see chapter 3, section 3.10)

## **1.12 LIMITATIONS OF THE STUDY**

Limitations applicable to this study will be discussed in chapter 5.

## **1.13 OUTLINE OF THE STUDY**

Chapter 1 introduced the study, described the purpose, objectives, research methodology, ethical considerations, reliability and validity of the study, and defined key terms.

Chapter 2 discusses the literature review undertaken for the study.

Chapter 3 describes the research design and methodology.

Chapter 4 presents the data analysis and interpretation of findings

Chapter 5 presents conclusions and makes recommendations.

Finally, a list of sources used and annexures are provided.

## **1.14 CONCLUSION**

This chapter described the background to the study, presented the problem statement, purpose and significance of the study, the research question and the definitions of concepts and briefly discussed the methodology and ethical considerations.

Chapter 2 discusses the literature review conducted for the study.

## **Chapter 2**

### **Literature review**

#### **2.1 INTRODUCTION**

This chapter discusses the literature review conducted on MOUs and factors that might contribute to the under-utilisation of an MOU.

The purpose of a literature review is to gain knowledge about the topic under study and existing research on similar topics. Previous research findings assist researchers to refine their studies and also form a basis for comparing and interpreting their own findings. It also assists the researcher to compile a written report on what is known about the topic (Burns & Grove 2003:133). The literature review assisted the present researcher to bring the problem into focus, formulate an appropriate research question, and select the research design and methodology to investigate the factors that could influence the utilisation of MOUs (Brink 2006:63; Polit & Hungler 2001:155).

The researcher conducted a literature review on:

- Establishment of MOUs in SA
- The role of the midwife at a MOU
- Women's perceptions of preferred place of delivery
- Utilisation of MOUs
- Material and human resources at MOUs
- Barriers to utilisation of MOUs.

#### **2.2 ESTABLISHMENT OF MOUs IN SA**

The first MOUs were established in 1980 in Cape Town (Fraser, Cooper & Nolte 2006:917). The ANC's (1994b:100) National Health Plan introduced changes which necessitated the availability of MOUs in previously disadvantaged communities, including the community under study. Free health services were implemented for pregnant women up to six weeks postpartum. In 1996 MOUs were opened in all nine



provinces. Midwives allocated to those units were highly skilled and in many instances had completed an advanced midwifery course. The majority, however, were re-deployed from academic hospitals.

### **2.2.1 MOUs in Cape Town**

In the Cape Peninsula, the Maternity and Neonatal Service Region (CPMNSR) came into operation in 1980 as a single organisation with the authority responsible for the antenatal care, delivery, postnatal care and care of all newborn infants in the region. One of the features of the CPMNSR was the establishment of MOUs or decentralised delivery units for the care of “normal” low risk mothers situated in townships.

The MOUs are staffed entirely by midwives who assume primary responsibility for ante-, intra- and postpartum care. Medical care is easily available by means of the obstetrical flying squad or ambulance services of the hospital involved. A doctor visits the MOUs regularly, at most once a week. This is essentially an urban programme and the MOUs are within easy reach of hospitals. The hospitals are organised in such a way that one hospital services a number of satellite clinics. All women with complications or risks are referred to the base hospital, in order for the clinics to deal only with normal cases (Nolte in Fraser et al 2006:8).

Cronje and Grobler (2003:679) and Nolte (in Fraser et al 2006:8) pointed out that MOUs have the following advantages:

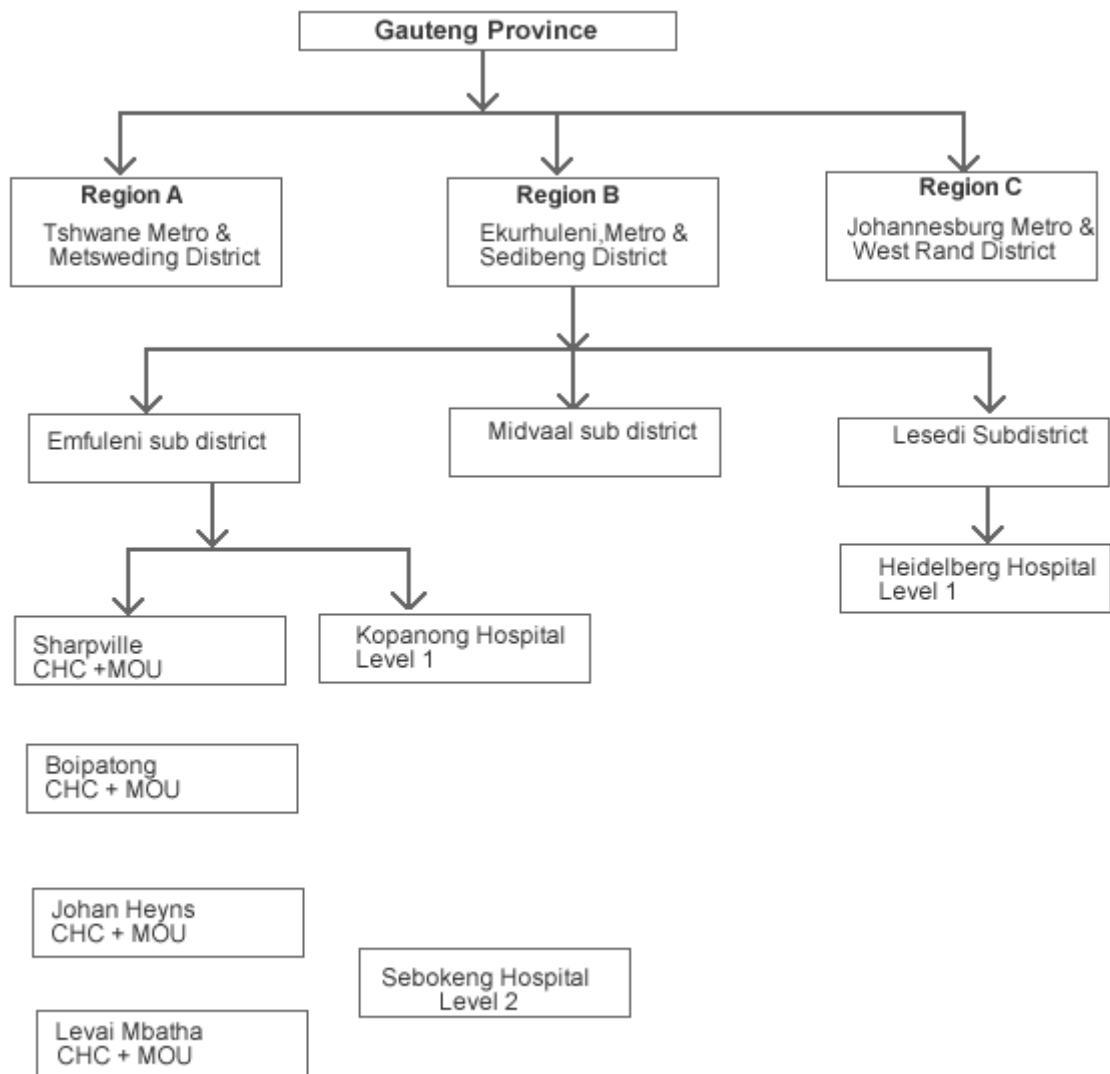
- The clinics are conveniently situated and save the women time and transport costs because the clinics are situated in such a way that women need not travel great distances.
- Women receive more intensive care from staff in their own community.

## **2.2.2 MOUs in Gauteng Province**

Although MOUs were initially established in 1980 in Cape Town (Fraser et al 2006:917), MOUs were only opened in all nine provinces in 1996. Midwives allocated to those units were highly skilled and in many instances had completed an advanced midwifery course. The majority of the staff, however, were re-deployed from academic hospitals (Department of Health 1995:7).

In the Sedibeng District within Emfuleni, two MOUs were erected (Sharpeville and Boipatong) in 1996. These MOUs were built in the same premises of the local municipality clinic but belong to Gauteng provincial authority. Equipment, modernised structures and the services of the MOUs are of good quality. The Gauteng MOU policy was implemented and followed and a referral system put in place. Decentralization of normal deliveries at hospital was done. However, although maternity care is available and accessible to childbearing women, some still prefer to seek assistance from the regional referral hospital or traditional sectors (Sedibeng District MCH Annual Report 2000:8).

The study was conducted in the Sedibeng District of Gauteng, which is divided into three sub-districts, namely Emfuleni, Lesedi and Midvaal. The district has three hospitals, Sebokeng Hospital, which is a referral centre for the community under study, and Kopanong and Heidelberg hospitals. Sedibeng District has four community health care centres (CHC), all in Emfuleni sub-district: Sharpeville, Levai Mbatha, Johan Heyns and Boipatong. The Gauteng provincial authorities run the Levai Mbatha and Johan Heyns CHCs. At the Sharpeville and Boipatong CHCs, the Emfuleni Municipality provides PHC services and provincial staff provide 24-hour MOU services. In Sedibeng district, 10 mobile clinics and 33 fixed clinics belong to the local authorities and 7 clinics belong to the province (DSIS Report 2001:1). The researcher conducted the study at the Sharpeville CHC in Emfuleni sub-district.



**Figure 2.1**

**Organisational structure of the health care levels in Gauteng Province**

Source: DHIS Report (2006:1)

Figure 2.1 indicates the location of the Sharpeville MOU where the study was conducted (DHIS Report 2006:1). The Sharpeville and Boipatong MOUs were erected in Sedibeng District in 1996. These MOUs were located on the premises of the local municipal clinics but belong to the Gauteng provincial authorities. The equipment, structures and services of the MOUs are of good quality. Gauteng MOU Policy (DOH 1995:7) was implemented and followed. A referral system was put in place and normal deliveries at hospital decentralised. Although maternity care is available and accessible to childbearing women, some nevertheless prefer to seek assistance from the regional referral hospital or traditional sectors (Sedibeng District MCH Annual Report 2000:8).

According to the Department of Health (1995:1), MOUs should be situated in, and be part of the community and should also be linked to a referral maternity hospital. Furthermore, MOUs should provide:

- Antenatal clinic services: pregnancy testing, booking and follow-ups
- Labour, delivery and postpartum care, 24 hours per day
- Essential care of the newborn, including vaccinations
- Postnatal clinic services, including infant vaccination and needs/risk assessment
- Advice on fertility control and contraceptives
- Active promotion of breastfeeding
- Appropriate referral of high-risk patients and complications to hospital
- Free, accessible and quality service to all who require it
- Prevention of mother-to-child transmission services (PMTCT)

Van Coeverden de Groot (in Van Rensburg 2004:678) stated further that the main objectives of an MOU are to

- provide a single, community-based and integrated obstetric, neonatal, paediatric and family planning service for all women living in a defined geographical area
- reduce the preterm, low birth weight, stillbirth and neonatal death rates in the perinatal service region to acceptable levels
- promote family planning in that perinatal region and especially to decrease the number of unplanned pregnancies
- provide continuing perinatal education for health care staff, as well as education for the patients and the wider community

### **2.3 ROLE OF THE MIDWIFE AT A MOU**

According to Fraser et al (2006:241), the role of the midwife at an MOU should:

- provide training to the clients on issues related to antenatal care, labour and postnatal care
- diagnose a health need and facilitate the attainment of optimum physical and mental health for the mother and child by the prescription, provision and

execution of a midwifery regimen or, where necessary, referral to a doctor or by obtaining assistance from a doctor

- execute a programme of treatment or medication prescribed by a doctor
- prevent disease relating to pregnancy, labour and the puerperium, and promote health and family planning by teaching and counselling individuals, families and groups, by implementing family planning skills and by monitoring the health status of the mother and child
- monitor the progress of pregnancy, labour and the puerperium
- monitor the vital signs of the mother and child
- monitor the reaction of the mother and child to disease conditions, trauma, stress, anxiety, medication and treatment
- prevent complications relating to pregnancy, labour and the puerperium, including performing episiotomies; suturing first and second degree tears or episiotomies, and administering a local anaesthetic
- administer medicines to the mother or child
- prescribe, promote or maintain the hygiene and physical comfort of the mother and child, and reassure the mother
- promote exercise , including ante- and post-natal exercises, rest and sleep
- facilitate body mechanics and the prevention of bodily deformities in the execution of the midwifery regimen
- supervise and maintain a supply of oxygen to the mother and child
- supervise and maintain fluid, electrolyte and acid base balance of the mother and child
- protect the skin and the maintenance of sensory functions in the mother and child
- facilitate the maintenance of bodily regulatory mechanisms and functions in the mother and child
- facilitate the nutritional status of the mother and child
- promote breastfeeding
- facilitate communication by and with the mother and father or family in the execution of the midwifery regimen
- coordinate the health care regimens provided for the mother and child by other categories of health personnel
- provide effective support to enable the mother and child to obtain the health care they need

## **2.4 WOMEN'S PERCEPTIONS OF PREFERRED PLACE OF DELIVERY**

Women's perceptions of the advantages and/or disadvantages influence their choice of preferred place of delivery. Lifestyle, support systems during pregnancy and other factors, in turn, affect their perceptions.

### **2.4.1 Lifestyle**

Andrews and Boyle (2003:101-102) stated that social and cultural changes have made it acceptable for women to have careers and a family. Malnourishment during pregnancy due to an inadequate or even "slimming" diet could lead to premature labour. The availability of advanced technology, such as epidural caesarean section and assisted deliveries at hospital, might lead pregnant women to opt for hospital delivery. Some families might encourage pregnant women to opt for hospital delivery for the rest and assistance offered by a hospital stay.

### **2.4.2 Non-traditional support systems during pregnancy**

A woman's perception of the need for formalised assistance from health care providers during the antepartum period is important (Andrews & Boyle 2003:104). Women generally perceive Western medicine as curative rather than preventative. Some health care providers view pregnancy as a disaster waiting to happen, a physiological state that at any moment might become pathological, because many cultural groups perceive pregnancy as a normal physiological process, not seeing pregnant women as ill or in need of the curative services of a doctor. Women in these diverse groups often delay or even neglect to seek prenatal care. Western women perceive pregnancy as a normal physiological process, not as being ill. These women and their partners emphasise the quality of pregnancy and childbirth, and many childbearing women rely on non-traditional support systems (Andrews & Boyle 2003:104).

Atkinson and Farias (1999:27-38) found that patients in north-east Brazil by-passed PHC facilities, which led to congestion at hospital out-patient departments. The main reason was a perception of the poor quality and limited range of primary-level urban health services.

### **2.4.3 Cultural attempts to control pregnancy**

Cultural beliefs about activities during pregnancy also play a role. Many people believe that the activities of the mother and to a lesser extent of the father can affect the unborn child. Some prescriptive and restrictive beliefs and taboos attempt to increase a sense of control over the outcome of pregnancy (Andrews & Boyle 2003:105). Food taboos in a pregnant woman's diet are thought to stem from the danger and uncertainty associated with pregnancy and childbirth (Andrews & Boyle 2002:89). For example, most Black women do not eat eggs during pregnancy because of the belief that egg yolk will form a vaginal plug during delivery. A pregnant woman needs protein for good nutrition.

### **2.4.4 Cultural interpretation of obstetric testing**

According to Andrews and Boyle (2003:109), many women "do not understand the emphasis placed on urinalysis, blood pressure readings, and abdominal measurements that occur in Western prenatal care. For traditional women, the vaginal examination may be so intrusive and embarrassing that they may avoid prenatal visits or request a female physician or midwife." Common discomforts of pregnancy may be managed through folk, herbal, home, or over-the-counter remedies on the advice of a relative (e.g., grandmother) or friends. This could result in complications in pregnancy or pregnant women receiving misleading information regarding the referral system, and her choice of place of delivery will be a hospital instead of an MOU.

#### **2.4.4.1 Birth and culture**

The physiological process influences beliefs and customs regarding the experience of labour and delivery. Factors such as cultural attitudes towards the achievement of birth, methods of dealing with labour pain, recommended positions during delivery, the preferred location for the birth, the role of the father and the family, and expectations of a midwife may vary according to the degree of acculturation to Western childbirth customs, geographic location, religious beliefs and individual preference (Andrews & Boyle 2003:110). Midwives must identify how much personal control and involvement a woman and her family desire during the birth experience (Andrews & Boyle 2003:111). At hospitals there are more health professionals with different cultural backgrounds than

at MOUs with only two or three nurses on duty who may belong to the same culture. Therefore a pregnant woman might perceive that hospital maternity staff will accept any position during delivery, such as squatting, and screaming, as she may not be the only one screaming.

#### **2.4.4.2 Support during labour**

Despite the traditional emphasis on female support and guidance during labour, spouses and male partners are increasingly being included. Many women from diverse cultures desire to have their husbands or partners present during the birth. Some women, however, still prefer their mother or a female relative or friend to be present during labour and birth (Andrews & Boyle 2003:111).

#### **2.4.4.3 Cultural expression of labour pain**

Longworth, Radcliffe and Boulton (2001:405) found that “women in the United Kingdom (UK) who delivered in health institutions valued access to pain relief given during labour”. Although the pain threshold is remarkably similar in all persons regardless of gender, social ethnic, or cultural differences, these differences play a definite role in a woman’s perception of labour pain. Because midwives care for women from a variety of cultural backgrounds in labour and birth, they must have a knowledge and understanding of how culture medicates pain (Andrews & Boyle 2003:112). In a study on Mozambican women’s experience of labour pain, Vilakati (2003:106) found that at the psychological level the participants’ reactions to the pain experienced during labour indicated anxiety and loneliness. Chalmers (1990:21) found that uncertainty about the outcome of labour was a major concern. The anticipation of a painful experience was frightening to these women, especially the primigravidae, who had no previous experience of giving birth. Previous nasty experiences, such as prolonged labour, foetal death and episiotomies, are further causes of fear and anxiety among women in labour. Furthermore, the study established that a feeling of loneliness resulted from labour being considered strictly a woman’s affair, supervised by woman (midwives, female relatives and friends). The informants indicated that women in labour received little emotional or social support during labour from these attendants and from professional nurses.



#### **2.4.4.4 Birth positions**

The nurse who cares for women in labour must realise that the choice of position is influenced by many factors other than culture. Moreover, the socialisation that takes place on arrival in a labour and delivery unit may prevent women from stating their preference. This, in turn, affects choice of delivery place in subsequent pregnancies as well as recommendations to other family members (Andrews & Boyle 2003:114).

#### **2.4.4.5 Midwife-client relations**

Butchart, Tancred and Wildman (1999:3) found that care during the puerperium stage of labour influences the woman's perception of herself as mother and her confidence in her ability to cope with the challenges of parenthood. The midwife-client relationship encourages pregnant mothers to verbalise their needs regarding choice of delivery place.

### **2.5 UTILISATION OF MOUs**

Demographic, socio-psychological and other factors can affect the utilisation or non-utilisation of MOUs.

#### **2.5.1 Demographic factors**

Demographic factors include age, race, gender, educational level and culture.

##### **2.5.1.1 Age**

Age is important, particularly if it is a teenage pregnancy or a woman's first pregnancy. Age often poses a worry regarding the ability to go safely through the process of childbearing (Bennett & Brown 2001:34). In SA, Pattinson and Moodley (2002:36) found women aged 30 or older are at greater risk of dying from obstetric complications than younger women.

Some school-going pregnant teenagers live with their grandmothers, who cannot support them. Old people are not familiar with MOUs and their functions as they used to

deliver their babies at home or at hospital. Consequently, some teenagers who were screened as low-risk pregnancy opt for hospital delivery (Pretorius & Greeff 2004:78).

Pregnant teenagers need to be separated from other pregnant women to promote confidentiality and respect as well as for emotional support and special care (Bennett & Brown 2001:216; Fraser et al 2006:22). Each MOU in the present study has two beds in one ward with no separation of teenagers and adult patients during delivery.

### **2.5.1.2 Race**

Racial and cultural issues affecting childbearing practices overlap. The researcher found no literature on specific racial issues that could influence women not to deliver their babies at health care clinics. Mudokwenyu-Rawdon (2001:36) pointed out that MOUs are in Black townships and therefore only used by Black patients.

### **2.5.1.3 Gender**

“Gender” implies social and cultural roles and patterns and options for men and women based on being male or female. Females are socially subservient in issues pertaining to health (Mudokwenyu-Rawdon 2001:36).

Helman (2001:110) stated that “healthy normal men are expected to have many premarital and extramarital affairs as proof of their masculinity, while women are barred from either. Men are also expected actively to defend their own and their family’s honour, while women’s honour lies in preserving their purity and chastity where promiscuity and extramarital sex is common within a society.”

Gender roles are rigid but often change and develop under the influence of urbanisation and industrialisation (Helman 2001:111). In industrialisation, machines replace human strength and when women assign childcare to others, strict division of labour by sex begins to disappear. What is seen as typical of the behaviour of one gender in a particular society may not be regarded as such in another. For example, in Islamic societies, women only have a domestic role, are restricted to the home and never allowed to work outside it. In other societies, women play a major role in the wider economic system and are major wage earners. In many peasant societies as well as

their domestic role, women are also involved in the raising of livestock, planting, and producing handicrafts for markets (Helman 2001:111).

Males and females are socialised in different ways. They are educated to have different expectations of life and to develop emotionally and intellectually in particular ways. Culture also provides explicit and implicit guidelines from infancy onwards on how to perceive, think, feel and act as either a male or female member of that society (Helman 2001:110).

#### **2.5.1.4 Women's changing role**

Modise (2000:10) found that women who are employed, earn salaries of their own and hold high positions at work, can afford to deliver at private hospitals to maintain their high status. Young pregnant women in urban areas, especially those employed, can afford private services because they are members of medical aid schemes.

#### **2.5.1.5 Polygamy**

According to Mudokwenyu-Rawdon (2001:36), worldwide "some 500 000 women die annually due to complications associated with pregnancy: 98% of those women are in the developing world. In Kenya and Senegal, women spend 47% of their reproductive years, between ages 15 and 49, either pregnant or breastfeeding." Mwoira (1994:80) emphasised that the social pressure on women to produce sons is greater in communities where polygamy is practised, and where the favourite wife is the one with the most sons.

#### **2.5.1.6 Cultural factors**

According to the WHO (2000:254), cultural accessibility in maternal care refers to a situation where a high proportion of pregnant women in a catchment area can independently choose and afford to go to a health facility for maternity services or treatment. Cultural acceptability considers the services offered. The biomedical management of childbirth and of maternity services might be influenced by local cultural practices (Mudokwenyu-Rawdon 2001:38).

Dennill, King and Swanepoel (2000:39) maintain that indigenous practitioners share socio-cultural orientation with their clients because they have the ability to reassure them and speak their language. Considering traditional practice may be a woman's first choice. In a community where most women were delivered at hospital as self-referrals, they may not understand the need and importance of delivering at MOUs near them. In the present study, attending antenatal care at the Sharpeville MOU provides an opportunity to promote healthy behaviour, and provide advice on pregnancy and its complications.

