

**A COMPARATIVE ANALYSIS OF FIXED AND MOBILE CLINIC
HIV/AIDS SERVICES IN MADIBENG SUB-DISTRICT**

by

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DECLARATION

I declare that

A COMPARATIVE ANALYSIS OF FIXED AND MOBILE CLINIC HIV/AIDS SERVICES IN MADIBENG SUB-DISTRICT

is my own original work, and that all sources and references used herein have been acknowledged by means of complete reference.

.....
DEBBIE KGOMOTSO HABEDI

.....
DATE

ABSTRACT

INTRODUCTION

The scourge of HIV and AIDS can no longer be underestimated. Its devastating effects have been translated into immeasurable monetary and human costs. Women and children, particularly among the rural communities, have borne most of the brunt accruing from the devastating socio-economic consequences of the disease.

PURPOSE

This study is intended to highlight the plight of rural communities who are constantly besieged by the demand and supply disequilibrium in the provision of primary health care and preventive interventions.

OBJECTIVES

To describe, compare and analyse HIV / AIDS health care services provided by fixed and mobile clinics in the Madibeng Sub-District of the North West Province.

POPULATION

The sampled participants were selected from a universal population among pregnant women.

SAMPLING

A sample of 100 pregnant women from the fixed and mobile clinics participated in answering the questionnaires during their antenatal care visits.

RESEARCH SETTING

The Madibeng Sub-District in the North West Province been selected as a suitable research site, as it met most of the selection criteria developed by the researcher's judgement sampling.

RESEARCH DESIGN

The data recorded on the questionnaires by the participants was used to compare and analyse the pregnant women's feelings about HIV / AIDS services of fixed and mobile clinics. Group discussions were also held prior self completion of questionnaires. Questionnaires were administered by the researcher and the two health promoters.

FINDINGS

It was found that participants in both mobile and fixed clinic have attended HIV / AIDS health care services. Fixed clinic and mobile clinic are respectively viewed as offering better health care services to pregnant women.

CONCLUSIONS

The research results from this study indicate that HIV / AIDS services provided at both the fixed clinic and mobile service points, including antenatal or prenatal care, are almost similar.

RECOMMENDATIONS

It is recommended for improving HIV / AIDS health care services that health care providers at Jericho mobile clinic and Jericho fixed clinic intervene by slowing the progression of HIV infection because it has a negative impact on the lives of women. The Jericho clinic and mobile clinic staff should be encouraged to adopt the perspective that HIV / AIDS is not a death sentence, but a preventable disease, notwithstanding its deadly consequences on families and communities. The staff at these clinics is also to be motivated to adopt co-operative health care and psycho-social strategies, in which team work and the involvement and participation of all relevant stakeholders is viewed as an integral part of the struggle against HIV / AIDS and its devastating spread.

Key terms:

Comparative analysis; Fixed clinic; Mobile Clinic; HIV / AIDS services; Sub-district; Midwife; Pre-test counselling; Post-test counselling; Prenatal care; Pregnant women; Anti-Retroviral treatment; HIV screening; Sexually active; Confidentiality; Privacy; Vertical transmission; HIV negative; Terminal of Pregnancy.

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Dedication

I dedicate this dissertation posthumously to my late aunt, Mrs Moipone Hilda Moabi (nee Habedi), who catalysed the process by which my ambition and dreams are beginning to reach fruition.

LIST OF ACRONYMS USED IN THE STUDY

AIDS	Acquired Immune Deficiency Syndrome
ANC	Ante Natal Counselling
ART	Anti Retroviral Treatment
ARVs	Antiretrovirals
BDH	Brits District Hospital
CADA	Computer Aided Data Analysis
CVS	Chorionic Villus Sampling
DOH	(National) Department of Health
EMDC	European Mode of Delivery Collaboration
ETU	Education and Training Unit (Gauteng Department of Health)
FBC	Full Blood Count
HIV	Human Immunodeficiency Virus
IVF	In-Vitro Fertilization
IPHG	International Perinatal HIV Group
LFT	Liver Function Test
LSCS	Lower Segment Caesarean Section
MDR	Multi-Drug Resistance
MTCT	Mother-to-Child Transmission(s)
NAM	National AIDS Manual
NAFCI	National Adolescent-Friendly Clinic Initiative
NWDOH	North West Department of Health
NWP	North West Province
PCT	Provide Counselling Testing
PMTCT	Prevention of Mother to-Child Transmission
PNC	Post Natal Counselling
RPR	Rapid Plasma Reagin
SHASTD	Society of Health Advisers in Sexually Transmitted Diseases
SPSS	Statistical Package for the Social Sciences
STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infection
TB	Tuberculosis
TOP	Termination of Pregnancy
UE&C	Urea, Electrocytes and Creatinine
UNISA	University of South Africa
VCT	Voluntary counselling and testing
WHO	World Health Organisation

KEY TERMS USED IN THE STUDY

Acquired Immune Deficiency Syndrome (AIDS): the most advanced stage of HIV infection, characterized by signs and symptoms of the body's inability to fight against infections due to the weakening of the immune system.

Analysis: a detailed examination of different constituent elements or structures; in this study, it means a detailed examination and presentation of the research findings.

Antiretrovirals: Medicines that prevent a retrovirus from damaging the human body further.

Antiretroviral treatment: Treatment that is intended to prolong the lives of HIV-infected persons and strengthening their immune system, by subjecting them to a regime of antiretrovirals.

Caesarean section: a trans-abdominal surgical procedure in which the abdomen and uterus are incised for the delivery of a newly-born child.

CD4 count: blood test that counts the number of cd 4 cells per microlitre of blood. It is also a special type of white cells which co-ordinate the body's responses to bacteria, infections and viruses.

Clinic: a primary healthcare facility, institution, or department where clients/patients may receive both nursing and medical services not requiring hospitalisation.

Comparative: considered in relation to another phenomenon; in this study it means comparing the provision of primary healthcare and HIV/AIDS services at the fixed clinic with those provided at the mobile visiting points.

Equivocal result: test result that indicates that there has been a non-specific reaction with the HIV antibody assay, the early stages of seroconversion or HIV 2 infections.

HIV-negative test result: an indication, after an appropriately conducted examination, that the individual is not HIV-infected.

HIV-positive test result: an indication, after an appropriately conducted examination, that the individual is HIV-infected.

HIV testing: the performance of an appropriately conducted examination by a trained and authorized healthcare practitioner/worker, intended to obtain a bodily sample for the specific purpose of determining the HIV status of an individual.

Human Immunodeficiency Virus (HIV): the name of the virus, which undermines the immune system and leads to AIDS. The immune system ultimately becomes so weak that the body succumbs to pathogens that would not normally cause illness and the HIV-positive person develops recurrent infections. Once the immune system is depleted to the extent that the person cannot evade infections, the individual is said to have acquired immunodeficiency syndrome(AIDS). (Bodkin & Minnaar 2006 : 23 – 24).

Informed consent: the voluntary agreement granted by a research participant indicating that he/she has been thoroughly acquainted with all ethical considerations of human dignity relating to involvement in the particular HIV/AIDS-related research; including explanation by the researcher as to the purpose of the research, the use to which the findings will be put, as well as the risks that may emanate from participation and involvement in such research.

Midwife: a trained professional who assists women in childbirth and conducts delivery of their children independently.

Minimum standards for training of HIV counsellors: the most basic requirement or criteria for eligibility to become a healthcare worker in the sphere of providing emotional and psycho-social support to HIV/AIDS infected and affected persons; in this study, the Health Promoters performed these tasks.

Mobile clinic: a vehicle specially designed to move essential healthcare and HIV/AIDS staff and equipment from one designated service point to another.

Mobile points: the designated healthcare venues or stations where nurses are able to render portable primary health care services using the mobile clinic – the ‘clinic on wheels’.

Pregnant women: In this study the pregnant women entails any women who has conceived irrespective of age.

Pre-test counselling: Guidance given to an individual prior to the administration of an HIV test, designed to ensure that the individual has sufficient information and knowledge on the basis of which informed decisions could be made about an HIV test.

Post- test counselling: the counselling provided when an individual receives his/her HIV test results in order to help convince him/her about the reality of the situation. It ensures that the person understands the meaning of the result and helps the person to cope. (Evian 2000 : 52)

Trained HIV counsellor: a person who has met the minimum standards for training of HIV counsellors – preferably on a course satisfying standards outlined in the Department of Health's National Policy for Health Act (Act No. 116 of 1990).

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CHAPTER ONE

OVERVIEW OF THE RESEARCH PROJECT

1.1 INTRODUCTION

Fixed clinics are not always able to provide essential and basic primary health care services to all members of a community, especially those in remotely located rural villages. The rigidly fixed physical locations of clinics present a problem of distance – *ipso facto*, accessibility – between themselves and the beneficiaries of the healthcare services. In that specific regard, local infrastructural development (e.g. number of available travel worthy roads) necessarily becomes an integral factor of service provision to the dependent communities. Mobile clinics – the ‘clinics on wheels’ – on the other hand, have been functionally designed to overcome such problems of distance and other infrastructural deficiencies by availing health care services at the convenience of the client and with minimal hindrances of time, place and distance. Administrative work, such as client/patient records and medical details, can be performed on-site. In addition, trained mobile clinic personnel at a designated service point can perform clinical work not requiring hospitalization and major anaesthetized surgical attention – such as minor stitching of a wound. In an attempt to narrow and reduce the service delivery gap (inaccessibility), mobile clinics then present an opportunity for the direly needed healthcare services to be brought to the local populace without the physical constraints of distance. Depending on the number of available mobile clinics at any particular moment, and the size of the recipient population to be served, mobile clinics could effectively reduce and nullify the disequilibrium between the supply and demand overload in the provision of health care services, particularly to underserved rural communities in remote villages.

In recent years, the involvement of the private and non-government sectors through donations and/or sponsorships has relatively yielded a quantitative increase in the number of mobile clinics throughout different parts of the country. In the health care ‘value chain’, the health care workers and

practitioners have become indispensable components in determining the critical need for mobile clinics so that "... accessibility variables such as location of resources and client referral processes" are fully considered (Clemen-Stone 1995:825).

In the course of rendering their primary health care functions and services, fixed and mobile clinics particularly focus on health promotion, screening, health education, physical assessment, and prenatal care services. Healthcare practitioners, irrespective of whether they are based at fixed or mobile clinics, fulfil various significant roles in meeting the needs of the health consumers (Clemen-Stone 1995:825). The prevalence of multitudinous forms of diseases, many of which were hitherto unknown in the medical fraternity, accentuates the need for communities' health care needs to be adequately served. Both fixed and mobile clinics are then expected to fulfill the needs of the health care system in an integrated and complementary manner. The mobile health care clinic complements the provision of such needs by fulfilling a range of concomitant activities and responsibilities at various designated service points; such as the promotion of healthy lifestyles through adherence to nutritious dietary regimes (health education).

1.2 BACKGROUND / CONTEXT OF THE PROBLEM

Jericho is a village in the Madibeng sub-district of the North-West Province (NWP), populated by between 10 000 and 15 000 community members. The village is situated approximately 40 kilometres from the town of Brits. It has only one fixed, one mobile clinic, and one youth centre to respectively cater for the health care and recreational needs of the entire village. The fixed clinic offers twenty-four hour services, whereas the mobile clinic and youth centre offer only forty-hour primary health care services per week to the community. HIV and AIDS testing are conducted at both the fixed and mobile clinics. In order to reach the designated twenty service points per day, the mobile clinic has to depart from the Madibeng sub-district at 8h00 to the different allocated points. This situation typically evinces the demand-supply overload alluded to earlier. Whereas there is an acute demand for health care services in the community, the scarcity of resources – such as only one mobile clinic having

to service about twenty sparsely located points – creates a burden on the supply side of those services (Ehlers & Mja 2000:44-48). It is already apparent that the time spent at each service point by the mobile clinic staff is unacceptably minimal. In addition, the client-health practitioner ratios in such a scenario reveal a supply-demand imbalance that is harmful to the provision of adequate HIV/AIDS prevention, treatment, and care services (Department of Health (DOH) 2001:11-13). Of the twenty mobile clinic points, the nearest one is Rietgat village; a return trip of approximately 60 kilometres from Brits; and the furthest is Klipvoorstad, a return trip of approximately 180 kilometres from Brits. The staff at the fixed clinic consists of professional nurses, assistant nurses, health promoters, volunteers, a primary health care doctor who visits the clinic on Fridays; as well as general workers such as cleaners, gardeners and security guards.

On the other hand, only one professional nurse and one nursing assistant staff the mobile clinic; while the youth health care centre has only one health worker and two assistants. Insufficiently equipped and understaffed health care institutions were found to be a critical contributor to the slow pace of youth HIV and AIDS education (Heunis, Van Rensburg & Ngwenya 2000:58-60). Jericho fixed clinic and Jericho mobile clinic refer pregnant women to Brits District Hospital (BDH) when the need arise for example, when their CD4 count levels are below 200. The National health Laboratory services are also performed in BDH. There is also a pharmacy which provides fixed clinic and mobile clinic with HIV / AIDS medication.

The BDH, which has a patient accommodation capacity of sixty beds, is the only (district) hospital serving the Madibeng sub-district. Its vision is to give quality and competitive health care through competent and skilful personnel within a warm, comfortable and user-friendly environment. Its mission is designed to reinforce the notion of pursuing equitable, accessible and quality health care through the empowerment of staff and the fostering of relationships with the relevant stakeholders and beneficiaries of the health care system throughout the Madibeng sub-district. The Brits District Hospital's service provision is further strengthened by the integration of an anti-retroviral

(ARV) clinic on its premises. In view of the health care demand and supply disequilibrium existing in the Madibeng sub-district, the background and context of the problem being investigated here necessarily becomes a factor of how prevention strategies and interventions could best be utilized to thwart off the rampant spread of HIV and AIDS among the broader Madibeng community. Both the vision and mission of the hospital could culminate as mere grandiose ideals, if integrated HIV and AIDS prevention and care approaches and strategies are not fostered within the broader Madibeng healthcare provision system (Makhubela-Nkondo 2004).

From April 2004 to the second half of 2007, the researcher has continuously observed that more pregnant women are visiting fixed and mobile clinics at the service points in the Madibeng sub-district at an exponentially increasing rate. The high incidences of teenage pregnancy rates in general, are indicative of the fact that safe sex is not accorded the austere observance and adherence it warrants (Williams & Mavundla 1999:58-61). This is what has starkly come to the researcher's realization since her appointment as a professional health care practitioner at the Madibeng sub-district. Despite the prevalence of daily patient bookings and the concomitant treatment follow-ups, the number of antenatal patients is increasing unabatedly.

Table 1 indicates the increase in the number of antenatal attendees during 2004 to 2007 in Madibeng Sub-district, North West South Africa.

Table 1: Madibeng Sub-district indicator data of pregnant women who tested positive for HIV infection

Year of attendance	Pregnant women tested	Pregnant women testing positive (n=%)
2004	551	202 (36.6)
2005	1145	385 (34.7%)
2006	4136	1220 (29.4%)
2007	5988	1649 (28.0%)

According to the Madibeng Sub-district indicator data, the number of pregnant women attending clinic increased from 551 in 2004 to 5988 in 2007. As VCT is part of services rendered in the Madibeng sub-district clinics, the number of those that tested positive to HIV also increased with an average of 34.175%. This is in line with national projections where according to the National Strategic plan of 2007-2011 the percentage of pregnant women who got tested is currently 75% (Khomanani news 2008).

It is also very important to remember that if a person becomes infected with HIV, there is a window period of six to twelve weeks during which time the body is recognizing the foreign matter, and preparing to defend itself against the virus. It is during this time that the body has no antibodies against HIV and the test will show as negative for HIV. Even when the body does begin to make antibodies against the HIV, the number of antibodies may still be too low to give a positive test result. The window period may in some instances be as long as six months. For this reason it is recommended that a second test be done at a later date to confirm the negative result. (Page, Louw & Pakkiri 2006 : 63). Pregnant women are advised to book as early as 12 weeks for antenatal care so that the initial HIV testing can be done with time enough left for a second testing should this be necessary. It is important to note that even though the test is negative early after infection the person is able to pass on the virus to others during this 'window' period. (Evian 2002: 41)

In Madibeng Sub-district, voluntary counseling and testing (VCT) is also conducted daily to enlighten patients on their Human Immunodeficiency Virus status. In this regard, professional nurses, health care promoters and doctors render professional pre- and post-counselling services. The state of affairs being outlined here is intended to illustrate a supply-demand overload on the one hand, and the dire need for protracted HIV/AIDS education programmes on the other. While there is an exponential and poignant demand for professionally trained health care workers in this sphere (Diale & Ross 2000:137-40), the increasing numbers of pregnancies arising from unprotected sexual behaviour suggests that the supply of relevant knowledge

and other interventions is at present grossly inadequate and virtually negligible.

Compared to urban and metropolitan environments, rural villages – due to factors such as generally low infrastructural development, poverty and insufficient means to accessing knowledge – are more likely to be affected by the risky occurrences of unprotected sex. In remote rural villages like Jericho, the fight against HIV/AIDS has to be launched from two main premises – prevention and proper care for the infected and affected persons. From a socio-cultural point of view, women have to be empowered in the total obliteration of the mindset and attitude that subjects them to vulnerability and a denial of control over their bodies, which is induced by the violence meted out against them in the demand by their partners and spouses to have unprotected sex. Drastic and massive joint interventions by health professionals and other stakeholders are urgently required to save the villagers in Jericho from an imminent HIV/AIDS catastrophe. Currently, families carry the heaviest HIV/AIDS burden due to the resultant loss of breadwinners, and children are often the worst affected. Apart from addressing the fatal HIV and AIDS consequences and the attendant social problems it creates; care, treatment and support have to be offered to people living with HIV/AIDS so that they can live longer and healthier lives, especially pregnant women who are at a high risk of incurring MTCT (mother-to-child transmissions). Furthermore, intervention strategies should be developed to care for orphaned children and inspire hope in their lives. Such an orientation necessarily becomes a long-term crime prevention strategy for those HIV/AIDS orphans who might become hopeless and resort to crime; or even live on the streets because of poverty and depravation arising from HIV-induced broken families (Makhubela-Nkondo 2004).

1.3 PROBLEM STATEMENT

The topicality of the prevalence of HIV infection necessitated that educationally promotive interventions be urgently explored and implemented (Mouton 2001 : 48). The study's feasibility is accentuated by the degree of its novelty, as no systematic investigation in this sphere at Madibeng is known to

have been undertaken at this scale and scope, in respect of the specific “unit of analysis” (Mouton 2001 : 50); viz, the comparative discourse on fixed and mobile clinics’ provision of health care services in the Madibeng sub-district. The pivotal focus and “unit of analysis” of the study is the comparative description and analysis of the extent to which the fixed and mobile clinics (do or do not) render, and are able to cope with HIV / AIDS service delivery at the Madibeng sub-district, North West province. Based on the Madibeng Sub-district Indicator Data (2007) the number of antenatal care attendees as well as those testing positive to HIV, have increased as indicated in table 1. The number of those testing positive usually excludes the women with a false-negative result due to the window period. Pregnant women who may initially refuse to undergo VCT are offered support and health talk with the intention of eventually impressing upon them the importance of VCT on their consent (Madibeng Sub-district Indicator Data, 2007).

Furthermore; the Antenatal Survey undertaken by the Ministry of Health in 2004 revealed that the prevalence of HIV infection among pregnant women attending public health facilities nationally was estimated to be 29,5%. (Department of Health 2004). This is supported by other research findings that report a high prevalence of HIV infection among teenagers that fall pregnant and young women between the ages of 25-29 years old (Department of Health 2004).

Mouton (2001:53) argues that “Research problems implicitly or explicitly embody a research question”. That is to say, a link of coherence exists between the problem(s) to be investigated, and the question(s) that guide such an investigation. The fundamental thrust of the problem statement was overviewed in the background and context of the problem, which is essentially premised in the question: what is the main problem, and why is it considered a problem at all.

According to the Education and Training Unit (ETU) (2002:1), about five million South Africans are HIV-positive. As more and more people become

infected, families and communities begin to feel the full impact of HIV / AIDS. It is vital that multi-pronged strategies and interventions by multiple teams from multidisciplinary medical and intellectual backgrounds be involved in the implementation of strategies and programmes intended to prevent the further spread of HIV / AIDS. The burden of caring for those infected and affected individuals and families should become a shared responsibility, before the HIV /AIDS catastrophe assumes even more nationally disastrous proportions.

Why does the afore-mentioned state of affair constitute a problem? The prevalence and rapid spread of HIV and AIDS in the Madibeng sub-district are real, especially amongst young adults and women between the ages of fourteen and forty-five. Viewed against the backdrop of rampant poverty, the very high pregnancy rates are a tangible manifestation that preventive measures such as the practice of safe sex, are not adhered to with the sincerity they deserve. High pregnancy incidences are further compounded by factors such as the scarcity of recreational and health care facilities, migrant labour and its attendant spousal infidelity, poverty and illiteracy. Infected persons exacerbate the state of victimhood among their affected families, as those breadwinners dying from the disease leave a support vacuum; especially among orphans who are then confronted with difficult socio-economic challenges. This state of affairs is further problematised by the fact that it creates a nexus of health and socio-economic challenges for the health care system to deliver satisfactory and adequate services. It is the very nexus that answers the question: Why is the health status quo in Madibeng a problem? It is poignantly important to compare the capacity to provide HIV/AIDS services between the only fixed clinic and the twenty mobile visiting points; because it is imperative for the community to be better informed about this dreadful disease in particular, and primary health care measures in general. The role of the mobile clinic staff cannot be underestimated, as it will complement the health education initiatives that seem to be losing their zest at local churches and schools (Department of Health 2004).

This study wished to explore and describe pregnant women's feelings about the HIV / AIDS services in fixed clinic and mobile clinic visiting points.

1.4 PURPOSE OF THE STUDY

The general purpose of the study therefore aims to comparatively examine the efficacy of mobile and fixed clinic health care services in HIV and AIDS prevention at the designated research sites. To that extent, causal factors in the spread and prevention of HIV and AIDS, as well as the mobile and fixed clinics as agents of the existing system of healthcare provision, have become the variables among which associations have been theoretically and conceptually framed.

As is the case with research questions forming a point of confluence with the research problem, the purpose of the study "... will have the most influence on the use of certain methods of data collection and especially data analysis..." (Henning 2005:1). In juxtaposition to the latter statement, the author adds: "When deciding on what data sources to use, *we keep the purpose of the study in mind all the time* [researcher's emphasis]" (Henning 2005:6). In other words, the purpose of the study is inextricable from the data collection methods and procedures. In that regard, the purpose of the study/research is categorized into general aims and specific objectives (Mouton 2001:122). In its logical conclusion, the research purpose and objectives are an embodiment of the research problem.

1.5 RATIONALE AND JUSTIFICATION OF THE STUDY

The rationale, motivation, and justification of this study attempts to answer the question: *Why is this particular study necessary?* In other words: *What has generated interest in the study, and of what use (value) will it become?* The background outlined in the preceding section presents a state of affairs in which the high prevalence of HIV and AIDS in the Madibeng area warrants a correspondingly high degree of health care service delivery and interventions; the kind of which should include the supply of information and knowledge on HIV and AIDS treatment, prevention and appropriate health care for those infected and affected by it.

As reflected earlier in the background and context of the problem, the researcher's own experiences (Mouton 2001:27) as a professional health care practitioner (nurse) motivated and prompted the undertaking of this study. The degree of HIV/AIDS-induced and rampant suffering in Madibeng sub-district provided a need to examine the underlying causes of the supply-demand disequilibrium of acutely needed services; knowledge and information on the prevention and care relating to the disease.

1.6 RESEARCH OBJECTIVE

In a more specific context of advancing the general purpose of the study, the following has been framed as the pivotal objective of the study:

- To describe, compare and analyse HIV/AIDS health care services provided by fixed and mobile clinics in the Madibeng sub-district of the North West Province.

1.7 RESEARCH QUESTIONS

In general, the structuring of the research questions frame the nature of the research and manner in which the research itself has been carried out. Mouton (2000:57), cited in Henning (2005:30), concurs: "Research designs are tailored to address different kinds of questions. When we attempt to classify different types of studies, it is not surprising that we do so according to the type of questions they are able to answer [researcher's own emphasis]". Furthermore, the researcher's questions themselves are a reflection of the qualitative researcher's ontological and epistemological worldview and understanding in relation to the problem to be investigated (Henning 2005:31). In the latter regard then, research questions become the integration of theory, conceptualization, and interpretation (Henning 2005:31; Mouton 2001:53). In a coherent investigation of phenomena, the nature and framing of the research questions forms a link with the research problem (Mouton 2001:53), and how it is envisaged to be resolved. Examples of research questions include, but are not limited to exploratory or preliminary, descriptive, casual, or evaluative questions (Mouton 2001:53-54). Since the nature of the problem is

such that a multiplicity of questions could be asked (and should be asked), listed below are only those questions that were viewed as advancing the general aims and specific objectives of the study. The following questions were then framed to guide the research process:

- How do pregnant women benefit from HIV / AIDS services at fixed clinic and mobile visiting points?
- Which roles do health care workers play in combating the spread of HIV / AIDS amongst pregnant women in fixed and mobile visiting points.
- Are the local pregnant women content with the current provision of fixed and mobile health care service delivery?