Mwoira (1994:81-82) found that in most traditional cultures the family decides on the most appropriate and safest place for mothers to deliver. Married couples may be governed by the customs and beliefs of the extended family as to where the baby should be delivered. In many traditional African cultures, married women cannot make decisions independently of their husbands (regarded as the head of the household) nor of the in-laws. This also affects the choice of pregnant women who have been screened as low risk, as their husbands might influence their decisions on the place of delivery.

#### **2.5.1.7 Use of traditional medicines during pregnancy**

O'Mahony and Steinberg (1995:1168) found that 78% of pregnant woman used "*isihlambezo*", and 32% used "*imbelikisane*", traditional medicines to accelerate and to induce labour. Most of the people in Sharpeville belong to the South Sotho ethnic group and use traditional medicines.

According to Ngubeni (2000:112), Zulu pregnant women are forced to drink traditional medicines during pregnancy. It is accepted that women obey their mother-in-law and all the elders of the family without argument. They believe that if anything should happen to the baby after refusing to take traditional medicines, they will be blamed. The use of traditional medicines might speed up labour resulting in emergency hospital delivery.

#### **2.5.2 Socio-psychological factors**

Socio-psychological factors that can affect women's decisions to deliver their babies at hospital include personality, social class and economic status, peer pressure as well as educational level (Mudokwenya-Rawdon 2001:36).

### **2.5.2.1 Personality**

The researcher found no personality factors, which could prevent women from delivering their babies at Sharpeville MOUs in the Emfuleni sub-district, Sedibeng district, in the literature reviewed.

### **2.5.2.2 Social class and economic status**

Naude and Setswe (2000:2) emphasised that poverty is one of the main problems for many women and while they may be treated free of charge, they might have to pay for transport to and from the health facilities. In addition, women of low socio-economic status usually cannot demand services and do not have the means to attract alternative providers (Naude & Setswe 2000:2; WHO 2000:27).

According to the WHO (2000:27), poverty is an important factor influencing pregnancy outcomes among women in different parts of the world. Furthermore, a “pregnant woman who is suffering economically may also suffer physically” (WHO 2000:27). People living in poverty experience malnutrition, due to lack of food. The MOU in the area of study provides tea or soup with bread post-delivery and patients stay for six hours postnatal care whereas at the hospital they receive a full meal, including tea or coffee, and soft porridge and may stay for more than 12 hours. This might influence pregnant women to opt for hospital delivery.

### **2.5.2.3 Peer pressure**

Pretorius and Greeff (2004:73) maintained “honest information could dispel myths about pregnancy, childbirth and puerperium. Antenatal patients are also, in a sense, a captive audience for information about reproductive health in general. On the other hand, well-meant advice can be misinterpreted or even misleading and less innocuous than thought.” This can have a negative impact on the choice of place of delivery.

Peer pressure can influence pregnant women to opt for hospital delivery based on misleading information. For example, HIV/AIDS support groups may influence pregnant women, who know their HIV status, to opt for hospital delivery in order to maintain anonymity in PMTCT.

Butchart et al (1999:5) pointed out that women who work and have access to television and Internet have increased knowledge and share information with peers, thus influencing the choice of hospital delivery. A pregnant woman living amongst middle class society might be pressurised by other pregnant women living in that area to deliver at the hospital even if she cannot afford it.

#### **2.5.2.4 Educational information**

Women in urban areas are exposed to a wealth of information regarding health and childbirth from radio, newspapers, television and magazines. They may consequently feel that they would rather deliver their babies at hospital than at MOUs (Williams 1996:103).

Jewkes and Mvo (1997:7) emphasised that teenagers living in urban areas are more educated than those in rural areas, and have more access to information from different media such as radio, television, magazines, Internet, books, posters, library, pamphlets and local newspapers. This information might influence them to opt for hospital for delivery, especially if they see hospital birth as having a high status.

Mudokwenyu-Rawdon (2001:50) found that women with no education tend to have more children than ones with primary or secondary education. Furthermore, women with no formal education tend to start childbearing at an early age and have more children. They also marry at an early age.

Stephen, Kimoti and Mpamyin (1996:9) stated that women of lower education tend to consult lower level health care workers such as traditional birth attendants. This lack of education and information pertaining to safe assisted delivery might prevent pregnant women from making informed decisions when choosing a place of delivery.

The WHO (2002:6) emphasised that pregnant women must be aware of the danger signs, which include vaginal bleeding, severe headaches, dizziness or blurred vision, generalised oedema, convulsions, breathlessness and tiredness, labour pains for more than 12 hours, excessive bleeding in labour or after delivery, ruptured membranes without labour for more than 12 hours, and fever without vaginal discharge after delivery.

## 2.6 MATERIAL AND HUMAN RESOURCES AT MOUs

Material and human resources are necessary for the effective utilisation of MOUs (Department of Health 1995:7).

According to Mashazi (2000:55), MOUs lack some of the facilities available in hospitals, such as public telephones, food for patients, adequate number of midwives and doctors, transport and privacy. This has led women to believe that the standard of care in MOUs is inferior compared to hospitals. Patients should be given information regarding safe care at MOUs. The MOU in the present study does not have public telephones, a waiting area, doctors, and public transport after hours or on standby, and full meals. The researcher is of the opinion that this could influence the pregnant women to choose a hospital as place of delivery. Sedile et al (1996:9) found that the Mohlakeng community in Krugersdorp did not utilise the Mohlakeng MOU because they felt it did not have resources like doctors, telephones and food. Consequently, they prefer to deliver their babies in hospital in Krugersdorp, which is about 30 kilometres from Mohlakeng.

The Department of Health (2002-2004) found that there was an increase in deaths in all primary obstetric causes of death such as hypertension, postpartum haemorrhage, non-pregnancy-related infections and pregnancy-related sepsis. These can be successfully handled by early detection and an efficient referral system. However, these components are lacking in MOUs in South Africa. There is a lack of appropriate referral guidelines and those that exist are often not properly followed and the scarcity of reliable transport is an ambiguous problem in rural and peri-urban areas. Lack of material and human resources was identified as one of the causes of under-utilisation of MOUs (Pattinson 1999:5).

McCoy (1996:5-6), Kirtley (1995:136), Myrda, Searger and Potgieter (1995:21) as well as Hulton et al (2000:39) found that pregnant women attending government health services had to wait very long for care because of the many patients, lack of space and lack of facilities and equipment. Gauteng Province is presently monitoring patients' waiting time, including at MOUs, which indicates that waiting time is a problem. The MOU in this study has one nurse for two or more patients.

In their study in an informal settlement in Gauteng, Westaway and Story (1996:11) found that clinics are not equipped for deliveries. Pregnant women have to make their own arrangements for delivery either at a hospital or another facility of their choice. The rise of RDP informal settlements could also increase hospital deliveries, even in the case of low-risk pregnancies, if there are no MOUs within the area.

Butchart et al (1999:5) emphasise that pregnant women want the following:

- Booklets of problems and solutions
- Posters
- Television and videos at the facility
- Guest speakers

Pregnant women also require information to be available to them after hours, such as an MCH support line on antenatal care, intrapartum and PNC issues.

Pretorius and Greeff (2004:78) emphasised that logistical aspects of antenatal health services, such as limited transport, long distances to travel to health services, lack of money to pay for transport, too few mobile clinics and long waiting queues and times, are serious preventing factors, especially in outlying rural areas.

With regard to human resources, pregnant women praise nurses and doctors at hospitals for their ability to assess, detect and treat pregnant women in labour before complications can occur (Pretorius & Greeff 2004:77). They are able to manage high-risk pregnancies, which cannot be done at MOUs. The hospitals are equipped with operating theatres where caesarean sections can be performed should there be a need. Pregnant women may assume that a hospital is a safer place for deliveries and has a higher standard of quality care than a MOU. This underlines the importance of adequate, well-trained human resources (staff) for the effective utilisation of MOUs.



## **2.7 NORMS AND STANDARDS**

### **2.7.1 Quality care**

The increasingly well-informed consumer, concerned with health care services, expects and demands quality care from all health care providers. Nurses and midwives at MOUs must provide high quality care to maintain quality nursing care standards through responsibility, accountability, reliability and commitment (Fransman 2002:16).

- Nurses at MOUs have to change their attitudes towards patients.
- They need to pay attention and have listening skills.
- They should provide sufficient information to pregnant mothers regarding pregnancy, delivery, postnatal care and the newborn baby.
- Nurses should treat patients with dignity and respect and act like professionals.
- Nurses at MOUs are qualified midwives therefore they must provide the skills they acquired effectively and efficiently on assessment of pregnant women, especially abdominal palpation for proper diagnosis and to avoid turning back of patients.
- Nurses and midwives at MOUs must operate according to the MOU policy and adhere to Gauteng maternity protocols, guidelines and procedures.

According to Fransman (2002:2), “antenatal care for pregnant women is of the utmost importance as the health of the nation depends on the health of the mother, child and family. Women and children are also forming the majority of the population”. Maternity service for pregnant women must thus be provided holistically and be of the highest quality. The government of South Africa, through the new health system, determined a programme to be in place in order to improve maternal health through access to quality antenatal care, delivery, postnatal, newborn and reproductive services for all women (ANC 1994a:46).

#### **The rendering of quality care**

According to the WHO cited in Booyens (1996:302), quality care is “the comparison of how the level of care actually provided compares with that which is defined as the

wanted level of care”. Therefore quality means meeting the customer’s requirements/ expectations.

## **2.7.2 Quality assurance**

Booyens (1996:302) defined quality assurance as “an attempt to ensure that patients received quality nursing care”. In order to ensure quality and to improve it, standards of quality are set and the adherence of the nursing practice to these standards are monitored and documented. Quality is associated with excellence, appropriateness, equity, accessibility, effectiveness, acceptability and efficiency.

### **2.7.2.1 Elements of the concept “quality”**

- Acceptability
- Accessibility
- Appropriateness/applicability
- Effectiveness
- Efficiency
- Equity (Booyens 1996:302)
- Safety and professional/technical competency (Muller 2000:63-64)

### **Acceptability**

Acceptability in health care involves:

- Supplying patients with the necessary information.
- Maintenance of confidentiality.
- To identify and satisfy the reasonable expectations of the patient, community, provider and funder.
- To satisfy with applicable risk management, adequate professional knowledge and competency, as well as technologically advanced services in accordance with the development and expectations of providers, funders and recipients of health care.

Acceptability should also be viewed within the legal, professional-ethical and cultural context of the various stakeholders. Services should further be socially acceptable in terms of privacy and standards of communication with the patient (Booyens 1996:302).

### **Accessibility**

Services should be convenient for the patient in terms of distance/geographical outlay and time. Accessibility of health care services further involves the provision of appropriate, knowledgeable and skilled health care workers, services when required as well as the “timeliness” of care (Booyens 1996:303).

### **Appropriateness**

Appropriateness is the key issue and refers to the right decision and care at the right time and is relevant to outcome. It further refers to the provision of services or interventions the individuals and community really need, be it physical, psychological or social (Booyens 1996:303).

### **Effectiveness**

Apart from technical effectiveness, the adequacy of equipment and staffing in the department should be included (Booyens 1996:303). Effectiveness also involves measuring and monitoring whether the intended benefits which are the health care goals, are being achieved for the individual, family or community (Booyens 1996:303; Bowling 1997:7; Muller 1998:3).

### **Efficiency**

Efficiency means that resources are not wasted on one service or patient to the detriment of another. It is further about the use of one’s time to meet a variety of needs, the skilled use of resources and the availability of equipment and assesses the relationship between inputs and outputs (Booyens 1996:303).

## **Equity**

Equity is about a fair share for all members of society, free from any form of discrimination and arranging special services to meet specific needs. It also assesses whether all these elements of quality have been equally available to all people (Booyens 1996a:304; Muller 1998:3; Stewart 1998:180; Whittaker & Diener 1996:126).

### **3.7.3 Standards of quality**

In order to provide quality-nursing care, standards of both practice and performance must be identified. Standards must be objective and measurable to enhance understanding and communication among practitioners. Standards of practice not only identify how nursing is to be practiced, but also serve as a base per staff orientation, education, and evaluation, as well as development of policies, procedures and protocols (Booyens 1998:606).

Booyens (1998:606) defined standard as “a written description of the desired level of performance, containing the characteristics associated with excellence, for measuring and evaluating actual performance or service delivery”.

#### **2.7.3.1 Types of standards**

There are three classic frameworks from which nursing care can be evaluated: structure, process and outcome. Each of these interacting elements contributes to the quality of nursing care and an improvement in any element (Katz & Green 1997:9; Muller 2000:68-69).

#### **Structure standard**

The structure standards define the rules under which the service must be delivered (Katz & Green 1997:9). Structure standards describes what is required for the performance of an action or nursing act and involves the evaluation of the setting and instrumentalities available and used for provision of care which includes the mission statement, objectives, physical aspects of infrastructure, equipment, qualifications and

experience of health providers (Muller 2000:68-69). Structure standards are nonnegotiable and nonmodifiable.

Bruwer (1994:10) referred to structure standards as the utilisation of the resources in the process of nursing and that reflects the full scope of practice of nurses and are specifically applied to their patients' profile.

### **Process standards**

Process standards referred to how the service is organised, delivered and used and describes step-by-step how an action or nursing act should be performed and covers the scientific principles of nursing namely: the process of assessment, planning, implementation and evaluation (Bowling 1997:10).

Therefore process standards defined how the service is to be carried out. Process standards are modifiable based on the individual practitioner's analysis of the situation at hand (Katz & Green 1997:9).

### **Outcome standards**

Outcome standards define both the desired results to be achieved and the undesirable results to be avoided. Process and outcomes are inseparable such as cause and effect (Katz & Green 1997:9).

Muller (1998:244) refers to an outcome standard as an expected result that should be able to measure the change in health status. It is the evaluation of the end results in terms of health status and satisfaction. In many ways it provides the final evidence of whether care has been good, bad or indifferent.

#### **2.7.4 Reasons in formalising quality improvement in health care**

The following are reasons why quality is assuming increasing importance in health care (Booyens 1998:599):

- For professional accountability (acts and omissions)

- Financial consideration (court cases, claims, etc)
- Quest for excellence (resourcefulness and staff)

## **2.7.5 Barriers to utilisation of MOUs**

There are several barriers to effective and optimal utilisation of MOUs, such as accessibility, affordability, availability and staff shortages and attitudes.

### **2.7.5.1 Accessibility, affordability and availability**

The WHO (2002:4) emphasised that accessibility includes poor roads, which may be impossible at certain times of the year, infrequent or inconsistent public transport, financial constraints and non-availability of trained personnel. The Alma Ata Declaration of 1978 emphasised bringing affordable and available health care as close as possible to where people work and live. Included in the declaration is the principle of accessibility (Naude & Setswe 2000:2).

According to Westaway and Cooper (1998:58), accessibility, availability and affordability as well as age, marital status and schooling are barriers to the utilisation of antenatal care. In the past, the doctor saw the patient once during pregnancy and at this visit determined the expected date of delivery, and that was the sum of the antenatal care that was given. The challenge facing contemporary perinatal health care is to ensure that healthy mothers give birth to healthy infants.

In SA, Cronje, Joubert, Chapman, De Winnaar and Bam (1993:765) found the maternity services inaccessible to women in the rural areas and that the previous government had provided insufficient hospitals and clinics in these areas. In the area of this study, the services are accessible to all pregnant women.

### **2.7.5.2 Staff shortages and attitudes**

In Khayelitsha, in the Western Cape, Jewkes, Abrahams and Mvo (1997:5) found that even where antenatal health services are available, pregnant women tend to utilise them sub-optimally. Fonn, Xaba, Tint, Coneo and Varkey (1998:697) found that patients complained that nurses “instruct each other to scold and insult women. They

leave patients alone and sleep.” Fonn et al (1998:697) added that long waiting lines and the inability of PHC facilities to provide a combination of services on a given day contributed to low utilisation of maternity services. Van Coeverden De Groot, Davey and Howland (1998:35-36) found that staff shortages in the Cape Peninsula prevented quality care by the midwives who were overworked and could not provide support and comfort for women in labour. The problem of staff shortages is not limited to the Western Cape.

According to Mashazi (2000:53), in Johannesburg, mothers found that the MOU nurses as well as members of the community health committees rude, uncaring, unfriendly, cold and impatient. Nurses who are overworked easily become frustrated, emotionally drained and tend to treat patients as impersonal objects.

Buchmann (1995:3) stated that negative attitudes of midwives result in patients not utilising the facility, opting for distant facilities at hospitals where they receive better care and treatment. Regarding barriers to utilisation of free antenatal care, Uyirworth, Itsweng, Mpai, Nchabeleng and Nkoane (1992:138), found that the respondents had the following complaints about the health care providers:

“Nurses are cheeky.”

“Don’t like the nurses’ attitude; they work slowly, sit doing nothing.”

“There are long waiting lines, up to four hours. Sisters are rude, speak English and make jokes about us.”

”The nurses shout at people, make them feel stupid. We become scared of them and end up feeling stupid.”

Clarke (1998:5) stated that women in labour frequently complained of being treated sub-optimally by the obstetric staff (midwives). The staff themselves admitted that women who are poor, illiterate and unlikely to take action against them are often treated the worst. Clarke (1998:5) further stated that patients treated badly by staff book later for antenatal care and attend the clinics less often.

In her study on obstetric services in South Africa, Clarke (1998:405) found that many women do not access antenatal care because of the distance from their homes to the clinics, inadequate transport, long waiting hours at clinics or poor treatment by the clinic staff. Sometimes they are turned away from the clinic because the service they seek is

not offered on the day on which they attend. Moreover, fewer women deliver at clinics than receive antenatal care, mainly because of the difficulties they experienced in getting to the clinics once labour has started (Clarke 1998:5). Clarke (1998:5) goes on to say that in some developing countries, such as Cuba, Ethiopia and Mongolia, maternity waiting homes have been set up to house women close to a health facility before their time of going into labour.

Buchmann (1995:3) found that members of the Tladi community did not utilise the Tladi MOU because of a lack of medical doctors and lack of quality care.

## **2.8 CONCLUSION**

This chapter discussed the literature review on MOUs, utilisation of MOUs and factors that contribute to under-utilisation of MOUs, internationally and locally.

Chapter 3 describes the research design and methodology of the study.



## Chapter 3

### Research methodology

#### 3.1 INTRODUCTION

This chapter describes the research methodology, delimitation of the study, geographical area, research design, target population, sampling design, data collection, data analysis, validity and reliability of the study and ethical considerations.

Cohen, Manion and Morrison (2000:44) stated that methodology in research refers to “a systematic way of gathering data from a given population so as to understand a phenomenon and to generalise factors obtained from a larger population”. It embraces the research design, population, instruments used to collect data, ethical considerations, data analysis and its interpretation. Methodology therefore helps the researcher and the reader to understand the process of the research thus giving it scientific merit.

The aim of the study was to investigate the factors that may influence the under-utilisation of Sharpeville MOU. The objectives of the study were to

- describe the factors/reasons that influence pregnant women who were screened as low risk pregnancies at Sharpeville MOU to deliver their babies at a hospital
- make recommendations to improve the utilisation of the Sharpeville MOU

#### 3.2 DELIMITATION OF THE STUDY

The focus of this study was on the factors contributing to under-utilisation of Sharpeville MOU in Emfuleni sub-district.

### **3.3 GEOGRAPHICAL AREA**

The Sharpeville MOU is situated in Emfuleni sub-district of Sedibeng district in Gauteng Province. The population of Emfuleni sub-district in the 2001 census was 658 421 and the growth rate is projected at 83%. Adults make up 79% of the population. There are 34% males, 45% females and 21% children in the Emfuleni sub-district.

### **3.4 RESEARCH DESIGN**

According to Burns and Grove (2003:26), the design of a study is the end result of a series of decisions made by the researcher concerning how the study will be conducted. The design is closely associated with the framework of the study and guides planning for implementing the study.

A quantitative, descriptive research design was chosen for this study in order to give a detailed description of the factors that may lead to the under-utilisation of Sharpeville MOU. Quantitative research is a formal, objective and systematic process for generating information about the world. The specific questions addressed will generate knowledge, which will directly improve the utilisation of the MOU (Burns & Grove 2003:40).

According to Brink (2006:148), a descriptive survey design may be utilised “to study characteristics in a population for the purpose of investigating probable solutions of a research problem”.

The survey was chosen for the following reasons:

- It is appropriate for the research objectives of this study as the aim of the study was not to infer cause and effect but to describe the nature of the research of the topic (Brink 2006:148).
- It provides data about the present and tells what people are thinking, anticipating, planning and doing.
- There is no active intervention on the part of the investigator that may produce researcher bias (Cohen et al 2000:171).
- It is useful for gaining new insight, finding new methods and pointing out the typical or average response (Lobiondo-Wood & Haber 2002:222).

According to Cozby (2003:115-117), a survey design may be utilised to study characteristics in a population to investigate probable solutions of a research problem. In this study, the survey design was used to investigate the factors that may influence the under-utilisation of Sharpeville MOU. It is impartial; there is no prejudice in the selection of units participating in the research. The research data can be collected in the natural setting and in a short time, using an interview (Brink 2006:148). In this study, the setting was Sharpeville MOU where clients were interviewed. Data were collected using a structured questionnaire.

### **3.4.1 Quantitative research**

According to Burns and Grove (2003:26), quantitative research is a formal, objective, systematic process in which numerical data are used to obtain information about the world. This research method is used to describe variables, examine relationships among variables, and determine the cause and effect of interactions between variables.

The research was quantitative because the data collected from this study was analysed in quantitative (numerical) form. Quantitative analysis involves the “manipulation of numerical data through statistical procedures for the purpose of describing phenomena or assessing the magnitudes and reliability of relationships among them” (Burns & Grove 2003:26).

Quantitative research uses structured tools to generate numerical data and uses statistics to interpret, organise and represent the collected data (Burns & Grove 2003:30). In this study, the research design was quantitative as the researcher used a structured interview schedule to collect data from the respondents. This method allowed the researcher to ask all the respondents the same questions with predetermined responses, which allowed objective data to be collected throughout the study. The researcher also used frequency tables and graphs to analyse and interpret the findings.

### **3.4.2 Descriptive design**

Burns and Grove (2003:480) define a descriptive design as a method to gain more information about variables within a particular field of study. The purpose is to provide a

picture of situations as they naturally happen. The design is used to identify a phenomenon of interest, identify variables within the phenomenon and develop conceptual and operational definitions of variables in the study (Burns & Grove 2003:798). Descriptive studies provide valuable base-line information. The method is also flexible and can be used to collect information from a large group of respondents (Polit & Beck 2006:189).