1.8 RESEARCH DESIGN AND METHOD

1.8.1 Introduction

A “research design” is dissimilar to “research methodology” (Mouton 2001:55).

1.8.2 Research design

The research design outlines the systematic processes involved in the investigation of the problem as presented by the researcher (Mouton 2001:49, 114). A research design refers to the plan and procedures to be used to accomplish the purpose and the specific aims of the study. It serves as a “management plan” (Henning 2005:142) to chart the course for the execution of the study. In addition, it focuses on the outcome of the investigation (findings) rather than on the instruments used to arrive at the outcome (Mouton 2001:56).

The design for this study is exploratory, analytic and comparative and it embraces both quantitative and qualitative aspects to provide narration and quantitative data for comparison and analysis of services provided in fixed and mobile clinics in Jericho, North West Province, South Africa.

1.8.2.1 Research Setting

The study was conducted in Madibeng sub-district of the North West Province. The sub-district’s fixed clinic (Jericho) and mobile clinic (Jericho

mobile) provide HIV/AIDS health care services to pregnant women. Other sites that provide HIV/AIDS care and support are the hospital in Brits, ARV centre and Jericho Youth Centre.

1.8.3 Research methodology

Research methodology “focuses on the research process *and the kind of tools and procedures to be used* [researcher’s own emphasis]”. It include discussion about the population, sample and sampling techniques as well as procedures used in the collection of data and the techniques used in its collection (Mouton 2001:56). The following elements conform to the investigative procedures adopted in the implementation of the research methodology:

1.8.3.1 Population

Polit and Hungler (2001:40) define a population as “an aggregate of all the individuals or objects to be studied with some common defining characteristics”. In this study the population consisted of pregnant women who attended HIV/AIDS health care services at fixed and mobile clinics. The sampled participants were selected from a universal population (Strydom & Delport 2002 : 333-35) among pregnant women and pregnant teenagers.

1.8.3.2 Sample and sampling technique

Sampling is a data collection procedure indicated to systematically select desirable research participants from the population (Henning 2005:71; Sarantakos 2000: 141,151). There are two sampling techniques, probability and non-probability. In the probability sampling technique, participants are randomly selected to give each and everyone an equal chance of participating while a non-probability sampling technique is used where sampling is based on availability of participants in terms of convenience and knowledge about the aspect studied. In this study a non-probability sampling technique was used to select a convenience sample of 100 participants from the population of pregnant women attending antenatal care at Jerico clinic and its mobile clinics.

The inclusion criteria

The research participants were rural pregnant women aged between 14 and 45 years and residing within the jurisdiction of Jericho and its neighbouring areas that are served by the mobile clinic unit. The other factor taken into consideration was the willingness to participate. Those who readily expressed a desire to participate were included. Levels of education attainment were considered, but were not exclusionary; as both literate and illiterate pregnant women were included.

The exclusion criteria

The first consideration for excluding research participants related to the age factor. Those younger than fourteen or older than forty-five years were excluded from the study. Villagers whose residential status fell outside the municipal jurisdiction of the twenty two mobile service points were also excluded. In addition, those members of the community who, refused or showed reluctance to participate (anxious about participation) were not forced to participate.

1.8.3.3 DATA COLLECTION PROCESS

Data collection is a process where information is obtained from participants through asking questions using a questionnaire, or an interview schedule or guide) or through observation. Interview schedules always relate to constructive conversation between the researcher and the participant where the question can either be closed or open depending on information required. Questionnaires are usually completed by the participant or in the case of limited literacy or preference, the researcher may complete this on behalf of the participant. Regardless of the type of instrument used to collect data, an informed consent (verbal and written) needs to be obtained from the participants before filling-in of questionnaires or responding to any research questions.

In this study the researcher, assisted by two health promoters, administered an interview guide by asking the questions as they appear in the guide. The health promoters were trained on the research process and a detailed discussion on how to present the questions in Setswana from English was

held. Aspects that needed clarity were discussed and agreed upon and notes were made next to areas in the guide that were thought to be difficult to assure uniformity. This was used as the template. The purpose of the study was explained, with emphasis on the fact that refusal to participate would not affect their future treatment at the clinic. Informed consent was obtained through formal signing or agreement before the actual questions could be asked. For those who could read, information leaflet and informed consent provided an explanation about what was involved in the study and what was expected of them.

The duration of the interview guide was one to two hours each. This included physical assessment, health education aspects as well as the routine VCT and the actual interview for the study. The participants were assured of confidentiality and privacy. Questions on the guide were used to avoid losing focus and to ensure that the similar relevant questions were asked prior to the filling-in of the guide in each case.

Triangulation was also employed to maximize the findings of the study (Henning 2005: 103). Triangulation itself took various forms (Polit & Hungler, 2001: 472). Data triangulation was used through the sourcing of data and information from various (primary, secondary and electronic) sources. Method triangulation was applied by the usage of collecting data through interview guide, physical assessment and observation of surroundings and practices. The four criteria used were:

- Credibility – This criterion is an assessment of the believability or credibility of the research findings from the perspective of members or study participants. This was employed by the researcher checking responses with participants, that is, gaining feedback on responses from the participants, and verifying information with the participants.
- Transferability – This refers to the degree that the findings can be transferred or generalized to other settings, contexts, or populations. The researcher enhanced transferability by keeping a detailed audit trail of the research methods, contexts and assumptions underlying the study. This “Thick description” would provide a basis of reference when necessary.

- Dependability – This refers to how reasonably researchers can be sure that the findings would be replicated if the study was conducted with different participants in the same context (De Vos 2005: 345).
- Confirmability – This refers to the extent to which the findings are a true reflection of the participants' experiences and the inquiry itself (De Vos 2005:345). This also refers to the extent to which unattached outside parties would agree with the efficacy and relevance of the employed data collection techniques, as well as agree with the pragmatic worthiness of the study (Henning 2005:147).

1.9.1 Observation of the research subjects

Participants were observed for body language as they responded to questions asked making sure that the questions posed are understood and participants are comfortable with them.

1.9.2 The review of documents

The fundamental thrust of reviewing relevant (primary and secondary) documents was intended to obtain quantitative and qualitative information, data and knowledge on, among others, population and other relevant socio-economic and cultural dynamics germane to the study.

1.9.4 Efficacy of data collection

The efficacy and precision of data collection advances the course of establishing a “truth value” upon which the findings of the study are located (Henning 2005: 147). In order to advance the course of the objective and unprejudiced collection of data – *ipso facto*, an objective and efficacious presentation and analysis of data – the researcher adhered to the strict protocol concomitant with the nullifying of researcher bias or distortion (Mouton 2001:106). To that extent, the following salient aspects were considered and applied during the course of data collection:

1.9.5 Validity of data

In the general sense, validity refers to the extent to which a research instrument (e.g. observation, questionnaires, or (semi) structured interview)

actually measures what it sets out to measure, without deviating into other, undeclared areas of research (Henning 2005: 147; Mouton 2001: 100). In this regard, validity could be construed as maximizing the absence of bias and distortion of procedures and results. In other words, "...the research findings need to "correspond" with *reality* [author's emphasis]" (Henning 2005: 147).

The questionnaires for instance, sought to elicit the actual and unhindered views and opinions of pregnant women and teenagers regarding, among others, the practice of unsafe sex. Were they coerced into unsafe sexual practices? The researcher was bound by research etiquette to respect and present their perspectives verbatim and in an un-convoluted manner, however debatable their views and opinions might be. As an aspect of validity, content validity required that each interview and questionnaire item be directly related to the specific unit of analysis (Mouton 2001: 105, 166-67). The researcher could not, for instance, ask the religious affiliations of respondents, as this would have a negative impact, particularly on the already HIV-positive individuals. Construct validity, on the other hand, determines the extent to which theoretical relationships between data items could constitute a logical base for the analysis of data (Mouton 2001: 105). In the study itself, this has been enhanced by the collation of data relating to the health (HIV/AIDS), socio-economic (e.g. unemployment trends and patterns in the Madibeng), and other relevant population dynamics.

1.10 DATA ANALYSIS

The phase of the research involving the "analysis" of the data encompasses the pragmatism and scrutiny of the collected evidence; that is, establishing the "methodological/epistemological home" of the study (Henning 2001:100). It included transcripts compiled from open-ended responses acquired through the interview guide. The raw information/data is collated for purposes of yielding meaning, logic and coherence to the study.

1.10.1 Qualitative data analysis

Polit and Hungler (2001: 380) point out that qualitative data analysis is a labour-intensive activity that requires creativity, conceptual sensitivity and

sheer hard work. It does not proceed in a linear fashion and is less structured. Polit & Hungler (2001: 459) further describe qualitative data analysis as “the process of organizing and integrating narrative information according to the emerging themes and concepts”.

Data from interview guides were methodically triangulated to establish a pragmatic reality and truth-value through a discourse and prosaic narrational process of interpretation and writing of the findings. In this study the researcher collected and analysed data concurrently. In the qualitative analysis of data ,comparisons, emergent themes and categories, patterns and trends were some of the aspects used to guide the formulation of the findings, so that the respondents’ views were not distorted(Henning 2001:128).

1.10.2 Quantitative data analysis

In this study, computer-aided data analysis (CADA) was applied to generate tables and graphs/diagrams based on the numeric and statistical interpretation of the collected data. The quantitative analysis of data applied in the allocation of numbers reflecting the frequency of responses, such as in the number of respondents per age or gender category.

1.11 ETHICAL CONSIDERATIONS

In keeping with research etiquette and convention, the researcher and research participants had to function and interact in a professionally conducive and humane environment (Mouton 2001:24-25; 238-46). To that effect, the following nuances, research ethics and principles were observed for the duration of the entire research process:

1.11.1 Explanation of the research

Chapter 2 of the Constitution of the RSA (Act 108 of 1996) guarantees the respect for human dignity and human rights. This guarantee does not immediately disappear by virtue of the subjects’ participation in any research activity). All the relevant facets of this research were explained to the participants prior to the beginning of the investigation (*per se*). The

explanation included the purpose of the research, its duration, the usage of the results, and the expected nature of (their) participation in the study. The participation by the various respondents was only sought after the necessary permission and the relevant local and provincial health care authorities had granted approval of the study's execution.

1.11.2 Informed consent

For purposes congruent with transparency and accountability on the part of the researcher, the above-cited explication was conducted in the predominant language of the local people – in this case, Setswana – and this presented an opportunity for them to ask questions, which they felt needed answering. The study could not proceed prior to the informed consent of potential subjects being attained.

1.11.3 Voluntary participation

The participants were neither coerced nor coaxed into participation. They firstly had to be sure that they understood all of the explanations in the preceding sub-section (1.11.1), upon which they base their full participation or refusal to participate. The participants were also informed of their right to withdraw at any given stage of the stage if they felt their rights were being violated.

1.11.4 Anonymity

The non-disclosure of the participants' identities was strictly adhered to. In addition, no allowance was made in the questionnaire or any other research instruments for personal identifiers such as their names, ID numbers or even the physical locations of their places of residence.

1.11.5 Confidentiality, privacy and trust

Any aspect relating to either the participation of subjects/respondents, their HIV/AIDS status and medical profiles were kept as information to which only the researcher was privy. The researcher allowed no unauthorized persons any form of access relating to the participants or their relatives, especially those infected and/or affected by HIV/AIDS. This mutually and ethically

binding agreement increased the trust between the researcher and the participants.

1.11.6 The right to fair treatment

All the members of the community were treated as human beings first. Those falling under the exclusion criteria of the sample were not treated prejudicially. Furthermore, those who exercised their right to non-participation and withdrawal at any stage of the research were treated as equally as prior to their selection or withdrawal.

1.12 CONCLUSION

The effective delivery of services by public sector organs of state (such as the Department of Health) has become one of the mechanisms by which the post-1994 dispensation in South Africa has been evaluated by the recipients and potential recipients of those services. The disequilibrium between the actual delivery levels of those services and the levels of demand and expectation by the beneficiaries of those services is at the heart of this investigation. Since the spread of HIV and AIDS is continuing unabatedly, those far-flung rural villages are then placed at high risk. The provision of mobile clinics through private-public ventures and partnerships would ameliorate the demand and supply imbalances. It is the considered view of the researcher that this study's pragmatic implications and efficacy will become meaningful through the fusion of theoretic/conceptual elements and real-life/empirical factors. This chapter then, attempts to define the parameters for such a fusion.

1.13 OUTLINE OF THE STUDY

Organization in structure of the study is as follows:

Chapter 1 outlined the purpose of the study, background to the problem, research design and methodology, including sample and data-collection instrument, ethical considerations as well as data analysis. Key terms were defined.

Chapter 2 covers the literature review conducted for the study.

Chapter 3 covers the conceptual framework.

Chapter 4 discusses the research design and methodology.

Chapter 5 discusses the data collection and analysis.

Chapter 6 presents the conclusions, limitations of the study and makes recommendations.

CHAPTER TWO

REVIEW OF LITERATURE

2.1 INTRODUCTION

The primary aim of reviewing literature in any field of knowledge is to contextualise the study in accordance with the identified units of analysis (Henning 2005:27). In addition, a synthesized review of literature facilitates the relevance of the findings in the context of "... the existing body of literature" (Henning 2005:27). Burns and Grove (2005:93), corroborate the above author's view of the literature review as consisting of all written sources relevant to the research topic selected. They state further that a literature review is "an organized written presentation of what has been published on a topic by scholars". Mouton (2001:87) argues that literature review should not only culminate with the researcher's compendium of texts in a particular field of knowledge. He contends that such a compilation should be done together with an interpretive and analytic perspective on how other scholars have dealt with the particular issue(s) under investigation. In the latter context, literature review then becomes "... a body of accumulated scholarship". The review would also help to search and investigate congenial findings from previous studies that form the basis for comparison when interpreting and translating such findings from a current study (Brink 1996:76). In aptly differentiating between "literature review" and "a body of accumulated scholarship", Mouton (2001:87) avers further that:

"The term "literature review" does not, in fact, encapsulate all that we intend to convey by the term. When you embark on your study ... Your interest is ... not merely in literature (which sounds as if it refers to a collection of texts), but in a body of accumulated scholarship. You want to learn from other scholars: how they have theorized and conceptualised on issues, what they have found empirically, what instrumentation they have used and to what effect (Mouton 2001 : 87) .

As Mouton (2001) attests in this instance; the general features of “literature review” or “the accumulated body of scholarship ... in any discipline or field of study states thus:

- It should provide multi-dimensional definitions of the unit(s) of analysis;
- It should illuminate on various theories, models and hypotheses in the field under investigation;
- It should offer perspectives on what other studies have previously produced in respect of existing data and empirical evidence thereof;
- It should enlighten on the kind of instrumentation used or developed, and to what extent these have been (un) successful.

2.2 THE CONTEXTUALISATION OF THE LITERATURE REVIEW

In this section, an attempt has been made to integrate and contextualise the salient theoretical, conceptual, and empirical frameworks observed in section 2.1 above, with the actual/practical scope covered by the researcher’s literature review. The latter – the actual scope covered by the researcher’s literature review – was applied with due recognition of the fact that: “A good review of the available scholarship ... *provides clues and suggestions about what avenues to follow* [researcher’s own emphasis]” (Mouton 2001:87). Appearing under various sub-headings below is an indication of the scope, or “avenues” of this study’s “accumulated body of scholarship” alluded to earlier by Mouton (2001). The range of sources consulted and reviewed includes primary documents by both the provincial and national Departments of Health in South Africa. The gravity of local and international HIV/AIDS-related literature centred on preventive and promotive measures. For the international perspective of the study, primary and secondary sources, including the electronic media, have been also been consulted to present a comparative and broader base for analysis and interpretation. The “oral tradition” has also been incorporated to some extent in the form of conversations with experts in this field, as well as the village sages and those who are very knowledgeable on the traditions and belief systems of the local people (Breier 2001:9-11; Dei 2000:9; Kraak 1999:1-2). On a comparative scale, the literature focusing on mobile clinics as service provision mechanisms was not as abundant as that focusing on HIV/AIDS (*per se*).

2.2.1 A historical overview of the provenance and etiology of HIV and AIDS

The formulation and construction of the above sub-heading "avenue" in this manner, is in tandem with the dimension and the aim of the literature review; both of which are focused at comparing and analyzing HIV/AIDS prevalence and the concomitant service delivery interventions at fixed clinics and mobile point services, especially amongst pregnant women. The construction of the sub-heading in this manner allows for both the generalistic and the specific domains of the literature to be explored, analysed, synthesized, and interpreted.

At its incipient stages, the mystification HIV/AIDS was allowed to persist for too long, and thus reinforcing some denialist views that it did not exist. Consequently, the alarming rate of the spread of HIV and AIDS in our country is considered one of the fastest in the world. The danger of being either infected by HIV/AIDS or being affected by its devastating emotional and socio-economic consequences is real, because it is carried and transmitted by humans. Many have grieved for siblings, uncles, friends and orphans left behind with no one to fend for them (Jacana Media 2005:5).

The first cases of HIV were diagnosed in South Africa in 1982, and for the first few years of the epidemic, the cases that were known were largely restricted to white gay men (Frank 2005:17). Since 1981, more than 20 million people have died because of this virus (Fortune Magazine 2005:7). It is unclear where the virus comes from, or why it appeared. Despite the uncertainty relating to its origins, what can be reliably ascertained is that HIV/AIDS is also a sexually transmitted infection (STI). Most STIs can be cured, but HIV is presently incurable (Evian, 1995). In 1983, HIV was found to be the cause of the Acquired Immune Deficiency Syndrome (AIDS). HIV itself is the virus that causes AIDS, and is characterized mainly by its weakening of the body's immune system. In 1990, the first antenatal surveys to test for HIV prevalence

were carried out by testing the status of women who attended antenatal clinics. Less than one percent (0,8percent) of the women were found to be HIV-positive; but after more than fifteen years, the percentage has increased to more than that. In 2004 alone, more than 40 million people were living with HIV/AIDS.

As is the case with many other diseases, especially in rural and underprivileged communities; poverty aggravates the conditions for AIDS, while it does not directly cause AIDS (Evian 1995: 12). For AIDS to occur, HIV must firstly be present. As one of the secondary causes, poverty and unemployment could force women into sex work and increase dependency relationships in which women are vulnerable to coercive and unprotected sex. The stigma attached to HIV/AIDS infection aggravates the emotional condition of the sufferers to higher levels, when compared to the emotional and stress levels of people suffering from other forms of diseases.

In a village like Jericho, factors such as ignorance and illiteracy, poverty and unemployment, contribute to the mystification of HIV/AIDS. Since 2004, there has been a huge increase in the number of cases of HIV-infected people who continue to contract the Acquired Immune Deficiency Syndrome (Madibeng sub-district Indicator Data : 2007). Limited health and recreational facilities, migrant labour and its concomitant incidences of spousal infidelity, as well as the conspicuous lack of access to information; all these factors have collectively presented new and multi-faceted challenges in the struggle to curb the spread of HIV/AIDS (Ehlers et al. 2000: 45). According to (Mackereth & Wright 1993:33), substantial work needs to be done if the spread of HIV infections is to be drastically reduced. By making informed choices about sexual behaviour, diet and medical treatment, people living with HIV/AIDS can lead longer and normal lives.

Every day, 1 600 children die of HIV/AIDS and their lives cut short. In Sub-Saharan Africa alone, 12 million children have been orphaned by HIV/AIDS. In 2006, one million African school children lost their teachers due to HIV/AIDS. Up to 20% of the nurses in South Africa are HIV positive. How are these

children to be meaningfully nurtured into balanced family structures and socially and mentally stimulating environments? Given the collective impetus of the above scenario, it is then not far-fetched to intimate that HIV/AIDS is the biggest challenge facing the world today (Fortune Magazine, March 2005: 7).

It is *fait accompli* that the staggering HIV/AIDS figures compiled from various parts of the world – especially among the developing countries – suggest that aggressive interventions are direly needed to alter the current trends of the spread of HIV and AIDS. Voluntary Counselling and Testing (VCT) has become a major strategy in the fight against HIV/AIDS, as the results can be known within ten minutes. Being HIV-positive is not a death sentence anymore. Early detection is one of the criteria by which medical treatment bases its success rates at preventing further transmissions. The dearth of specialized equipment at primary health care clinics could hamper the rapid availability of HIV/AIDS test results. For instance, when the result of one test is positive and the next becomes negative, a laboratory test becomes necessary to confirm the actual and scientifically verifiable results under reliable and controlled conditions. It takes between twenty-three days and three months from the time of infection for enough antibodies to form before they can be detected . This is known as the window period.(Makhubela – Nkondo 2004). As an educational strategy, VCT enables people to make informed decisions on the basis of their status. The acquisition of HIV/AIDS-related knowledge and information is paramount in inculcating a culture of safe sex as a frontal attack on the deadly disease. The government's Health of the Nation campaign has targeted HIV/AIDS prevention and care as its key intervention strategy. However, this noble ideal has to be supported by the money and the commitment necessary to actuate and translate statements into cogent and tangible results. Our future and that of the next generations depends on such meaningful action. The overview outlined above is necessitated by the need to illustrate the provenance and magnitude of HIV and AIDS; therefore, the intensity with which the scale and scope of interventions would have to be launched.(Makhubela- Nkondo 2001;4).

2.2.1.1 The impact of HIV on pregnant women

Of all socio-economic categories, women in rural areas – in addition to poverty, illiteracy and some culture-specific roles and prescribed forms of behaviour – bear the full brunt of HIV/AIDS devastation (Miller & Yeager 1999: 10). For HIV and pregnancy-related situations, the delivery of health care services is of critical importance (Bury, McLachlan & Morrison 1992:66-68). If women are to receive effective help with HIV-related problems, there must be provision for effective and appropriate services which women are both able and happy to use (Heunis, Ngwenya & Van Rensburg 2000:45). There are, however, a variety of reasons why women fail to utilize these services. There is still the widely held view that HIV is the pathology intended largely for the *demi-monde* – those who are in some way “bad”, or whose moral deportment and lifestyles are unacceptable. Attendance of HIV information or screening services becomes erroneously construed as an admission of this type of lifestyle. There must therefore be recognition that many women suffer the shame and the stigmatization attached to HIV. They also suffer anxiety that their HIV status might be scornfully and subtly shared by clinic staff and be reflected in their attitudes and behaviour towards them. Even if this is not the case, women often feel health care services are unlikely to provide them with effective practical help with underlying personal and social problems. Such an ‘indictment’ on the health care system implies that counselling services need to focus deeply into what might appear as ‘peripheral’ factors to healthcare professionals (Diale & Ross 2000:136-39; Heunis et al. 2000:54-62).

Apart from concerns about possible treatment, women often feel that they did not have enough time to regularly attend health care services due to what they considered as pressing personal and social problems that may have much greater immediacy for their families. These would include problems relating to housing, financial or legal difficulties. It has been repeatedly observed by the researcher that women placed the needs and health of their families before their own health interests. In reality, an HIV-infected woman has an even greater problem; and the many additional services she is

required to attend may be very time-consuming, leaving her with no chance of normal life. Not only does attending services occupy much of her time, but it ensures that the problems of HIV remain firmly in the forefront of her mind, which can prove to be stressful. In addition, the need to attend so many services may result in women suffering real or perceived loss of control over their lives. It is therefore desirable to co-ordinate health care services and other daily activities, making them as efficient and unobtrusive as possible. The establishment and development of multi-purpose centre, especially in remotely placed villages like Jericho, would promote the kind of situations which require women to obtain help with all their social, economic and legal problems at the same place as they receive health care services. This would make life less stressful for them. Access to such services should always be flexible and easy so that women could get help as quickly as the problems arose (Heunis et al. 2000:56-58). Therefore, if women infected or affected by HIV are to be encouraged to use services, it is important that services should be developed to meet their needs and wishes. This cannot be done without consulting the women themselves. Services should be user-friendly, efficiently organized and integrated to provide help with as many issues as possible at a single site; thus removing the time-consuming need to attend large numbers of single services at different locations.

Professional health care staff should display and offer sympathetic, non-judgmental, supportive, and compassionate attitudes towards women and every person seeking professional health care assistance. Women should be involved in deciding the details of their own personal care on the basis of well-informed and expertly provided knowledge. They should be encouraged to exercise choices without the fear that they will be viewed as irresponsible, dissentient, or uncooperative if they choose not to accept a particular service. Service providers must be careful not to impose their own views on women, and should try to help them retain as much control over their lives and bodies as possible. If the health care services fail to attract women, it must be acknowledged that the problem may lie within the providers of the services rather than with the women. Services are, after all, intended to improve the quality of life, not detract from it. In that particular context, the commercial

maxim: *The customer is always king*, should be persuasive enough to galvanize health care authorities into elevating the quality of services rendered to the health care-consuming public.

2. 2.2 Life after HIV diagnosis

The intended purpose here is to help pregnant HIV/AIDS-infected women and their families live constructively and longer. Support and information should be provided to women infected and affected with HIV/AIDS, and also to educate and inspire them to initiate self-advocated programmes that would purposefully expand preventive and promotive education and information on the disease. By so doing, public awareness of women's HIV/AIDS issues and compassionate responses will be promoted (Ewles & Simnet 1999:262).

2.2.3. Living with HIV and AIDS

The ways in which women cope with their HIV infection and even address their respective problems vary, but these survival and coping mechanisms generally represent resolutions based on limited resources. Due to the statistically very low HIV disclosure rate, support groups are advantageous for, among others, allowing pregnant HIV-positive women to develop emotional bonds with one another. Women attending antenatal clinics and receiving counselling are more likely to want to know their status than men. Women are therefore encouraged to reveal their status to their partners, but many are reluctant. The crisis they face is once again, loss of financial support, stigma, and in some cases, physical violence and rejection by their partners. Women also fear recriminations that may lead to social and familial castigation (Gender-Aids Forum 2004).

2.2.4 Prevention and protection against HIV infection

The use of contraceptives such as condoms, especially among the youth, needs to be emphasised (Foy & Dickson-Tetteh 2001:64). This is the age group that is more vulnerable due to ignorance and unsafe sexual conduct (Williams & Mavundla 1999:58). The importance of safe sexual practices must also be emphasized for HIV-positive and HIV-negative pregnant women, as they still confront coercive sexual intercourse challenges. According to Evian

(2003:223), ways to prevent HIV/AIDS transmission should be implemented in the antenatal and labour phases of pregnancy, as well as during post-delivery (postpartum). The author further indicates that anti-retroviral therapy (ART) is the best strategy to prevent mother-to-child transmission of HIV. HIV-positive mothers should be given ART as prophylactic measure. Studies have shown that in Africa, breastfeeding increases the risk of mother-to-child transmission (MTCT) by 12% to 43% (Fortune Magazine 2005). In an environment that is predominantly characterised by a high frequency of risk factors, pregnant women in particular, have to seek and apply maximum protective measures to safeguard themselves and their families against HIV and AIDS infections and transmissions. To create an enabling environment for the protection of pregnant women, three principal factors have to be critically considered as guidelines:

- Improving the social and economic status of women: Measures of protection should continuously strive for the complete eradication of women's exploitation and abuse in the home, at work, and in society as a whole. In rural villages and farming communities, women still continue to work long hours and are then expected to fulfill domestic roles within their families as well.
- Providing a method over which they have sufficient control: Applicable legal instruments and cogent empowerment measures should enable women to function in their own environment and define their own methods of operationalizing independence from all forms oppressive and sexist practices. Such empowerment could include bodies/organisations and forums wholly owned and controlled by women themselves.
- Getting more men to adapt to safer sex: Women's empowerment and freedom from all forms of oppression strengthens their independence and right to equal treatment. Especially in rural and farming communities, the inculcation of literacy programmes assists in obviating myths and other culturally-steeped enactments and stereotypes that perpetrate male dominance; thus eliminating women's rights to control and determine the

fate of their bodies (such deciding the number of children to conceive, and when to do so.

2.2.5 Risk factors

It is important to note that the assessment of risk, particularly in relation to issues of sexual health, may be sensitive and difficult to discuss with men or women in any setting. Ngxabisi (1997:160) goes even further to state that “culture acted as a barrier of communication on sexuality issues” even between parents and their children. However, such discussions should be an integral part of maternity care; as most women consulting for antenatal care have, by definition of being pregnant, had unprotected sex. They are therefore prone to high levels of risk for any sexual infection (Kennedy 2003:62). Factors that exacerbate HIV transmission and pose serious risks and danger to women include poverty, polygamous marriages, rape, spousal infidelity and widow inheritance. Sexually transmitted infections also pose a high risk; if untreated, they can lead to HIV prevalence. Heterosexual intercourse, on the other hand, overwhelmingly becomes a source of transmission (Frank 2005:17; Kennedy 2003:62).

2.2.6 Management of HIV and pregnancy

Voluntary counselling and testing (VCT) should be performed to detect any sexually transmitted infections (STIs) such as syphilis, gonorrhoea, and chlamydia (Diale & Ross 2000:136-141; Heunis et al. 2000:55-56). Tuberculosis (TB) should be ruled out, and baseline toxoplasmosis titres should be obtained. Screening and prophylactic treatment are of importance in the HIV infected gravida.

2.2.7 Managing HIV/AIDS as a chronic disease in the primary care setting

According to the chronic care model described by Wagner (2004:7), there must be interaction that can be supported best by harnessing and integrating the contributions to health care, from both the community and the clinic. The design of health care for HIV-positive pregnant women in both mobile and fixed clinics should take into account the varied needs of the patients, fully

utilize the spectrum of skills of the clinic personnel, and strive to accomplish the six attributes of effective health care identified by The Institute of Medicine. Those attributes are: patient-centered, effective, safe, efficient, timely and equitable health care. According to Gray (2004:28), “an average of 24.5% of South African antenatal clinic attendees tested HIV-positive in 2000.” Comprehensive and continuous health care are of optimum importance at both the fixed and mobile clinics, because having the same providers over time allows patients to develop appropriate confidence and trust in the health care staff. Successful communication about sensitive HIV- related issues, such as sexual practices, prevention, family support, disclosure, confidentiality, drug use and death and dying, requires a long-term patient-provider relationship (Diale & Ross 2000: 136-141).

2.3 HIV/AIDS TESTING AS PART OF A WIDER SCREENING PROCEDURE

On its own merits, HIV/AIDS testing facilitates a broader screening procedure intended to promote health care education and awareness among the youth, pregnant women and the broader community (Diale & Ross 2000: 138-39). At the same time, this process helps to facilitate the early detection and prevention of the further spread of HIV and AIDS. In this context, HIV testing is not only a lifesaving mechanism; but also an economic *sine qua non*, as longevity translates into a productive labour pool for the job market.

2.3.1 Pregnancy testing

The testing of pregnant women has often been a controversial issue (Ades, Dunn, Newell & Peckham 1995: 35-40). In discussing the risks of HIV-positive pregnancy, the following considerations need to be borne in mind:

- The effects of the pregnancy on the progression of the disease;
- The effects of the HIV infection on the outcome of the pregnancy;
- The risk of materno-fetal HIV infection;
- The risk of transmitting the infection through breastfeeding

The advantages and disadvantages of testing for this group of women at this stage of their lives have evoked strong opinions and feelings from both

proponents and antagonists alike. (Nursing and Midwifery Council 2002: 4-7). However, as more information emerged about the medical management of the disease and ways to reduce vertical transmission, so has policy altered. In the light of the medical and other benefits accruing for the mother and child, the national guidance on antenatal testing was further strengthened to the advantage of the mother making efforts to find out her HIV status (Bott 2005: 51). The Department of Health 1999 in (Kennedy 2003: 62) recommends that this policy should be subject to monitoring and audit. Such monitoring should be able to provide information which includes the number of women who:

- Booked for antenatal care;
- Were offered an HIV test;
- Decided to accept / decline a test (known as the uptake rate);
- Were found to be infected (known as the identification or detection rate);
- Accepted interventions to reduce vertical transmission.

An alteration in the immune function during pregnancy, as well as an increased morbidity and mortality from a variety of viral illnesses among pregnant women, have led to concerns about an adverse effect of pregnancy on HIV progression. Seeming to confirm these concerns were early reports of a high incidence of progression to clinical illness in the short-term follow-up of asymptomatic HIV- infected women who were identifiable, because of their delivery of children who developed AIDS (Kennedy 2003: 62).

2.3.2 When to undergo an HIV test?

The early detection of HIV infection by antibody testing techniques can confer a number of benefits (Department of Health 1996). These include allowing the individual to obtain medical and supportive health care, and to taking action to prevent HIV transmission. Early HIV detection among pregnant women allows them to make informed decisions about conception and the management of pregnancy, including infant feeding. Such an orientation clearly indicates that there is a place for pre-conceptual testing to allow couples to know their HIV status prior to pregnancy. In certain parts of the world, a pre-marital testing

service is available. Pre-conceptual diagnosis may give either partner more time to deal with issues arising from the test results. However, many couples currently do not appear to access any formal pre-conceptual service, either in general practice, family planning clinics or other health care settings (Briggs & Blinkhorn 1999:57- 58). They would obviously not be diagnosed through this route.

HIV testing in assisted conception units and fertility services has become more widespread. (Boyd, Hart & Simpson 2001: 654-656). In the United Kingdom, 42% of assisted conception units tested for HIV in 1999. (Avery, Abusheika & Marcus 2000: 1657-1661). However, as most women do not require such services in order to conceive, the opportunity for testing for the childbearing woman is most commonly addressed in pregnancy, generally at the first booking appointment. Recommendations for pregnancy testing reflect the guidance that diagnosis should be conducted at the earliest possible stage. This allows those diagnosed as HIV-positive the opportunity to be offered advice and treatment during antenatal care for their health and that of their baby (Department of Health 1999).

One of the concerns regarding health care policies which recommend testing for pregnant women as part of their antenatal care, is whether pregnancy is the best time for a woman to find out she is HIV-positive. Dealing with the many issues that can arise following such a result is obviously difficult in pregnancy, but deferral of diagnosis till a more appropriate time – whenever that might be – can create its own problems (Kennedy 2003: 64). If a woman is infected, she is likely to find out at some point, either through becoming ill herself or via the paediatric services. It has been stated that an even worse time for a woman to conduct an HIV test is when she has a sick child. The responses of some women to diagnosis via paediatric services have been to express amazement to clinicians that they were not tested during pregnancy, when numerous blood specimens are taken (Mercey & Nicholl 1998: 249-251). Some women have contemplated litigation under such circumstances. Such experiences have influenced health care policy guidelines about the importance of pregnancy as a time to undergo an HIV test. The essential point

to stress however, is that whenever an individual is diagnosed with HIV, appropriate steps need to be taken.

2.3.3 Why undergo an HIV test?

In clarifying a decision on the reasons for any screening test, a number of considerations should be addressed. When testing is considered, the benefits and any harm, whether to the group or to the individual, must be clearly assessed, and the informed consent of the incumbent should be obtained (DOH 2001). Relevance to current study is to encourage pregnant women in fixed and mobile clinics to undergo an HIV test and exhort them to enroll on retroviral treatment, in an effort to preclude their unborn babies from contracting HIV / AIDS.

2.3.3.1 Benefit to mother and child and reduction of vertical transmission

Evidence suggests that a person infected with HIV may benefit from early treatment of any such conditions that would accelerate the onset of AIDS or any HIV-related diseases.

One of the main arguments for antenatal testing is still that, if a positive diagnosis is made early, the woman and her partner would have time to consider alternative options still available to them to prevent the transmission of HIV infection to their unborn child. This notion is supported by the government's initiative through the prevention of mother to child transmission (PMTCT) programme. The programme ensures early testing of pregnant mothers and it is done so that infected mothers can be immediately put on treatment regardless of CD4 count. According to Baggley et al (2002) and Coovadia & Coutoudis (2001) the PMTCT programme has reduced mother to child transmission from 30% to 13%. The programme offers voluntary confidential counseling and HIV rapid testing (VCCT), advice, counseling and support on safe infant feeding for HIV positive women and free antiretroviral drugs for pregnant women. Women in the programme are delivered under supervision of a health professional who will ensure that the 3rd stage of labour is not unduly prolonged and that the baby is delivered quickly and the

cord is cut as soon as possible . The advice about exclusive infant feeding is to allow the woman a free choice to decide on whether to exclusively feed the infant on breast milk or exclusively on formula. The woman and her family have to be informed about the technique of exclusive infant feeding and how it impacts on prevention. Exclusive breast feeding refers to 6 months breast feeding only with the child not given even water to drink. Coovadia & Coutsooudis (2001) in their comparative study reported that out of the 551 HIV positive women who exclusively breast-fed and 157 who provided mixed feeding for 6 months, HIV transmission was higher (26.1%) in the mixed feeding group compared to 19.4% in the exclusively breast-fed group.

2.3.3.2. Health promotion

Offering HIV testing can be used as an opportunity for health promotion (Ewles & Simnet 1999:261-63). When the health care worker discusses testing, it can provide an opportunity to inform women and their partners, of the risks of transmission. Such discussions can include information about risky behaviour, safer sexual practices, and the prevention of transmission. Information on the safe use of drugs can also be obtained during the testing sessions; which could also become behaviour modification and post-counselling opportunities, especially when the HIV test result is positive. In the event that an individual declines the test, the pre-test discussions may effect a change in behaviour. This factor is an important aspect to consider, especially for a woman's HIV-negative results in antenatal testing. She would need to be motivated to remain uninfected, which is the most effective way of reducing vertical transmission.

2.3.3.3 Epidemiology

The gaining of epidemiological data has also been cited as one of the benefits of testing for HIV. Such data on prevalence and spread within populations can assist in monitoring the effectiveness of public health care programmes (Edelman & Mandle 2002:252). The antenatal population is a vital component of a number of groups to be surveyed for epidemiological data. They reflect a cross-section of the broader population.

2.3.3.4 Infection control

Infection control has sometimes been cited as a reason for testing. In a survey of health care consumer views on antenatal testing, one of the reasons given for the test being compulsory was “to safeguard the health professions” (Catalan, Gazzard & Meadows 1993: 141-148). An assumption behind such reasoning is that if a health care worker knows that someone is HIV-positive, they will adopt different, and presumably more stringent, infection-control precautions. The main reason for the individuals to know about their HIV status is to enable them to make decisions in relation to their health and – in the context of pregnancy – that of their unborn child. It is acknowledged that decisions about health are not made in isolation from an individual’s social and cultural context. This context also needs to be considered as well when discussions about testing occur (Kennedy 2003:70).

2.3.4 Considerations for appropriate HIV testing

In order to provide an appropriate health care service that addresses the needs of pregnant women in conjunction with the administration of antenatal HIV testing, various factors need to be considered. These factors include:

- Training and knowledge of health care workers about HIV infection, including a clear understanding of the process of testing (Diale & Ross 2000:136-38);
- The views and perceptions of consumers of the HIV testing service; whether or not – on the basis of sufficient and appropriate information – it is both understood and acceptable for them to make informed decisions (Diale & Ross 2000:136-38);
- The provision of an easily accessible, multidisciplinary service for the care and support of HIV-infected women (Diale & Ross 2000:136-38).

All these factors should be regularly monitored in order to promote consistent national standards, in accordance with the Department of Health’s National Health Plan for South Africa.

2.4 Pregnant women's criteria for effective antenatal HIV testing

Studies have indicated that pregnant women think the test is important and acceptable to them (Meadows 1993; Duffy et al. 1998; Simpson et al. 1998). However, having a positive attitude to a test does not automatically translate to the acceptance of the test (Jefferies, Sherr & Victor 1996: 99-111). As far as the testing itself is concerned, the pre-testing discussion with the healthcare worker is very influential. Other influences which have been shown to be independent predictors of intention to be tested include: benefit to the woman herself and/or her partner, being in favour of testing, being single, being younger, perceived risk of HIV, and knowledge that HIV can be transmitted by breast feeding (Meadows 1993; Boyd, Johnstone & Simpson 1998: 262-267). In Simpson's study, the most frequently reported reasons for taking or not taking the HIV test were that: "It's a good idea to have it as a routine test", and "I've been in a stable relationship for a long time" (Simpson et al. 1998: 327-335).

2.4.1 The extent of spousal support

Partners can be an important influence in a woman's decision to undergo an HIV test during pregnancy. The extent of the partner's influence can also affect women's emotional and psychological experience of whether they feel supported or unsupported in their decision (Baxter & Bennet 2000: 308-311). When discussing sexual health and pregnancy, spousal support can raise issues of social and gender power relationships for the couple; and this concern needs to be considered. It has been suggested that it may be more beneficial to address such issues by joint HIV counselling of the couples during pregnancy, rather than the selective counselling of women only (Bott 2000:709-711). In an earlier study conducted in 1998, 82% of pregnant women felt the HIV test should be available in antenatal clinics, while 48% reported that they themselves would take the test. At that time, anxiety levels surrounding the HIV test were significantly higher than for other routine antenatal tests (Sherr, Stevens & Victor 1989: 165-171). However, a recent study has shown that anxiety was not raised where the test was offered to all, and where the midwife offering it had a positive attitude to testing (Stevens et

al. 1989). A more recent study has shown that anxiety was not raised where the test was offered to the couple, and where the midwife offering it had a positive attitude to testing (Simpson et al. 1998). Such findings reflect the changes in attitudes and approaches to HIV testing since the 1980's. In-depth interviews of women's views concerning testing revealed that they felt some anxiety whilst waiting for the test results, but felt it was no worse than waiting for any other result. It is in this realm that support by the spouse becomes crucial. The manner in which the results were disseminated caused considerable concern and discussion, and it has been suggested that this area may require further investigation (Boyd, Hart & Simpson 1999b: 21-29).

2.4.2 The quality of the HIV testing service itself

As for all pregnant women, antenatal care for an HIV positive woman should, as far as possible, be evidence-based and be of a high quality. It is important that the concern about HIV infection should not overlook the fundamentals of pregnancy care. Appropriate schedules of antenatal care should be used to prepare for a healthy pregnancy and birth, provide pregnancy, birth and infant care information for mothers, monitor maternal and fetal wellbeing, and offer appropriate referral if complications occur. As part of the pregnant woman's antenatal care, screening will provide the basis for recommendations for other conditions, including infection screening (rubella, syphilis and hepatitis B). For example, a link has been demonstrated between bacterial vaginosis and premature delivery; it is therefore good healthcare practice to screen HIV positive pregnant women for this condition and treat where necessary (Blott, Lyall & Ruiter 2001: 314-334). Women may also be susceptible to infections such as candida albicans, particularly if they are immune-suppressed. Careful monitoring is required for the progress being made. Monitoring fetal growth is essential in all pregnancies and, if there is concern, assessment by ultrasound should be arranged. The quality of HIV testing services for pregnant women (and their spouses) plays a role insofar as the health status of the unborn child is concerned. At the same time, the level of training accorded to the professional HIV testing staff also has a bearing on the extent of the efficacy and quality of the entire service (Diale & Ross 2000:136-41).

2.4.3 Dietary and drug advice in the prevention of vertical transmissions

Dietary and nutritional advice and support are particularly important, as some women experience nutritional deficiencies such as anaemia. Certain dietary requirements are also associated with pregnant women's antiviral therapy regimens. A correlation has been shown between vitamin A deficiency and vertical HIV transmissions (Chiphangwi, Miotti & Semba 1994: 1593-1597). HIV-positive pregnant women may require referral to a dietician for further advice on their nutritional needs (National Aids Manual 2000). If an HIV-positive woman indulges in the abuse of drugs, her pregnancy-related needs may be even more complex. Her inclusive health care will need to address the management of her drug addiction, her pregnancy and her HIV infections (and sometimes Hepatitis B and/or C) simultaneously. There may be difficulties in respect of adherence to complex antiviral regimes, as well as resultant practicalities of phlebotomy arising in order to assess viral load – if there is poor venous access. Risks of pre-term labour, delivery and intra-uterine growth retardation associated with drug use, may compound risks associated with HIV infection. In order to provide optimal healthcare, it is important to have appropriately viable lines of communication between the pregnant woman and all the healthcare agencies involved. There may be particular challenges in the prescription of antiviral therapy that may interact with recreational drug therapy. For instance, zidovudine levels are increased by habit-forming opiates, whereas the absorptions of stavudine and didanosine are increased by co-administration with methadone. Similarly, when administering nelfinavir, methadone levels are reduced; and so dosage adjustment is usually necessary. Some combinations, such as ecstasy and ritonavir, have proved fatal. It is important for clinicians to be aware of such combination possibilities.

During the antenatal period, it is good practice and can be reassuring for the mother to meet the paediatric team who will be involved in the follow-up care for her child. She may have particular questions about her baby's health as well as the practical issues of knowing where the clinic is. There may be particular issues that HIV-positive pregnant women wish to discuss, and specific antenatal classes have been established in some areas. It is

recommended that a term birth for an HIV-positive woman should be by a pre-labour lower segment caesarean section (LSCS), as this has been shown to significantly reduce the risk of vertical transmission (European Mode of Delivery Collaboration 1999; Perinatal HIV Group 1999). The woman may have anxieties about the procedure and the anaesthesia, which should be discussed and addressed in the antenatal period to allow her to make an informed choice. Zidovudine is administered intravenously to the mother before and during the operation and the dosage is calculated on maternal weight. Other antiviral medication is administered orally prior to delivery by operation. If the mother ruptures her membranes or goes into labour prematurely, the benefits of elective caesarean section are less clear and the risks of HIV transmission must be balanced with the risk of premature birth (Lyll et al. 2001). If the mother chooses vaginal birth, antiviral therapy should still be given, the membranes should be left intact for as long as possible; while the fetal scalp electrodes and fetal blood sampling should be avoided. If there are signs of fetal distress, an emergency caesarean should be considered, as the risks of vertical transmission is increased after emergency operative vaginal procedures (Lyll et al. 2001).

2.4.4 Impact of HIV testing on reproductive health

When an initial HIV diagnosis is administered, many women experience a temporary loss of libido. If a problem occurs following routine antenatal screening, midwives should reassure women that their sexual desire would resume. Reproductive counselling for HIV-infected women should be educational, supportive and non-directive (Beckerman 1998). HIV-infected women have a right to make choices in relation to childbearing, and they should be given relevant information to enable them to exercise that right. Reproductive choices and options should be discussed in a sensitive and non-judgmental way. In-vitro fertilization (IVF) is now considered ethically acceptable for couples seeking assisted reproduction, since vertical transmission rates are now greatly reduced and life expectancy for parents taking highly active antiretroviral therapy (HAART) is increased (Low-Beer & Smith 2004; Gilling-Smith et al. 2001). Varying rates of 15%-20% vertical transmissions have been reported in Europe, 15%-30% in the USA and 23%-

35% in Africa (Newell & Peckham 1993). In addition, newly-born children could become HIV-infected as a result of breastfeeding; which adds another 7%-22% to the risk of transmission (Dunn 1992: 585-588). The risk may be reduced to below 2% by giving antiretroviral therapy to the mother and baby, performing an elective caesarean section and avoiding breast-feeding (European Collaborative Study 2001). In the administration of an HIV test, HIV-infected pregnant women would need to be advised of the possible embryonic or fetal toxicity associated with antiretroviral therapy. Although caesarean section has a proven protective efficacy without significant maternal morbidity, its role is now being re-evaluated in mothers with an undetectable viral load. Midwives should continue to advise HIV-infected women and new mothers, recommending the avoidance of breast-feeding as part of a programme of interventions to reduce the risk of mother-to-child HIV transmission (UK Chief Medical Officer's Expert Advisory Group on AIDS 2004).

2.5 SOME CRITICAL ETHICAL CONSIDERATIONS AND THE ROLE OF MIDWIVES IN HIV AND PREGNANCY TESTING

A survey of the consulted literature not only reflected on the background on HIV screening during pregnancy. A critical element of ethical principles that underpin the midwife's role in relation to offering and recommending HIV testing during pregnancy, emerged as a perennial aspect of the research topic. As health care 'agents' between the mother and the unborn child, midwives fulfill an indispensable function in the health care system; and their roles could not be underestimated. As a result, it is very crucial that they execute their functions with due consideration and observance of ethical principles relating to HIV and pregnancy testing. Although all ethical considerations are equally salient, only a few are mentioned here.

It is also worth mentioning at this stage that the nuances of "ethical considerations" are referred to at various stages of the study. For instance, the concept "ethical considerations" was referred to in the preceding chapter in the context of a research-specific variable; that is, insofar as this nuance had to be observed by the researcher. Hereinafter, it is applied to *both* the

researcher and the extent to which it relates to a specific and *practical* aspect of a unit of analysis; in this case, the midwives as key elements in the HIV and pregnancy testing function.

2.5.1 Beneficence

When applying the ethical principle of beneficence, the midwife should ensure that the outcomes of healthcare result in 'good' being done to the woman and her newly born child. This entails informing women of the advantages of HIV testing during pregnancy, which includes, but not limited to, the reduced rate of vertical transmission. Less than 2% of mother to child transmissions (MTCTs) occur during the first and second trimesters of pregnancy, whereas over 80% occur from the thirty-sixth week of pregnancy onwards. The vast majority (70%) occurs during labour and delivery (De Cock, Fowler & Mercier 2000: 1175-1182). The main obstetric risk factors for MTCT are vaginal delivery, prolonged duration of membrane rupture, chorioamnionitis, and pre-term delivery (European Collaborative Study 1999). Some of the interventions that have been found to reduce the risk of vertical transmission are: antiretroviral therapy, bottle-feeding, elective caesarean section, early diagnosis of the mother, and testing other family members for HIV.

2.5.2 Non-maleficence

When applying the ethical principle of non-maleficence, the midwife should ensure that any act or omission does not result in harm (Bott 2005:51). An awareness of any potential harm will enable midwives to discuss individual concerns with the concerned women, who must decide for themselves whether or not screening is in their best interest. Midwives can also offer advice and support to minimize any potential harm associated with the management of HIV infection. To provide optimum health care, midwives need to be particularly knowledgeable about the following, especially when the HIV test yields a positive result (Bott 2005:51):

- Any potential and unintended harm by different treatments and their possible side effects;
- Possible adverse consequences of a positive HIV test result;

- Psychological impact, such as the risk of suicide;
- Social consequences, such as impact on work, family, interpersonal and personal relationships; stigmatization, discrimination and sometimes harassment;
- Child-focused pre-emptive measures such as the avoidance of breast-feeding, risks associated with sepsis following caesarean section are greater in HIV-infected women;
- Potentially increased risk of pre-eclampsia;
- Insurance and/or mortgage issues (Antenatal HIV Testing Working Party 1998).