With the descriptive design the researcher plans either to assemble new information about an unstudied phenomenon or to gain more information about characteristics of individual situations, or groups, and the frequency within a particular field of study (Burns & Grove 2003:268). In this study, the descriptive design was used to describe and investigate the nature of the phenomenon of under-utilisation of Sharpeville MOU in Emfuleni sub-district of Sedibeng district.

### **3.5 CONTEXTUAL**

A contextual study is one where the phenomenon of interest is studied in terms of its immediate context (Mouton & Marais 1990:49). This study was contextual in that it focused on the factors and or reasons for the under-utilisation of the MOUs in Emfuleni sub-district of the Sedibeng district at Sharpeville Community Health Centre (CHC).

### **3.6 TARGET POPULATION**

Burns and Grove (2003:366) defined population as the entire aggregate of cases that meet a designated set of criteria. In this study the population was postnatal mothers who had delivered their babies at the hospital, despite booking at the MOU for antenatal care and delivery. These mothers were attending the Sharpeville MOU for their six-week postnatal check up.

#### **3.6.1 Inclusion criteria**

According to Brink (2006:148), inclusion criteria are the characteristics that those people in a sample should possess.

The inclusion criteria for the study were postnatal mothers who

- resided in Sharpeville location in Emfuleni sub-district
- attended antenatal care at Sharpeville clinic
- were screened as low risk pregnancies during their antenatal visits
- had delivered their babies at the hospital after they were booked to deliver at Sharpeville MOU and were now attending postnatal clinic for their six week check-up at Sharpeville MOU
- were willing to be interviewed by the researcher

### **3.6.2 Exclusion criteria**

Brink (2006:148) described exclusion criteria as characteristics, which a participant may possess, that could adversely affect the accuracy of the results.

The exclusion criteria for this study were postnatal mothers who

- delivered their babies at MOUs
- attended antenatal at Sharpeville clinic, screened as low risk pregnancies and booked for delivery at MOU but during labour were referred to deliver their babies at hospital for complications which unexpectedly occurred related to their condition
- were screened as high-risk pregnancies, attended antenatal care at hospital and delivered their babies at the hospital
- did not attend antenatal care at Sharpeville clinic and who did not book to deliver at MOUs
- attended antenatal care at Sharpeville clinic but delivered at hospital by Caesarean section
- were not residing in Sharpeville location in Emfuleni sub-district
- participated in the pre-test at Boipatong MOU
- cannot speak English, Sotho, Tswana, Pedi or Zulu

### **3.7 SAMPLING DESIGN AND PROCEDURES**

According to Burns and Grove (2003:385), sampling involves selecting a group of people, events, behaviour, or other elements with which to conduct a study. Burns and Grove (2003:48) describe a sample as subset of the population that represents the entire population in order to obtain information regarding the phenomenon. The samples represent the population. A sample is a sub-section of the population, which is selected to participate in a study. The selected sample should therefore have similar characteristics of the population under study to allow generalisability of the results to represent the population (Polit & Beck 2006:259).

There are two methods of sampling; one yields probability samples in which the probability of selection of each respondent is assured. The other yields non-probability samples in which the probability of selection is unknown (Brink 2006:148).

This study used a convenience sampling method of non-probability sampling design to select the clients used as respondents. A convenient sample consists of using the most readily available or most convenient group of subjects for the sample (Brink 2006:150). This method was chosen because it provided easy access to the respondents. It was simple, practical, economical, and quick and did not require an elaborate sampling frame which was not available. The respondents were chosen from clients who were attending the postnatal clinic at Sharpeville MOU when the researcher was present at the clinic. The parameters of generalisability in the sample were negligible; the study did not seek to generalise to a wider population. This study simply represented itself (Cohen et al 2000:102).

One hundred respondents were interviewed using a structured questionnaire at the Sharpeville MOU during December 2005 and January 2006.

### **3.8 DATA COLLECTION**

Data collection is a systematic means of gathering information related to the research purpose or questions (Burns & Grove 2003:498).

Data was collected in December 2005 and January 2006. Data was collected using a structured questionnaire in a face-to-face interview. The prospective respondents attending the postnatal clinic were approached to participate in the study. Detailed information about the study was given to the clients using their own home language before consent to participate was obtained. Both verbal and written consent was obtained before the face-to-face interviews for completion of the questionnaires (Rooney 1992:6) (see Annexure C for consent form). Face-to-face interviews were conducted in a private room. Data was collected on Mondays and Thursdays (see table 3.1).

**Table 3.1 Data-collection framework**

Week	Dates	Days	Total hours per day		Number of women interviewed
1	5-12-2005	Monday	08:00-12:30	5 hrs	10
	8-12-2005	Thursday	08:00-14:30	7 hr30	15
2	12-12-2005	Monday	08:00-12:30	5 hrs	10
	15-12-2005	Thursday	08:00-14:30	7 hrs 30	15
3	19-12-2005	Monday	08:00-12:30	5 hrs	10
	22-12-2005	Thursday	08:00-14:30	7 hrs 30	15
4	29-12-2005	Monday	08:00-12:30	5 hrs	10
5	6-01-2006	Thursday	08:00-14:30	7hrs30	15
<b>Total</b>		<b>8 days</b>		<b>50 hours</b>	<b>100 respondents</b>

### 3.8.1 Research instrument

According to Wilson (1989:336), the choice of a data-collection method is one of the most important steps in the research process. Different instruments can be used on their own or in combination with one another. A structured interview schedule was designed after the literature review and with the help of the two supervisors and the statistician.

Individual interviews were done and a structured interview schedule was used as the data collection instrument. The structured questionnaire was selected because it enabled the investigator to be consistent in asking questions and data yielded was easy to analyse with the help of a statistician and using the SPSS computer program (Burns & Grove 2003:178).

In the structured interview schedule the researcher asked open-ended and closed-ended questions to find out what people know and thought about the phenomenon under study.

The research respondents were interviewed directly to avoid misinterpretation and to ensure clarity on all issues. Burns and Grove (2003:498) maintain that a questionnaire is the best method of collecting data especially if the survey strategy is used.

The questionnaire has specific advantages. Polit and Hungler (2001:293) points out that the specific advantages of using a questionnaire are:

- It is a rapid and efficient method of gathering information.
- Measurement is enhanced because all subjects respond to the same questions.
- Subjects are kept anonymous.

### **3.8.2 Conducting the interviews**

The researcher collected data by using face-to-face interviews. The items included in the structured interview were designed by the researcher with the assistance of the supervisors and based on information acquired during the literature review. A statistician evaluated the questionnaire.

The researcher designed a structured interview schedule with both open-ended and closed questions. An interview schedule is a questionnaire with closed or fixed alternative questions as well as indications of how to answer each question (Brink 2006:151). Structured interviews are formalised so that all respondents hear the same questions in the same order and in the same manner.

#### **3.8.2.1 Advantages of structured interviews**

Interviews have the following advantages:

- Interviews are more feasible for most people. The responses can also be obtained from individuals who cannot read or write.



- The response rate for interviews is usually high as respondents are less likely to refuse to be interviewed if they are available.
- An interview is a flexible method, which allows the researcher to explore the deeper meaning of phenomena.
- Face-to-face interviews also produce information through personal observations of the respondents' verbal and non-verbal communication.
- The researcher can clarify ambiguous or confusing questions.
- The respondents are less likely to leave a question unanswered.
- The researcher controls the structured interview (Burns & Grove 2003:420, 422; Polit & Beck 2006:291, 296).

The structured interview schedule was divided into four sections:

- *Section A* comprised socio-demographic data, which sought to obtain respondents' details such as age, marital status, educational status and occupational status.
- *Section B* sought to determine the obstetric information.
- *Section C* was aimed at obtaining information on the quality of service rendered at MOUs.
- *Section D* was aimed at the availability and implementation of MOUs norms and standards.

The structured interview schedule consisted of mostly closed and some open-ended questions on the factors of the respondents regarding utilisation of MOUs in Emfuleni sub-district. The questions were clear, unambiguous, and arranged in such a way that data collected was as easy and accurate as possible (Polit & Hungler 2001:286).

### **3.8.3 Data collection procedure**

Individual interviews were conducted to allow the postnatal mothers who were unable or unlikely to complete questionnaires, such as those who were not literate enough for reading, writing and ability to express themselves in the English language (Burns & Grove 2003:422). The questions for the interview schedule were written in English while the researcher communicated in Southern Sotho, which is the home language of the majority of the community under study, in order to maintain consistency and to enhance

confidentiality as well as anonymity for those who do not understand English by avoiding the use of interpreters.

During each individual interview, the respondents were given an opportunity to ask questions concerning the research. Debriefing sessions were conducted at the end of each individual interview and the researcher thanked the respondents for their participation.

The total number of selected respondents was 100. Each interview took approximately half an hour to complete.

### **3.8.4 Validity**

Polit and Hungler (2001:408) defined validity as the degree to which an instrument measures what the researcher is intended to measure. Validity addressed the appropriateness, meaningfulness and usefulness of the specific inferences made from instrument scores. It has to do with truth strength and value (Burns & Grove 2003:500).

The structured interview schedule mostly focused on content validity, which refers to the accuracy with which an instrument measures the factors under study. Therefore, content validity was concerned with how accurately the questions asked intended to elicit the information sought. The research instruments were tested for content validity.

### **3.8.5 Content validity**

Content validity refers to the extent to which various research elements measures what each one purport to measure (Polit & Hungler 2001:250).

An instrument cannot validity be measuring the attribute of interest if it is erratic, inconsistent and inaccurate. However, an instrument can be reliable without being valid. The central aim of a data collection instrument is to establish a relationship between the independent variable and dependent variable with high degree of certainty. A data collection instrument should measure what it is supposed to measure.

The content validity was achieved through a critical review of the instrument by the supervisor and joint supervisor and other experts in the area of study. The statistician

scrutinised the items constructively for subsequent statistical analyses using the SPSS computer program. The sections in the structured interview schedule are relevant for identifying factors, which could influence women's choice to rather deliver their babies at a regional hospital, than at the Sharpeville MOU where they attended antenatal clinic. Changes were made according to the feedback from the statistician and the supervisors who reviewed the interview schedule. A pre-test was also carried out to ensure validity.

### **3.8.6 Construct validity**

Construct validity ensures that abstract concepts are measured adequately and logically, and relationships between variables are identified with the instrument based on theory, and clear operational definitions.

Construct validity includes the definition of variables in line with existing literature or theory and differentiates between respondents who possess the trait and those without the trait (Burns & Grove 2003:232). In this study the interview schedule was based on the literature reviewed and the relevance to the variables in the study. The variables were operationally defined to create common understanding between the researchers and readers.

### **3.8.7 Threats to internal and external validity**

#### **3.8.7.1 Internal validity**

Internal validity is the extent to which the results of the study reflect reality rather than extraneous variables. Threats to internal validity are factors that may give false positive or false negative in the measurement of variables. Lack of internal validity may be observed when other variables rather than the independent variables under study are responsible for part of or the entire observed outcome on the dependent variable. Therefore, the researcher has to be observant of other variables rather than the dependent variables that may affect the outcome of the results (Burns & Grove 2003:232). The researcher was observant of the following factors, which could give false or negative measurement of the variables in the study.

## **Setting**

The study was conducted in a natural environment, i.e. MOU postnatal clinic, as it wanted to explore the factors which influenced patients who were screened as low-risk patients, attended the MOU for antenatal care, but then opted to deliver at a hospital.

## **Pre-testing**

Burns and Grove (2003:228) stated that information obtained on pretest may improve the responses of respondents. In the study, respondents were interviewed on separate dates, individually and in privacy to avoid other respondents overhearing and information gained from the pre-test was not disclosed.

### **3.8.7.2 External validity**

External validity deals with the ability to generalise the findings of the study to other members of the population rather than the sample (Burns & Grove 2003:234). The study has limited generalisability due to the sampling approach of respondents and a small sample size.

### **3.8.8 Reliability**

According to Burns and Grove (2003:494), reliability is defined as an extent to which an instrument consistently measured a concept. Reliability relates to the precision and accuracy of the instrument. If used on a similar group of respondents in a similar context, the instrument should yield similar results (Brink 2006:207).

Accurate and careful phrasing of each question to avoid ambiguity and leading respondents to a particular answer ensured reliability of the tool. The respondents were informed of the interview and of the need to respond truthfully.

### **3.8.9 Pre-test**

A pre-test is a trial run of the major study. Its purpose is to check the time taken to complete the questionnaire whether it is too long or too short too easy or too difficult and to check the clarity of the questionnaire, items and to eliminate ambiguities or difficulties in wording (Brink 2006:206).

A pre-test was conducted to test the questionnaire for reliability and validity. Ten respondents with similar characteristics to the research sample who were not part of the main study were interviewed. Venda, Tsonga and Xhosa languages were a problem in communication especially those cannot speak English or Zulu language. The researcher excluded them. Time for interviewing each respondent was approximated (Brink 2006:206).

## **3.9 DATA ANALYSIS**

Data analysis is “the systematic organisation of research data and the testing of research hypothesis, using those data” (Polit & Hungler 2001:444).

It also entails “categorising, ordering, manipulating and summarising the data and describing them in meaningful terms ”(Brink 2006:178). The completed questionnaires were given to a statistician who used the SPSS computer program to analyse the data. Most of the questions included in the questionnaire were closed questions. The questions were coded for easy analysis by computer. The open-ended questions were categorised by hand by the researcher. A member of Computer Support Services at Unisa captured the data. The findings were discussed and the data presented in the form of frequency tables and bar graphs.

Descriptive and inferential statistics were used in the data analysis and summaries included descriptive statistics, frequencies and percentages

### **3.10 ETHICAL ISSUES**

Conducting nursing research requires not only expertise and diligence but also honesty and integrity (Burns & Grove 2003:195). When human subjects are used in a research study, they have to know the activities they will be involved in, that their rights need to be protected and their person should be safeguarded hence the researcher needed to ensure their adequate protection.

Pera and Van Tonder (2005:4) defined ethics as “a code of behaviour considered correct”. It is crucial that all researchers are aware of research ethics. Ethics relate to two groups of people; those conducting research, who should be aware of their obligations and responsibilities, and the “researched upon”, who have basic rights that should be protected.

The study therefore had to be conducted with fairness and justice by eliminating all potential risks. The respondents must be aware of their rights. Ethical issues observed in a study may include:

- Informed consent
- Right to anonymity and confidentiality
- Right to privacy, justice, beneficence
- Respect for persons (Brink & Wood 1998:200-209)

#### **3.10.1 Permission to conduct the study**

Permission to carry out the study was obtained from Sharpeville CHC in Emfuleni sub-district.

The rights of the institution in which the researcher intended to conduct the research were obtained through the permission granted by the following institutions:

- Sedibeng District Health Services
- Sedibeng District Council
- Emfuleni Subdistrict
- Sharpeville Community Health Centre
- Gauteng Province Public Health – Research Unit

For application of permission (see Annexure A) and for permission granted approvals (see Annexure B).

### **3.10.2 Respect for persons as autonomous individual**

Respect for persons is a basic human right. Autonomous individuals have the right to choose to either participate or not, in the research. The *Collins English Dictionary* (2001:286) defined choice as “the act or an instance of choosing or selecting; the opportunity or power of choosing”. The decision is to be made without coercion. Respondents were allowed to act independently by giving their informed consent to participate in the study. In this study it was ensured that respondents gave informed consent to participate in the study. Prior to the respondents giving consent, the purpose of the study was fully explained to them in the language they were well conversant with. Risks and benefits were highlighted. The respondents were informed that participation was voluntary and they were free to withdraw should they so wish. The respondents were assured that neither participation, withdrawal nor refusal to participate would affect their entitlement to health services. Prior to signing the consent, there was a period of question time to ensure that the participants fully understood the explanations. At the end of the explanations, the respondents were asked to sign a written consent (see Annexure C).

### **3.10.3 Confidentiality and anonymity**

Confidentiality is “a basic ethical principle while anonymity is one way in which confidentiality is maintained. To ensure anonymity, steps are taken to protect the identity of the individual by neither giving their name when presenting research results,

nor including identifying details which may reveal their identity such as workplace, personal characteristics and occupation” (Brink 2006:151). In this study, anonymity was achieved by not putting names on the questionnaire. The researcher at the end should not be able to link any information to any participant. The interview was conducted in a private office where no third person could overhear the conversation.

#### **3.10.4 Avoiding harm**

Avoiding harm is another basic human right to be considered when conducting research on human beings. According to Burns and Grove (2003:206), risks that may be encountered in research include physical, psychological, emotional, social and financial ones. In this study, psychological harm through periods of long waiting and maintaining confidentiality and anonymity was the probable risk the patients could have encountered. The researcher spent 30 minutes in interviewing each participant. Maintaining privacy, confidentiality and anonymity during the interview also prevented psychological harm.

#### **3.10.5 Justice**

Justice relates to “the fair treatment of those in the study” (Burns & Grove 2003:705). In this study, the participants were treated fairly by giving them information prior to participation and by giving them the option to withdraw from the study if they wanted to without any negative consequences regarding entitlement to health services. Selection of the sample following the guidelines of the inclusion criteria also ensured that all those who met the criteria had a fair chance to be chosen to participate in the study.

#### **3.10.6 Informed consent**

Informed consent is “a legal requirement before one can participate in a study” (Brink 2006:151). After a full explanation of the nature of the study, participants were asked to give either verbal consent for those who could not read or write or written consent of their willingness to participate in the study (see Annexure C).



### **3.11 CONCLUSION**

This chapter described the research methodology and ethical considerations. Chapter 4 presents the data analysis and interpretation of findings.

## Chapter 4

### Data analysis and interpretation

#### 4.1 INTRODUCTION

This chapter discusses the data analysis and interpretation. The study sought to answer the following questions:

- What are the factors that influence pregnant women who were screened as low risk pregnancies at Sharpeville MOU to deliver their babies at a hospital?
- What recommendations can be made to improve the utilisation of Sharpeville MOU?

In this study a convenience (accidental) sampling method was used to select the subjects. The subjects were selected on the day of their postnatal clinic visit by the researcher with the assistance of the postnatal unit manager. The clients' postnatal cards were checked on their arrival for their six weeks' postnatal follow-up visit. Mothers who met the inclusion criteria were then selected and directed to the identified room where the individual interviews were conducted. The postnatal records of mothers selected for this study were also assessed.

One hundred respondents from Sharpeville MOU participated in the study. A statistician analysed the data, using the Statistical Package for Social Sciences (SPSS) version 13.0. Descriptive and inferential statistics such as frequencies, tables and percentages were used in the data analysis and summaries. Relationships between variables were identified using frequencies.

The researcher collected data from the respondents using a structured interview schedule with four sections. The data was analysed and presented in the same order:

- Section A – Socio demographic data
- Section B – Obstetric information
- Section C – Quality of service rendered at MOU
- Section D – MOU norms and standards

## 4.2 SECTION A: SOCIO-DEMOGRAPHIC DATA

This section dealt with information such as the place where the women actually live, their ages, home language, marital status, educational level and occupational status. Biographic questions gather data on respondents' characteristics (Mudokwenyu-Rawdon 2001:35). The demographic data assisted the researcher to interpret the findings of the women who were screened as low-risk pregnancies yet opted to deliver their babies at a hospital rather than at Sharpeville MOU.

### Item 1.1 Where do you live? (N=100)

All the respondents (N=100) lived in Sharpeville.

### Item 1.2 Age in years (N=100)

Table 4.1 indicates the respondents' ages.

**Table 4.1 Respondents' age**

AGE	FREQUENCY	PERCENTAGE
15-19	21	21,0
20-24	25	25,0
25-29	24	24,0
30-34	17	17,0
35-65	13	13,0
<b>TOTAL</b>	<b>100</b>	<b>100,0</b>

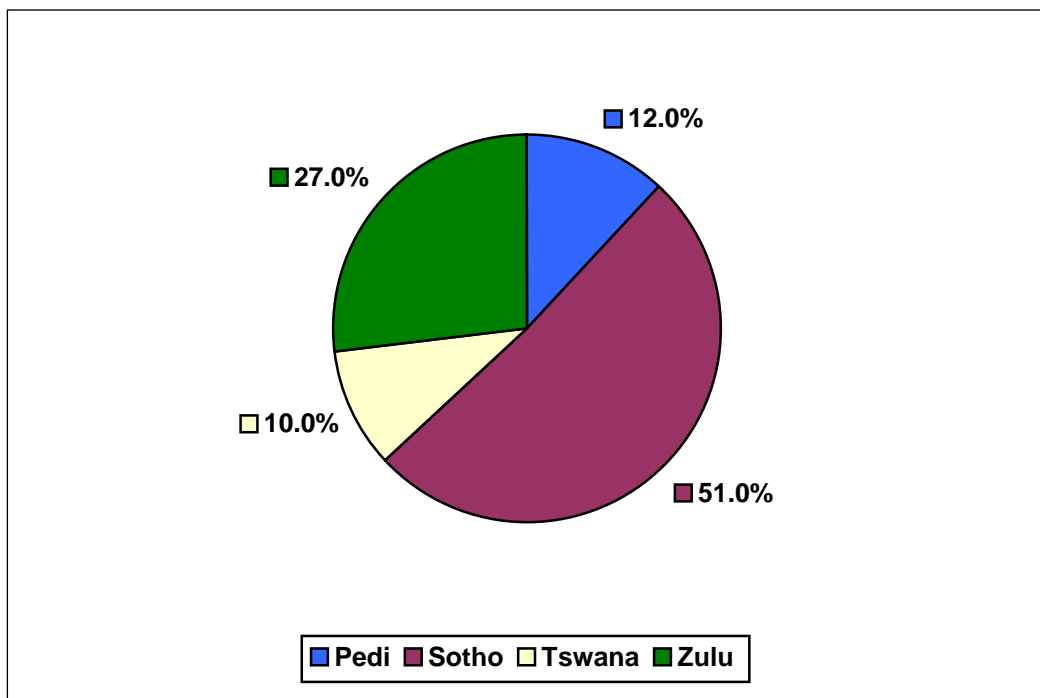
Of the respondents, the majority (49%; n=49) were between 20 and 29 years old; the youngest was 16 years old and the oldest was 38 years old, thus the ages ranged from 16 to 38. Only 13% (n=13) were over 35 and none were 40 or older. According to the Department of Health (1995:5), pregnant women who are 40 years or older are classified as high-risk pregnancies and referred to high-risk clinics at hospitals to deliver their babies.

Pregnant women aged 16 years or younger are at an increased risk of maternal and perinatal mortality and morbidity due to anaemia, obstructed labour and pre-eclampsia because their own physical growth and maturation are still incomplete. They may

present with added risks if the pregnancy is unplanned and/or unwanted (WHO 2004:15).

### Item 1.3 Home language (N=100)

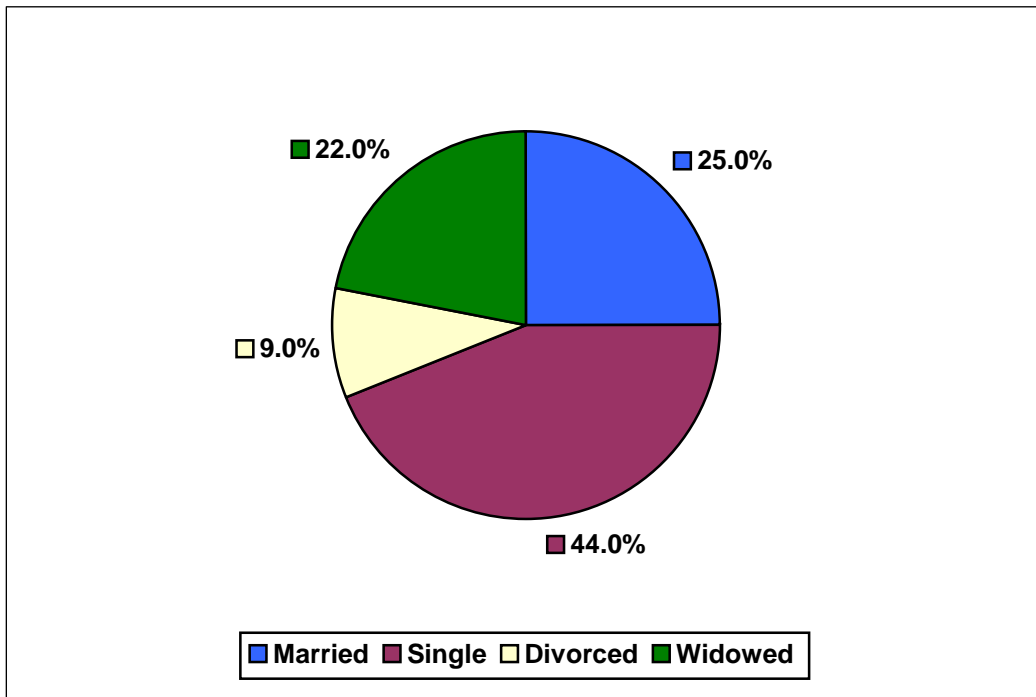
Figure 4.1 indicates that 51% (n=51) of the respondents spoke Sotho; 27% (n=27) spoke Zulu; 10% (n=10) spoke Tswana and 12% (n=12) spoke Pedi.



**Figure 4.1**  
**Home language**

### Item 1.4 Marital status (N=100)

Figure 4.2 indicates that of the respondents, 44% (n=44) were single while 22% (n=22) were widowed and 9% (n=9) were divorced. Only 25% (n=25) were living with their husbands. Therefore, those women's partners and/or families or friends could exercise some influence over their decision to deliver their babies at a hospital or at an MOU.



**Figure 4.2**  
**Marital status**

**Item 1.5 Highest level of formal education (N=100)**

Table 4.2 presents the respondents' educational levels.

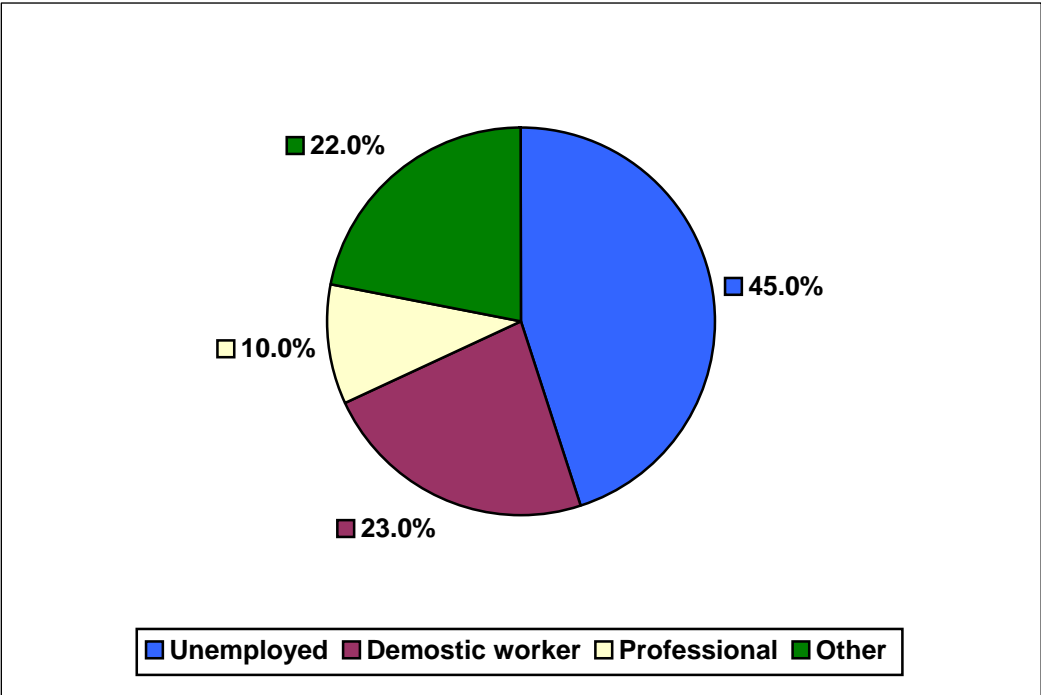
**Table 4.2 Highest level of formal education**

FORMAL EDUCATION OBTAINED	FREQUENCY	PERCENTAGE
Primary school	32	32,0
Secondary school, below matric	38	38,0
Matric	20	20,0
University/College	10	10,0
<b>TOTAL</b>	<b>100</b>	<b>100,0</b>

Table 4.2 reveals that of the respondents, 10% (n=10) had university or college education, and 32% (n=32) had only primary school education. The level of education could have an influence on the choice of place of delivery. The data shows that of the respondents, 70% (n=70) had not obtained higher educational qualifications: 32% (n=32) had primary school and 38% (n=38) had secondary school education. No one had never gone to school, which was good as it meant that all the respondents could understand health information on pregnancy and labour.

**Item 1.6 Source of income (N=100)**

Figure 4.3 indicates that of the respondents, 45% (n=45) were unemployed; 23% (n=23) were employed as domestic workers; 10% (n=10) were employed as professionals and 22% (n=22) had other incomes. Due to the scarcity of jobs in Sedibeng district, 45% (n=45) were unemployed, and 23% (n=23) worked as domestic workers. It is therefore important that unemployed and low salaried women attend and deliver their babies at an MOU where the service is free.



**Figure 4.3**  
**Source of income**

**Item 1.7 Affordability of transport within the Sharpeville area (N=100)**

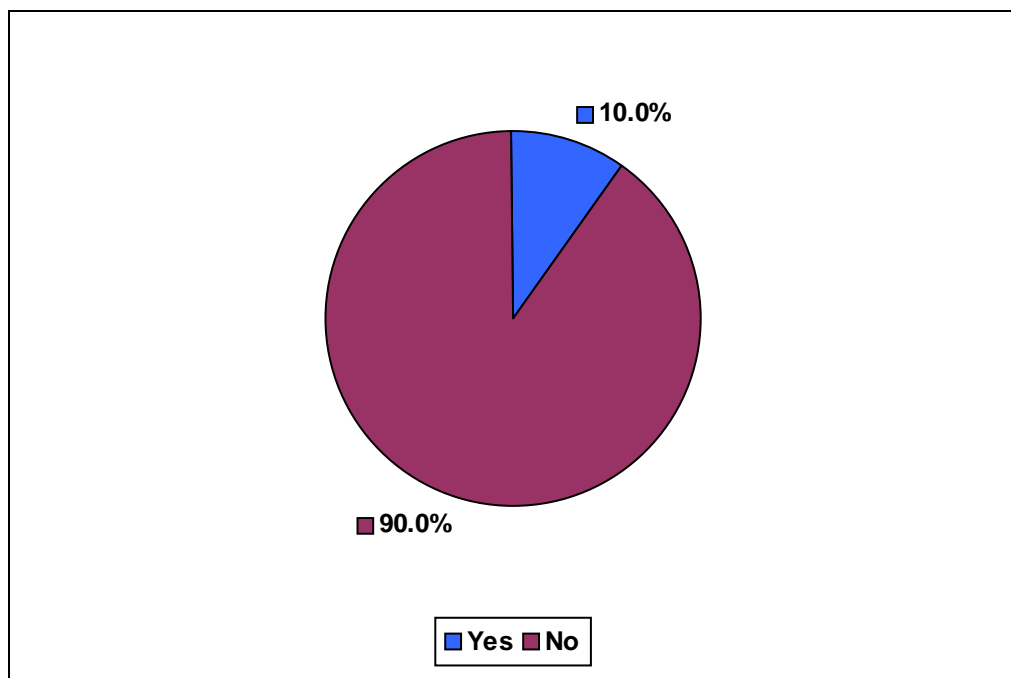
None of respondents made use of public transport to and from the MOU as they lived in the Sharpeville area within 2 to 5 kilometres from the Sharpeville clinic and MOU, which is a walking distance. There was no public transport after hours. The only means of transport for maternity cases in Sedibeng District after hours was by ambulance.

### Item 1.8 Cost of services (N=100)

All the respondents, 100% (N=100) indicated that they received antenatal care and maternity services free of charge. This is in line with the stipulations in the National Health Act, 61 of 2003.

### Item 1.9 Membership of a medical aid (N=100)

Figure 4.4 indicates that of the respondents, only 10% (n=10) were members of a medical aid scheme, and 90% (n=90) made use of the free maternity services offered at the MOU.



**Figure 4.4**  
**Membership of a medical aid scheme**

## 4.3 SECTION B: OBSTETRIC INFORMATION

Aspects discussed under this section include gestation at booking, number of antenatal care visits, number of pregnancies, history of abortions and stillborn, number of children alive, intended and actual place of delivery and cultural practices which influenced the decision on place of delivery.

## Item 2.1 Date of first antenatal care booking (N=100)

Table 4.3 indicates the date of the respondents' first antenatal care booking.

**Table 4.3 Date of first antenatal visit**

TRIMESTER	MONTH AND YEAR	FREQUENCY	PERCENTAGE
First trimester	February 2005	0	0,0
	March 2005	1	1,0
	April 2005	12	12,0
Second trimester	May 2005	31	31,0
	June 2005	12	12,0
	July 2005	34	34,0
Third trimester	August 2005	10	10,0
	September 2005	0	0,0
	October 2005	0	0,0
	<b>Total</b>	<b>100</b>	<b>100,0</b>

Table 4.3 indicates the gestational age at which the respondents attended their initial antenatal care visit. Of the respondents, 77% (n=77) had attended their first antenatal care visit during the second trimester; 10% (n=10) during the third trimester, and 13% (n=13) during the first trimester. The researcher determined the gestational age according to the dates of first visits and the actual date of delivery.

The WHO (2003:27) recommended that the initial antenatal care visit should take place before 16 weeks of pregnancy or during the first trimester. The early initiation of antenatal care attendance is important, for example to prevent and treat anaemia, to screen and treat syphilis and to identify and manage women with medical complications. Early care also allows for the development of inter-personal relationships between the midwife and the pregnant women as well as the development of a plan for delivery.

## Item 2.2 Gestational age at booking (N=100)

Table 4.4 indicates the respondents' gestational age at their first antenatal care booking.



**Table 4.4 Gestational age at booking**

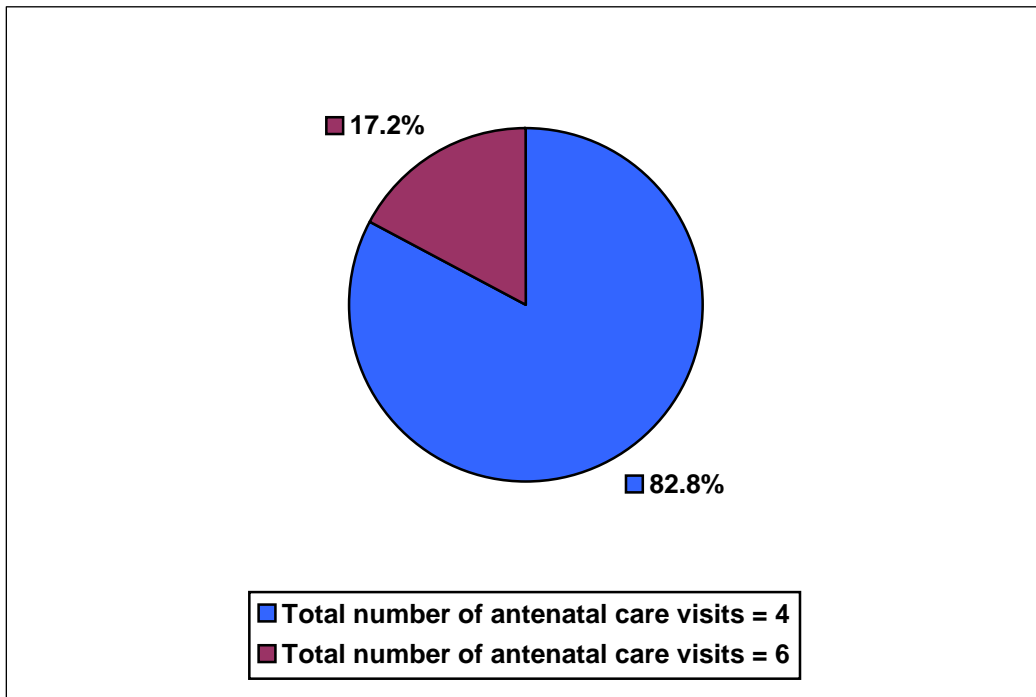
<b>GESTATIONAL STAGE (WEEKS)</b>	<b>FREQUENCY</b>	<b>PERCENTAGE</b>
4	16	16,0
8	32	32,0
12	12	12,0
20	40	40,0
<b>TOTAL</b>	<b>100</b>	<b>100,0</b>

Table 4.4 indicates that of the respondents, 40% (n=40) were 20 weeks' pregnant; 32% (n=32) were 8 weeks' pregnant; 12% (n=12) were 12 weeks' pregnant, and 16% (n=16) were 4 weeks' pregnant at their first antenatal care booking. The early bookings were a positive indication as preparation for labour could be extensive. According to the Department of Health (2002:19), pregnant women need to book at four weeks or immediately when they missed a menstrual period. Information regarding early antenatal care booking should be disseminated to young women in the community. A complete assessment of gestational age and risk factors can be made at the first antenatal visit.

The purpose of the first visit is to introduce the woman to the maternity service. Information is shared between the woman and midwife in order to discuss, plan and implement care for the duration of the pregnancy, the birth and postnatal. The earlier the first contact is made with the midwife, the more appropriate and valuable the advice given relating to nutrition and care of the developing foetal organs, which are almost completely formed by 12 weeks gestation (Fraser et al 2006:241).

**Item 2.3 Total number of antenatal care visits (N=100)**

The respondents were asked to indicate the number of antenatal care visits they had undergone.



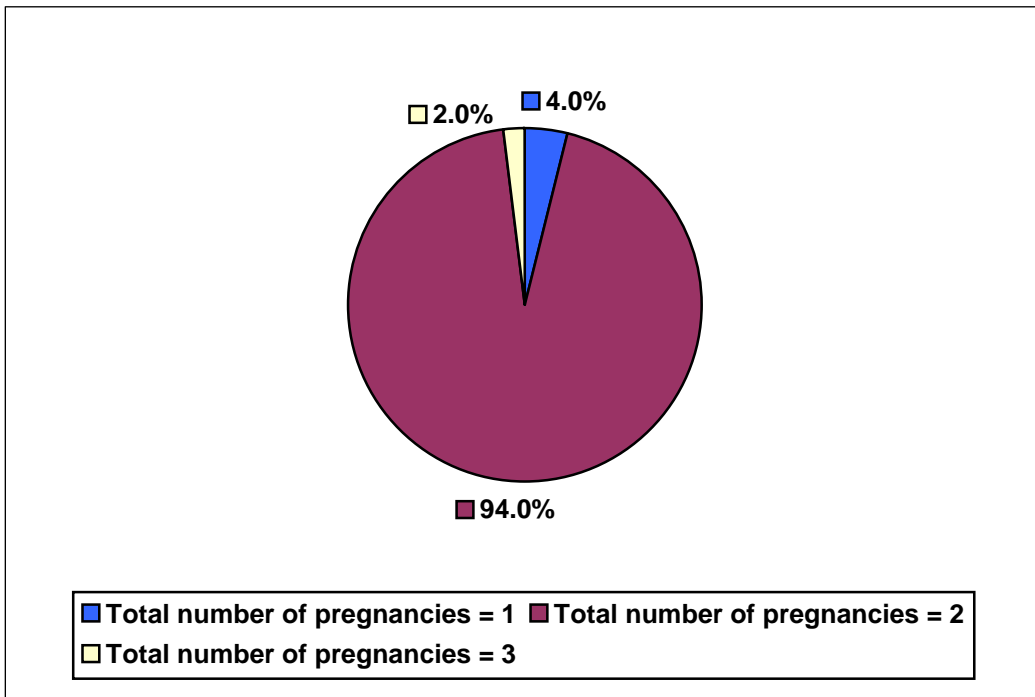
**Figure 4.5**  
**Total number of antenatal care visits**

Figure 4.5 indicates that of the respondents, 82,83% (n=83) reported four visits, 17,17% (n=17) reported six visits and one respondent did not answer the question. The frequency of visits is usually determined by the policy of the institution. The timing and number of visits will vary according to individual need and changes should be made as circumstances dictate (Fraser et al 2006:260).

According to the Department of Health (1995:7), the ideal number of antenatal visits is six. Only 17,7% (n=17) of the respondents met the ideal number of visits to the antenatal clinic under study.

**Item 2.4 Parity of respondents (N=100)**

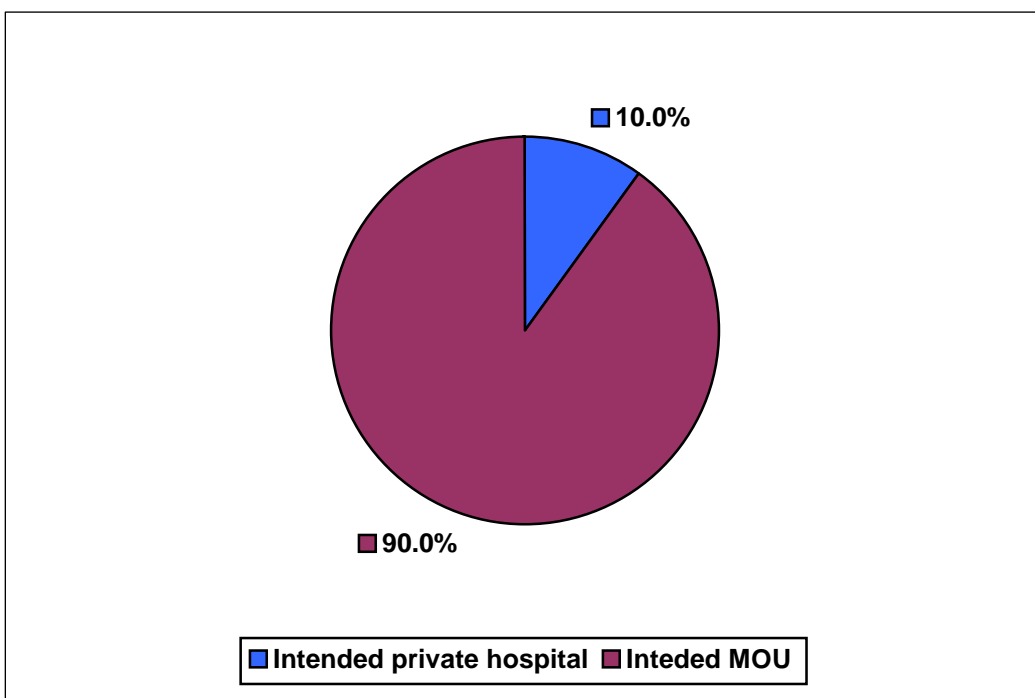
Of the respondents, 94% (n=94) had had 2 pregnancies; 4,0% (n=4) indicated 1 pregnancy and 2% (n=2) indicated 3 pregnancies.



**Figure 4.6**  
**Parity of respondents**

**Item 2.5 Place of delivery (N=100)**

Of the respondents, 10% (n=10) indicated a private hospital and 90% (n=90) indicated an MOU as their choice of place of delivery. However, all of the respondents delivered their babies at a provincial hospital.



**Figure 4.7**  
**Place of delivery**

In SA, midwives, general practitioners and obstetricians are responsible for antenatal care. Midwives are usually responsible for the care of women with low-risk pregnancies, who go to public hospitals or clinics. Most women receive antenatal care in the community, either at a local clinic or hospital-based clinic (Fraser et al 2006:241).

Options for place of birth include the home, a birth centre, peripheral unit or a hospital. Women who have risk factors identified or who develop complications during pregnancy usually plan for a hospital birth. In the case of this study, the women were all classified as low-risk cases.

**Item 2.6 Cultural practices that influence the decision on place of delivery (N=100)**

Table 4.5 indicates cultural practices that (could) influence the decision on place of delivery.

**Table 4.5 Traditional family healer recommended place of delivery**

Response	FREQUENCY	PERCENTAGE
Yes	23	23,0
No	77	77,0
<b>TOTAL</b>	<b>100</b>	<b>100,0</b>

**Item 2.6.1 Traditional family healer recommendation (N=100)**

Of the respondents, 23% (n=23) indicated that a traditional family healer had recommended that they deliver their babies at the provincial hospital.

Helman (2001:111) defined culture as “that complex whole which includes knowledge beliefs, art, morals, law, custom, and any other capabilities and habits acquired by man as member of society”.

According to cultural practice, a Shona woman should deliver her firstborn child at her parents’ home area so that the family can provide support during delivery and in caring for the newborn baby (Mudokwenya-Rawdon 2001:36).

### **Item 2.6.2 Language barriers (N=100)**

None of the respondents indicated that language barriers were a limitation.

### **Item 2.6.3 Witchcraft practices (N=100)**

Of the respondents, 22% (n=22) said that they delivered their babies at a hospital because witchcraft practices cannot reach the hospital (see table 4.6).

**Table 4.6 Witchcraft practices**

<b>Response</b>	<b>FREQUENCY</b>	<b>PERCENTAGE</b>
Yes	22	22,0
No	78	78,0
<b>TOTAL</b>	<b>100</b>	<b>100,0</b>

Sellers (1995:417) found that pregnant mothers believe in tying ropes around the abdomen to alleviate pain brought by the presence of evil spirits. Sellers (1995:418) also described the following practices to drive away bad influences: witchcraft, magic charms, potions and incantations. These beliefs and practices might have a negative influence on place of delivery as the MOU are nearer to their neighbours, families or community.