2.5.3 Informed consent

As opposed to non-maleficence – which is centred on the healthcare provider, such as the midwife – informed consent is more client-centred; that is, the information that needs to be provided *to* the pregnant woman *prior* to her final decision. Each pregnant woman needs to be aware of the implications of receiving an HIV diagnosis, as well as the consequent treatment and interventions. Such awareness will empower her to decide for herself whether or not testing would be in her best interest. Informed consent has to be characterised by a voluntary decision made on the basis of adequate information and deliberation. Midwives are then encouraged to ensure that women are appropriately provided with relevant and up-to-date information. The information should be such that it is clear, precise, and user-friendly (National Midwifery Council 2002). In disseminating information and knowledge to pregnant women, midwives should include the following issues as the basis on which informed decisions would be made. The listed items below are by no means exhaustive:

- The nature and purpose of the HIV and pregnancy test, that these are not linked to any other survey;
- The advantages and disadvantages of such a test;
- Insurance and/or mortgage (Antenatal HIV Testing Working Party 1998);
- Advice on safer sex;

- The entire process of testing and immediacy of results;
- An assurance that the service being provided is non-discriminatory;
- Information on possible risks.

2.5.4 Confidentiality and privacy

Prior to the administration of an HIV and pregnancy test, midwives and other healthcare practitioners taking part have to give an assurance to their clients that strict confidentiality is observed, and that no unauthorized persons will be privy to any information accruing from the test without the permission of the client/pregnant woman. Any breach of the agreement could lead to litigious action by the aggrieved client (Gerrish & Lacey 2006:174).

2.5.5 Autonomy

Autonomy is inextricably linked with informed consent and entails facilitating a woman's ability to formulate and carry out her own plans so that she is in control of her life and can act freely within the context of rational decision-making (Burns & Grove 2005:158). Midwives should ensure that clients are neither coerced nor coaxed into undergoing the HIV and pregnancy test, as this would constitute a violation of the pregnant woman's rights, and would also undermine her sense of autonomy and right to self-determination – even where a refusal may result in harm or death to the woman or the fetus; unless a court of law orders to the contrary (Nursing Midwifery Council 2002:4). A perpetuation of these unprofessional and unethical practices may also discourage some women from seeking antenatal care and resort to legal recourse (Gerrish & Lacey 2006:174). When obtaining a client's informed consent, midwives should ensure that all test-related discussions are documented in the woman's case notes, and that those who consented did so in writing, verbally or by voluntary co-operation (NMC 2002). Midwives should explore the woman's feelings, identify her individual needs, and devise a health care plan care in partnership with the client.

2.6 FORMS OF HIV AND PREGNANCY TESTING

This section does not necessarily proffer a 'classical typology' of HIV and pregnancy testing. Rather, it illustrates the various circumstances and needs

under which the above-mentioned forms of testing may yield various outcomes relating to a woman's reproductive health.

2.6.1 Selective or universal testing?

Several reasons have caused the offering of selective testing to become the least favoured option. Amongst other factors, it leads women to underestimate the potential risk of infection if they are not within a recognized risk group, lulling those who are perceived to be 'low risk' into a false sense of security (Barton, Catalan, Meadows & Stone 1991: 1400). Selective testing is also less effective in determining infection rates because some HIV-positive women attending antenatal clinics are not aware of, or are unwilling to disclose their status. Non-disclosure in itself may constitute risky behaviour. (Barbacci, Chaisson & Repke 1991: 709-711) suggest that universal testing avoids possible stigmatization of those deemed to be 'at risk'. A large study was carried out by the above-cited authors in the inner-city area of Baltimore, USA, and found that selective screening of women with identified 'risk factors' would only have detected 57% of HIV-seropositive women. When universal testing was offered to all pregnant women, the detection rate rose to 87%. Universal testing is also the more favoured option among women; as corroborated by a study that found that only 10% of women and 6% of midwives were in favour of selective testing (Catalan et al. 1991). Another study, in which 789 women were asked to complete a questionnaire, it was established that of the 94% who responded, the majority (67%) agreed that HIV testing should be offered to all midwives, so as to enable them to provide information in an unbiased manner. Midwives need to ensure that all pregnant women, irrespective of their cultural origins, are able to understand the relevant information, and that they are not coerced into having the test against their will. Midwives should also be prepared to discuss the test, which involves providing accurate information based on the best currently available evidence.

Better diagnosis rates for HIV infection during pregnancy enable infected women to make informed choices regarding interventions aimed at reducing the risk of mother-to-child transmission (MTCT) from 25%-30% to less than 2% (Low-Beer & Smith 2004). When a positive HIV antibody test is identified,

the result is announced to the woman by an appropriately trained healthcare professional, such as a specialist nurse or midwife, an HIV physician or an obstetrician. In the event of a negative HIV result, information is given regarding interventions such as antiretroviral therapy, caesarean section, and the avoidance of breast-feeding (Low-Beer & Smith 2004). The HIV-infected pregnant woman will need to be cared for by a multidisciplinary team consisting of an HIV physician, an obstetrician, a midwife, and a pediatrician. In addition, some women may need to be referred to a social worker, and may require the expertise of psychiatric services. Further support and help are available to women and their families from non- profit organizations and support groups.

2.6.1.1 A negative result

A negative HIV test result implies that there is no indication of the virus in the body's immune system. It is important to inform the woman of the results of all her tests, including the results that are negative. Those results that show no abnormalities are likely to provide reassurance and relief to her. She may have been particularly anxious whilst waiting for them. Most negative HIV results are made available concurrently with the results of other antenatal screening tests. Discussion and counselling following a negative HIV result should include information about the 'window period'. If the 'window period' is three months or more since the last possible exposure to HIV, there is more certainty about the result. If there are concerns about recent infection, information on prevention, as well as another testing should be advised at an appropriate time. The possibility of further exposure should be explained, and the individual given the information to enable her to make choices about future safe behaviour. It is important to inform the woman that her negative result does not necessarily indicate that her partner is negative. The most reliable way for her partner to know is to have his own blood tested at an authorized health institution. It is important for midwives to use the testing opportunity to encourage behaviour change where appropriate; and to ensure that the individual, as well as being relieved, realizes the limitations of negative result despite the apparent absence of ongoing risk factors for infection. It is on the

basis of these ongoing risk factors that additional counselling and referral to specialist services for further support, may be needed (Kennedy 2003:76-78).

2.6.1.2 A positive result

An HIV-positive test result is an indication that there is certainly a presence of the virus in the individual's immune system. Counselling following a positive result should be given in an appropriate setting with the relevant health care professionals available for support. This may vary according to local availability of staff, but may include a specialist counselor or health advisor and midwife or obstetrician. Obviously, it is important not to overwhelm the woman with too many staff members. Reactions to the announcement of test results will vary from individual to individual, depending on the content of such an announcement. It is important to allow time for the person to absorb the information, and wherever possible, not giving such results in the middle of rushed antenatal clinic, but arranging the appointment at the end of the clinic or another more suitable time. It can be a very tense time. An individual's reaction to an HIV diagnosis has been compared to the responses to death and dying. The author describes four stages in which the negative HIV test results could be reacted to: initial shock, numbness and disbelief, denial, and acceptance. Whilst an individual may not rigidly adhere to this pattern, it is important for health care workers involved in the dissemination of HIV-negative test results to be aware of these likely responses (Kennedy 2003: 79).

Breaking these results requires great sensitivity. People remember very clearly the way in which such information is given to them, and may go over it repeatedly through the rest of their lives. If disseminated unprofessionally, the individual's distress can be greatly magnified (Ashurst & Hall 1989). In the event of a positive HIV diagnosis, there is often a desire for factual information about the illness, prognosis and treatment. There may be a need for repetition of information, as shock can often block a thorough comprehension of what transpired. Response to the news will vary and depend on many physical and psychological factors (Bor, Dilley & Miller 1993: 59). A strategy for health care and management needs to be agreed upon with the individual, which includes

a plan for those whom she can involve and turn to for support. For the pregnant woman, receiving such news in a safe and contained environment may help “re-engage her after the shock of diagnosis” (Miller et al. 1993). Considering the implications of having a life-threatening infection and the significance this holds for her child and her family, an HIV-negative pregnant woman will need multiple levels of support at this time in her life.

2.6.1.3 An unequivocal result

An unequivocal result is one on whose basis no indication of a virus activity and presence could be fully affirmed or negated. An unequivocal result is obtained on very rare occasions. This may indicate that there has been a non-specific reaction with the HIV antibody assay, the early stages of sero-conversion or HIV 2 infection. Counselling based on such results involves the possible options that could be resorted to after the results have been professionally divulged. These options include repeating the test both locally and in a reference laboratory, and using different assays. Discussions should also occur about partner testing as, the woman’s sero-converting may induce a strong possibility of her partner becoming HIV-positive; and he will require treatment himself. The client will need considerable support in this time to cope with the stress that this delay and uncertainty is likely to cause. Being unable to give a confirmed result for a number of weeks can cause significant anxiety. Information about protection from further exposure, and transmission to others during this period must also be given (Kennedy 2003:79).

2.6.2 Antepartum

Clinical care of the HIV-infected pregnant woman should be individualized and based on the immunological stage of the HIV disease. In addition, other medical, psychosocial, and/or obstetrical risk factors or conditions should be considered in the clinical care regime. In the early course of her infection and in the absence of other non-HIV risk factors, an HIV-infected woman should not be considered high risk but be referred to a tertiary care setting. Consistency of care is important and has been associated with increased compliance during both the antenatal and postpartum periods. Counselling on

HIV-related and pregnancy issues is a particularly critical component of the health care system. Many women might learn that they have a chronic, life-threatening, and probably fatal disease at a time of crisis; which is traditionally an occasion of joy and celebration in anticipation of the birth of a child. In such a time of crisis, information is often slowly assimilated, and both patience and repetition are required. Confidentiality must be held as a basic tenet of HIV care, and the patient must be assured of this. Decisions about continuation of pregnancy should be approached gently but directly, with counselling that is factual, supportive and non-coercive (Faden & Kass 1996: 47).

At the initial prenatal visit and throughout the pregnancy, education about pregnancy, HIV and other issues relevant to each individual woman is essential. The education supports the partnership between the patient and the provider, which is the goal of optimal health care. Communication between provider and patient should always be clear, sensitive, culturally appropriate, and in a language that is properly adjusted to the woman's level of understanding. In addition to the standard history and physical examination obtained at each routine obstetrical visit, special emphasis should be placed on the review of systems and examination targeted to HIV-related signs and symptoms. Attention must also be given to the myriad psychosocial issues consuming the lives of many HIV-infected women; such as homelessness, drug abuse, domestic violence and mental illness. Drug treatment programmes and other support services and assistance should be made available to the client/patient.

Pap smears and screening for STIs, including hepatitis, should be a routine part of prenatal care for HIV-infected women. Screening for TB in HIV-infected individuals and others at increased risk has become more significant with the emergence of multiple drug-resistant strains of mycobacterium TB. Safer sexual practices, including condom use, should be emphasized throughout pregnancy, as well as education about available methods of postpartum contraception. Procedures that potentially may increase the risk of perinatal transmission, such as chorionic villus sampling (CVS) and amniocentesis, should be avoided if possible. Antepartum biophysical fetal heart rate testing

should be considered in HIV-infected women who are significantly immunosuppressed, or who have risk factors for fetal compromise, such as active drug use. Certain immunizations, such as influenza, hepatitis B and pneumococcal vaccines, may be given during pregnancy and may be indicated for certain HIV-infected women.

Other obstetrical and medical management should be based on the immunological stage of the disease. Baseline CD4 cell counts (or percentages) should be performed at entry into prenatal care and repeated at intervals during the pregnancy. If the initial cell count is greater than 600/mm³, it is recommended that repeat testing in three and six month intervals be conducted (Sperling et al. 1992). The extreme variability of CD4 cell count results and the lacunae of knowledge regarding the nature of pregnancy and HIV progression, many obstetrical experts have recommended repeat testing each trimester. Furthermore, very low CD4 counts of less than 200/mm³ should be confirmed in one week (Faden & Kass 1996: 48).

2.6.3 The primary care team

The primary health care team is well equipped to care for those in the community who are infected and affected by HIV. The skills of doctors, district nurses, practice nurses, health visitors, clinical nurses specialists, physiotherapists, occupational therapists, social workers, home helpers (volunteers), community care assistants, and any other community health care workers and practitioners have been proved to be collectively valuable assets in the fight against the spread of HIV and AIDS; which is everyone's problem. Whether due to clinical practice or other forms of directly or indirectly induced behaviour, we are all at risk of HIV. At the same time, HIV/AIDS has broken down barriers of stigmatization and prejudicial attitudes. New standards of client-centred health care have also been developed. Furthermore, the resilience of the human spirit in the fight against HIV and AIDS, has been galvanized to the maximum. In strengthening the strategies and interventions for HIV/AIDS prevention, the primary health care team has then become critical in the dissemination of the following relevant issues:

- Risk factors associated with infection;
- Personal behaviour that protects against contracting or transmitting HIV/AIDS;
- Relationship between HIV infection in pregnancy and prospects for the fetus/newly born child;
- Risks and potential benefits of testing for both mother and child (including limits on confidentiality, associated social risks, available anti-discrimination protection, pregnancy termination, medical benefits of early clinical intervention in HIV-infection, and any constraints or obstacles to access to abortion or medical services for HIV-infected women and children);
- Prevalence of HIV infection in the local community and impact on the test result (where appropriate);
- Availability of anonymous or alternative testing sites;
- Reassurance that testing is voluntary, in particular that the woman's decision about testing will not affect access to, or quality of her prenatal care;
- Acknowledgment of the detail and complexity of the information presented, that personal pretest counselling is conducted with women interested in HIV testing before they make a final decision.

2.7 PSYCHOLOGICAL HEALTH, COUNSELLING AND SUPPORT

In addition to monitoring the physical health of the pregnant woman and her child during pregnancy and childbirth, it is equally important to attend to her psychological and mental health needs as well. Shock, depression and anxiety could become initial responses to an HIV/AIDS diagnosis, especially when the result is positive. Concerns may be raised about family relationships, and what was going to happen next in relation to the woman and child's health. These concerns may feel overwhelming to women, and it is important that organizations have support mechanisms in place, which may include a specialist midwife or obstetrician, health advisors, specialist nurses, counselling services, voluntary groups or community support groups. Some individuals may also gain spiritual support from hospital or clinic chaplainry services or their personal religious leaders. In-depth counselling involves the

understanding of a person in their social and familial contexts, and assisting them to develop coping strategies at a time when they are likely to be feeling vulnerable (Chippindale & French 2001). Cultural norms will also influence the impact of an HIV diagnosis and pregnancy. In many cultures for instance, the importance of having a child should not be underestimated. Support needs to be ongoing during pregnancy though some women will access it more frequently than others. The initial post-test counselling following a positive result has been described earlier in the preceding sections. Further follow-up is likely to revisit issues first raised at the initial counselling appointment (Miller et al. 1993).

2.7.1 Psychological health care concerns

Concerns by HIV-positive pregnant women are very different, but common issues and questions raised may include the following (Miller et.al 1993):

- Will their own health deteriorate? If so, how quickly? How effective are the antiviral drugs and what are the possible side effects?
- The effect of HIV infection and stress on the pregnancy and the child's health. There are likely to be particular anxieties for women who already have HIV-positive child already, or who have had a previous child die due to an HIV-related illness;
- The effect on relationships – if their partners have already been told about their infection, anxieties about his response become dominant, and may affect her mental stability. If the partner was not told, concerns arise on having to live with a secret;
- Effect on family and other support network – anxieties arise on whether or not support and confidentiality will be obtained from the community, or ostracisation will be effected;
- Anxieties about other family members – 'Are my other children infected? Should I have them tested? How will my parents react?'
- Welfare concerns, such as housing, finance or immigration issues.

This is not an exhaustive list and though the counselor cannot 'solve all problems', counselling skills and techniques may help the pregnant women to

strengthen their own coping mechanisms (Chippindale & French 2001). Some women may have no family or friends that they feel they can turn to, and may rely solely on professional or voluntary support. Even when women are aware of their HIV diagnosis before they become pregnant, they may still need to address issues or anxieties about HIV and pregnancy or revisit issues about disclosure or their family support network. If there are significant concerns about a woman's mental health, referral to appropriate psychiatric services should be offered. It is important that women know how to access and contact counselling services, and that all professional staff maintain good liaison with other agencies, in order to help address anxieties collaboratively.

2.8 CONCLUSION

In this chapter, a survey of the available literature relating to HIV/AIDS among pregnant women has been presented. The literature also illuminated on the valuable HIV testing programmes and other health care services rendered in clinics is presented. The various stages of HIV and AIDS testing have been explored, with pregnant women becoming the indispensable focus on the exploration of the literature. The aspect of antenatal health care and the roles of various health care workers and practitioners has emerged as making a significant contribution to helping women to decide about testing and to deal with the results thereof. Ethical concerns and professional conduct have been critical aspects covered in the "scholarship review", which also gave knowledge on the administrative component of health care practice (United Kingdom Central Council 1998). Despite the preponderance of information and data on specific HIV/AIDS and pregnancy issues, the same was not sufficiently available on the state of mobile health clinics, especially in rural and remote villages.

2.9 SUMMARY

As the incidence of HIV and AIDS continues to escalate amongst female adults and girls in Madibeng Sub-district, midwives should anticipate the likelihood of encountering patients with HIV infections. Midwives must be adequately prepared to meet the challenges of managing women with HIV/AIDS during pregnancy. Pregnant women are the most severely affected

group because of being among the first in fixed and mobile clinics to be tested, to learn about their HIV status and to be offered treatment. Pregnant HIV positive women need additional services like, continuous counseling, care and support.

Pregnant women's desires for sexual intimacy and childbearing do not vanish after they are diagnosed HIV infection. Continuous counselling during pregnancy must be focused on the pregnant women and their needs rather on the beliefs of the primary health care practitioners. Accurate and up to date information to be provided to pregnant women seeking information about HIV/AIDS services. Clearly, warning of the risk of HIV will have little effect if the motivation to have a child is stronger than the desire to avoid infection. The challenge is to foster a society in which sexual activity and pregnancy can be delayed, barrier contraception used consistently; and as far as possible, planned conception is safe from HIV infection through mutual testing, joint decision-making and appropriate medical care. Information and knowledge on HIV and AIDS are the key to the fight against the disease.

CHAPTER THREE

CONCEPTUAL FRAMEWORK

3.1 INTRODUCTION

The theoretical rationale of this study was guided by the identification of logical associations among variables (Brink 2006:24; Polit & Hungler 1992:367). As outlined in Chapter 1, the objectives of the study are located in the integration of education and training programmes that advance the fight against HIV/AIDS. Furthermore, it is the intended aim of this study to comparatively examine the efficacy of mobile and fixed clinic health care services of in HIV and AIDS prevention at the designated research sites. To that extent, causal factors in the spread and prevention of HIV and AIDS, as well as the mobile and fixed clinics as agents of the existing system of healthcare provision, have become the variables among which associations have been theoretically and conceptually framed. Polit and Hungler (1999:107) mention that – as opposed to theories – conceptual frameworks are less formally constructed mechanisms for developing or organising structures along which information, knowledge and data could be ‘assembled’. A conceptual framework further ‘delineates’ the units to be analysed into various perspectives, and in accordance with the themes under which the variables have been constructed or organised (Miles 1994:18). In this chapter, the conceptual framework has been developed by grouping variables under interrelated themes. The themes themselves have been located in the realm of three major areas, namely:

- the primary health care policy domain, in which the health care policy macro-environment of the Madibeng Sub-District is presented;
- the HIV/AIDS domain, in which the pregnancy prevalence rates in the selected sample is mentioned;
- the service delivery domain, in which the capacity to deliver (or a lack thereof) is stated. That is to say, the state of the fixed and mobile clinics as health care delivery systems is presented.

Figure 3.1 is the researcher's own diagrammatic representation of the correlational value and interaction among the stated three spheres; namely, the primary health care domain, the HIV/AIDS domain, as well as the service delivery domain. The nature of the interrelatedness of the three variables could have either a positive or negative impact on the researcher's conception of the investigated phenomena (Polit & Hungler 1997: 107-109). The figure also indicates the centripetality of HIV/AIDS, when linked to the other two domains/environments. The value of centripetality and correlation manifests itself in the social, political, economic, health, religious and cultural spheres of the lives of the Madibeng community. Figure 3.1 is relevant in that all the three domains are symbiotically related and interdependent, thus enhancing a holistic view of the HIV /AIDS phenomenon.

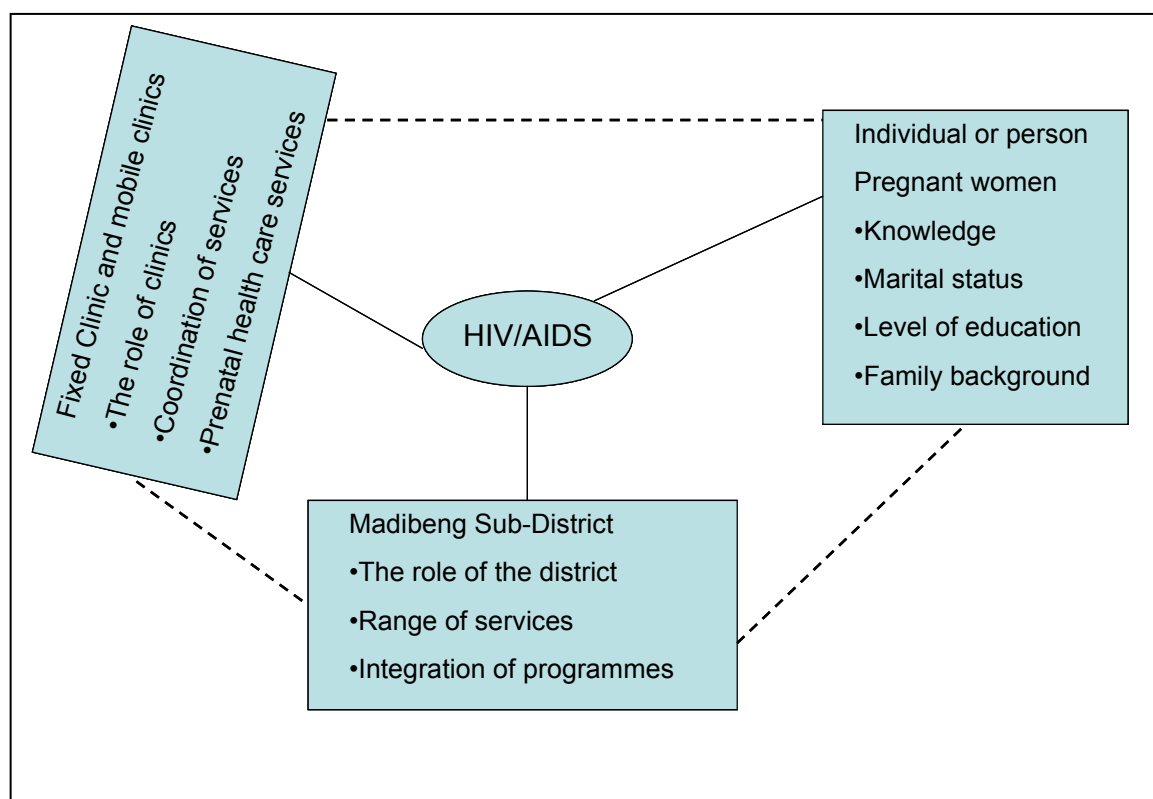


Figure 3.1 : A holistic overview of the conceptual framework

Source: Researcher's own conceptualisation

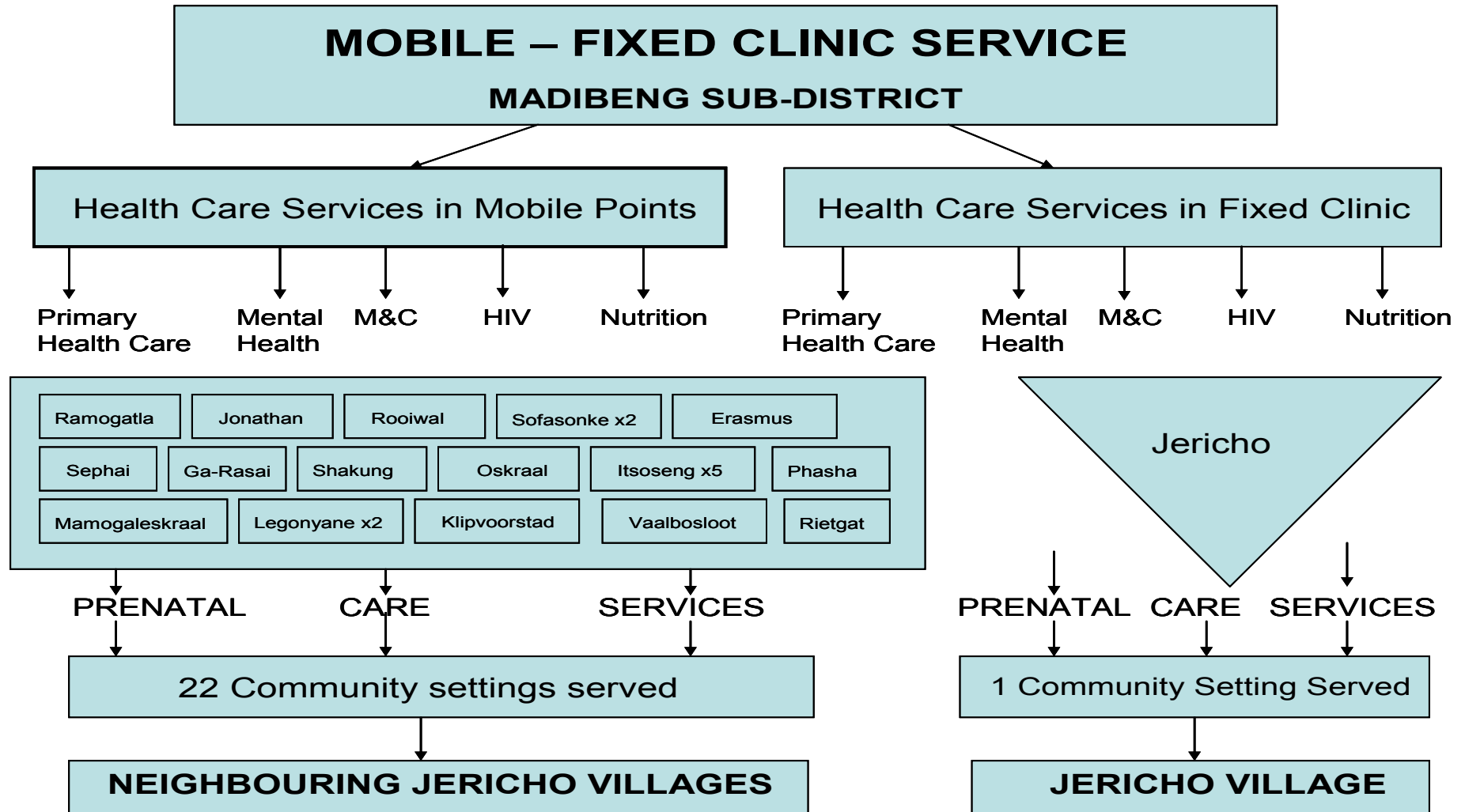
In the primary health care sphere, the local and provincial health care authorities are the elements around which the formulation of primary health

care policy gravitates. The efficacy (or lack thereof) of the policy is determined by the extent to which it is responsive to the needs and demands of the local communities. The integration of local health care services and programmes with the rest of the province, is the fundamental approach to meeting the efficacy demands of the community.