### **Item 2.6.4 Traditional medicines (N=100)**

Oosterbaan and Barreto Da Costa (2003:39-43) found that most traditional healers discouraged pregnant women from the use of appropriate nutrition, antenatal and delivery care. However, pregnant women who believe in traditional healers' medicines did not consider their referral, but tended to ignore clinic advice.

According to the Department of Health (2002:57), "both being underweight and overweight feature in the top ten risks in terms of the global burden of disease. Changes in consumption and production of food, alcohol, tobacco and other substances have pervaded societies around the world as a result of globalisation. Dietary changes are also accompanied by changes in working and living patterns." Therefore health education given to pregnant women at antenatal clinics should include nutrition. The

education should encourage the women to eat a balanced diet as pregnancy makes extra demands on them.

O'Mahony and Steinberg (1995:1168) found that 78% (n=78) of Xhosa pregnant women used "*isihlambizo*" and 32% (n=32) of pregnant women used "*imbelikisane*" traditional medicines to accelerate labour and also to induce labour.

Ngubeni (2000:112) emphasised that Zulu pregnant women are forced to drink traditional medication during pregnancy. It is accepted that pregnant women obey their mother-in-law and all the elders of the family without argument. They believe that if anything wrong happens to the baby after refusal to take traditional medicines, they will be blamed.

#### **Item 2.6.5 Privacy maintained**

None of the respondents indicated maintenance of privacy as a reason for going to the hospital.

#### **Item 2.6.6 Beliefs**

In response to item 2.6.6, none of the respondents indicated beliefs about the delivery position as a consideration.

Rituals regarding the placenta were not considered when the place of delivery was selected. Only 35% (n=35) of the respondents indicated that woman request cultural beliefs such as traditional attire.

### **4.4 SECTION C: QUALITY OF SERVICE RENDERED AT MOUs**

This part of the structured interview schedule covered nine aspects, namely:

- Level of satisfaction with the service delivery by nursing staff at the clinic
- Information received from the primary health care clinic about pregnancy care
- Signs and symptoms that will make women suspect that they might be developing obstetric problems

- Information received from the PHC during antenatal care clinic visits about delivery care, which includes signs and symptoms of labour preparations for delivery, medications, progress, positions of labour, and equipment used
- Information received from the antenatal care clinic regarding postnatal care and newborn
- Major reasons that contributed to the pregnant women's decisions not to deliver their babies at the MOU
- The mothers' expectations of MOU services
- Referral for medical assistance
- Information on when to seek medical assistance

Quality care according to the WHO (cited in Booyens 1996:302) is "the comparison of how the level of care actually provided compares with that which is defined as the wanted level of care". Quality of midwifery care is not a simple homogeneous variable, but a complex construct incorporating values, beliefs and attitudes of individuals in the health care interaction (De Kock & Van der Walt 2004:3-2).

The existence of maternal health services does not guarantee their use by women. Neither does the use of maternal health services guarantee optimal outcomes for women. Good quality maternal health services are those that meet the following criteria (De Kock & Van der Walt 2004:3-2):

- They are accessible and available as close as possible to where women live, and the lowest level facility that can provide the services safely and effectively.
- They are acceptable to potential users and responsive to cultural and social norms such as preferences for privacy, confidentiality and care by female health workers.
- They have on hand all essential supplies and equipment.
- They provide comprehensive care and/or links to other reproductive health services.
- They provide for continuity of care and follow-up care.
- They are staffed with technically competent health care providers who rely on clear guidelines and protocols for treatment.
- Workers who provide caring, respectful and non-judgemental care that is responsive to women's needs staff them.

- They provide information and counselling for clients on their health and health needs.
- The clients are involved in decision-making and seen as partners in health care who are also active participants in protecting their own health.
- They offer economic and social support to health care providers that enables them to do the best job they can.

**Item 3.1 Level of satisfaction with the service delivery at the clinic regarding nursing staff (N=100)**

Table 4.7 indicates the respondents' perceptions of nurses' attitudes at the clinic.

**Table 4.7 Respondent's perceptions of attitudes of nursing staff and experiences of the service delivery at the clinic**

Item interview scheduled	Satisfied		Dissatisfied		Total
	Frequency	%	Frequency	%	
3.1.1 Welcoming attitude of the nursing staff	32	32,0	68	68,0	100,0
3.1.2 Friendliness	32	32,0	68	68,0	100,0
3.1.3 Offering of a seat	20	20,0	80	80,0	100,0
3.1.4 Speaking to you in way that you are able to understand.	35	35,0	65	65,0	100,0
3.1.5 Listen to you when you are talking.	32	32,0	68	68,0	100,0
3.1.6 Patience of nursing staff	30	30,0	70	70,0	100,0
3.1.7 Kindness and helpful	30	30,0	70	70,0	100,0
3.1.8 Performance of the physical examinations	31	31,0	69	69,0	100,0
3.1.9 Waiting time	29	29,0	71	71,0	100,0
3.1.10 Communication among staff.	81	81,0	19	19,0	100,0

**Item 3.1.1 Welcoming attitude of the nursing staff (N=100)**

Although 32% (N=32) of the respondents indicated that they were satisfied with the level of service delivery at the clinic, 68% (N=68) reported that they were dissatisfied for the following reasons: rudeness, lack of respect, unprofessional behaviour, unfriendliness and hostile behaviour. According to the South African Health Rights Charter (1996:9-12), nurses should display a welcoming attitude to patients; be friendly; offer seats to their patients, listen to their patients and talk to them in a way that they can understand; be patient with their patients and provide general information as well as pregnancy related information (Makhubela-Nkondo 1996:12).



This finding corresponds with the findings of a report on Confidential Enquiries into Maternal Deaths in SA (2002-2004:26) that poor interaction exists between clients and health care providers.

The following comments represent the feelings of the majority of dissatisfied respondents “I am also afraid of the nurses. They bully and mistreat us. They ask difficult questions. We expect that nurses should welcome and be patient with us so that we can be able to ask questions”. Some patients were unable to voice their concern and present their problems to them.

Beckhard and Harris (1997:37) found that “changes of attitudes should take place through a process of unfreezing attitudes, as people were already trapped in certain behaviours and ways of life. A good principle to bear in mind is that if one can find an activity that can loosen up or unfreeze frozen attitudes or alleviate the process of creating the necessary conditions for incurring changes of attitude.”

### **Item 3.1.2 Friendliness (N=100)**

The majority of the respondents (68%; n=68) were dissatisfied with the friendliness of nurses and reported that nursing staff appeared hostile, reserved and unapproachable.

According to some of the respondents,

“I went straight to the consulting room. The sister came to the room with anger and hatred in her face and said to me I am working on her nerves, I must stop talking to other clients.”

“The nurses were very rude, irritable and unfriendly, when I requested the sister to provide me with a private room, she answered me very harshly and said this is not a private clinic.”

“Nurses are cheeky, rude, work slowly and speak English, which we don't understand, and make jokes about us”.

Pretorius and Greeff (2004:74) emphasise that the content of antenatal health service rendering should be changed to be more user-friendly, culturally sensitive and modern.

Too much emphasis is placed on the number of visits instead of the content and the aspects need to be revised. Lastly, teenagers should receive special care as they are deprived of emotional support throughout pregnancy and labour.

Westaway and Cooper (1996:137) found that women have different degrees of control over the timing and amount of care obtained. Accessibility, availability, affordability and acceptability of the services along with the attitudes towards the pregnancy were found to be barriers to utilisation of health services in Ivory Park. Fonn, Xaba, Tint, Coneo, and Varkey (1998:697) found that in South Africa, “nurses instruct each other to scold and insult women. They leave patients alone and sleep.” These aspects could contribute to low levels of utilisation of maternity services. Mashazi (2000:53) reported that the attitudes of nurses at Mohlakeng MOU were found to be rude, uncaring, unfriendly, cold and impatient by the mothers who delivered their babies at the MOU. The negative attitudes of midwives result in patients not utilising the facility, opting for distant facilities at hospitals where they received better care and treatment (Buchmann 1995:3).

In their survey, Uyirworth, Itsweng, Mpai, Nchabeleng and Nkoane (1992:138) revealed that negative attitudes of staff in Limpopo Province (Lebowa) were the main reason given by the mothers for not utilising the maternity services.

### **Item 3.1.3 Offering of a seat (N=100)**

Of the respondents, only 20% (n=20) were satisfied with the quality of care as the midwife offered them a seat in a polite manner; 80% (n=80) reported that a nurse did not offer them a seat; 45% (n=45) got themselves a seat while 35% (n=35) were offered a seat by other clients.

### **Item 3.1.4 Speaking to you in a way that you are able to understand (N=100)**

Williams (1996:200) states that health professionals must speak the same language, empathise with, and respect those they are trying to educate.

Levine (1994:120) found that health services that are available “may be viewed as alien because clients are out of their realm and feel uncomfortable with the staff. Providers are often viewed as belittling their clients, talking above them.”

According to the Department of Health (1997:104), the majority of health workers have poor communication skills and fail to communicate effectively with their patients at district and community levels. This should be corrected through the *Batho-Pele Principles*, which are displayed in all health institutions. The *Batho-Pele Principles* include courtesy, consultation, service standards, access to information, openness and transparency, redress and value for money.

According to the Patients’ Right Charter (ANC 1994a:45), the patient has the right to the following:

- Considerate and respectful care.
- Obtain complete current information concerning the illness.
- Receive necessary information to give informed consent to any procedure or treatment.
- Refuse treatment to the extent permitted by law.
- Privacy concerning own medical care programme.
- Know in advance what are the appointment times.

Only 35% (n=35) of the respondents were satisfied with the quality of service and that they were addressed in a way that they understood (see table 4.7): “I feel comfortable as if I ask a question, they explain to me and make sure that I understand.”

The staff addressed them in their own language (Southern Sotho) and appeared to have sufficient time to explain in full what they could expect. However, of the respondents, 68% (N=68) were dissatisfied and reported that nursing staff appeared hostile, reserved, unapproachable and unsocialable; were in a hurry, too fast, brief and short without explanation for a person to remember; and “the nurse does not really understand how difficult it is remembering what she said”.

De Kock and Van der Walt (2004:3-3) indicated that positive interactions between women and health care providers lead to client confidence and compliance.

### **Item 3.1.5 Listen to you when you are talking (N=100)**

Of the respondents, 32% (n=32%) described the listening skills of the nurses at MOUs as “paid attention to me”, “maintained eye to eye contact”, “had enough time” and “disturbance was avoided”. However, 68% (n=68) were dissatisfied and reported that the nursing staff lacked listening skills, lack of attention, lack of eye contact, and was interrupted in between the conversations.

Fraser et al (2006:24) maintained that the midwife should adopt a supportive attitude towards a pregnant woman. She must reduce anxiety by building trust and being reassuring. She must create a positive atmosphere and explain all the procedures in understandable language and provide excellent obstetrical care by touching, making eye contact and speaking softly to the patient.

Communication is the bedrock of accessible and woman-centred services, for two reasons:

- Women can access and use services only if they are aware of their existence. Midwives can overcome this issue by communicating appropriately.
- Women from disadvantaged backgrounds, for social and political reasons, are not confident and unable to express their needs and preferences to the midwives and so fail to utilise services effectively.

In circumstances where women cannot effectively communicate with the midwives, they are unable to fully participate in the decisions about the care they receive. It is therefore vital that women are provided with relevant and appropriate information, so that they can actively participate in the decisions about the care they receive (Fraser et al 2006:25).

### **Item 3.1.6 Patience of nursing staff (N=100)**

In response to item 3.1.6, on the patience of nursing staff, 30% (n=30) of the respondents were satisfied that nurses displayed patience, while 70% (n=70) were dissatisfied and indicated that nursing staff were in a hurry, had no time, were impatient, displayed intolerance, and lack of support.

Good relationships between women and midwives promote trust and confidence, thus providing a conducive environment where the midwife can determine their needs and preferences.

### **Item 3.1.7 Kindness and helpfulness (N=100)**

Of the respondents, only 30% (n=30) were satisfied and described the kindness and helpfulness of nursing staff at MOUs as people who “are compassionate, merciful, willingly to assist, able to answer questions, ready to advise and give support”. Seventy percent (n=70) were dissatisfied and reported that nursing staff at MOUs were “cruel, inhuman, merciless; unable to answer questions; lack of advice and guidance” (see table 4.7):

“I would like to be seen by the doctor”.

“The sister was very rude, she shouted at me and said, ‘I never sent you to boys and make you pregnant; your friends and children of your age are at school.’” I could not stop crying because it was not what I expected as an answer from the nurse.”

“I was looking forward to people around me.”

“Like I raised the problem of heartburn and I was told by the nurse there is nothing that can be done.”

### **Item 3.1.8 Performance of physical examinations (N=100)**

Of the respondents, 31% (n=31) were satisfied with the performance of the physical examination and explained that it was well conducted and the assessment from head to toe, abdominal palpation and history taking well performed. However, 69% (n=69) reported that the physical examination was poorly performed, incorrectly done, wrongly conducted, lack of abdominal palpations and wrong diagnosis on date of birth. According to some of the respondents:

“I was not put on an examination bed for palpations. The nurse put a foetal scope over my abdomen on top of my clothes while I was sitting on a chair.”

“I wanted to undress but the nurse stopped me, she asked me how far along my pregnancy was and wrote it down.”

“I presented the problem that I had pain below the abdomen. When I explained this to the nurse, she answered to me that it is the way it should be.”

“They did not explain to me ... they only said go back home and come back if you see some bleeding and water.”

In SA, the midwife is recognised as a practitioner in her own right and is accountable and responsible for her own acts and omissions. A midwife must, in terms of the Nursing Act (50 of 1978, as amended), be registered with the South African Nursing Council (SANC) to practise midwifery.

### **Item 3.1.9 Waiting time (N=100)**

Of the respondents, 29% (n = 29) were satisfied with the time they spent waiting and stated that they were very early at the clinic therefore they were the first clients to be seen. They spent half an hour at the clinic. The majority (71%; n=71) were dissatisfied, however, and indicated that they waited between 2 and 6 hours to be seen and attended by nursing staff.

Most of the respondents raised concern about the adherence to the exact time on duty. The local authority municipality clinics operate from 08:30 to 16:00. The antenatal care services are also available at those clinics. According to some of the respondents,

“When you come for antenatal clinic checkups the nurses expect you to be at the clinic at 07:00. I arrived at the clinic on time.”

“When we were at their consulting rooms, they did not attend to patients immediately as they came.”

“Patients wait for a long time.”

”I requested permission from work to visit the clinic. I arrived at the clinic at seven o'clock in the morning, waited for nurses to come and help us but to find

that nurses attend to patients at their own time. Hence I went back to work. I was late, it is difficult to wait here in front as is normal but I don't like waiting."

"I don't have any problem, the only thing that got to me was sitting for four hours at the clinic ... that was the only thing that troubled me and you come again, and you must still wait and the nurse goes for tea, you still have to wait for another half an hour."

Hulton, Matthews and Stones (2000:39) found that pregnant women attending public health services had to wait very long for care because of the large number of patients, lack of space and facilities, shortage of staff and equipment.

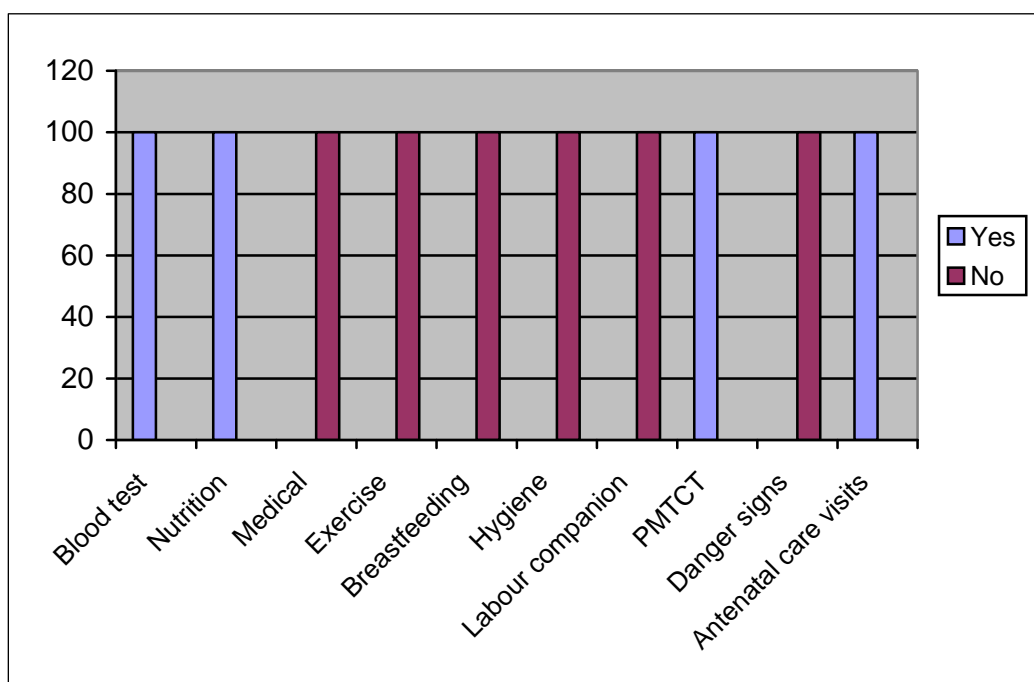
#### **Item 3.1.10 Communication among staff (N=100)**

Of the respondents, 81% (n=81) were satisfied with the communication among staff. They reported that communication was good. The nurses talked to each other, assisting each other, although everyone seemed to focus on the daily work allocated to her.

#### **Item 3.2 Information received from nursing staff at the MOU**

According to the WHO (2002:5), antenatal care includes the provision of education that ensures that mother and baby are in good health during pregnancy, delivery and post-natally. Some of the concepts promoted through health care messages include antenatal visits, essential services clean and safe delivery, danger signs and symptoms coping with emergencies, newborn care and family planning.

Butchart et al (1999:5) confirmed that women want information to be available to them through booklets, posters, television, videos, mindset (educational programme systems), guest speakers and mother and child-line on the Internet or support groups. The information received by respondents from nursing staff during their antenatal care visits is displayed in figure 4.8.



**Figure 4.8**

**Information received from nursing staff at the MOU regarding pregnancy**

### Item 3.2.1 General information received on pregnancy (N=100)

Of the respondents, 100% (N=100) acknowledged that they received adequate information from the nursing staff on:

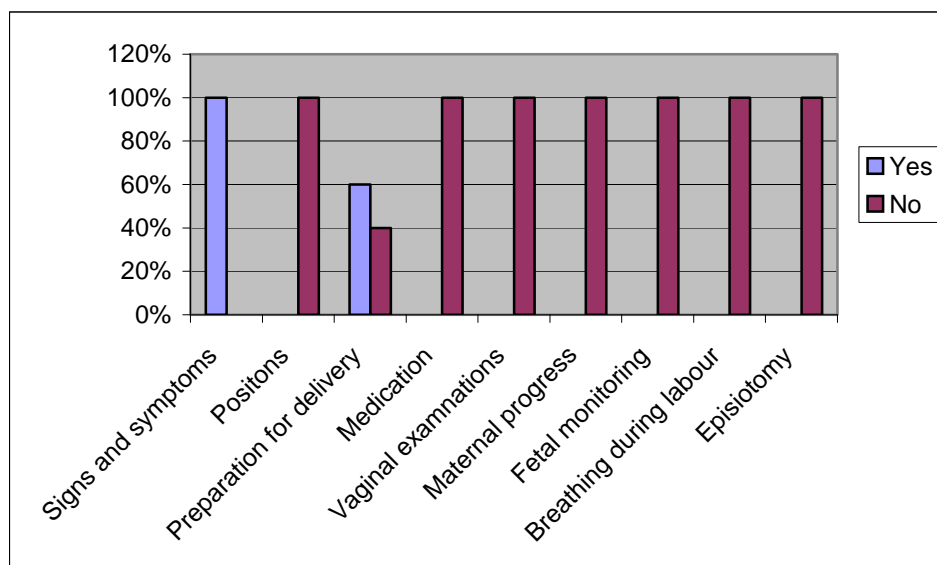
- Blood test. All the respondents were tested for HIV and STI.
- Nutrition. The eating of soil and ashes, not to drink unprescribed medicines; avoid smoking, alcohol and drugs.
- PMTCT. Prevention of mother-to-child transmission.
- Antenatal care visits. All the respondents were given return dates for antenatal care visits.

Figure 4.8 shows that all the respondents (100%; N=100) did not have information regarding medical assistance, exercise, hygiene, danger signs of pregnancy and labour companions. If these women failed to seek medical attention for signs of possible obstetrical complications, they might encounter life-threatening situations should they opt for MOU deliveries. It is up to the nurses and midwives at the antenatal care clinics to teach pregnant women when to seek medical attention.



### Item 3.2.2 General information received regarding delivery/labour (N=100)

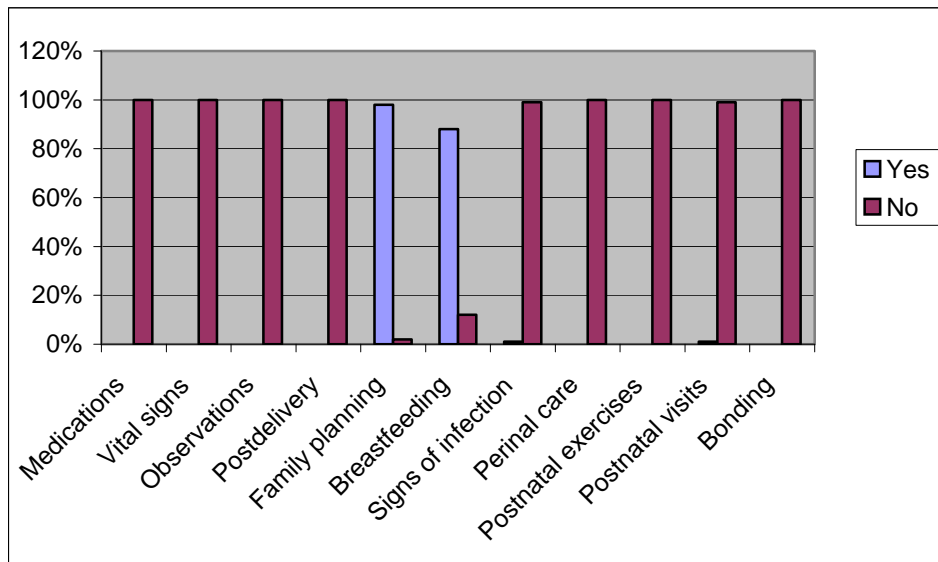
All the respondents received information on ruptured membranes and labour pain as signs and symptoms of labour. Furthermore, 60% (n=60) were informed to have a nightdress ready for delivery. Of the respondents, 100% (N=100) acknowledged that they were not given information regarding birthing positions such as lithotomy, medication, such as drip (IV therapy), maternal progress, vaginal examinations, fetal monitoring, breathing exercises during labour and episiotomy.



**Figure 4.9**  
**General information received regarding delivery/labour**

### Item 3.2.3 General information received regarding postnatal care (N=100)

Of the respondents, 98% (n=98) received information on breastfeeding and 100% (N=100) received information on family planning. None of the respondents received information on medication, vital signs, observations, postdelivery signs of infection, perineal care, and postnatal exercises. Postnatal visits and bonding were also not explained. This might lead pregnant women to assume that the hospital is best because of lack of postnatal information.



**Figure 4.10**

***General information received regarding postnatal care***

The following information regarding postnatal care is of importance:

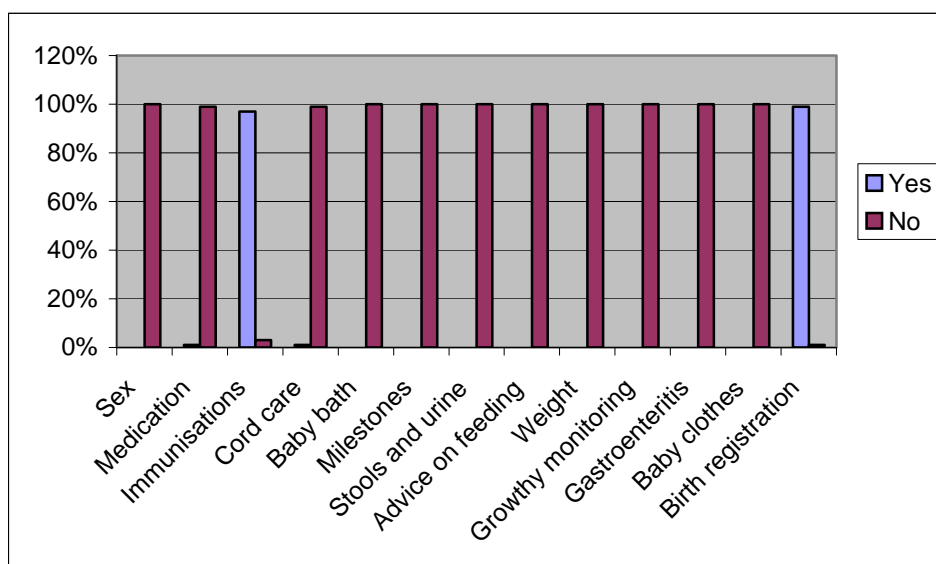
- Medication such as drip (IV therapy) and injection of Oxytocin immediately after delivery of the infant.
- Vital signs such as pulse rate, blood pressure and temperature will be taken to detect any abnormalities or changes.
- Observations of excessive vaginal bleeding, anaemia and to check if the uterus is well-contracted to screen postpartum haemorrhage and urinary symptoms.
- Post delivery procedures; for example, if episiotomy performed, has to be sutured, low haemoglobin needs to be corrected by blood transfusion and examination of the placenta for completeness and any abnormalities.
- Family planning method for the first three months as a choice of the mother has to be provided.
- Breastfeeding or formula feeding explained and demonstrated.
- Signs of infection, such as fever, high temperature, diarrhoea need to be mentioned.
- Perineal care to prevent spread of infection and avoid sepsis.
- Postnatal exercises to assist the uterus to contract.

- Postnatal visits where the mother will be given appointments to attend her nearest clinic after three days and again after two weeks for reassessment as described above.
- Bonding. The mother needs to know that immediately she has delivered a baby, the child will be put on her breast for bonding (Department of Health 2002:38).

### Item 3.2.4 General information received regarding the newborn (N=100)

Health education received from the midwives at the clinic about caring for the newborn baby was insufficient except for the information on immunisation, where 98% (n=98) of the respondents indicated that they received information on that aspect and 99% (n=99) received information on birth registration.

It was found that women did not receive information on sex-related issues, medications, cord care, baby bath, milestones, stools and urine, advice on feeding (for example frequency and amount), weight, growth monitoring, signs of dehydration and gastroenteritis and baby's clothes. These are important points in education of the pregnant women as preparation for motherhood and caring for the newborn. Advice on preparation of the name and surname of the child is important.



**Figure 4.11**

**General information received regarding the newborn**

## **Sex**

Mothers should know how to detect abnormalities among the males such as descent or undescended testicles.

## **Medication**

The child has to receive treatment after delivery of 3,5 gram Chloromycetin eye ointment to prevent infection and Konakion (Vitamin K) to prevent bleeding from the cord.

## **Immunisations**

First doses of polio drops and BCG vaccines need to be given to the child to prevent polio and TB. The importance of the “Road-to-Health-Card” (RTHC) and how to check and interpret the weight on the RTHC must be explained.

## **Cord care**

To keep the area clean and dry to observe any signs of infection.

## **Baby bath**

How and when to wash the baby. Soap and temperature of the water, oil or Vaseline, must also be given as information to the mother.

## **Milestones**

The mother should be taught how to monitor the development of the child on a milestones chart to be able to detect abnormalities early.

## **Stool and urine**

Colour, frequency, amount and odour of the stools and urine are important details that the mother should know. She must also know about normal and abnormal stools and urine.

## **Advice on feeding**

The mother should know the advantages and disadvantages of breastfeeding and artificial (bottle feeding) to enable her to make proper decisions. A nurse at a facility needs to assist her on infant feeding and techniques, whether breast or formula. She must know when, how, the amount, frequency of feeding. Expression of breast milk should be demonstrated to her.

## **Weight**

She must have a demonstration on how to check plotted weight on the immunisation card and how to interpret it.

## **Growth monitoring**

She must be made aware of the normal weight and signs and symptoms of malnutrition. Advice on balanced nutrition and on how to weigh the child at home on a daily basis should be provided.

## **Gastro-enteritis**

Signs and symptoms of dehydration and diarrhoea must be given to her in an educational form and pamphlets. She must be given a session on oral dehydration therapy for treatment.

## **Baby clothes**

The mother needs to be given advice on what to bring along in receiving a newborn, such as nightdress, napkins, blankets to keep for discharge from the MOU.

## **Birth registration**

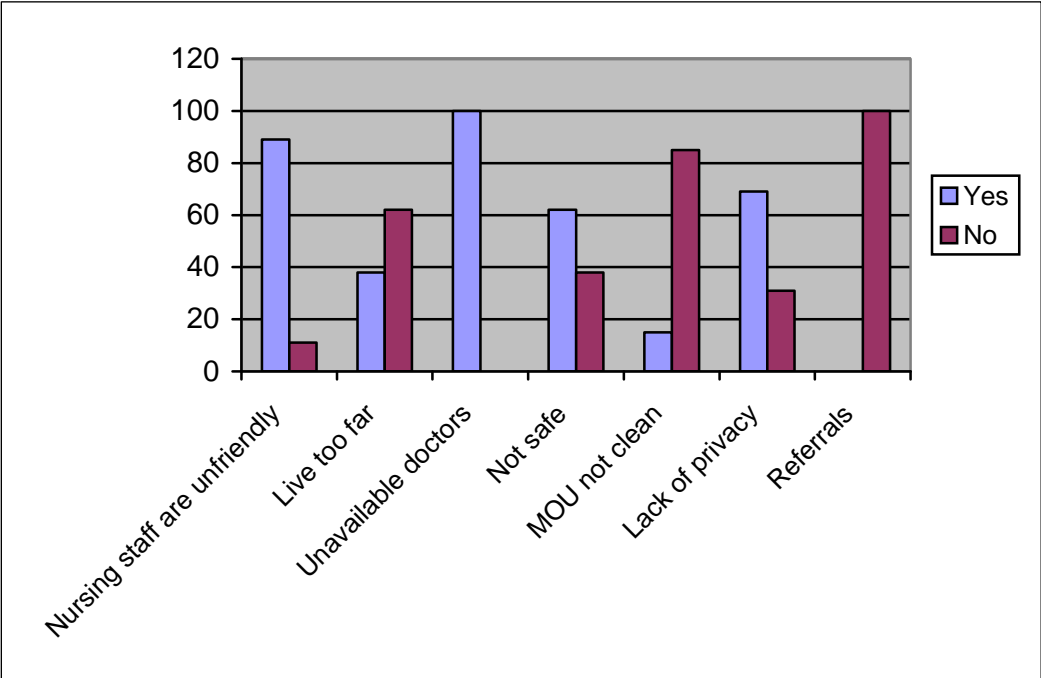
Advice on identity books of both the mother and father if the surnames are not the same. The mother should come with proper names and surname for the baby for registration purpose (birth certificate) (Department of Health 2002:25).

**Item 3.3 Reasons for not delivering the baby at the MOU (N=100)**

In response to item 3.3, the majority of the respondents (89%; n=89) reported unfriendly nursing staff, unavailability of doctors, lack of privacy and lack of security as reasons for their decision not to deliver their babies at Sharpeville MOU. The respondents gave the following reasons for not delivering their babies at the MOU:

- Nursing staff are unfriendly (89%; n=89)
- Live too far (38%; n=38)
- Unavailable doctors (100%; N=100)
- Not safe (62%; n=62)
- MOU not clean (15%; n=15)
- Lack of privacy (69%; n=69)

None of the 100 respondents were referred to deliver at the hospital; they were self-referrals.



**Figure 4.12**  
**Reasons for not delivering the baby at the MOU**

### **Item 3.4      Expectations of MOU services (N=100)**

In an open question the respondents indicated that the following services were important to them and which they expected from the MOU services:

- Ambulance services (90%; n=90)
- Privacy/confidentiality (88%; n=88)
- Availability of doctors (82%; n=82)
- Friendly service (79%; n=79)
- Labour companion (58%; n=58)
- High quality care (50%; n=50)
- Increased length of stay (47%; n=47)
- Human and material resources (linen) (47%; n=47)
- Access to pain relief (30%; n=30)
- Cultural practices (27%; n=27)
- Proper full meal (24%; n=24)
- Information session (20%; n=20)

Of the respondents, 90% (n=90) indicated that an ambulance service should operate for 24 hours at the MOU as a standby transport for referrals to the hospital and for patients who are in labour after-hours to transport them from home. The main reason given was lack of ambulance services. Ambulance services in Sedibeng do not collect patients from home, only at clinics. Therefore patients make use of public transport during the day to hospital to avoid inconvenience.

Furthermore, of the respondents, 88% (n=88) indicated privacy with increased cubicles, from 1 to 3, and number of delivery beds from 2 to 10 beds, maintenance of confidentiality by nursing staff, separate/special cubicles for teenagers, HIV/AIDS health status (PMTCT) and special cubicles for those who could afford them.

Buchmann (1995:3) found that members of the Tladi community in Soweto, Gauteng Province did not utilise Tladi maternity obstetrical unit for the following reasons:

“There is no doctor to examine our babies like in Zola Community Centre and Baragwanath hospital”.

“The standard of care is very low compared to Baragwanath Hospital.”

Modise (2000:5) stated that women who chose to deliver their babies at Johannesburg Hospital gave the following reasons: lack of friendly service at MOUs; hospital was close to their home; good transport links; good personal attention from staff; cleanliness; doctors were always available, and proper full meal.

Most of the respondents also reported the unavailability of doctors at the MOU, and that they felt unsafe in the absence of doctors:

”What if I complicate”.

“I like to be seen by the doctor”.

In response to an open question, the respondents stated:

“I think the MOU is too small and there is no doctor”.

“The MOU is boring and there are no public phone facilities”.

“The security officer is useless, he does not have a gun so our babies can be stolen”.

”Sisters at the MOU are always unfriendly. We deliver our babies in one room, irrespective of the age, and they do not allow husbands to witness labour”.

Of the women who delivered their babies at a hospital, 100% (N=100) were not referred by the nursing staff, because they were screened as low-risk pregnancies who qualified to deliver at a MOU. Of the respondents, 69% (n=69) indicated that there were other factors that contributed to their decision to deliver their babies at the hospital, including traditional healer’s recommendation, family or friends took them to hospital, and the ambulance driver transported them to the hospital instead of the MOU after-hours.

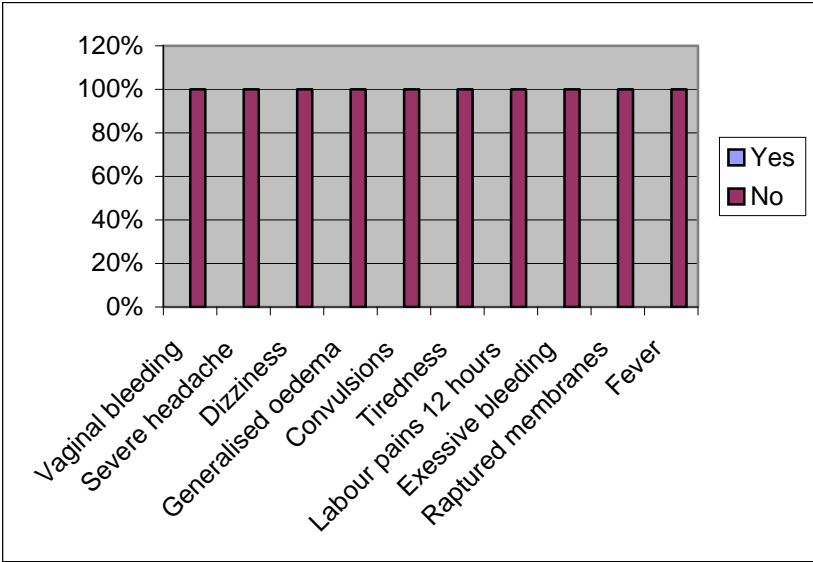


The Department of Health (1995:3) stipulates that the unit must employ more staff: midwives nurses, auxiliary nurses and security officers according to the size of the population that they serve. The guidelines further state that material resources such as transport, telephones, food, need to be organised to ensure smooth running of the unit and to attract the community who utilises the facility.

Proper safety and security measures have to be maintained. The MOU should have a security gate between the labour ward and the reception area, as well as an alarm system, which is connected to the local police station (Department of Health 1995:3).

**Item 3.5 Referral for medical assistance (N=100)**

The respondents indicated which danger signs the women would seek medical attention for and for which they would not seek medical attention. According to the Department of Health (2002:24), the district is the basic unit of a health care region, served by a district hospital and a number of health centres. A well-coordinated referral system, with access to transport and facilities, is essential for the provision of optimal care to all pregnant women in the district.



**Figure 4.13**  
**Referral for medical assistance**

- The Department of Health (2002:24) further stated further that “certain essential information must be provided to all pregnant women, verbally and in the form of written or illustrated pamphlets”, including the five danger signs and symptoms of pregnancy.

Figure 4.13 indicates that 100% (N=100) of the respondents did not receive information regarding referral for medical assistance. It is of grave concern that none of the respondents received sufficient information on the danger signs (see figure 4.13).

This lack of information might have had a negative impact on the women’s choice of place of delivery because of lack of information. The women might have developed a fear of unknown, which affected their choice of place of delivery.

#### **4.5 SECTION D: MOU NORMS AND STANDARDS**

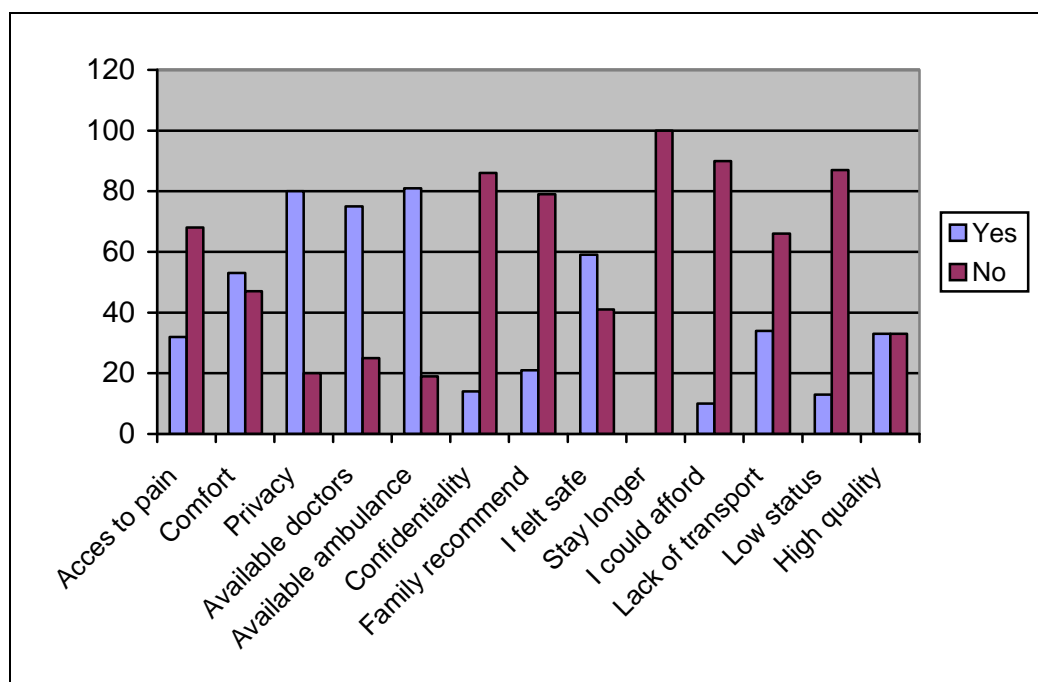
The study explored the MOU norms and standards. Five aspects were covered, namely:

- Main reasons for opting hospital delivery.
- Necessity to have an MOU in their area.
- The opinion regarding the utilisation of Sharpeville and Boipatong MOUs by the pregnant women.
- The recommendation of the facility by the women to their sisters or best friends.
- The rating of the overall service at MOU.

#### Item 4.1 Reasons to deliver the baby at hospital (N=100)

Figure 4.14 indicates that the following aspects influenced the respondents' decisions to choose the delivery place:

- I wanted access to pain relief (32%; n=32).
- The midwives provide comfort during labour (53%; n=53).
- There are more cubicles for privacy (80%; n=80).
- Availability of doctors in case I have complications (75%; n=75).
- Availability of an ambulance service (81%; n=81).
- Maintaining confidentiality about my HIV status (14%; n=14).
- Parents or friends took me to hospital because of previous bad experience at MOU (21%; n=21).
- I felt safe (59%; n=59).
- Length of stay after delivery at the hospital is longer than at a MOU (six hours).
- I could afford it (10%; n=10).
- Lack of transport after hours to MOU (34%; n=34).
- Low status if delivered at MOU rather than at hospital (13%; n=13).
- High quality of care at hospital (66%; n=66).



**Figure 4.14**

***Reasons for opting hospital delivery***

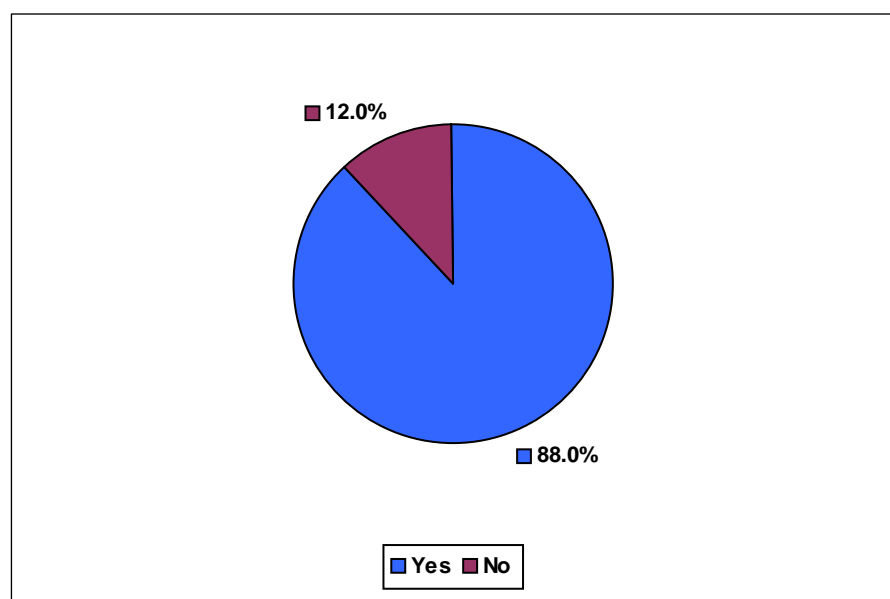
#### Item 4.2 The necessity of having an MOU in the area (N=100)

The respondents indicated the following reasons for an MOU in their area (see figure 4.15). Of the respondents, 88% (n=88) felt it was necessary to have an MOU in their area and they supported their statement as follows:

- It is nearer to the community.
- It is cheaper for the families and friends to visit.
- It is accessible and available.
- It is easy to communicate with the nursing staff.
- For urgent attention in case of women in labour.
- To reduce the workload at the hospital.
- To prevent complications and to relieve stress and fear among pregnant women”.

Twelve percent (n=12) of the respondents felt that it was not necessary to have a MOU in the area, for the following reasons:

- It will be close to the neighbours and enemies.
- To maintain privacy and confidentiality.
- To accommodate traditional healer’s services.
- To prevent witchcraft beliefs practices.
- To avoid evil spirits to reach the mother and the baby.