The HIV/AIDS domain is not peripheral to the health care policy domain, although the spread of the disease has necessitated the introduction of a culture of expediency (e.g. in the immediate availability of HIV test results). The most integral factor here is the extent to which the level of HIV/AIDS consciousness is accentuated. That would be a strategic approach to preventing the further spread of the disease. The service delivery domain on the other hand, is more dependent on the training proficiency of the professional staff at 'grassroots' level. However, their proficiency is still affected and influenced by the policy and HIV/AIDS domains, which could either boost or quash their morale and expected levels of performing their tasks.

The following figure 3.2 (appearing on page 58), is a holistic depiction of the microcosmic element of the service delivery environment in the conceptual framework. As opposed to the broader and macrocosmic sphere covered by figure 3.1 above, figure 3.2 below particularly focuses on the mobile and fixed clinic environment as an aspect of the service delivery domain (environment); and shows the similarity of those that are offered by both mobile and fixed clinic services: primary health care, mental health, mother and child (M&C), HIV/AIDS and nutrition services. The services at the fixed clinic are rendered at a single community setting, and the mobile clinic renders services at twenty two community service points. However, prenatal health care services are rendered at both these clinics. The figure also displays names of some of the settings under which mobile clinic service delivery is rendered.

Figure 3.2 : A holistic overview of the mobile and fixed clinic services



3.1.2 Rationale for conceptual framework

For purposes of this research, the Fawcell model of conceptual development used by Polit & Hungler (1993) describes this conceptual model as the developer's point view of the nature of formal explanations and statements that constitute nursing as a health discipline. To that extent, the conceptual models in this chapter have become the less formal diagrammatic/graphic depiction of the Fawcell mode of development.

Whereas the previous chapter provided a review of the existing literature and scholarship on the HIV/AIDS phenomenon; in the current chapter, the conceptual framework is presented and described. The conceptual framework *per se* refers to the abstractions or concepts that are assembled by virtue of their relevance to the critical units of analysis in this investigation. Albeit theories and conceptual models being conjunctively used as the building blocks for the graphical construction of phenomena, conceptual schemes represent 'looser' or less structured mechanisms for organizing, describing and presenting phenomena (Polit & Hungler 1999: 107). In addition, "Conceptual models provide a perspective regarding inter-related phenomena, but are more loosely structured than theories. They were not directly testable by researchers in the same way that theories are. They are constructed representation of some aspect of our environment. 'Conceptual framework' and 'conceptual model' were used interchangeably. The model represents phenomena with a minimal use of words. A visual or symbolic representation of a conceptual framework helps to express abstract ideas in a more readily understandable or precise form than the original conceptualization" (Polit & Hungler 1999 107).

Schematic models strike a visual sight of familiarity to all readers, regardless of their (readers') levels of intellectual complexity. In an IT-dominated age such as the present, conceptual frameworks, by virtue of their interactive multimedia visualization, are visually less 'straining' than theoretic argumentation – which is replete with *prosaic* abstractions. Conceptual frameworks also become a diagrammatic representation of the researcher's phenomena of interest; for that reason, the two diagrammatic presentations in

this chapter could make it possible to act as representations of "... a formal theory that was relevant to nursing research problems, such as some [problems] that were an aspect of the research's focus. Conceptual frameworks and models can be used to clarify concepts and to provide a context for research findings that might otherwise be isolated and difficult to interpret" (Polit & Hungler 1993: 109).

3.2 THE PRIMARY HEALTH CARE POLICY DOMAIN

The primary health care domain has been conceptualised here to refer to the centripetal/inward macro-environment within which the provision of health care is enabled in accordance with both a culture of human rights and conventional ethical practice within the professional health sector. In this domain, an interaction of the following variables has a confluent effect on the final outcome of health care policy. The variables listed below are by no means definitive:

3.2.1 The politico-legal domain of health care policy

A dominant ideology within a particular social milieu determines how relevant health laws are enacted. In the specific case of this study, The Constitution of the RSA (Act 108 of 1996) is the supreme law within which all citizens are by law entitled to non-discriminatory, affordable, and quality health care by the state. To that effect, the Health Act and other related laws safeguard the provision of health care within a human rights culture. Consequently, recipients are not to be treated unethically.

3.2.2 The socio-cultural domain of health care policy

The transformation of cultures universally, has not occurred at the same time and at the same pace. Some societies and cultures are more receptive of new developments, while some are resistant and remain conservative. As a result, clashes frequently occur with what 'science' would declare as 'irrelevant'. For this and many more reasons, it was incumbent on the researcher to consult broadly with the communities falling under the research sites, so that maximum participation and findings could be obtained.

3.3 THE HIV/AIDS DOMAIN

HIV/AIDS is the critical sphere in the study. However, it is not the domain causing health care policy formulation. Rather, its devastating effect has been such that on its own, the prevalence and spread of HIV/AIDS has had tremendous implications on the larger health care system. For instance, new standards have had to be adopted due to the infection mechanisms of the disease, as well as its various mutations and strains that to date still defy any nearness to a cure. The role of knowledge and education on HIV is very indispensable in this environment, as it becomes a way of inculcating the observance of safe sexual conduct. It is evident that knowledge of HIV and AIDS is increasing in South Africa. Whether or not this has translated into actual behavioural change, is another matter. Within the rural Madibeng environment and its remote villages, some still deny that HIV/AIDS is indeed a serious health problem. The denial has led to unprecedented increases of HIV infection among the rural communities.

It was imperative for the conceptual framework to encompass pregnancy rates among adult women and teenagers, so as to establish a variable link between the pregnancy rates and the spread of the disease among the designated research sites. It is on the basis of establishing such a link that preventive and promotive education and training programmes and interventions could be deployed. Most importantly, the concentration on the specific sampled population also incorporated other relevant dynamics such as HIV pregnancy testing, related mother/infant mortality rates, as well as the mental health dimension. The sample population invariably became the determinant of the extent to which the health care system was perhaps able to render strategic services pertinent to the prevention of the further spread of the disease.

Pregnant women could be subjected to HIV infection due to the high risks that are imminent in their environment. The risk factors are attributable to variables such as unsafe health practices, pressure from their partners/peers and their wishes to have their own children. Their perception, knowledge and understanding of HIV /AIDS issues have a correlation value with the outcomes

of intervention mechanisms to be initiated and implemented. Their perception, knowledge and understanding of HIV / AIDS issues could be influenced by other factors such as religion, culture and level of intellectual and mental development.

3.4 THE SERVICE DELIVERY DOMAIN

To a larger extent, the capacity (or lack thereof) of the health care system to render efficacious services to the clients and 'consumers' of that service, inadvertently 'measures' the capacity of the public politico-legal environment to execute its fiduciary function. Failure to meet that mandate translates itself into mere policy rhetoric. For purposes of this study, the fixed and mobile clinic service points became the variables according to which the supply-demand service disequilibrium could be addressed. It is this particular domain that a hypothesis has been derived. In accordance with the hypothesis an assumption was made that the scale and scope of the HIV menace was such that concomitant approaches seriously needed to be adopted. Considering the size of the Madibeng population and the number of available health facilities (one fixed clinic, one mobile clinic servicing about twenty points), and one youth centre), the pro-rata allocation between facilities, professional staffing, and number of villagers to be served, obviously amounts to huge imbalances that could easily compromise the quality and range of services rendered. The role played by clinics and their professional staff is also very important in this sphere (environment).

A graphic representation in Table 5.2 of Chapter 5, of services provided at the different health facilities, indicates the nature and types of services provided is virtually the same. Each and every health care programme has a coordinator assigned to it. The mobile and fixed-clinic professional staff submits statistics at the end of each month to different coordinators. Prenatal or antenatal health care services are rendered at both clinics. The main aim is to educate clients and communities on issues related to pregnancy, to improve access to quality services, and thereby reduce maternal and neonatal mortality rates. The following information is shared with pregnant women and the communities:

- Importance of early confirmation of pregnancy and regular attendance of antenatal care services;
- Importance of HIV testing to access PMTCT and ARV services to reduce transmission of HIV, and for the survival of both mother and neonate;
- Use of 'barrier method' (condoms) during pregnancy, so as to protect the unborn child from infections such as syphilis, HIV and others;
- Danger signs to be observed by pregnant women and reporting on time to the nearest health facility for prompt management and prevention of complications.

The fixed and mobile clinics were regarded as the grassroots levels of health care components tasked with the responsibilities of averting an HIV an AIDS crisis in the community. It is at this level that the failure or success of basic service delivery could be determined. Such service already included the provision of mobile clinic which is accessed by people in the remotest parts of villages, as well as health education, promotion programmes including the following: use of condoms; continuous health education with regard to HIV and AIDS; psychosocial support; nutritional advice, and organized training for volunteers, non-governmental organizations and home-based health care personnel.

3.4.1 Protocol for preparing patients for anti-retroviral treatment in the Madibeng sub-district

The Brits District Hospital (BDH) is one of the health care sites also accredited by the NWDOH as an ARV treatment site. In Setswana, the site is called Motswedi wa Tshepo, loosely translated as Fountain of Hope. Patients from the mobile and the fixed clinic qualify for ARVs only if the basis of the following criteria:

- They have undergone the positive HIV antibody test (Elisa)
- They have an absolute CD4 count below 200, or the WHO clinical stage 4 HIV with any CD4 count value;

- Disclosure of HIV test to responsible person willing to monitor treatment and to members of the household;
- They are willing and committed to take the ARVs for life, in spite of possible side effects and their impact on the quality of life;
- They do not have active TB, or not already on any TB treatment;
- They are not addicted to alcohol or other narcotic substances;
- They are not on depression treatment.

The baseline tests for all ARV-qualifying patients include: Urea, Electrocytes and Creatinine (U.E.&C); Liver Function Test (LFT); Full Blood Count (FBC); Rapid Plasma Reagin (RPR) or (Syphyllis); Urine dipstick; and Papsmear for women.

The two diagrammatic presentations in this chapter are therefore intended to graphically illustrate the 'conceptual trajectory' followed in this study.

3.5 CONCLUSION

The health care conceptual framework articulated above also became the sphere along which the logic of argumentation in the study is located (Mouton 2001). Its main advantage is that it enabled the researcher to concentrate on relevant and specific issues, rather than haphazardly discussing the research process itself, as well as the methodology used.

Various frameworks have been adopted to construct a value of co-relation in defining the various conceptual environments of: primary health care, HIV/AIDS and pregnant women, as well as the service delivery. All the three domains are linked in diverse ways, and they have different emphasis to the relationship among them insofar as addressing the HIV/AIDS phenomenon is concerned. This study is to a large extent based on the logic of HIV/AIDS and pregnant women as critical tenets with correlation to personnel and the environments of the health care services in fixed and mobile clinics at the Madibeng sub-district.

Further research to determine the comparative analysis *and* integration of HIV and AIDS services in the broader Madibeng sub-District in the North-West Province, would be necessary. The reason for such further research is that there are still other mobile and fixed clinics in other sub-districts of the province.

CHAPTER FOUR

RESEARCH DESIGN AND METHODOLOGY

4.1 INTRODUCTION

The research design and methodology reflected herein is the plan or blueprint of how the researcher conducted the research (Mouton 2001:55-56). A combination of qualitative and quantitative research strategies was pursued. The terms 'qualitative' and 'quantitative' refer both to the method of data collection, and to the type of data collected. The integration of both qualitative and quantitative research strategies is necessitated by the fact that health and health care problems encompass a complex mix of social, economic, political and environmental factors. A comparative analysis of HIV/AIDS services on fixed clinic and mobile visiting points in the Madibeng sub-district is an example of the complexity and interrelatedness (mix) of variables constituting health care problems and the relevant strategies of resolving these multi-dimensional challenges.

4.1.1 Rationale for the integrated approach to research design

Triangulation, which is variously associated with the application of multiple approaches, has been found to be most applicable and relevant for the data collection and analysis processes in this study. (Polit & Hungler 2001:217) succinctly indicate its fundamental application and nature thus:

“... many areas of inquiry can be enriched through the judicious blending of qualitative data and quantitative data collection and analysis – that is, by undertaking multi method research”.

By allowing for multiple methods and approaches to establishing 'truth value', triangulation – as a component of the integrated approach – has many advantages, especially for a study with a complexity and mix of interrelated variables such as the current one. The prevalence of HIV/AIDS among the target population of Madibeng (pregnant adult and young women) is neither an isolated nor a peripheral development. The phenomenon under investigation exists within a milieu of a plethora of variables such as poverty, unemployment, and general under-development; the latter also accounting for the supply-demand disequilibrium in the provision of health care services. The

following are some of the factors that accentuate the value of triangulation as an integrated method of data collection and analysis.

Complementarity: The multiple approaches work towards maximizing each other's functionality, rather than working against each other. Findings are represented in words (qualitatively) and in numbers (quantitatively). In this study for instance, the empirical/fieldwork aspect supports and adds to what has already been obtained from both primary and secondary sources (Polit & Hungler 2001:217).

Incrementality: The integration of applicable methods promotes the production and dissemination of knowledge into new horizons. In the study, the observation of research subjects in their naturalistic setting – in addition to the 'oral tradition' designed to obtain an in-depth understanding of the indigenous culture – provides the backbone for the increase in knowledge by utilizing both conventional and *local* perspectives; that is, "...creating new knowledge frontiers" (Polit & Hungler 2001:218).

Enhancement of validity, reliability, and credibility

The complementarity of methods further maximizes the 'truth value' of the findings. In order to facilitate the nuance of credibility, the researcher involved multiple stakeholders in the entire study. These ranged from healthcare practitioners and workers to policymakers in the North West Department of Health (NWDOH) and 'ordinary' villagers themselves; as well as local leaders in various civic or community-based organizations. This approach ensured that various perspectives and modes of understanding the HIV and AIDS phenomena were obtained by the researcher. Consequently, these formed the basis for an unbiased representation of the actual state of the phenomena under investigation.

4.2 RESEARCH SETTING

The study was conducted in Jericho fixed clinic hall and in Jericho mobile clinic visiting points' halls. Jericho clinic and Jericho mobile clinic provide HIV/AIDS services to pregnant women in Madibeng Sub-District. Jericho Youth Centre was used as an assembling place for only ten pregnant women residing next to it but attending prenatal care services at Jericho fixed clinic.

4.3 RESEARCH DESIGN

The research design refers to the plan and procedures to be used to accomplish the purpose and specific aims of the study. In this study the group discussions were held prior to completion of questionnaires.

4.4 POPULATION

The target population for the study was pregnant women, unemployed and employed, married and single residing in the Madibeng Sub-District, North West Province, South Africa and attending antenatal care at Jericho clinic and its mobile visiting points.

4.5 SAMPLE AND SAMPLING TECHNIQUE

A non-probability convenience sampling technique was used to select hundred (100) participants from those attending ante-natal care visits at the Jericho clinic and its mobile points.

Inclusion criteria were:

- Pregnant women, who, regardless of HIV status, were attending antenatal care services at Jericho fixed clinic and mobile clinics and were willing to participate in the study
- The age range was from 14 to 45 years of age.

Exclusion criteria were:

- The age range that was below 14 years of age and above 45 years of age.
- Pregnant women who were not willing to participate as indicated verbally or through body language when asked to participate.

Babbie (1992: 464) attests that "...research often, though not always, represents an intrusion into people's lives...participation must be voluntary". This norm is far easier to accept in theory than to apply in practice, however the author cautions researchers to be especially sensitive to any appearance that might signal hesitation or involuntary participation. Therefore, apprehensive gestures were part of the exclusive criteria.

The extent of participant involvement facilitated the indispensable participatory element in the study. It was during this (participatory) phase – especially during unstructured interviews – that the researcher was able to observe the participants in a naturalistic context (Polit & Hungler 2001:186). The generality of the participatory aspect of the research enabled the researcher to have a closer 'grass roots' understanding of the views of women and young girls who had been made vulnerable by the dominant culture of coercive and unprotected sex by their male partners or spouses (Polit & Beck 2004:265).

4.6 SAMPLE SIZE

A total of hundred pregnant women participated in the study. The reason for choosing only 100 of them was largely because it was neither practical nor necessary to study all the individuals in the study population. All the participants were residents in Jericho and the neighbouring villages, and received their first antenatal health care provision at either the mobile service points or the Jericho fixed clinic.

4.7 REPRESENTATIVENESS

In research the sample has to be as representative as is possible of the population under study (Babbie 1992: 197). It is often difficult to achieve this in its entirety, especially when the sampling method is that of convenience. In this study, bearing in mind the convenience sampling used, attentive planning regarding the sample was undertaken. The hundred participants selected were considered to be a distinct group of pregnant women who patronize the Jericho clinic and its mobile visiting points.

4.8 DATA COLLECTION AND INSTRUMENTATION

In any systematic investigation of phenomena, some form of a measuring instrument has to be used in order to collect data that has been considered germane to the research process (Mouton 2001:100). In the context of the comparative analysis of service delivery at the fixed and mobile clinics in the Madibeng sub-district, the utilisation of the an interview guide became the more formal component of data collection.

Interview guides, are, in some instances presented as questionnaires. These elicit "...self-report...where the respondents write answers in response to printed questions" (Brink 1996: 154). Well-designed questionnaires are easy for the respondents to fill-in, and for the researcher to administer and score closed-ended questions; such as yes/no, multiple-choice, true-false. In formulating items in the interview guide, the researcher was guided by the extent to which the content met the objective of the study. Furthermore, the contents had to raise HIV/AIDS awareness among the participants and the broader community of the Madibeng sub-district. The questions were culturally and racially sensitive, so as to attract maximum participation in the event that they were to be completed or filled in by other participants in a different setting and context.

In this study the interview guides were administered to the participants by the researcher and the two health promoters whose assistance she had requested. The two health promoters, who had been briefed prior to the administration of the interview guide, were provided with check-lists that also included the contents of the guide. The two health promoters were selected to assist based on their knowledge of fixed and mobile clinic clients, and as such were able to recruit participants to the study as well as their understanding of the processes in the fixed clinic and mobile clinics. It was at this stage that all the related aspects of ethical conduct (e.g. participant anonymity) were observed. The nature of the questions was such that they were unambiguous, understandable, and in an affirmative rather, than a negative manner (Brink 1996:156)

4.8.1 Pilot study

Pilot tests are designed to determine the feasibility of the study. Pilot tests are implemented in settings convenient for the researchers, and are somewhat similar to ones in which the intervention will be used. (Delport, De Vos, Fouche' & Strydom 2006: 402). This process of pilot testing was aimed at ensuring that the questionnaire was sufficiently comprehensive to address the relevant units of analysis stipulated in the research topic and its objective. Brink (2006 : 166), affirm that a pilot study is a small-scale study conducted prior to the main study on a limited number of subjects from the population at hand. Its purpose is to investigate the feasibility of the proposed study and to detect possible flaws in the data collection instruments, such as ambiguity, wording and/or inadequate time limits. Most importantly, the pilot study ensures that all the variables are in fact observable and measurable (Brink 2006 : 166).

The pilot study interview guide was administered to ten pregnant women at the Jericho fixed clinic and mobile clinic service points in the Madibeng sub-district of the North-West Province. The participants taking part in the pilot study were not included in the main study. During this stage, the researcher was helped by the two health promoters to administer the questionnaires. The participation of the ten pregnant women (five from fixed clinic and five from the mobile clinics) during the pilot study and their group discussions became some of the mechanisms used by the researcher to determine whether or not there was a need to amendment or standardize the interview guide. The pilot interview guide consisted of eight questions to be responded to. Some of the factors that could determine whether or not there was a need for amendment or standardization included the following:

- Would the interview guide items be understood in the same way by the respondents (pregnant women of both fixed clinic and mobile clinic), and in the same context as intended by the researcher?

- Would the subject matter being researched (HIV/AIDS) be acceptable for discussion to the respondents; if so, would they co-operate and participate voluntarily in any related research activity?
- Was the study and its conceptual framework not time consuming and covering many HIV/AIDS aspects that may lead to confusion?

A lot of information was gathered during group discussions with ten participants. The analysis of this information is contained in Appendix L.

After obtaining permission from participants, a field note book and a tape recorder were used to gather all the information from the group discussions. The researcher and the two research assistants presented the English questions in Setswana when necessary. This pre-testing experience enabled a smoother running of the final process, as areas of concern were addressed. There was no reason for a second trial-run of the interview guide because the first was successful. Consequently, arrangements were then put in place for the main study to be undertaken.

4.9 RELIABILITY AND VALIDITY

The reliability and validity of research findings are of great importance in all studies. Reliability refers to "the extent to which measures are consistent or repeatable over time" (Brink:1987).The questionnaires were presented to pregnant women at the fixed clinic and at the mobile visiting points, whilst the health promoters used a check-list to ensure that in administering the questionnaire all aspects are addressed, such as, detection of ambiguity of the wording, repetition of items, insufficient responses, spaces left unanswered, length of completion, inappropriate answers, inadequate or redundant response categories, and any other flaws in the completion of the questionnaires. By subjecting the questionnaires to this quality assurance process, their reliability is ensured to ascertained that they actually measure what was initially intended, and could also do so in another different context and setting. It is to be understood that no test can be valid without being reliable (Brink, 1987). A test may nevertheless have a high degree of reliability without being valid. In the design of this measuring instrument the researcher

attempted to pay attention to both. Establishing validity required firstly that the extent to which conclusions effectively represent empirical reality, be determined. That is to say, the conclusions should be corroborated by what actually transpired during fieldwork. Secondly, validity should assess whether constructs (e.g. practice of unsafe sex) devised by researchers represent or measure the categories of human experience that occur (e.g. the devastating consequences of HIV/AIDS) (Brink1996:124).

4.10 ETHICAL CONCERNS AND CONDUCT DURING PRE-TRIALS

From the very beginning at the trial (pilot) stages, permission had been obtained to conduct the research at the Jericho Clinic and the mobile service points. The participants in the research (including the local and provincial healthcare authorities) were made aware of the purpose of the research, and how the results would be utilised. Voluntary participation was sought, and every participant had to sign an informed consent and could withdraw at any stage of the research process despite the signed consent and without fear of penalties such as exclusion from benefitting from the services offered in the clinics. Anonymity was guaranteed, and no unauthorised individuals were allowed access into any aspect of the research, including clients' confidential records.

A breach of confidentiality is particularly serious for women who are HIV positive, due to the risk of discrimination and prejudicial treatment, even within the health services. Midwives and other health care practitioners are advised to "... treat information about patients and clients as confidential and use it only for the purposes for which it was given ... [they should also] ensure that patients and clients understand that some information may be made available to other members of the team involved in the delivery of care" (NMC, 2002:7). In addition, midwives must "... guard against breaches of confidentiality by protecting information from improper disclosure at all times" (NMC, 2002:7).