**Figure 4.15**

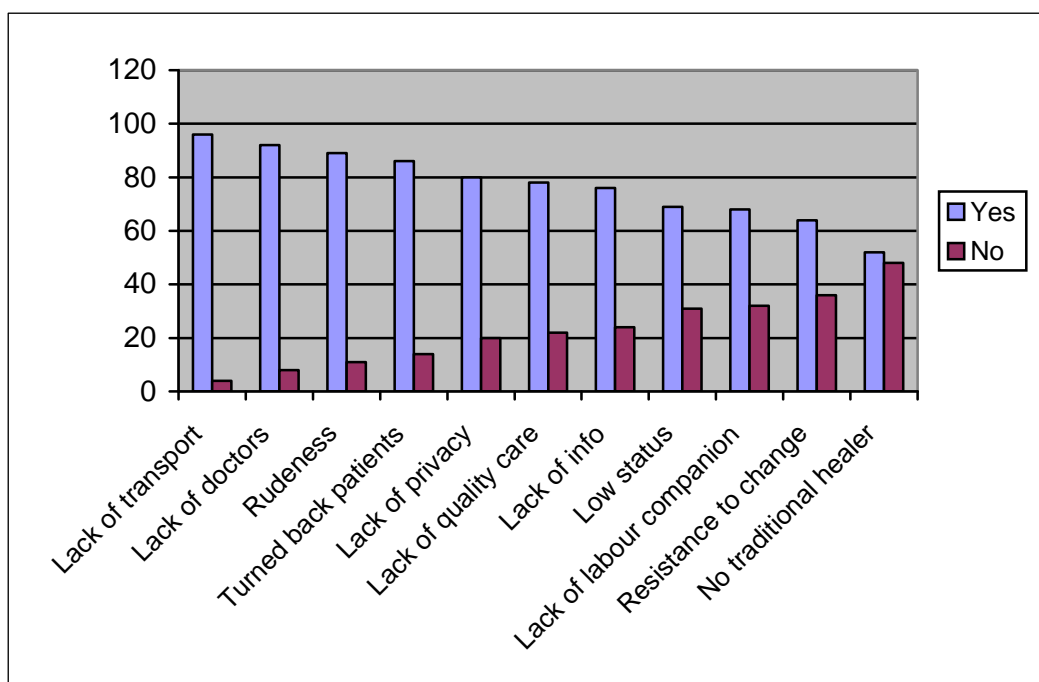
***The necessity of having an MOU in the area***

**Item 4.3 Opinions regarding pregnant women not utilising the Sharpeville and Boipatong MOUs (N=100)**

In an open question the respondents indicated that the following reasons might be the factors influencing pregnant women not to utilise Sharpeville and Boipatong MOUs:

- Lack of transport/ unavailability of ambulance services at MOU (96%; n=96).
- Unavailability of doctors at MOU (92%; n=92).
- Rudeness/unfriendly service (89%; n=89).
- Turning back of patients/wrong assessment (86%; n=86).
- Lack of privacy/confidentiality (80%; n=80).
- Lack of quality care (78%; n=78).
- Lack of information (76%; n=76).
- Low status if delivered at MOU (69%; n=69).
- Lack of labour companion (68%; n=68).
- Resistance to change (64%; n=64).
- Lack of traditional healer's services (52%; n=52).

Gqozo (2004:3) found negligence and negative attitudes by nurses at Sharpeville MOU.

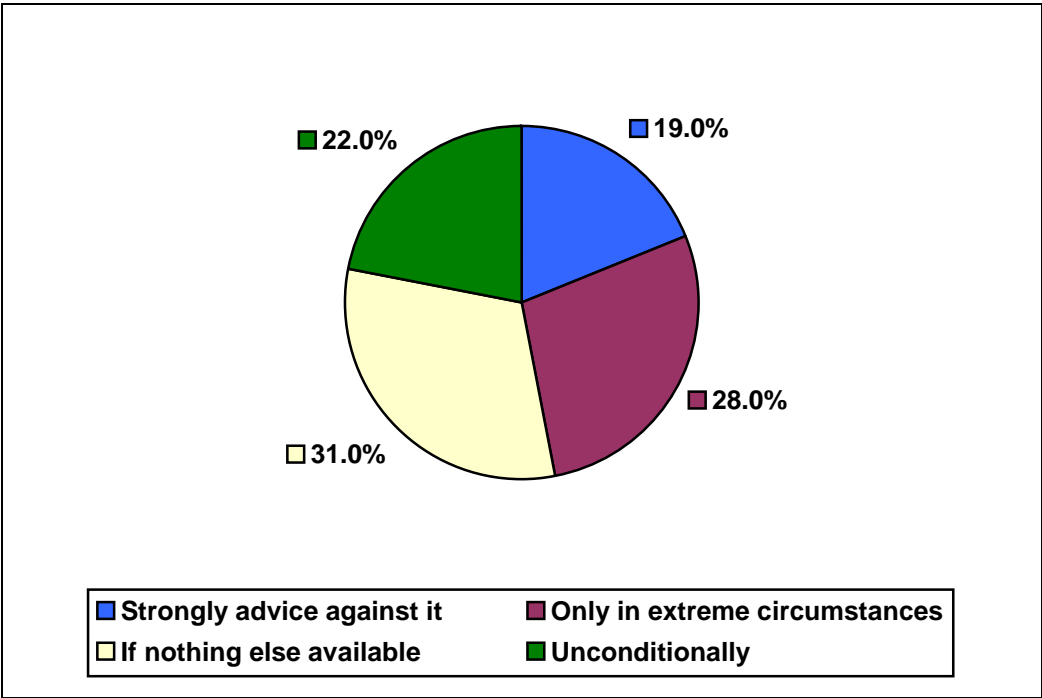


**Figure 4.16**

**Opinions of pregnant women not utilising the Sharpeville and Boipatong MOU**

**Item 4.4 Recommendation of the facility by the women to their sisters or best friends (N=100)**

Of the respondents, 31% (n=31) reflected that they would recommend this facility to their sisters or best friends if nothing else was available; 28% (n=28) would recommend it only in extreme circumstances; 19% (n=19) would strongly advise their sisters or best friends against attending the MOU, and only 22% (n=22) would recommend them to this facility unconditionally. Therefore, the majority of the respondents would not recommend their friends or sisters to utilise the MOUs.



**Figure 4.17**  
***Recommendation of the facility by the women to their sisters or best friends***

**Item 4.5 Rating of the service at a MOU (N=100)**

Of the respondents, 79% (n=79) rated the overall services at the MOU as very bad; 21% (n=21) rated them bad. None of the 100 respondents rated the overall MOU services as good or very good.

## **4.6 CONCLUSION**

This chapter discussed the data analysis and interpretation with the use of graphs, frequency tables, descriptions and inferential statistics. The demographic information provided background information on the respondents and factors that influenced their decision to deliver at a hospital instead of the MOU.

Chapter 5 concludes the findings of the study, discusses its limitations and makes recommendations for practice and further research.

## **Chapter 5**

### **Findings, limitations and recommendations**

#### **5.1 INTRODUCTION**

This chapter summarises the study, presents the findings, discusses the limitations of the study, and makes recommendations for practice and further research.

The introduction of the 1994 National Health Policy (NHP) brought about changes that necessitated the availability of MOUs in the previously disadvantaged communities. The community under the study was one of the beneficiaries (ANC 1994a:100). The MOU was built and officially opened in April 1996 by the MEC, Mr Amos Masondo.

Despite the availability of these services, members of the community still travel to the hospital for the delivery of their babies, which puts a further burden on the already overcrowded hospital while the MOUs remain under-utilised.

The purpose of this study was to identify reasons why women screened as low-risk pregnancies preferred hospital deliveries to delivering at the MOU, which is within their reach in Emfuleni sub-district. It was hoped that normal deliveries at PHC level would increase and deliveries at the hospital as well as the maternal and infant morbidity and mortality rates would be reduced.

#### **5.2 SECTION A: SOCIO-DEMOGRAPHIC DATA**

The socio-demographic data explored in this study included the place where the women reside, age, home language, marital status, level of education and occupational status.

##### **5.2.1 Respondents' place of living (item 1.1)**

Although all the respondents (N=100) lived in Sharpeville, which is within 5 kilometres of the Sharpeville MOU, they preferred to deliver their babies at Sebokeng Hospital, which is 25 kilometres away from their homes. The distance the women had to travel to the



MOU had no apparent influence on the women's decision as to the preferred place of delivery.

### **5.2.2 Respondents' age (item 1.2)**

Of the respondents, 21% (n=21) were between 15 and 19 years of age and still living with their parents/families; 49% (n=49) were between 20 and 29. The youngest respondent was 16; the oldest was 38, which indicated an age range from 16 to 38. Only 13% (n=13) were in the older categories and none were 40 and older.

### **5.2.3 Respondents' home language (item 1.3)**

Although 51% (n=51) of the respondents were Sotho-speaking, the respondents who were Zulu-, Tswana- and Pedi-speaking also spoke and understood Sotho well.

### **5.2.4 Respondents' marital status (item 1.4)**

Of the respondents, 44% (n=44) were single; 22% (n=22) were widowed; 25% (n=25) were married and indicated that they were living with their husbands, and only 9% (n=9) were divorced.

### **5.2.5 Respondents' level of education (item 1.5)**

Of the respondents, 32% (n=32) had primary school training; 38% (n=38) had attended secondary school below matric, 20% (n=20) had obtained matriculation and were at a technikon/college, and only 10% (n=10) had obtained university certificates.

### **5.2.6 Respondents' source of income (item 1.6)**

Of the respondents, 45% (n=45) were unemployed; 23% (n=23) were employed as domestic workers, 22% (n=22) had other sources of income. Only 10% (n=10) were employed as professionals in public service as follows:

- 3% (n=3) were social workers
- 4% (n=4) were teachers

- 2% (n=2) were policewomen

### **5.2.7 Affordability of transport (item 1.7)**

Of the respondents, 46% (n=46) were transported by ambulance to the hospital because public transport was inaccessible in Sharpeville area after-hours. The paramedics took them to the hospital without referrals by the MOU staff.

### **5.2.8 Cost of service (item 1.8)**

Of the respondents, 100% (N=100) indicated that they received antenatal care and maternity services free of charge, which is in line with the stipulations in the National Health Act (61 of 2003).

### **5.2.9 Membership of medical aid (item 1.9)**

Of the respondents, only 10% (n=10) belonged to a medical aid scheme. All the respondents, including the women who were members of a medical aid scheme, delivered their babies at a provincial hospital.

## **5.3 SECTION B: OBSTETRIC INFORMATION**

### **5.3.1 Respondents' date of first antenatal care booking (item 2.1)**

Of the respondents, 77% (n=77) attended their first antenatal care visit during the second trimester; 10% (n=10) during the third trimester, and only 13% (n=13) during the first trimester. According to the WHO (2004:27), the initial antenatal care visit should take place before 16 weeks of pregnancy or during the first trimester. Furthermore, early initiation of antenatal care attendance is important, to prevent and treat anaemia, to screen and treat syphilis, and to identify and manage women with medical complications as well as for the development of interpersonal relationships between the midwife and the pregnant women and the plan for delivery. Late booking might have an influence on the women's decision on place of delivery.

**5.3.2 Respondents’ gestational age at booking (item 2.2)**

Of the respondents, 40% (n=40) were 20 weeks’ pregnant at their first antenatal care booking; 32% (n=32) were 8 weeks’ pregnant, which was a positive aspect as preparation for labour could be extensive; 12% (n=12) were 12 weeks’ pregnant, and only 16% (n=16) were 4 weeks’ pregnant. According to the Department of Health (2002:19), pregnant women are encouraged to book for antenatal care as soon as pregnancy is detected, even as early as 4 or 5 weeks’ gestation.

**5.3.3 Respondents’ total number of antenatal care visits (item 2.3)**

Of the respondents, 82,83% (n=83) reported four visits, 17,17% (n=17) reported six visits, and one did not answer the question. According to the Department of Health (2002:26), the schedule for return antenatal visits in low risk women is as follows (see table 5.1):

**Table 5.1 Schedule for return antenatal visits in low-risk women**

GESTATION AGE AT CURRENT VISIT (WEEKS)	SCHEDULE FOR RETURN VISIT
5-19	24 weeks
20-23	28 weeks
24-28	32 weeks
29-36	After 4 weeks
37-38	After 2 weeks
39-40	41 weeks
41	42 weeks

The fact that the majority of the respondents attended the MOU for antenatal care four times indicated that they may not have been satisfied with the care and may therefore have opted to deliver their babies at a hospital.

**5.3.4 Parity of respondents (item 2.4)**

Of the respondents, 94% (n=94) reported to have had two pregnancies. The fact that 94% (n=94) of the women had two children could imply that they may have had experience of the care received at the MOU, which may have prompted their decision to deliver their babies at the hospital.

### **5.3.5 Place of delivery (item 2.5)**

Of the respondents, 10% (n=10) indicated that a private hospital was their choice of delivery place while 90% (n=90) intended to deliver their babies at an MOU as their choice of place of delivery. Although none of the respondents wanted to give birth in the provincial hospital, all the respondents did give birth at a provincial hospital.

### **5.3.6 Cultural practices that might influence the decision on the place of birth (item 2.6)**

Of the respondents, 23% (n=23) indicated that their traditional healer recommended the hospital as place of delivery. None of the respondents (N=100) indicated that language barriers were a limitation. Only 22% (n=22) of the respondents stated that they delivered their babies at hospital because witchcraft practices could not reach them (mother and baby). The maintenance of privacy, beliefs regarding delivery position and rituals regarding placenta were not part of the decision when the place of delivery was selected. These findings show that cultural practices could have played a role on the decision of the pregnant women on place of delivery.

## **5.4 SECTION C: QUALITY OF SERVICE RENDERED AT MOUs**

### **5.4.1 Level of satisfaction of service (item 3.1)**

Although 32% (n=32) of the respondents indicated that they were satisfied with the level of service delivery at the clinic 68% (n=68) reported that they were dissatisfied. Those who were dissatisfied gave the following reasons: rudeness, lack of respect, unprofessional behaviour, unfriendliness and hostile behaviour of the midwives. Only 20% (n=20) were satisfied as the midwife offered them a seat in a polite manner. Of the respondents, 80% (n=80) were dissatisfied because nurses did not offer them a seat, they had to get themselves a seat or other clients offered them a seat. The majority (68%; n=68) were dissatisfied with the service and reported that nursing staff appeared hostile, reserved, unapproachable and unsocialable. The respondents also reported that the nursing staff did not listen and pay attention to them; there was no eye contact, and they experienced disturbances during conversations. Of the respondents, 70% (n=70) were dissatisfied with the service and reported that the nurses were in a hurry,

impatient, intolerant and showed a lack of support. They stated further that nursing staff were cruel, inhuman, merciless and unable to advise and guide them. Sixty-nine percent (n=69) of the respondents supported their statement by reporting poor physical examination and wrong diagnosis. The majority (71%; n=71) reported that they waited between two and six hours to be seen and attended by nursing staff.

#### **5.4.2 Information received from nursing staff regarding pregnancy, delivery/labour, postnatal and the newborn baby (item 3.2)**

Of the respondents, 100% (N=100) acknowledged that they received information from the nursing staff regarding the following:

- *Pregnancy.* They received information on nutrition, blood test for HIV and STI, prevention of mother-to-child transmission and antenatal visits.
- *Delivery/labour.* All the respondents, (N=100) indicated signs and symptoms such as ruptured membranes and unusual pains. Only 60% (n=60) of the respondents were informed to have a nightdress ready for delivery.
- *Postnatal.* Of the respondents, 100% (N=100) received information on family planning and 98% (n=98) on breastfeeding.
- *Newborn.* All the respondents (100%; N=100) received information on immunisations and birth registration.

Although all the respondents (100%; N=100) received information from the nursing staff at the MOU, the following information was not given to them:

- *Pregnancy.* The respondents (100%; N=100) did not receive information on medical assistance, exercises, breastfeeding, hygiene, labour companions and danger signs of pregnancy.
- *Delivery/labour.* The respondents did not receive information on positions, for example lithotomy and squatting, medications, for example drip (IV therapy), vaginal examinations, maternal progress, fetal monitoring, breathing during labour and episiotomy.
- *Postnatal.* They did not receive information on medications, vital signs, observations, post delivery procedures, signs of infection, perinatal care, postnatal exercises and postnatal visits.

- *Newborn baby.* They did not receive information on the following:
  - *Sex observations.* For example, in male infants, the mother needs to observe the testicles when bathing the baby for early detection of undescendent testicles.
  - *Baby bath.* How, when, and the temperature of the water.
  - *Milestones.* The mother must to be able to observe the child's development and know how to read and interpret the development milestone chart.
  - *Stools and urine.* The mother should be able to differentiate normal and abnormal, know the colour, odour, amount and frequency of stools and urine.
  - *Advise on feeding.* Formula feeding, amount, when to feed, how to express milk from the breast.
  - *Weight.* How to read and interpret the road-to-health card and the plotted dot on the card.
  - *Growth monitoring.* The mother needs to know the normal weight and signs and symptoms of malnutrition to be able to report abnormalities.
  - *Gastro-enteritis.* Signs and symptoms of dehydration and diarrhoea, and how to mix oral dehydration solution at home.
  - *Baby clothes.* What the mother should bring for the newborn, such as nightdress, napkins and blanket to keep the baby warm on discharge.

The Department of Health (2002:24) stated that essential information must be provided to all pregnant women, verbally and in the form of written or illustrated cards. If they fail to seek medical attention for signs of possible obstetrical complications, they might encounter life-threatening situations. Therefore lack of information in regard to pregnancy, delivery, postnatal care and newborn baby may have had an influence on the place of delivery.

#### **5.4.3 Reasons for not delivering baby at a MOU (item 3.3)**

All the respondents (100%; N=100) indicated that their reasons for not delivering their babies at the MOU were:

- Nursing staff are unfriendly (89%; n=89)
- Live too far (38%; n=38)
- Doctors unavailable (100%; N=100)
- MOU not safe (62%; n=62)
- MOU not clean (15%; n=15)
- Lack of privacy (69%; n=69)

None of the respondents was referred to deliver at a hospital hence they were self-referrals.

#### **5.4.4 Expectations of MOU services (item 3.4)**

The respondents indicated that the following services were important to them and expected from the MOU services:

- Ambulance services. Of the respondents, 90% (n=90) mentioned that an ambulance service is needed to operate 24 hours at an MOU as a standby transport for referrals. In Sedibeng district, ambulance services operate at clinics and are not used to fetch patients from home to clinic.
- Privacy/confidentiality. Of the respondents, 88% (n=88) indicated that the clinic should increase the cubicles from 1 to 3 and the number of delivery beds from 2 to 10 beds to maintain privacy and confidentiality.
- Friendly service. Of the respondents, 79% (n=79) stated that nurses at the MOU should be friendly and support the patients and practise “*Ubuntu*”.
- Labour companion. Of the respondents, 58% (n=58) required their friends, partners and families to support them through the delivery process.
- High quality of care, including human and material resources, a proper full meal, increased length of stay and health information sessions. Of the respondents, 50% (n=50) indicated quality care as important to them. These expectations of MOU services could have an influence on the decision of place of delivery.

#### **5.4.5 Referrals for medical assistance (item 3.5)**

The nursing staff referred none of the respondents (N=100) for medical assistance. Therefore the pregnant women were self-referrals to the hospital. The referrals for

medical assistance in this study thus had no influence in decision on choice of delivery place.

#### **5.4.6 Information on when to seek medical assistance (item 3.6)**

None of the respondents (100%; N=100) received information on seeking medical attention for the danger signs and symptoms of pregnancy. The Department of Health (2002:24) advises that a woman who experiences any of the danger signs and symptoms should report immediately to her clinic or hospital with her antenatal card. It is the responsibility of the nurses and midwives at the clinics to inform pregnant women on signs and symptoms that warrant medical attention. For example, dizziness, blurred vision, severe headache and generalized oedema would certainly indicate the possibility of impending pre-eclampsia/eclampsia episodes threatening the well-being and lives of both the mother and unborn child. A lack of information could have an influence in the decision of place of delivery.

### **5.5 SECTION D: MOU NORMS AND STANDARDS**

#### **5.5.1 Reasons to deliver babies at hospital (item 4.1)**

The following aspects, which are available at the hospital, influenced the respondents' decisions to choose the hospital as delivery place and not an MOU:

- Access to pain relief (32%; n=32)
- Comfort provided by the midwives during labour (53%; n=53)
- Availability of doctors in case of complications (75%; n=75)
- Availability of ambulance services (81%; n=81)
- Confidentiality maintenance (14%; n=14)
- Recommendations by parents/friends because of previous bad experiences at MOU (21%; n=21)
- Safety (59%; n=59)
- Length of stay at MOUs: 6 hours (100%; n=100)
- Affordability (cost at hospital R13 for card) (10%; n=10)
- Lack of public transport after hours in Sharpville (34%; n=34)
- Low status if delivered at MOU (13%; n=13)



- High quality of care at hospital (66%; n=66)
- More cubicles for privacy at hospital (80%; n=80)

### **5.5.2 Necessity for having a MOU in the area (item 4.2)**

Of the respondents, 88% (n=88) felt that it was necessary to have an MOU in their area for the following reasons:

- Nearer to the community
- Cheaper for the families and friends to visit
- Accessible and available when in need
- Easy to communicate with nursing staff as they are fluent in Southern Sotho
- Urgent attention in case of women in labour
- To reduce the workload at the hospital
- To prevent complications and to relieve stress and fear among pregnant women.

Only 12% (n=12) of the respondents indicated that the MOU needed to be far from the community for the following reasons:

- To accommodate traditional healer's services.
- To prevent witchcraft beliefs and practices.
- To avoid evil spirits reaching the mother and the baby.
- To avoid neighbours and enemies from the community.

### **5.5.3 Opinions regarding pregnant women not utilising the Sharpeville and Boipatong MOUs (item 4.3)**

The respondents indicated that the following factors might influence the pregnant women not to utilise the Sharpeville and Boipatong MOUs:

- Lack of public transport after hours in Sharpeville and Boipatong (96%; n=96)
- Unavailability of doctors at MOU (92%; n=92)
- Rudeness/unfriendly services (89%; n=89)
- Turning back of patients/wrong assessment (86%; n=86)

- Lack of privacy/confidentiality (80%; n=80)
- Lack of quality care (78%; n=78)
- Lack of information (76%; n=76)
- Low status if delivered at MOU (69%; n=69)
- Lack of labour companion (68%; n=68)
- Resistance to change (64%; n=64)
- Lack of traditional healer's services (52%; n=52)

Gqozo (2004:3) reports negligence and negative attitudes by nurses at Sharpeville MOU, which are supported by these findings.

#### **5.5.4 Recommendations of the facility (MOU) by women to their sisters and best friends (item 4.4)**

Of the respondents, 31% (n=31) reflected that they would recommend the MOU to their sisters or best friends if nothing else was available; 28% (n=28) would recommend only in extreme circumstances; 19% (n=19) would strongly advise their sisters or best friends against attending the MOU, and only 22% (n=22) would recommend them to this facility unconditionally. Therefore the majority of the respondents would not recommend their friends or sisters to utilise the MOUs at present.

#### **5.5.5 Rating of the services at the MOU (item 4.5)**

None of the respondents rated the overall services at MOU very good or good; 21% (n=21) rated the overall services at MOU very bad. It was thus evident that the services currently offered to the patients may have influenced their place of delivery.

### **5.6 PRACTICAL SIGNIFICANCE OF THE STUDY**

The findings will be presented to provincial officials responsible for the MOU services and a report tabled at District level with a synopsis tabled through the Provincial Maternal and Child Health Department. The findings should have policy and training implications for nurses providing maternity services in both provincial and local authority (municipality) in Emfuleni sub-district of Sedibeng district and Gauteng Province as a

whole. It is envisaged that the plan of action will lead to more effective utilisation of MOUs.

## **5.7 LIMITATION**

This study was contextual as it was only conducted at one MOU therefore the findings cannot be generalised to other MOUs. Some of the principles of the findings might be applicable in similar institutions.