During her familiarizing with the research setting in the negotiated entry phase of the embryonic stages of the research, the researcher was able to establish and build an ethically conducive rapport between herself, the participants,

and the professional health care team. Participants were neither hoaxed nor coerced into participating in the investigation. Their right and decisions were respected. The respective research setting sites themselves were made free from any harm that could jeopardize the participants during any stage of the research and data collection. The participants were also informed of the purpose of the study and the roles that they were expected to fulfil; including the Ethical Approval for Research from NWDOH (North West Department of Health) and clearance certificate from UNISA (University of South Africa), which were shown to the participants(see Appendix B). This openness on the part of the researcher ensured that accountability and transparency constituted an important element of the investigation; as it enable the participants' written consent to be embraced in an environment of mutual trust.

4.11 CONCLUSION

The primary aim of this chapter was to outline how the practical aspects of the research were applied. The involvement and participation of relevant stakeholders became crucial in enabling the empirical element reach its envisaged fruition.

CHAPTER FIVE

DATA COLLECTION AND ANALYSIS

5.1 INTRODUCTION

The previous chapter addressed the research design and methodology of the research. These two aspects of the research process were viewed as concurrent and complementary mechanisms, rather than two peripheral means designed for a common end. In a similar vein, the current chapter views the qualitative and quantitative presentation and analysis/interpretation of the data collection and dissemination process as cast in a symbiotic mode. The data presentation and analysis processes have been configured through the integration of the qualitative and quantitative data. The qualitative mode of data presentation here is distinguishable by its prosaic/narrational method (dominant in the preceding chapters) of focusing on, and discussing emergent themes and patterns in the data presentation and analysis process.

The quantitative mode of data presentation and analysis on the other hand, is identifiable by its graphic/diagrammatic and statistical focus. This is sometimes conducted by utilising computer-assisted data analysis (CADA) programmes and software (Henning 2005:126-128), which generates optical viewer interest, due to the interactive multimedia illustration and coding of data (Henning 2005; Polit & Hungler 1998). In this particular instance, both computer-aided and manual data analytic methods were employed. The manual analysis involved a thorough review of all recorded information and data that the researcher had obtained during the course of the data collection process (Brink 1998:185). By utilising the code book and tally sheets, the researcher was able to function as a statistician. Mouton (2001:107) accentuates the value of the code book; stating, “a code book is constructed for documenting the whole survey process, including copies of the questionnaire, response rates, [and so forth]...”. This chapter then, focuses mainly on the aspect of numerical/statistical data analysis (represented mainly

in tables and figures) and the prosaic/narrational discourse of discussion and interpretation of the collected data relates to the open-ended questions contained in the questionnaire.

5.1.1 The fieldwork experience

The practical/empirical aspect of the study was conducted at the Jericho Clinic, the Jericho Youth Centre, and the mobile clinic service points under the jurisdiction of the Madibeng sub-district healthcare authorities. As indicated in Chapter 1, the primary objectives of the study premised on comparing and analyzing the provision of HIV/AIDS health care services, particularly to pregnant women and teenagers in this area. Categories of themes emerged from the qualitative data collected: the nature and range of HIV/AIDS services at the Jericho Clinic, and the nature and range of HIV/AIDS service provision at mobile clinic visiting points, as well as the youth centre. Negotiating entry into the respective research sites was not very difficult, as the researcher is also a professional health care employee of the NWDOH at the Madibeng sub-district (Jericho Mobile Clinic).

Table 5.1: Sample distribution of all participants

FACILITY	N (NUMBER OF PARTICIPANTS)	%
Jericho Clinic	40	40
Jericho Youth Centre	10	10
Jericho Mobile Clinic	50	50
TOTAL	100	100%

The above table represents the number of participants during filling-in of interview guides at the respective sites. The reason for selecting the Jericho Youth Centre was because ten of the participants were residing next to it. So 50% of the participants were from Jericho village and another 50% were from the adjacent villages where the mobile clinic provides health care services.

5.2 THE FINDINGS OF THE STUDY

5.2.1 INTRODUCTION AND HEALTH EDUCATION PROVIDED

Antenatal health care services are conducted every Tuesday at the Jericho Clinic. As a matter of routine, the professional nurses and other trained health care workers in the facility provided health education to patients in the mornings on these Tuesdays. HIV and AIDS testing are encouraged as part of a wider screening procedure when pregnant women book for antenatal care. Others involved in the dissemination of knowledge and information on these days include Love Life personnel and health promoters working in the employment of the NWDOH. The content of the health education topics discussed are presented hereunder:

5.2.1.1 When to test?

The education and information/knowledge dissemination emphasised on prevention and early HIV and AIDS detection among pregnant adult women and teenagers. The availability of this knowledge enables them to make informed decisions about conception and the management of pregnancy, including infant feeding. HIV/AIDS health care services at the fixed clinic are conducted every day during consultation sessions, especially when the professionally trained healthcare workers/practitioners suspect or observe signs and symptoms that may be associated with the HIV/AIDS illness. Pre-counselling sessions are the sole prerogative of trained health care counsellors, the health promoters and the doctor who visits the clinic on Fridays. Volunteering family planning, TB and STI patients are also tested for HIV, after pre-counselling sessions had been conducted. Most importantly, the patient/client ought to have filled-in the written consent forms prior to the administration of the HIV test.

Patients were aware of the prevalence of HIV/AIDS, because they seemed to know someone else in the family or community who suffered from this dreadful disease. However, it was observed during the focus group discussions that their knowledge seemed limited; as they tried, to no avail, to

differentiate between HIV and AIDS. This is conspicuously observed in the first responses to the related question (on page 80). The National Health Policy Act (Act no 116 of 1990:1) defines HIV (Human Immune-Deficiency Virus) as: "... the virus that causes AIDS". The Act, furthermore defines AIDS as: "... the late and most advanced stage of the HIV disease, and is characterized by signs and symptoms of severe immune deficiency, where the body loses the ability to fight against infections because the immune system is weakened" (National Health Policy Act (Act no 116 of 1990:1).

5.2.1.2 Why is HIV/AIDS testing conducted?

During the education and knowledge dissemination sessions, it was critical that the patients be informed of the benefits of HIV testing as an early detection mechanism designed to prevent the spread of the disease. By that very fact, it also became a mechanism of promoting healthier lifestyles. More detailed discussions on the rationale offered for HIV testing were especially indicated in Chapter 2 (section 2.3.3, pages 34-37) of this study. For that very reason, and in order to avoid a repetition, the following *thematic* example *only* serves to indicate the 'provenance' of education approaches embraced at the clinic; as corresponding with the 'tried and tested' literature-based information and knowledge. There would therefore, be no need for the restatement of all the attendant benefits of HIV testing.

5.2.1.3 Benefit to mother and child and reduction of vertical transmission

Evidence suggests that an infected person may benefit clinically from prophylactic treatments to delay the onset of any HIV-related diseases, and from earlier treatment of any such conditions. HIV testing then, is of benefit to both the individual, the community, and the public health care system as a whole (DOH 1992). One of the main arguments for promoting antenatal HIV testing is that, if a positive diagnosis is made, the woman and, where possible, her partner would have time to consider options available to them and to plan their pregnancy accordingly. Some of the available options made known to the clients under such conditions included:

- access to treatment for the mother;
- availability of drug therapy to reduce vertical transmission;
- information about the most appropriate type of delivery and post-natal care (such as advice on infant feeding).

Knowledge of HIV status prior to delivery allows the mother to consider the use of antiviral therapy for herself and her baby, and to make an informed decision on the most appropriate type of birth. It has been shown that when the mother is in labour, the use of invasive procedures, prolonged rupture of membranes and a long labour, may all increase the chance of vertical transmission. There is also evidence that birth by elective caesarean section can reduce the chances of a vertical transmission. A full discussion of the use of antiviral therapy, and the advantages and disadvantages of both types of delivery was offered; it served as the basis upon which the patient could make her informed choice.

5.2.2 HIV/AIDS service provision at the mobile servicing points

A comparison of health care service provision at both the fixed and mobile clinics indicates that; not considering the physical infrastructure and equipment, the range of services is approximately the same at both health care facilities. Antenatal services at the mobile clinic are conducted daily, except on weekends – which is also the case at the fixed Jericho Clinic. Health education is provided in the mornings by the professional nurse and the nursing assistant on arrival at each mobile service point. Voluntary counselling and testing (VCT) is also encouraged when pregnant women book for their antenatal care which, is also done in fixed clinic. Health promoters rarely accompany the mobile clinic to its service points. The following table is a diagrammatic comparison of services provided at both the fixed Jericho Clinic and the mobile service clinic variant.

Table 5.2: Comparison of fixed and mobile clinic service provision

Fixed (Jericho) clinic	Mobile clinic service points
------------------------	------------------------------

Fixed (Jericho) clinic	Mobile clinic service points
1 Working days: Sunday to Saturday	1 Working days: Monday to Friday
2 Time: 07h00-16h00	2 Time: 07H00-16H00
3 Staffing: 6 professional nurses; 4 assistant nurses; 1 doctor; 2 health promoters; 2 Love Life counsellors; and three cleaners.	3 Staffing: 1 professional nurse; 1 assistant nurse; and sometimes 1 health promoter.
4 Physical resources: 10 Rooms.	4 Physical resources: 1 canopy van.
5 Services: Antenatal clinics on Tuesday only; 5.1 Voluntary counselling and testing every day; 5.2 HIV testing on TB patients daily; 5.3 HIV testing on STI patients daily; 5.4 HIV testing on family planning patients every day (Reproductive Health Services); Written consent forms are obtained prior testing.	5 Services: Antenatal clinics, Monday to Friday; 5.1 Voluntary counselling and testing every day; 5.2 HIV testing on TB patients daily; - 5.3 HIV testing on STI patients daily; 5.4 HIV testing on family planning patients every day (Reproductive Health Services) Written consent forms are obtained prior testing
6. Health Talks: Dildos are used during demonstrations on how to wear condoms; 6.1 Femidon leaflets are also issued for females, with illustrations of how to insert female condoms; 6.2 In-service training of health workers done monthly; 6.3 Health education provided daily to patients by health workers;	6. Health Talks: Dildos are used during demonstrations on how to wear condoms; 6.1 Femidon leaflets are also issued for females, with illustrations of how to insert female condoms; 6.2 In-service training of health workers done monthly; 6.3 Health education provided daily to patients by health workers;
7 Communication: Notices on notice boards, billboards, pamphlets, clinic booklets, clinic leaflets, posters, and relevant telephone numbers are	7 Communication: Notices attached inside mobile car, pamphlets, booklets, clinic leaflets, posters, and also relevant telephone numbers are

Fixed (Jericho) clinic	Mobile clinic service points
<p>displayed;</p> <p>7.1 Public disclosure encouraged and stigma discouraged;</p> <p>7.2 Awareness campaigns; e.g. screening done at sponsored events when people volunteer to do that;</p> <p>7.3 Healthy life style emphasized through;</p> <p>7.3.1 Proper nutrition;</p> <p>7.3.2 Safe sex practice;</p> <p>7.3.3 Enough rest and sufficient sleep;</p> <p>7.3.4 Regular exercise to strengthen the immune system;</p> <p>7.3.5 Abstinence from alcohol, drugs;</p> <p>7.3.6 Abstinence or condomise;</p> <p>7.3.7 Enlistment with support groups.</p>	<p>displayed;</p> <p>7.1 Public disclosure encouraged and stigma discouraged;</p> <p>7.2 Awareness campaigns; e.g., screening done at sponsored events when people volunteer to do that;</p> <p>7.3 Healthy life style emphasized through;</p> <p>7.3.1 Proper nutrition;</p> <p>7.3.2 Safe sex practice;</p> <p>7.3.3 Enough rest and sufficient sleep;</p> <p>7.3.4 Regular exercise to strengthen the immune system;</p> <p>7.3.5 Abstinence from alcohol, drugs;</p> <p>7.3.6 Abstinence or condomise;</p> <p>7.3.7 Enlistment with support groups.</p>
<p>8. Referral system: Patients whose CD4 count levels are below 200cells/ul are referred for social grants and for antiretroviral treatment;</p> <p>8.1 Full-blown AIDS patients are referred to local hospices;</p>	<p>8. Referral system: Patients whose CD4 count levels are below 200cells/ul are referred for social grants and for antiretroviral treatment;</p> <p>8.1 Full-blown AIDS patients are referred to local hospices;</p>
<p>9Treatment: Prophylactic treatment administered on patients whose CD4 cells are above 200 include: Cotrimazoles, Multivitamins and Iron Supplements.</p>	<p>9Treatment: Prophylactic treatment administered on patients whose CD4 cells are above 200 include: Cotrimazoles, Multivitamins and Iron Supplements.</p>
<p>10 Nutritional supplements:</p> <p>10.1 Philani porridge, Pellargon and enriched meal and for non-breast feeding (PMTCT);</p> <p>10.2 Patients are encouraged to</p>	<p>10 Nutritional supplements:</p> <p>10.1 Philani porridge, Pellargon and enriched meal and for non-breast feeding (PMTCT);</p> <p>10.2 Patients are encouraged to</p>

Fixed (Jericho) clinic	Mobile clinic service points
undertake home gardening, and to eat vegetables and fruits almost daily.	undertake home gardening, and to eat vegetables and fruits almost daily.

Notwithstanding, the almost similar provision of health care services at both the fixed Jericho Clinic and mobile service points variants, some dissimilarities have the effects of rendering the service delivery system acutely incongruent. For instance, the fixed clinic is open for seven days a week; has two health promoters who are always present during working hours; and three cleaners. That only one occasionally available health promoter is provided for mobile points, suggests that the patients and the communities are ‘denied’ their services. In addition, the physical infrastructure of a mobile clinic vehicle is itself a factor of incongruence in service delivery. That there are ten rooms at the fixed clinic, implies that a range of services are able to be provided daily, supported by the availability of more trained professionals than at the service points. The canopied van functioning as a mobile clinic, subjects the clients to inclement weather conditions. By its very constructed mode, spatial constraints render it to limited modifications and improvisation. Logically, a full staff complement cannot fit into such a van; which places the provision of other critical requisites (e.g. a stretcher or wheel chair) in serious jeopardy.

5.2.3 How pregnant women benefit from the fixed and the mobile clinic

With the dedicated assistance of the health workers and counsellors, the patients/clients became stronger and wiser about their future choices. The HIV-infected clients, through professional counselling they received, gradually began to accept the prevalence of the virus in their bodies; without considering this as a death sentence. Acceptance is in itself very crucial, considering the psychological and emotional barriers that the infected patient would have to transcend. Patients were encouraged to join and become members of support groups, which helped in the broadening of the support base outside of the home and the family. The support groups that are offered in clinics by professional nurses and other health workers are exemplary. Clinics staff work as a team to bring hope to patients who first felt helpless and dejected. The majority of participants reported that they felt free to get

knowledge and support systems from the fixed clinic and the mobile clinic. They further stated that the safe and caring environment was conducive for them to express themselves freely and relate any kind of personal, and other problems.

Pregnant women who tested HIV-negative, are also encouraged to remain negative and undergo a re-test after three months; so as to validate the prevalence or non-prevalence of the virus in their bodies. HIV positive pregnant women are advised to continue visiting the clinics during the third trimester, so that nevirapine could be administered to them. They are also advised that their newly-born children will have nevirapine administered on them within three days from birth. Prophylactic treatment, vitamins and iron supplements are given to patients to strengthen their immune systems. For the promotion of HIV and AIDS literacy, monthly and weekly meetings are scheduled for informative talks; guidance in healthy lifestyle choices; and small group discussion and sharing of problems, such as difficulties of disclosure and possibilities of death. Friendships have blossomed and many who were desperately sick at first, are now regaining strength and health since they started antiretroviral treatment and began following healthy lifestyles. Professional nurses are tasked with referrals for antiretroviral treatment, which is presently available at the ARV centre. Antiretroviral treatment is given only to patients whose CD4 counts cell levels are less than 200 cell/ul.

5.3 QUANTITATIVE DATA PRESENTATION AND ANALYSIS

A total of 100 participants responded towards the 100 questionnaires by filling-in at the three research sites. Forty participants were from the fixed clinic, ten from the youth centre, and fifty from the mobile clinic service points. All the participants were pregnant women. Their ages ranged from 14 years to 45 years. Participants were teenagers, matured young women and older women of 45 years. The ten participants were residing next to the youth centre but attending antenatal health care services at Jericho fixed clinic. The following figures illustrate the various age bands of the research participants.

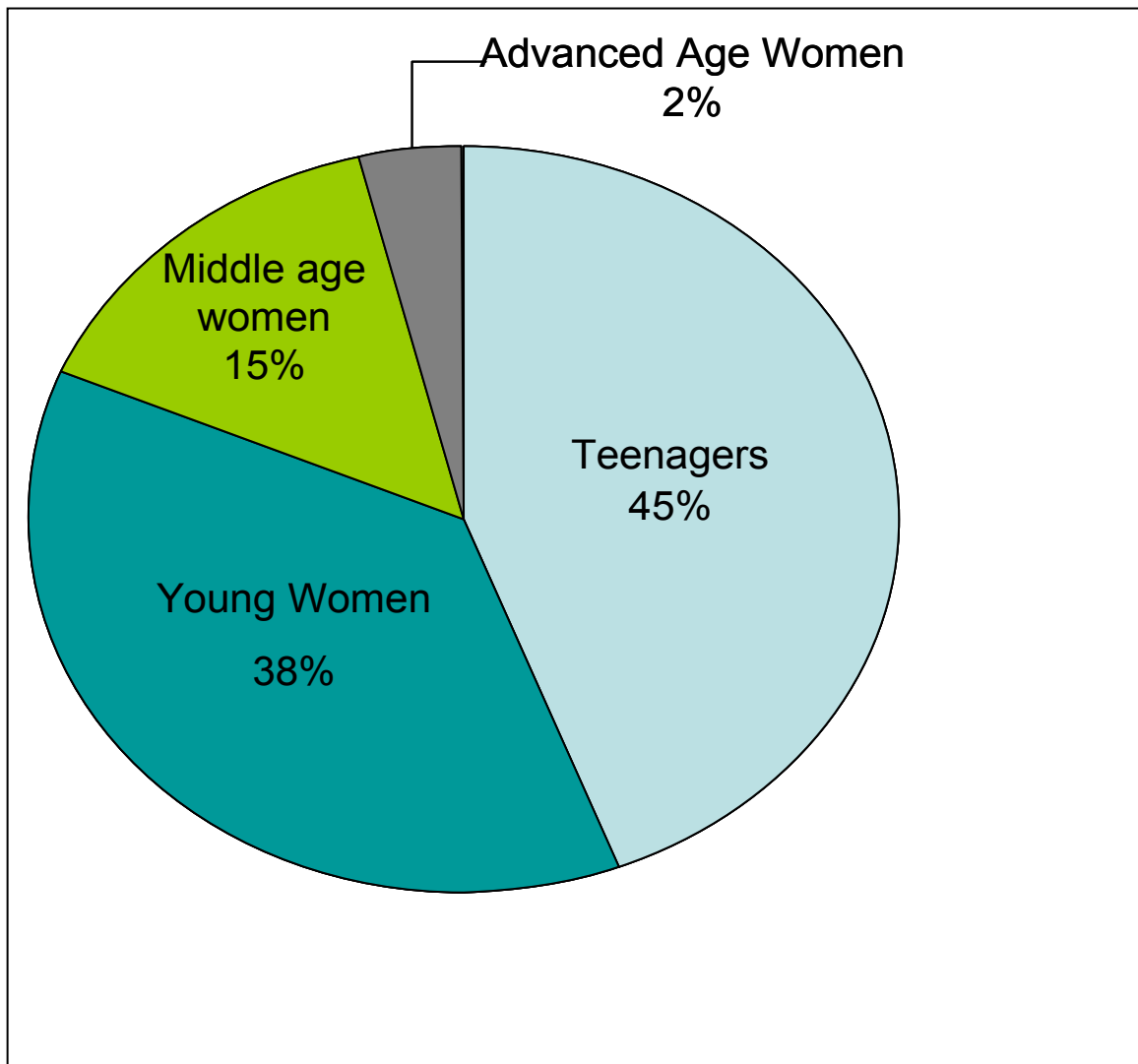


Figure 5.1 : Age distribution of the participants (N=100)

The highest percentage comprised teenagers (45%), followed by young women (38%), then middle aged women (15%); and lastly, older women (2%) of 45 years old. That the teenagers constituted the majority of participants, augurs well for the viability of HIV/AIDS information and knowledge dissemination in the area. Teenagers are also the vulnerable age cohort on whom the most aggressive education campaigns have to be directed.

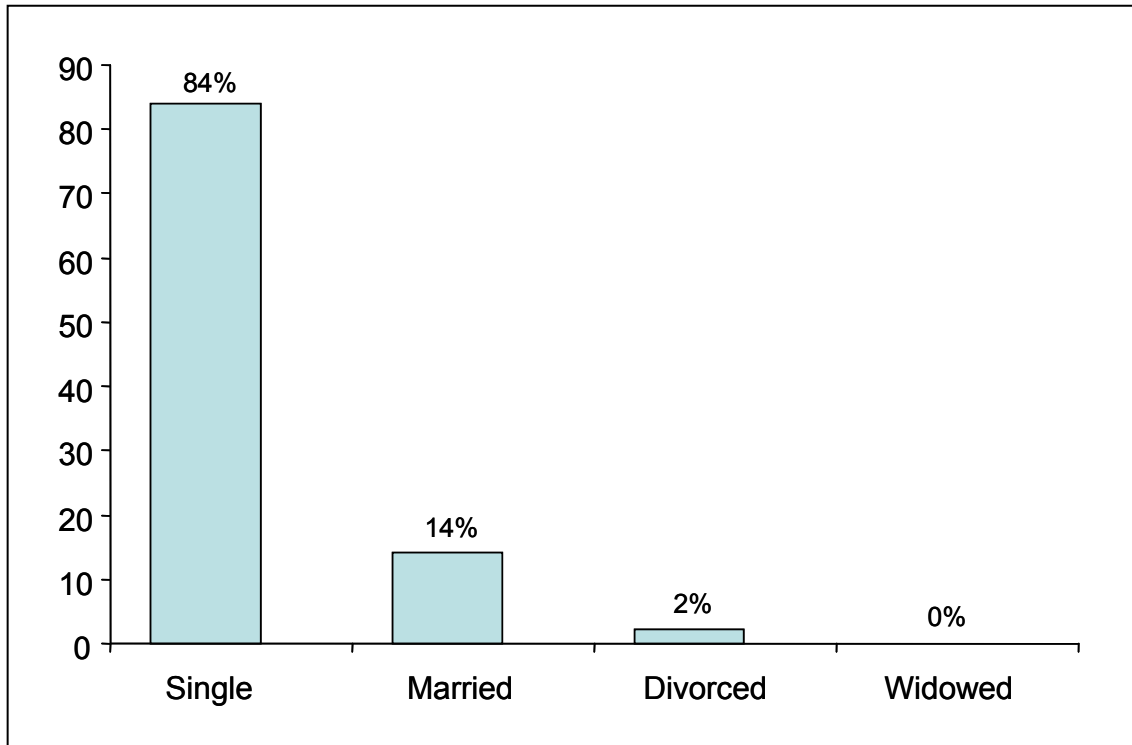


Figure 5.2 Respondents' marital status (N = 100).

Indicated above is that 84% of the 100 interview questionnaires respondents were single women; 14% were married; and 2% were divorced and 0% widowed. That the majority are single women, could possibly become a noteworthy factor insofar as partner infidelity is concerned. However, that should not necessarily imply that there is an element of immorality common to these women. Sex after marriage has obviously become anachronistic. Some of the teenagers reported verbally that through the help of the support grants, they are able to raise their children; even though others reported that it is not enough and their partners took care of their children.

Indicated below (Figure 5.3) is the rate at which prenatal or antenatal care clinic attendance is confirmed. Thirty nine % showed that they attended regularly, while 59% attended irregularly; and 3% didn't attend at all. Reasons for regular attendance ranged from the monitoring of the growth of the child from conception until birth, and voluntary counselling and testing so that the relevant care can be provided in time. Reasons for irregular attendance given by the other 58% ranged from long queues, insufficient staff; and their results

not treated confidentially; the latter is a serious indictment on the state of professional conduct at these health care facilities.

Although not initially included in the questionnaire, the frequency of attendance as shown in Figure 5.3 was acquired from supplementary data obtained from women who initially tested negative but subsequently tested positive after the window period.

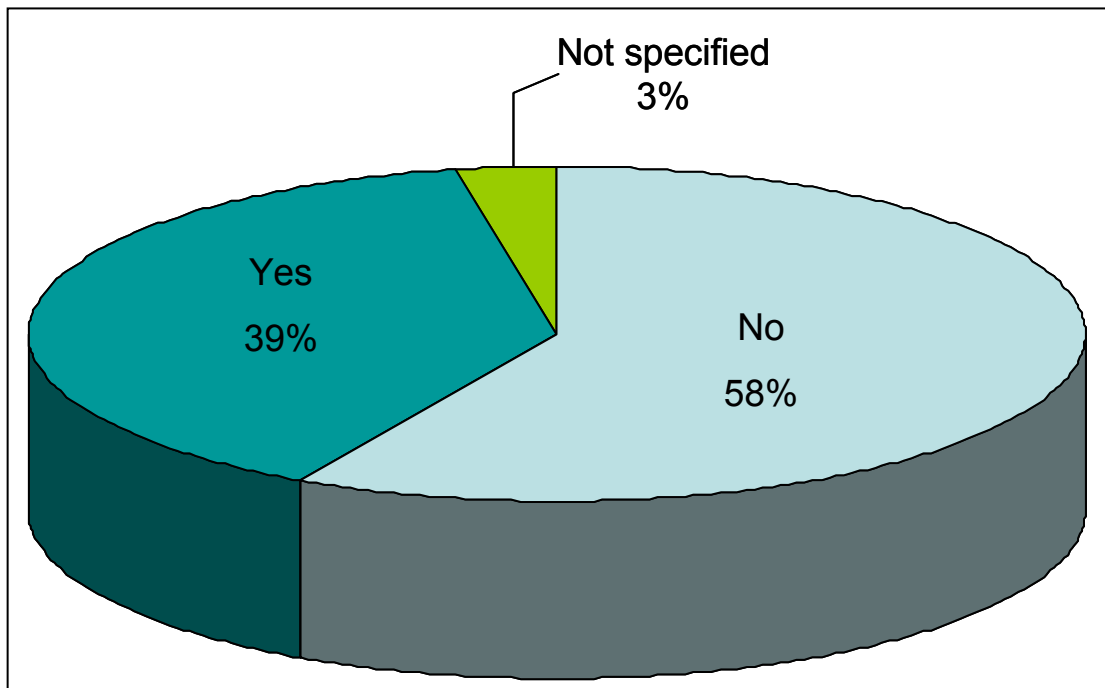


Figure 5.3: Frequency of attendance of prenatal care (N = 100)

The majority of the respondents (89%) in figure 5.4 below are well supported by their partners or spouses during their pregnancy, and only 9% received a non-committal kind of support. This trend could perhaps account for the high pregnancy rates even amongst those who are single; they are already supported by their partners throughout the pregnancy, despite their unmarried status. It would then seem that marital status did not necessarily have any direct bearing on the degree of support the pregnant women received, or would receive.

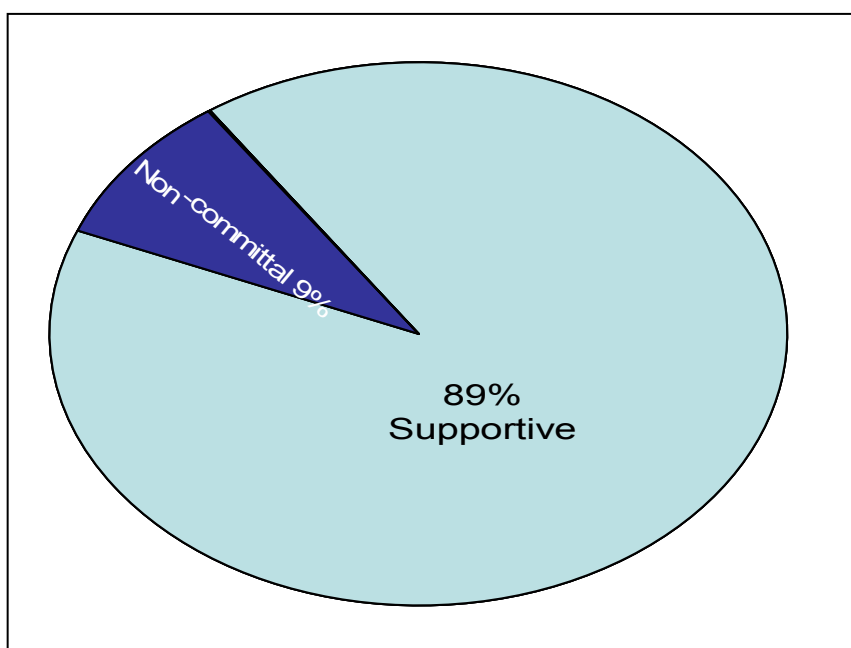


Figure 5.4: Extent of partner support/attitudes (N = 100)

Most of the participants affirmed that they received sufficient support from their partners at eighty-nine percent; as shown in figure 5.4.; while only a negligible number of nine-percent claim that no supportive or poor attitudes were exhibited by their partners. Two percent is missing as the forms were not completed in this section.

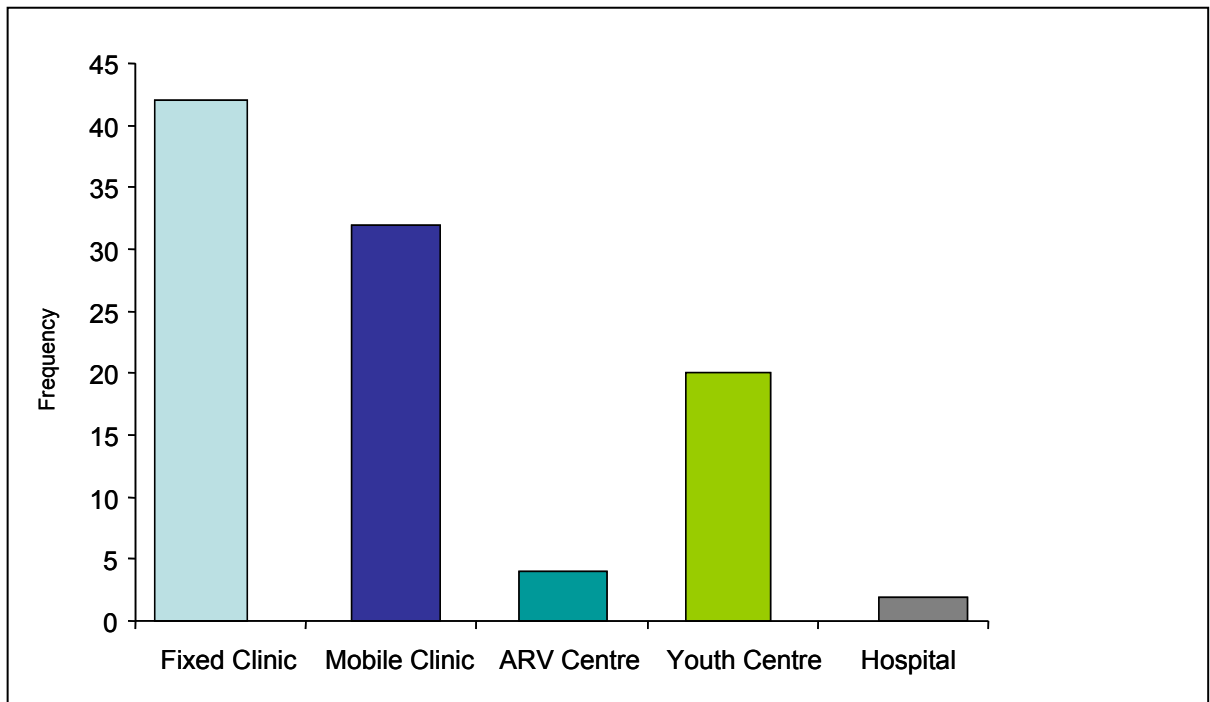


Figure 5.5 above illustrates the degree of the participants' acceptance or rejection of the mobile service points. The highest percentage (42%) indicates an acceptance and preference of the fixed clinic; followed by the mobile clinic at 32%, the youth centre (20%), ARV centre (4%) and the smallest percentage (2%) is for the hospital. The reason for high percentage of fixed clinic preference/acceptance is possibly that it is within the traveling radius of the participants. The mobile clinic was accepted/preferred as it is easily reached, and it travels to different points. The youth centre is still within the participants' traveling and residential radius, which is why it is accepted. ARV centre and the hospital are far away from the villages, and traveling towards Brits is reported as costly; thus presenting the mobile points as the preferred alternative. The 4% and 2% are those of participants who have been referred to the hospital and the ARV centre.

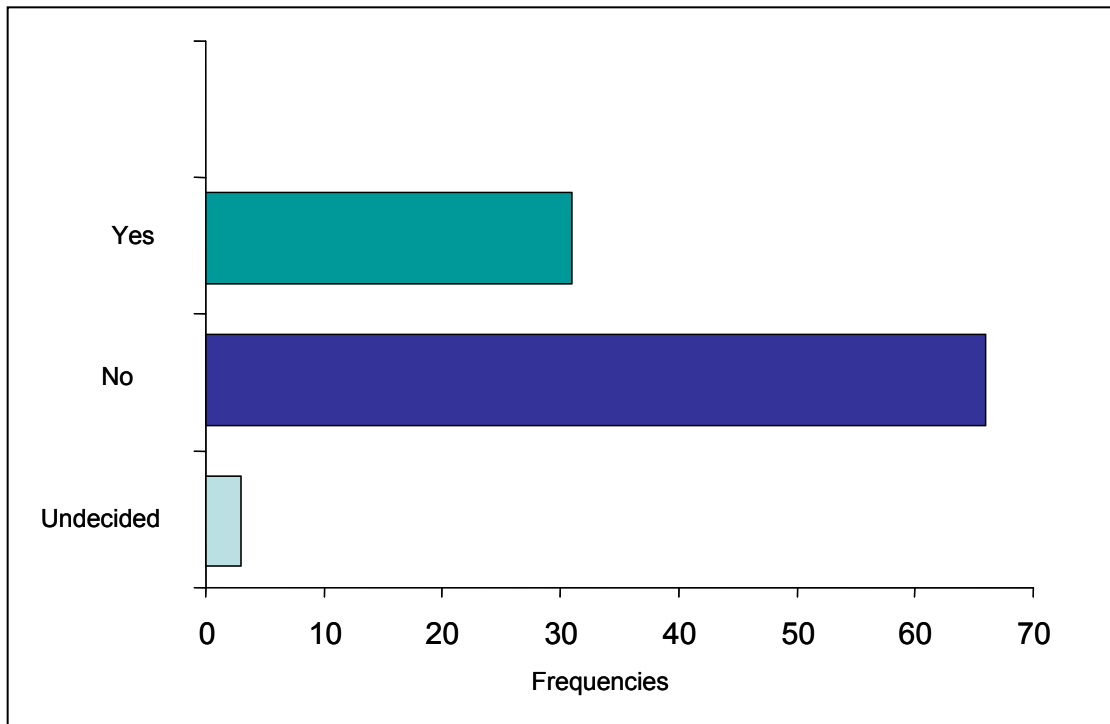


Figure 5.6: Termination of pregnancy at mobile and fixed clinics (N=100)

The diagrammatic illustration above indicates that the majority (66%) reported that the termination of pregnancy should not be encouraged in the clinics, even after a positive HIV test. Thirty one percent stated that Termination of Pregnancy should be encouraged in clinics after testing positive for HIV. It would appear that the majority espouse 'the right to life' philosophy.

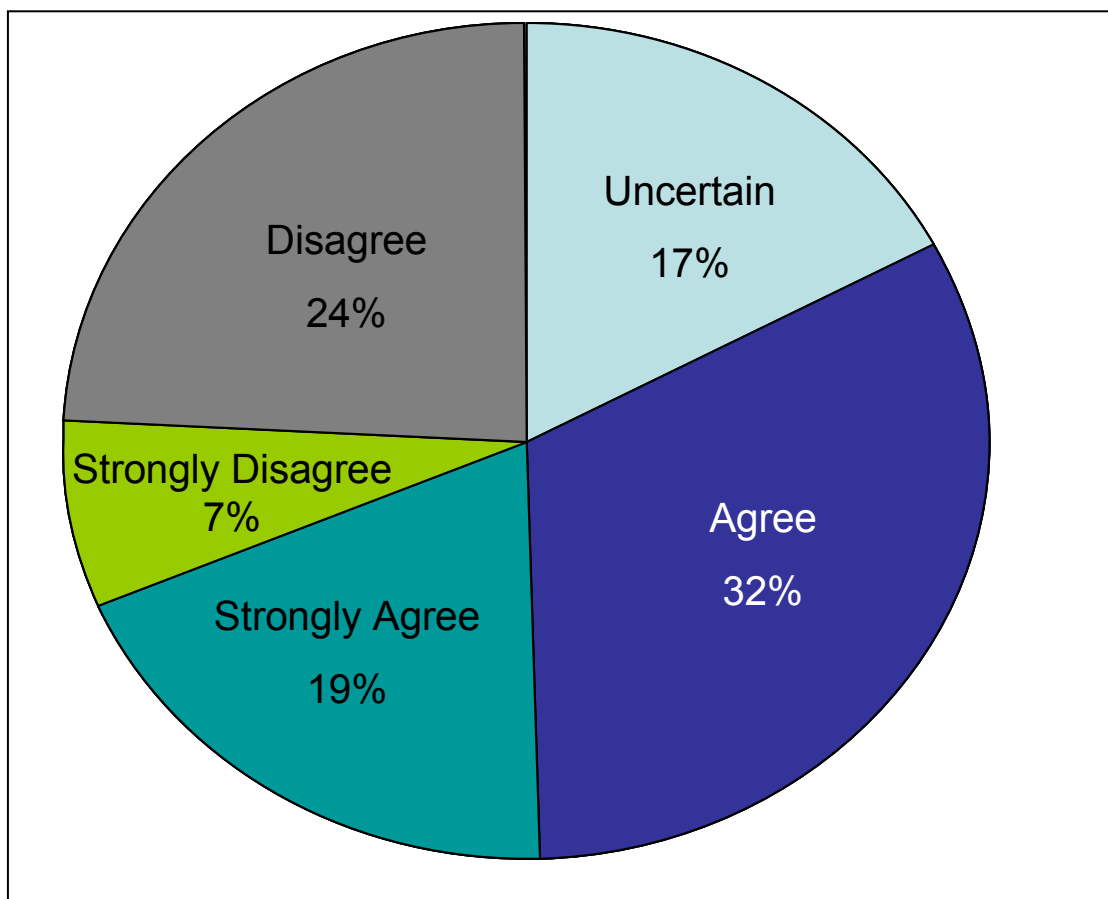


Figure 5.7: Perceptions regarding vertical transmission (N = 100)

The above figure (5.7) indicates that a 32% majority agreed that there was a chance of pregnant women incurring the vertical transmission of the disease. On the whole, the collective degree of agreeability of 51% (19% + 32%) indicates that HIV/AIDS information and knowledge dissemination have made significant inroads in obviating notions of denialism about basic facts among members of the community.

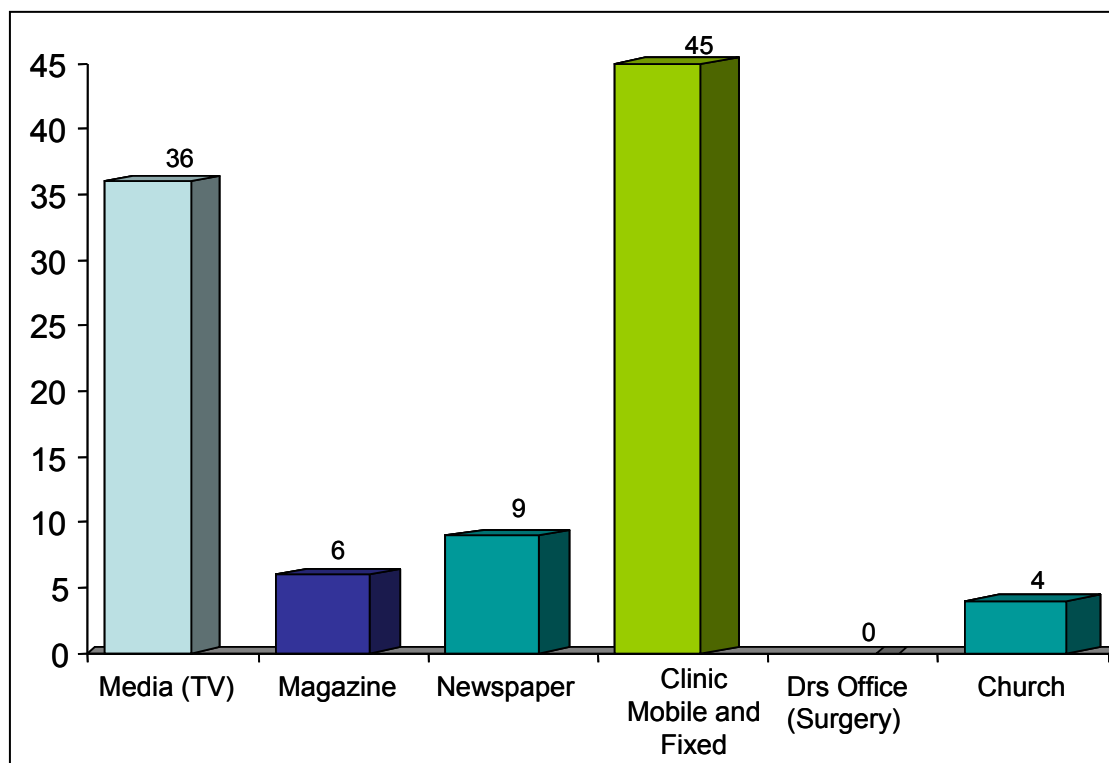


Figure 5.8: Source of HIV and AIDS information

It is apparent from the illustration above (Figure 5.8) that with a majority 45% response rate, both the mobile and the fixed clinic are the primary sources of information regarding HIV and AIDS healthcare services. Given the state of unemployment in the area, the rationale for the clinics becoming the dominant modes of information and knowledge dissemination, could be premised on the fact that the primary healthcare system is comparably less expensive than the private sector. The low percentages ascribed to the doctor's consulting room have to do with the prohibitive cost structure; and

that the church in the area is not serving as an HIV/AIDS information agency, is a serious indictment on the stakeholder constituencies.

5.5 TABULAR PRESENTATION OF STUDY QUESTIONNAIRE

A significant portion of qualitative information relating to the pilot study questionnaire has been discussed in sub-section 4.8.1 of Chapter four (page 71); that is, in the research design and methodology of the investigation. Following hereinafter is the combination of qualitative data and the tabulated quantitative data accruing from the data relating to the 100 participants. It is worth restating that the ten initial respondents of the pilot study withdrew prior to any meaningful progress having been made. The pilot study questionnaires were then refined and all 100 participants were then involved. These are still the same participants drawn from various age groups indicated in the age distribution illustrated in figure 5.1 above. The pre-trial questionnaires were pre-tested in the Madibeng area, and the respondents chosen from the fixed and mobile clinics served as refinement agencies for the standardization of the questionnaire as a research instrument ((Brink et al. 2006:166).

Table 5.3: Family types of respondents

Family type	N	%
1. Nuclear family	38	38%
2. Extended family	62	62%
TOTAL	100	100%

The prevalence of the majority 62% affirms the dominant *status quo* according to which blacks – irrespective of their rural or urban placement or location – characteristically live in the family home infrastructural environment. The possible reason for the majority 62% response above is that the majority of participants are still residing or staying at the family house, and possibly not yet married.

Table 5.4: Employment status of participants

Employment status	N	%
1. Employed	18	18%
2. Not employed	82	82%
TOTAL	100	100%

The 82% majority of respondents not employed in the area could be part of a broader trend that characterizes most rural areas in the country. The above statistical illustration is a poignant reflection of the general socio-economic challenges facing this particular community. This information has also been brought to light in Chapter 1 (on the Background/Context of the Problem).

Table 5.5: Women HIV/AIDS vulnerability factors

Contributory Factors	N	%
1. Lack of information; lack of education; no access to health services;	58	58%
2. No access to health services	5	5%
3. Lack of education	14	14%
4. None of the above	5	5%
5. All of the above	23	23%
TOTAL	100	100%

Option 1 above indicates that the *collective* impact of lack of information, no access to health care services, and illiteracy (58%), could contribute towards pregnant women becoming vulnerable to HIV /AIDS. 5% reported none of the factors, 23% reported all of the factors, and 14% reported lack of education as the contributing factor. For a sustainable interventionist approach to the resolution of the problem of vulnerability, it would be advisable to view it in a comprehensive context, such as indicated in the 58% collective response above.

Table 5.6: Percentile distribution of pregnant women's support base

	Support Base	Always	Sometimes	Often	Never	TOTAL
1	Partner	65%	30%	2%	3%	100%
2	Family	61%	32%	4%	3%	100%
3	Support group	22%	34%	28%	16%	100%
4	Counsellors	34%	24%	28%	14%	100%
5	Health workers	52%	29%	16%	3%	100%

It is obvious from the percentile distribution above that, irrespective of the 'source' of support, the magnitude and degree of support for HIV-infected pregnant women derives from the partner/spouse (65%), and the family (61%). It is interesting to note that counsellors and other health workers collectively account for the 86 % (34%+52%) of the patients' support base. Paradoxically, the support group (22%) was found to be less influential as a support base for the patients. Often, the support group has been the primary source of support networking, with the partner becoming the last item.

Table 5.7: Sexually active reproductive age group as likely vertical transmission stage

Response	N	%
Agree	55	55%
Disagree	45	45%
TOTAL	100	100%

The majority of 55 respondents (55% of sample size) agreed that most HIV-positive women are in the sexually active reproductive age group. The implication is that, unless preventive measures (e.g. safe sex, spousal fidelity and abstinence) are strictly adhered to, the community runs the risk of having its most reproductive sector becoming the main conduits of the spread of HIV and AIDS.

Table 5.8: Quality of health care services at respective sites

Site	Good	Reasonable	Improved	Moderate	Poor	Total
Fixed clinic	40%	11%	20%	12%	17%	100%
Mobile clinic	32%	34%	28%	6%	0%	100%
Hospital	29%	30%	33%	4%	4%	100%
ARV centre	20%	25%	15%	37%	3%	100%
Workplace	3%	10%	21%	39%	27%	100%
Youth centre	19%	22%	20%	29%	10%	100%

The respective 40% and 32% 'Good' responses for the fixed and the mobile clinic indicate the general perceptions of these two health care sites or facilities as being the most preferred by the local people. Although sometimes long queues and understaffed conditions, it would seem that these two facilities are very apt at making do with whatever resource shortages they have at their disposal. To the extent that trained professional staff are able to render some semblance of 'Good' services, is also an indication of their high motivation. As a variable of the health care system, it is worrisome that the workplace is mostly under-achieving in terms of the above-stated 'ratings'. On a closer inspection of the above statistical presentations, that the workplace is the lowest (3%) in the 'Good' category and the highest (27%) in the 'Poor' category; corroborates the perception that HIV/AIDS information and knowledge are not sufficiently disseminated at the respective places of employment.

Table 5.9: Convenience of health care facility

Site	Good	Reasonable	Improved	Moderate	Poor	Total
Fixed clinic	48%	20%	10%	15%	7%	100%
Mobile clinic	33%	30%	27%	8%	2%	100%
Hospital	30%	29%	35%	5%	1%	100%
ARV centre	20%	12%	28%	35%	5%	100%
Workplace	2%	10%	16%	50%	22%	100%
Youth centre	28%	33%	21%	17%	1%	100%

Once more, the fixed clinic and its mobile variant respectively feature as the two most 'Good' sites. Whereas the same sites (with 40% and 32% respectively) were the most preferred in terms of quality service delivery in the previous table (5.8); the fixed clinic and the mobile service points are still the most convenient. This could possibly be attributed to the proximity of these health care facilities to the place of abode of the villagers. Proximity is important, it translates to the time when those services are acquired by the recipients of those services. For an economically depressed sector (due to the high rates of unemployment), the nearer the health facility, the more affordable it is, as there are little, or no financial costs incurred to reach the health care-providing facility or site.

Table 5.10: Efficacy and efficiency of health care facility

Site	Good	Reasonable	Improved	Moderate	Poor	Total
Fixed clinic	44%	25%	16%	8%	7%	100%
Mobile clinic	28%	34%	34%	4%	0%	100%
Hospital	22%	27%	31%	19%	1%	100%
ARV centre	15%	14%	30%	32%	9%	100%
Workplace	4%	12%	18%	41%	25%	100%
Youth centre	12%	20%	14%	27%	27%	100%

Reminiscent of the trend observed in the preceding three tables, the fixed clinic and mobile service points (44% and 28% respectively) are still regarded

as the most efficacious, compared to the other three health care-providing sites. Correspondingly, and in accordance with the trend already observed previously, the workplace is the second highest “Poor” performing site with 25%. What has now emerged is that any comprehensive intervention strategy has to involve the employment sector as partners.

5.6 CONCLUSION

On the basis of “... the weight [support] of evidence” (Mouton 2001) obtained in the above tabular and graphical illustrations, it is irrefutable that primary health care services are rendered at both the fixed clinic and at the mobile visiting points, in some form or other. The analytic interpretations and discussions needed to be corroborated with irrefutable data/evidence. Data is not very useful on its own. Data has to be collected, processed and analyzed so that emerging patterns and relationships among related variables and phenomena could be established. The various forms of responses elicited thus far, were primarily intended to compare service delivery at both the fixed clinic and the mobile service points (clearly articulated in Table 5.2 on pages 79-82). The analysis and interpretation of data/ evidence gave practical meaning to the problem(s) under investigation.