## **5.8 RECOMMENDATIONS**

Based on the findings, the researcher makes the following recommendations for improving the utilisation of the Sharpeville MOU. The midwife is recognised worldwide as the person who is alongside and supporting women giving birth. However, the midwife also has a key role in promoting the health and well being of childbearing women and their families before conception, ante- and post-natally, including family planning.

The midwife's skills are increasingly valued and midwives are urged to expand their roles even more. This demands a wide range of skills, knowledge and attributes.

Recommendations to improve the utilisation of MOUs by pregnant women are made on the following findings:

### **5.8.1 Norms and standards of the MOU**

Regarding the norms and standards of the MOU, the following recommendations are made to improve the utilisation of MOUs by pregnant women:

- A meeting should be organised to re-visit all the policies with regard to the services rendered at MOUs. Once these policies have been revised and put in place, workshops should be planned for the midwives in MOUs.
- A thorough investigation undertaking a situational analysis of the services should be undertaken in order to assess the resources for the MOU: equipment, staff, ambulance services, rotation of staff, building examination rooms to monitor deliveries, needs, length of stay, and emergency medication. Furthermore, all the

policies of the MOU should be re-visited and, where necessary, new policies drawn up according to the needs identified in the situational analysis. Once the analysis has been completed, the authorities identified should address the needs, which have arisen. Some of the needs identified in this study and solutions recommended are:

- Install public telephones.
  - Make provision for a waiting area, which has a TV, so that patients can receive health education while waiting to be seen by the health care professionals. It is also recommended that a tuck shop be made available for the patients
  - Employ a sufficient number of security staff at the MOU.
  - Establish collaboration with the public transport associations, civic forum and policing forum of that area to ensure safe care and transport of patients 24 hours a day.
- To ensure that the quality of services rendered at the MOU is of a high standard, a quality assurance programme should be implemented and regular audit meetings scheduled.
  - The implementation of a quality circle will be of great importance to the MOU. A quality circle is a group of 6 to 12 volunteer employees who meet regularly to discuss and solve problems affecting the quality of their work. At the meeting, problems are identified, data is collected, surveys are undertaken and problems analysed. The team recommends solutions, which are sent to top management who make a decision. The reason for using quality circles is to push decision making to the MOU level at which recommendations can be made by the people who do the job and know it better than anyone else.
  - The authorities should motivate for an obstetrician's team to visit the MOU at least once a month to assess and confirm the screening of pregnant women such as low-risk and high-risk pregnancies.

### **5.8.2 Nursing practice at MOUs**

In today's health care environment, quality-nursing care is not just a goal of the nursing profession. It is also an expectation of the public. The following recommendations are made for nursing practice at the MOU:

- Encourage midwives to attend perinatal and preventive mother-to-child transmission counselling sessions to enable them to diagnose the patients properly.
- An in-service training programme should be implemented at the MOU for nurses, midwives, including paramedical staff, on the care of pregnant women, MOU policies, guidelines and protocols.
- The SA Government has prescribed certain policies, which should be implemented in all government institutions. Two of the policies are the implementation of the Batho Pele principles and Patients Right Charter. It is recommended that regular meetings with the staff be held to ensure that these policies are adhered to.
- A “patient’s satisfaction form” should be designed and given to each patient for comments. The recommendations and needs of the patients should be implemented in the care plans at the MOU.
- Regular workshops should be held with the staff where they could express their feelings about the work situation in debriefing sessions.
- Self-appraisal, reflection on action and the identification of factors influencing the provision of care should be discussed.
- An organisational support system for the staff should be available. Support staff could include psychologists, social workers and clerics.
- Attendance of maternal mortality meetings should be encouraged. This not only enhances the action of the midwife, but also encourages teamwork between health professionals.
- As midwifery practice is dynamic, it is imperative that the institution ensures that an in-service programme is developed and the latest information is demonstrated and discussed with the staff.

### **5.8.3 Nursing education at MOUs**

A critical analysis of the midwifery curricula should be undertaken especially with regard to the module on Nursing Dynamics where the emphasis should be on human rights and legal liability between nurses, patients, family members of the health care team; the moral and ethical foundation of nursing and the caring ethic in nursing. Based on the findings of the study the following recommendations are made with regard to the training of midwives and in-service training at the MOU:

- Regular values clarification sessions should be held with the staff members in order to establish values, norms and beliefs in the care given to patients.
- In-service training programmes should be initiated to address the attitudes of the nursing staff. Clear messages should be portrayed to the nursing staff on the need of having sympathetic caring attitudes towards pregnant women.
- For an institution to deliver competent care, it is recommended that the nursing staff undergo regular competency tests to ensure that their knowledge is up to date. These competencies could influence the outcomes of the performance appraisals of each midwife.
- Staff members should be encouraged to undertake or participate in evidence-based research in the MOU and that the results thereof be implemented in the MOU.
- In-service training of nurses and midwives on how to provide health education to their clients regarding information needed on pregnancy, delivery, postnatal care and newborn baby.
- Cultural awareness and sensitivity workshops should be presented at the MOU. These workshops would enable midwives to become aware and sensitive to the patients' cultural beliefs, practices and values. This cultural knowledge would enable midwives to render cultural competent care to the patients.
- Encourage the midwives to attend conferences and symposiums to keep them up to date on current trends in obstetrics and neonatology.
- The nursing care of patients should be based on experiential reflection. This type of reflections can develop moral, professional and personal understanding. Several models of reflective cycles are available in the literature. Such models usually consist of three phases: the experience, the reflective processes and the outcomes. These reflective models can effectively be used to analyse nursing care situations in order to render competent care to all patients. Reflective cycles could be used for staff to gain valuable personal experiences in the care of their patients.
- A maternal mortality committee should be established at the MOU and regular meetings scheduled. Attendance of these meetings should be mandatory for midwives and nurses.
- An in-service training programme should be established whereby the needs of the staff as well as the institution are addressed.

- Open days could be organized for the community to explain the role and function of the MOU. This would create the involvement of the community in the MOU.
- Midwives should be encouraged to be committed to lifelong learning, including attendance of conferences and seminars, and also to further their academic and professional qualifications.

#### **5.8.4 Health education to pregnant women**

- A well-planned health education programme for the clients should be developed annually. The programmes should undergo peer evaluation. The contents of the programme could include:
  - Antenatal care
  - Labour signs and symptoms
  - Include partner in health education programmes
  - Postnatal care
  - Care of the newborn
- Women should be encouraged to attend antenatal clinic early - as soon as the pregnancy is detected and even as early as 4 or 5 weeks' gestation. Women should be empowered to take responsibility for their own health care.
- Encourage community participation in saving mothers and babies. Pamphlets/booklets could be designed for the community with information about the services rendered at the MOU.
- Patients could be asked about the quality of care they received at the MOU. This could be an ongoing process. The patients' reports should be analysed and discussed with the community at the scheduled open days. These evaluations could be used to assist health care planners to enhance the quality of midwifery services at the MOU and thereby to increase the proportion of MOU deliveries.

#### **5.8.5 Future research**

The researcher recommends that future research be conducted on the following topics:

- Attitudes of the nursing staff
- Quality of maternity services offered at the MOU
- Workload of staff members at MOUs

- The utilisation of ambulances at MOUs
- Competency skills audit of midwives at MOUs
- Cultural practices in midwifery
- Length of stay at maternity facilities
- Effects of the “doula system” (birth companion)
- Health education given to pregnant mothers
- Barriers to effective communication between midwives and patients.

## **5.9 CONCLUSION**

This chapter concluded the study, discussed its limitations and made recommendations for practice and further research. The study attempted to identify the factors influencing pregnant women to deliver their babies at hospital although they were screened as low-risk patients and attended the antenatal clinic at the MOU. These patients were booked to deliver their babies at the MOU but then opted to deliver their babies at a hospital. The research result indicated that the major factor preventing women from delivering their babies at the MOU related to midwives' attitudes and lack of caring. Improving the quality of the midwifery services depends primarily on the commitment of the midwives. The aim of the MOU is to render safe and competent service to the community. There should be a commitment that maternity services be readily and easily available to all. Midwives and women should be able to forge new partnerships based on mutual respect and an acknowledgement that pregnancy and labour are, in most cases, part of the normal pattern of health for women who choose to have babies.



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# STRUCTURED INTERVIEW SCHEDULE

## SECTION A: SOCIO-DEMOGRAPHIC DATA

Answer each question by tick (X) in the appropriate box or write down your response in the space provided.

		OFFICE USE
<b>1.1</b>	<b>Where do you live?</b>	
	Sharpeville <input style="width: 40px; height: 20px;" type="text" value="1"/>	
	Boipatong <input style="width: 40px; height: 20px;" type="text" value="2"/>	
	Other <input style="width: 40px; height: 20px;" type="text" value="3"/> Specify: .....	<input style="width: 40px; height: 20px;" type="text"/> 1
<b>1.2</b>	<b>Please indicate your age in years.</b>	
	15-19 <input style="width: 40px; height: 20px;" type="text" value="1"/>	
	20-24 <input style="width: 40px; height: 20px;" type="text" value="2"/>	
	25-29 <input style="width: 40px; height: 20px;" type="text" value="3"/>	
	30-34 <input style="width: 40px; height: 20px;" type="text" value="4"/>	
	35-39 <input style="width: 40px; height: 20px;" type="text" value="5"/>	
	40-44 <input style="width: 40px; height: 20px;" type="text" value="6"/>	<input style="width: 40px; height: 20px;" type="text"/> 2
	45 and older <input style="width: 40px; height: 20px;" type="text" value="7"/>	
<b>1.3</b>	<b>Please indicate your home language (the language in which you communicate with family and friends). Choose only one language.</b>	
	Afrikaans <input style="width: 40px; height: 20px;" type="text" value="1"/>	
	English <input style="width: 40px; height: 20px;" type="text" value="2"/>	
	Ndebele <input style="width: 40px; height: 20px;" type="text" value="3"/>	
	Pedi <input style="width: 40px; height: 20px;" type="text" value="4"/>	
	Sotho <input style="width: 40px; height: 20px;" type="text" value="5"/>	
	Tswana <input style="width: 40px; height: 20px;" type="text" value="6"/>	
	Swati <input style="width: 40px; height: 20px;" type="text" value="7"/>	
	Tsonga <input style="width: 40px; height: 20px;" type="text" value="8"/>	
	Venda <input style="width: 40px; height: 20px;" type="text" value="9"/>	
	Xhosa <input style="width: 40px; height: 20px;" type="text" value="10"/>	
	Zulu <input style="width: 40px; height: 20px;" type="text" value="11"/>	<input style="width: 40px; height: 20px;" type="text"/> 3
	Other (specify) <input style="width: 40px; height: 20px;" type="text" value="12"/>	
<b>1.4</b>	<b>Please indicate your marital status.</b>	
	Married, living together <input style="width: 40px; height: 20px;" type="text" value="1"/>	
	Single <input style="width: 40px; height: 20px;" type="text" value="2"/>	
	Divorced/separated <input style="width: 40px; height: 20px;" type="text" value="3"/>	
	Widowed <input style="width: 40px; height: 20px;" type="text" value="4"/>	<input style="width: 40px; height: 20px;" type="text"/> 4
	Other (specify) <input style="width: 40px; height: 20px;" type="text" value="5"/>	
<b>1.5</b>	<b>Please indicate highest level of formal education.</b>	
	None <input style="width: 40px; height: 20px;" type="text" value="1"/>	
	Primary school <input style="width: 40px; height: 20px;" type="text" value="2"/>	
	Secondary school, less than matric <input style="width: 40px; height: 20px;" type="text" value="3"/>	
	Matric <input style="width: 40px; height: 20px;" type="text" value="4"/>	<input style="width: 40px; height: 20px;" type="text"/> 5
	University/college <input style="width: 40px; height: 20px;" type="text" value="5"/>	
	Other (specify) <input style="width: 40px; height: 20px;" type="text" value="6"/>	

			OFFICE USE
<b>1.6 Please indicate your source of income by putting a cross (X) in the appropriate column</b>			
Self employed		1	
Unemployed		2	
Farm worker		3	
Domestic worker		4	
Professional (please specify)		5	<input type="text"/> 6
Social pensioner		6	
Other (specify)		7	
<b>1.7 Affordability of the services. How much do you spend on public transport to and from the MOU? Indicate the amount during the day and after hours.</b>			
<b>Transport</b>	<b>During the day</b>	<b>After hours</b>	
Less than R10	1	1	<input type="text"/> <input type="text"/> 7-8
R10 to R50	2	2	
More than R50	3	3	
<b>1.8 How much did you pay for:</b>			
Attendance at antenatal visit		R	<input type="text"/> 9
Delivery of baby		R	<input type="text"/> 10
Other (please specify)		R	<input type="text"/> 11
<b>1.9 Do you belong to a medical aid?</b>			
Yes	<input type="text"/> 1	No	<input type="text"/> 12
		<input type="text"/> 2	

## SECTION B: OBSTETRIC INFORMATION

				OFFICE USE
2.1	Date of first antenatal (ANC) booking: .....			<input type="text"/> 13
2.2	How far pregnant were you at booking? Weeks <input type="text"/>			<input type="text"/> 14
2.3	Total number of ANC visits: .....			<input type="text"/> 15
2.4	How many pregnancies have you had? Miscarriages <input type="text"/> 1 Live births <input type="text"/> 2 Stillborn <input type="text"/> 3			<input type="text"/> 16
2.5	Place of delivery (please indicate the place of delivery where you intended to deliver your new baby and where you finally delivered (put a cross (X) in the appropriate box).			<input type="text"/> <input type="text"/> 17-18
		<b>Intended</b>	<b>Actual</b>	
	Provincial hospital	1	1	
	Private hospital	2	2	
	At home	3	3	
	MOU	4	4	
	Other (specify):	5	5	
2.6	Cultural practices which influenced the decision on place of delivery.			<input type="text"/>
		<b>Yes</b> <b>1</b>	<b>No</b> <b>2</b>	
2.6.1	Traditional family healer recommended it		<input type="text"/>	19
2.6.2	Language barriers are a limitation		<input type="text"/>	20
2.6.3	Witchcraft practices cannot reach the place of delivery		<input type="text"/>	21
2.6.4	Traditional medicines allowed		<input type="text"/>	22
2.6.5	Privacy is maintained		<input type="text"/>	23
2.6.6	Beliefs:			
	Delivery position		<input type="text"/>	24
	Rituals regarding the placenta		<input type="text"/>	25

## SECTION C: QUALITY OF SERVICE RENDERED AT THE MOUs

				OFFICE USE
<b>3.1 The following items relate to the various aspects of your attendance to the MOU. Please indicate the level of satisfaction of the service delivery at the clinic regarding nursing staff..</b>				
	<b>Satisfied</b>	<b>Dissatisfied</b>	<b>Comment</b>	
	<b>1</b>	<b>2</b>		
3.1.1 Welcoming attitude				<input type="checkbox"/> 26
3.1.2 Friendliness				<input type="checkbox"/> 27
3.1.3 Offering of a seat				<input type="checkbox"/> 28
3.1.4 Talking to you in a way that you are able to understand				<input type="checkbox"/> 29
3.1.5 Listen to you when you are talking				<input type="checkbox"/> 30
3.1.6 Patience				<input type="checkbox"/> 31
3.1.7 Kindness and helpful				<input type="checkbox"/> 32
3.1.8 Performance of the physical examinations				<input type="checkbox"/> 33
3.1.9 Waiting time				<input type="checkbox"/> 34
3.1.10 Communication among staff				<input type="checkbox"/> 35
<b>3.2 Information received from nursing staff at the MOU. General information regarding:</b>				
	<b>Yes</b>	<b>No</b>	<b>What information received</b>	
	<b>1</b>	<b>2</b>		
3.2.1 Pregnancy:				
Blood test				<input type="checkbox"/> 36
Nutrition				<input type="checkbox"/> 37
Medical assistance				<input type="checkbox"/> 38

**OFFICE USE**

Exercise				<input type="checkbox"/>	39
Breastfeeding				<input type="checkbox"/>	40
Hygiene				<input type="checkbox"/>	41
Labour companions				<input type="checkbox"/>	42
Preventive mother to child treatment				<input type="checkbox"/>	43
Danger signs of pregnancy				<input type="checkbox"/>	44
ANC visits				<input type="checkbox"/>	45
3.2.2 Delivery/labour					
	<b>Yes</b>	<b>No</b>	<b>What information received</b>		
	<b>1</b>	<b>2</b>			
Signs and symptoms of labour				<input type="checkbox"/>	46
Positions, for example lithotomy and squatting				<input type="checkbox"/>	47
Preparations for delivery				<input type="checkbox"/>	48
Medications, for example drip (IV therapy)				<input type="checkbox"/>	49
Vaginal examination				<input type="checkbox"/>	50
Maternal progress of labour				<input type="checkbox"/>	51
Fetal monitoring through CTG				<input type="checkbox"/>	52
Breathing during labour				<input type="checkbox"/>	53
Episiotomy				<input type="checkbox"/>	54

**OFFICE USE**

3.2.3 Postnatal				
Medications				<input type="checkbox"/> 55
Vital signs				<input type="checkbox"/> 56
Observations				<input type="checkbox"/> 57
Postdelivery				<input type="checkbox"/> 58
Family planning				<input type="checkbox"/> 59
Breast feeding				<input type="checkbox"/> 60
Signs of infection				<input type="checkbox"/> 61
Perineal care				<input type="checkbox"/> 62
Postnatal exercises				<input type="checkbox"/> 63
Postnatal visits				<input type="checkbox"/> 64
Bonding				<input type="checkbox"/> 65
3.2.4 Newborn				
Sex				<input type="checkbox"/> 66
Name and surname (identification tag)				<input type="checkbox"/> 67
Medication (prophylactic)				<input type="checkbox"/> 68
Immunisations				<input type="checkbox"/> 69
Care of the cord				<input type="checkbox"/> 70
Baby bath				<input type="checkbox"/> 71

				<b>OFFICE USE</b>
Milestones				<input type="checkbox"/> 72
Observations of stools and urine				<input type="checkbox"/> 73
Advice on baby feeding, for example, frequency and amount				<input type="checkbox"/> 74
Weight				<input type="checkbox"/> 75
Growth monitoring				<input type="checkbox"/> 76
Signs of dehydration and gastro-enteritis				<input type="checkbox"/> 77
Baby's clothes				<input type="checkbox"/> 78
Birth registration				<input type="checkbox"/> 79
Were your questions answered to your satisfaction?				<input type="checkbox"/> 80
<b>3.3 I did not deliver my baby at the MOU because:</b>				
	<b>Yes</b>	<b>No</b>	<b>Comments</b>	
	<b>1</b>	<b>2</b>		<input type="checkbox"/> 81
Nursing staff are unfriendly				
I live too far				<input type="checkbox"/> 82
There are no doctors available				<input type="checkbox"/> 83
I do not feel safe				<input type="checkbox"/> 84
The MOU is not clean				<input type="checkbox"/> 85
Cost/Lack of confidentiality/Lack of privacy/Could afford better/Lack of confidence in MOU staff/ Husband not allowed to be present?				<input type="checkbox"/> 86
Other (please specify)				<input type="checkbox"/> 87

**OFFICE USE**

<b>3.4 What did you expect from MOU services?</b>				<input type="checkbox"/> 88
.....				
.....				
<b>3.5 Referral for medical assistance.</b> <b>Did the nursing staff of the MOU refer you for medical assistance?</b>				<input type="checkbox"/> 89
Yes <input type="checkbox"/> No <input type="checkbox"/>				
<b>3.6 Did you receive sufficient information on when to seek medical assistance at MOU in case of:</b>				
	<b>Yes</b>	<b>No</b>	<b>Comments/ What information</b>	<input type="checkbox"/> 90
	<b>1</b>	<b>2</b>		
3.6.1	Vaginal bleeding			<input type="checkbox"/> 90
3.6.2	Severe headache			<input type="checkbox"/> 91
3.6.3	Dizziness or blurred vision			<input type="checkbox"/> 92
3.6.4	Generalised oedema			<input type="checkbox"/> 93
3.6.5	Convulsions			<input type="checkbox"/> 94
3.6.6	Breathlessness and tiredness			<input type="checkbox"/> 95
3.6.7	Labour pains for more than 12 hours			<input type="checkbox"/> 96
3.6.8	Excessive bleeding in labour			<input type="checkbox"/> 97
3.6.9	Ruptured membranes without labour for more than 12 hours			<input type="checkbox"/> 98
3.6.10	Fever with or without vaginal discharge after delivery			<input type="checkbox"/> 99



## SECTION D: MOU NORMS AND STANDARDS

Indicate your main reasons for opting hospital delivery by ticking in the appropriate column.

				OFFICE USE
4.1 I decided to deliver my baby at hospital because:				
	Agree	Disagree	Unsure	
				<input type="checkbox"/> 100
4.1.1 I wanted access to pain relief				<input type="checkbox"/> 101
4.1.2 The midwives provide comfort during labour				<input type="checkbox"/> 102
4.1.3 There are more cubicles for privacy				<input type="checkbox"/> 103
4.1.4 Availability of doctors in case I have complications				<input type="checkbox"/> 104
4.1.6 Availability of an ambulance services				<input type="checkbox"/> 105
4.1.7 Maintaining confidentiality about my HIV status				<input type="checkbox"/> 106
4.1.8 Parents or friends took me to hospital because of previous bad experience at MOU				<input type="checkbox"/> 107
4.1.9 I felt safe				<input type="checkbox"/> 108
4.1.10 Length of stay after delivery not being required to stay for too long or not being allowed to stay for long enough?				<input type="checkbox"/> 109
4.1.11 I could afford it				<input type="checkbox"/> 110
4.1.12 Lack of transport after hours to MOU				<input type="checkbox"/> 111
4.1.13 Low status if delivered at MOU rather than at hospital				<input type="checkbox"/> 112
4.1.14 High quality of care at hospital				<input type="checkbox"/> 113
4.1.15 Other (please specify)				<input type="checkbox"/> 114

		OFFICE USE
<p><b>4.2 Do you think that is necessary to have an MOU in your area? Please support your answer.</b></p> <p>.....</p> <p>.....</p> <p>.....</p>		<input type="text"/> 115
<p><b>4.3 What is your opinion regarding why pregnant women are not utilising the Sharpeville and Boipatong MOUs?</b></p> <p>.....</p> <p>.....</p> <p>.....</p>		<input type="text"/> 116
<p><b>4.4 Will you recommend this facility to your sister/best friend (strongly advise against it/only in extreme circumstances/will recommend it if nothing else available/will recommend it unconditionally)</b></p> <p>.....</p> <p>.....</p> <p>.....</p>		<input type="text"/> 117
<p><b>4.5 How do you rate the overall service at MOU (very bad/bad/good/very good)?</b></p> <p>.....</p> <p>.....</p> <p>.....</p>		<input type="text"/> 118