In the context of this particular investigation, data was collected through the utilization of research instrument mainly being a questionnaire, the tape recorder and the group discussions assisted in gathering information. Qualitative data was analyzed earlier in the chapter, as indicated by the orientation towards the prosaic or narrational mode of discourse, such as when the results are explained or interpreted in words. Data was subsequently analysed quantitatively by the researcher and the two research assistants. Figures, tables and percentages were used in this chapter to collate the collected data into the quantitative mode of analysis. The end result of the data presentation and analysis/interpretation process is to configure the numerically abstract information into tangible and practical experiences for the resolution of real-life problems such as those identified in the realms of incongruent provisions of health care services at the designated research sites. For instance, the illustrations configured as figures 5.1 to 5.8,

and tables 5.1 to 5.10, depicted how the participants responded towards the respective interview- or questionnaire-based questions.

Conclusions and limitations of the entire study will be drawn from the results and interpretations already discussed in this chapter. Recommendations and generalizations based on the data will also be made in the next, and last chapter, of the study.

CHAPTER SIX

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

The previous chapter primarily focused on the qualitative and quantitative data collection and analysis. The collected data served as the basis upon which the truth value and 'weight' of the results/findings could be supported, as having practical and meaningful implications for the study and its relevant stakeholders. This chapter is intended to objectively broaden the study's practical implications and meaningfulness by presenting the conclusions and recommendations arrived at, the limitations of the research, as well as the opportunities for further research that, is congenial to salient aspects of the research.

6.2 AIMS OF THE STUDY

The primary purposes of the study were explicitly outlined in Chapter 1. Numerous studies and publications already exist, but none of these specifically addresses a comparative analysis of HIV/AIDS service provision at the fixed Jericho Clinic and its mobile visiting points. In a narrower scientific context, the study and its findings have the cumulative effect of fulfilling the need to contribute to the corpus of existing literature and to benchmark fixed and mobile clinic service delivery.

The general purpose of the study as stated earlier aims to comparatively examine the efficacy of mobile and fixed clinic health care services of in HIV and AIDS prevention at the designated research sites. To that extent, causal factors in the spread and prevention of HIV and AIDS, as well as the mobile and fixed clinics as agents of the existing system of healthcare provision, have become the variables among which associations have been theoretically and conceptually framed.

The extent to which the health care system at Madibeng is able (or perhaps not able) to alleviate the demand-supply overload or disequilibrium of health care services in the area, with the utilization of available resources at the fixed and mobile clinics. In other words: to determine the effectiveness (or lack

thereof) of the HIV eradication measures. Such effectiveness – or lack thereof – could only be determined by comparing the health services of HIV and AIDS among pregnant patients at the fixed clinic and the mobile service points. By its logical conclusion, such a comparative approach would also determine to what extent the Provide Counselling Testing (PCT) programme at the fixed clinic and the mobile service points is accomplished.

6.2.1 Objective of the study

The specific intention of the study was to describe, compare and analyse health care services provided (including HIV/AIDS care & management) by fixed and mobile clinics in the Madibeng sub-district of the North West Province.

6.3 CONCLUSIONS

The following conclusions are based on the findings/results of the study, and serve as the framework on which recommendations were constructed.

6.3.1 Age distribution of respondents

The respondents/participants in this study (Figure 5.1) were between the ages of 14 years and 45 years. The highest percentage (45%) was in the 14-18 years age cohort. The implication is that for HIV/AIDS prevention measures to be successful, this would be the age cohort to be targeted. The campaigns should also be extended to their schools.

6.3.2 Participants

In terms of the sampling criteria, pregnant women participated in the study. The very nature of the actual, or would-be state of “pregnancy” presupposes that only females satisfied this inclusion criterion.

6.3.3 Marital status of participants

The highest number of participants (84%), were single/unmarried, making it most likely that occurrences of the spread of HIV and AIDS could be rampant among this group, due to the partner infidelity factor. While the decision to be married or remain single is a matter of choice, married couples are more likely

to absolve themselves from infidelity because of respecting their marriages. This assertion is corroborated by the very low 2% divorce rate of the participants.

6.3.4 Frequency of attendance of prenatal care

That 58% of the respondents in Figure 5.3 indicated an irregular attendance of prenatal health care services, is a serious indictment on both the respondents and the health care providers. Apart from their own health concerns, pregnant mothers (or mothers-to-be) are expected to have the interest of the unborn child at heart. Lack of sufficient financial resources would also not be a very cogent reason, considering that 'the clinic on wheels' brings the services to the people and the fixed clinic also within the radius.

6.3.5 Extent of partner support/attitude

The highest percentage (89%) in Figure 5.4 illustrates that pregnant women were fully supported by their partners. Interestingly, this acts against the commonly-held perception that support groups were most likely to be the dominant mode of support for the pregnant women. However, the low 2% divorce rate in the area of study could also account for the high rate of spousal support. Marital status then, does not appear to be a factor insofar as support during pregnancy is concerned.

6.3.6 Preferred health care education and training site

The Jericho mobile service points and the Jericho Clinic are respectively the most accepted and preferred health care facilities in the area. The reason for this preference could be financially-induced (less travel involved), or service-oriented (better treated than at the other health care facilities).

6.3.7 Termination of pregnancy

The highest percentage (66%) illustrated in Figure 5.6, were of the view that TOP should not be encouraged in clinics after a pregnant woman has tested HIV positive. These were just the views and feelings of participants at the fixed clinic and mobile clinic visiting points.

6.3.8 Perceptions regarding vertical transmission

The Likert scale was used as an example of a summated rating instrument for testing knowledge; due to the fact that “perceptions” are constructed on the basis of attitudes and feelings. The highest percentage of (32%) in Figure 5.7 agreed that HIV can be transmitted vertically during pregnancy. Such a minor response implies among others, that the level of HIV knowledge is low.

6.3.9 Source of HIV/AIDS information

That the highest percentage (45%) in Figure 5.8 indicated the fixed and mobile clinics as their primary sources of HIV/AIDS-related information and knowledge, corroborates the viewpoint posited in 6.3.8 above; that is, confirmation that the education campaigns being advocated and propagated by both clinical systems have borne fruit.

6.3.10 Family types of respondents

The extended family mode, with a majority 62% in Table 5.3, is the dominant form of family structure. This valuable information is also helpful for other studies with a social science perspective. The fixed clinic and the mobile clinic offer HIV/AIDS health care services to patients from extended families.

6.3.11 Employment status

Table 5.4 illustrates that a majority 82% of the respondents were not employed. Considering the socio-economic hardships occasioned by such an unacceptably high rate of unemployment, it is highly commendable that both the fixed and mobile clinics offer some valuable nutritional packages (e.g. Philani porridge & Pellargon) to non-breastfeeding mothers in order to alleviate their condition.

6.3.12 Women HIV vulnerability factors

A majority of 58% of the respondents in Table 5.5 ascribed vulnerability to HIV/AIDS to the combined effects of lack of education, lack of information and no access to health services. For prognostic purposes, the implication is that viable HIV/AIDS strategies and interventions would have to embrace

comprehensive trajectories; one-dimensional approaches would certainly place a burden on the already limited financial, human, infrastructural and physical resources.

6.3.13 Support base

Table 5.6 indicates that the partner (at 65%) and the (extended) family (at 61%) are respectively the most dominant support bases for HIV-infected pregnant women.

6.3.14 HIV-positive and sexually active reproductive age group

Table 5.7 indicates that 55% of the respondents agree that most of the HIV positive women are in sexually active age group. This alarming state of affairs implies that the message of safe sex needs to be spread more aggressively. Risky behaviour in this age group does not argue well for the health of children to be born. Sexually active women have to be made aware of the dangers they are exposing themselves to.

6.3.15 Quality of health care services

Table 5.8 clearly indicates that the fixed clinic (with 40% good) and the mobile service points (with 32% good), are respectively viewed as offering better health care services than the other three health care facilities. The implication is that these two highly regarded health care-providing sites ought to improve on those 'negativity factors' such as those causing long queues. This implies that quality health care HIV/AIDS services are provided in rural remote villages of Jericho among pregnant women. Jericho clinic staff and Jericho mobile clinic staff try their level best in combating the spread of HIV/AIDS.

6.3.16 Convenience of health care services

The majority opted for "Good" responses of 48% for the fixed clinic and 33% for the mobile service points, respectively indicate some 'vote of confidence' in the services rendered; despite the prevalence of some challenges that exist. It is then incumbent on the local health care authorities to take the community into their confidence and institute the necessary improvements, before the community begins to feel that their trust has been exploited and misplaced.

Conveniently the Jericho fixed clinic is within the radius of the participants and the mobile clinic visits the points through traveling.

6.3.17 Efficacy and efficiency of the health care services

In Table 5.10, the trend observed in the preceding three tables, the fixed clinic and mobile service points (44% and 28% respectively) are still regarded as the most efficacious compared to the other three health care-providing sites. This shows that the fixed clinic and mobile clinic are ahead of all other possible health care sites when coming to issues of HIV/AIDS services among pregnant women.

6.4 A SUMMATIVE PERSPECTIVE OF THE CONCLUSIONS

A bird's eye view of the main units of analysis indicates the following pattern:

- The fixed and mobile clinics provide health maintenance activities, general medical care and HIV specific care at one visit. For pregnant women, this means integrating a range of preventive and therapeutic, medical, gynecological and psychological services into the same setting. This also helped to maintain the integrity and ensure accessibility to primary health care services;
- Having the same providers over time allowed pregnant women to develop appropriate confidence and trust in the clinics staff. A long-term patient provider relationship accurately assessed changes in clinical and social conditions faced by pregnant women;
- Pregnant women identify their needs when visiting the fixed and mobile clinics. Up-to-date and accurate information concerning all issues about HIV/AIDS services is freely and easily available;
- Women made their issues their highest priorities;
- Health care providers in both fixed and mobile clinic are more vocal about HIV/AIDS services;
- According to the results of the research both fixed clinic and mobile clinic services are suitable settings for HIV/ AIDS health care services among

pregnant women. Primary health care workers work as front line soldiers because HIV gained stronghold silently. The combating of the spread of HIV / AIDS in the Sub-district and teaching pregnant women how to cope living with HIV / AIDS is of importance and for the community to be saved from being wiped off from the face of the earth. Primary health care professionals should take decisive action against it.

6.5 RECOMMENDATIONS

The study has revealed the prevalence of some problems relating to the comparative analysis of HIV/AIDS health care services provided at both the fixed and mobile visiting points in the Madibeng Sub-District. The data collected served as the basis upon which the realism of the study's objectives could be achieved. The main recommendations listed below are propositions that are intended to improve the provision of HIV/AIDS-related services in the area, and are focused on human resources development (professional staffing of the clinics), HIV/AIDS management, as well as the nature and levels of education interventions. The propositions listed under each recommendation are not necessarily exhaustive, but serve as a basis for further deliberation.

6.5.1 Human resources development

Recommendations in this category relate to the professionalization of the health care service, intended to improve the knowledge and qualifications levels of the health care workers in the designated research sites.

- Professional health care staff at the fixed clinic and mobile clinic to be encouraged to attend regular in-training courses whose major content should include new developments and knowledge in the HIV/AIDS sphere. The employment of more staff would ease the burden on overworked members of staff;
- Training should be multidisciplinary, and be aimed at empowering professional staff in a range of skills and competencies (e.g. human relations, stress management and computer literacy);
- Voluntary HIV/AIDS work should be encouraged and rewarded. Members of the community rendering services in this regard should undergo specialized

short-courses, including practical training at both the fixed clinic and the mobile service points. The involvement of a para-professional cadre of volunteer workers reinforces a sense of joint ownership of the fight against HIV and AIDS;

- The local and provincial health care authorities should jointly allocate budgetary provisions for both the training of volunteers and re-training of professional staff, and incentivisation models be established to attract and retain more professional and volunteer workers;
- An additional professional staff complement is urgently needed for the Youth Centre and mobile service points in particular, where the dearth of service delivery has engendered complaints of “long queues” being some of the reasons associated with the non-attendance of prenatal services;
- Professional staff are to be reminded of their obligations to their clients, and desist from unprofessional conduct exhibited by the “gossips” alluded to by some clients.

6.5.2 HIV/AIDS management

The nature of HIV/AIDS management variables in this sphere relates to mechanisms applied in the control of the further spread of the disease.

- On the basis of the resolution on the employment of more staff above, a thorough statistical database should begin to be utilized. This should not only focus on pregnant teenagers and adult women, but include all members of the community. That would assist in keeping records of, among others, HIV/AIDS-related fatalities, rate of new infections, and financial implications on the province as a whole;
- Coordinated inter-departmental strategies should be deployed to address other aspects related to the HIV/AIDS pandemic, e.g. the upkeep of HIV orphans and labour relations in the protection of HIV-infected persons. Local civic, religious, traditional, political, and other organisations should be integrated to spread the message of prevention as a critical and inexpensive method of the management of HIV and AIDS. Inclusion of other stakeholders will help fixed clinic and mobile clinic in fighting the spread of HIV/AIDS.

- The continuous provision of cost-effective services is crucial, considering the rate of unemployed adults in the community. However, the provision of grants should be highlighted only as a fiduciary function of the state, rather than as enhancing promiscuous and risky sexual conduct among teenagers;
- Males should be encouraged to attend all clinically provided services, in order to broaden their scope on the subject and expand co-responsibility in controlling the spread of the disease;
- Pregnant mothers should be educated in the holistic perspective of HIV/AIDS in a socio-economic context;
- Voluntary counselling and testing should be emphasised by professional staff as critical approaches in control and prevention of the further spread of the disease;
- Prophylactic treatment to be continued to be given, because it is thus far the only treatment for prolonging the lives of HIV positive patients.
- Private-public partnerships and networking should be pursued with vigour. Programmes should be designed to involve the private sector in particular, for complementary disease management strategies to benefit their employees.

6.5.3 The nature and levels of education interventions

Variables falling under this category are those that are concerned with elevating the levels of awareness on the importance of preventing the spread of the disease.

The levels of HIV and AIDS awareness are not to become the sole responsibility of women and teenagers, but every community member. Awareness campaigns and workshops should include the youth, women's groups, religious leaders, traditional health practitioners, and the non-governmental organizations sector. The motto: "Knowing Your Status" should be the rallying 'slogan' for all the comprehensive HIV and AIDS health care initiatives;

- Professionally trained health care workers should regularly visit schools in the area to illuminate on a variety of topics relating to health in general, and HIV/AIDS in particular. Other HIV/AIDS agencies (e.g. Love life) should be jointly involved in education and awareness campaigns;

- The NWDOH should embark on ‘road shows’ in the area at least once a month, emphasizing the value of accountable sexual behaviour, and VCT;
 - In order to enhance comprehensive educational interventions, pregnancy issues should be integrated into programmes that address a range of other reproductive health issues such as family planning and substance abuse;
- Women in the area should be assisted to form their own empowerment organisations to serve as multidisciplinary support bases, which will reduce the male dependency syndrome. Consequently, they become more literate, entrepreneurial, and less vulnerable to manipulation by male chauvinistic demands. Assertiveness in negotiating safe sex must be a luxury available to all women especially if they are single, unemployed and even when still studying, and for those who are in violent relationships. Women’s generally ‘inferior’ status within the family and society should not create a social vulnerability mindset which makes them particularly blameworthy and susceptible to HIV infection;

6.5.4 Service delivery

- The main health care centre at Jericho should establish a multi-purpose unit to act as a referral centre assisting pregnant and HIV-infected women deal with challenges of abuse, sexual violence, and spousal support; since the infrastructure can accommodate that.
- Counselling and support for HIV-infected women should also be sensitive to gender-related and culture-sensitive issues. HIV support projects are only the beginning of the local communities’ response to the illness, and a new culture is needed to support all infected people regardless of their socio-economic status;
- In order to improve support base mechanisms, a record of prenatal clinic attendance should be kept and strict follow-up be adhered to for those patients not attending regularly. Reasons for non-attendance should be sought and be resolved as expeditiously as possible;
- Trained youth should be utilised to improve ailing services at the Youth Centre, and incentives (even if these are not pecuniary) be introduced to inculcate a culture of volunteerism and service to the community;

- Interactive multimedia technologies should be incorporated as education materials during community-based promotive education campaigns, as well during prenatal visits. This would enhance the profile of the three health care facilities as institutions of choice for every member of the local communities;
- A registry book should be kept at the entrances of both the fixed clinic and the Youth Centre for visitors and clients to record their service rating of the healthcare facility. For the mobile service points, this book should be kept by the staff and made publicly available at each service point. These ratings should be collated and acted upon on a weekly basis;

6.6 LIMITATIONS OF THIS STUDY

The issues listed below relate to factors that could render some aspect(s) of the limitations, due to either the researcher's oversight or some inherent flaw in the research design and research methodology itself. According to Polit & Hungler (1999: 259) the two health promoters served as mediators in the selection of participants, thus minimizing sampling bias. In eliminating the sampling bias, the researcher took note of factors such as punctuality where no member of the participant group was excluded on account of late arrival at the questionnaire and interview venues, and language competency in relation to translation. In addition, a respondent's/participant's personal views and perception of HIV/AIDS and other related issues did not constitute grounds for prejudicial treatment during any stage of the research. Furthermore, their levels of literacy/education did not subject them to automatic inclusion or exclusion in the study.

- For the number of research sites visited, out of a total of twenty two mobile clinic service points, only twenty were visited because other points are visited twice in a month (in addition to the one fixed clinic) during the questionnaires administration phase. To that extent, the validity, credibility, and reliability of the findings could become severely compromised;
- The group discussions were only held at the fixed clinic with 40% of the sampled population, and 50% at the mobile service points and the Youth Centre 10% were excluded. The transferability/generalizability of the findings could be invalidated;

- Only a few questions were translated into Setswana during the questionnaire administration phase. All the questions needed to be accorded the same treatment, in order to maximise participation and elicitation of responses;
- Although the number of females interviewed (100) constitutes a reasonable sample size, the thrust of the group discussions interviews at only one site (fixed clinic) with 40 participants, poses a problem for the credibility, validity, and reliability of the findings;
- Generalisation of results from this research will require a larger research sample. The Madibeng Sub-District has an estimated 500 or more villages. By implication, there are still many more mobile service points to be included in the survey;
- The study was conducted only in the remote village settings of Madibeng due to research funding constraints. The researcher had initially planned to conduct the investigation in the entire Madibeng area. There are still four other mobile clinics which render services on the mines and farms, where HIV and AIDS is still a major cause for concern. As a consequence of the afore-cite state of affairs, the analysis of results could reflect a demographically skewed picture in terms of urban, rural, peri-urban, or mining/farming dynamics and variables;
- With the help of two research assistants, quantitative data was analysed manually by using a code book and the tally sheets. That meant the statistical package for the social sciences (SPSS) and the services of a statistician were not implemented;
- The time frame allocated for the research was relatively short, as the scope of the dissertation was limited. In areas like Madibeng, a full two years' study should be conducted in order to improve the quality of health care services rendered by Madibeng sub-district ,especially with the issue of HIV and AIDS becoming a factor of the study's major unit of analysis;
- The questionnaires were pre-tested too close to their actual implementation and a few questions sounded repetitive when translated into Setswana – the participants' language.

6.7 FURTHER RESEARCH

The approach towards further research is closely linked to those factors identified as presenting limitations to the study.

- Further research of HIV/AIDS issues is required in all the other fixed clinics and mobile visiting points under the fiat of the Madibeng Sub-District health care authorities. There are still more fixed clinics, some rendering primary health care services for forty hours per week; and others twenty four hour daily health care services;

6.8 CONCLUSION

The chapter was thematically focused on the extent to which the study was relevant and meaningful as a source of reference for the improvement of health care services in the designated research sites. Data alone is not useful. It has to be processed and analyzed so that patterns and relationships can be explored. The research results indicated that HIV/AIDS services provided at both the fixed clinic and mobile service points, including antenatal or prenatal care, are almost similar. Promotive and primary health care is provided, rather than sickness care. It is the duty of the health care providers at Jericho mobile clinic and Jericho fixed clinic to intervene by slowing the progression of HIV infection because it has a negative impact on the lives of women. HIV/AIDS health care provision services in fixed clinic and mobile clinic among pregnant women bring together a team work and create appreciation by patients.

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APPENDIX A: The Pilot Study interview guide

Interview questions relating to: **A Comparative Analysis of HIV/AIDS Services on Fixed Clinic and Mobile Visiting Points in the Madibeng Sub-District.**

Please indicate the applicable answers with a cross (x).

SECTION 1: Demographic Information

A: Age cohort

Cross with x, the age group to which you belong

	Participant Category	14-18 years	18-25 years	25-35 years	35-45 years
1	Teenager				
2	Young woman				
3	Middle-aged woman				
4	Older woman				

B: Marital status

Which of the following best describes your marital status?

1. Single
2. Married
3. Divorced
4. Widowed

C: Family type

Which of the following family types resembles your family setting?

1. Nuclear family
2. Extended family

D: Frequency of antenatal care visits

Is this your first visit to the Antenatal Care Clinic?

1. Yes
2. No

E. Employment status

Are you presently employed?

1. Yes
2. No

F. Extent of partner support

How does your partner feel about this pregnancy?

1. Happy
2. Unhappy

G. Women vulnerability factors

HIV/AIDS impact on women is not only quantitative, women's subordinate roles in society also exposes them to unquantifiable emotional and psychological vulnerability. Which of the following do you think are the contributing facts? Cross with (x) for your correct answer next to the relevant 'box'.

- (i) Lack of education
- (ii) Lack of information
- (iii) No access to health services
- (iv) Financial dependence

1. (i), (ii), (iv)
2. None of the above
3. All of the above
4. (i)

H. Preferred healthcare education and training site

Education, information, training and knowledge on the prevention of Sexually Transmitted Infections and HIV/AIDS is best provided in which of the following sites? Cross with x inside the 'box' that represents your view.

1. Fixed clinic
2. Mobile clinic
3. ARV centre
4. Youth centre
5. Hospital

SECTION 2: Level of HIV/AIDS Understanding

I. Termination of pregnancy

Should termination of pregnancy be encouraged in clinics when a pregnant woman has tested positive for HIV?

1. Yes
2. No

J. Frequency of support base

Which of the following are more likely to become a strong source of support for pregnant HIV-positive women? Cross with x for only one frequency mode for the support group of your choice.

	Support base	Always	Sometimes	Often	Never
1	Partner				
2	Family				
3	Support group				
4	Counsellors				
5	Health workers				

K. HIV/AIDS Vertical Transmission

Infected pregnant women have a 15-45% chance of passing HIV to their newly born children during, or shortly after birth.

1	2	3	4	5
Strongly disagree	Disagree	Uncertain	Agree	Strongly agree

L. Sexually active reproductive age group as likely vertical transmission stage

Most of HIV positive women are in sexually active reproductive age group and the virus causing AIDS can cross the placenta and infect the baby still to be born. Do you agree or disagree with the statement?

- 1. Agree
- 2. Disagree

M. Quality of health care services at respective sites

How would you rate the health care service provision at the following sites?

	Site/service point	Good	Reasonable	Improved	Moderate	Poor
1	Fixed clinic					
2	Mobile clinic					
3	Hospital					
4	ARV centre					
5	Workplace					
6	Youth centre					

N. Convenience of health care facility

Which of the following health care sites is more convenient for you?

	Site/service Point	Good	Reasonable	Improved	Moderate	Poor
1	Fixed clinic					
2	Mobile clinic					
3	Hospital					
4	ARV centre					
5	Workplace					
6	Youth centre					

O. Efficacy and efficiency of health care services

How would you rate the efficacy and efficiency of the following health care sites in the prevention of the HIV/AIDS pandemic?

	Site/service point	Good	Reasonable	Improved	Moderate	Poor
1	Fixed clinic					
2	Mobile clinic					
3	Hospital					
4	ARV centre					
5	Workplace					
6	Youth centre					

P. Source of HIV/AIDS Information

Which of the following would you regard as the most common source of HIV/AIDS information?

1. Electronic media (e.g. radio & TV)
2. Magazines
3. Newspaper
4. Clinic Leaflets
5. Surgery Leaflets
6. Church Services

APPENDIX B: UNISA Research & Ethics Clearance Certificate



**UNIVERSITY OF SOUTH AFRICA
Health Studies Research & Ethics Committee
(HSREC)
College of Human Sciences
CLEARANCE CERTIFICATE**

Student No: 32401760

Project Title: **A COMPARATIVE ANALYSIS of FIXED & MOBILE CLINIC
HIV/AIDS SERVICES IN MADIBENG SUB-DISTRICT**

Researcher: D. HABEDI

Supervisor/Promoter: PROF. O.N. MAKHUBELA-NKONDO

Joint Supervisor/Joint Promoter: PROF. T.R. MAVUNDLA

Department: **Health Studies**

Degree: **MA (Health Studies)**

DECISION OF COMMITTEE

Approved

Conditionally Approved

Date: 15 January 2007

**Prof TR Mavundla
RESEARCH COORDINATOR: DEPARTMENT OF HEALTH STUDIES**

**Prof SM Mogotlane
ACADEMIC CHAIRPERSON: DEPARTMENT OF HEALTH STUDIES**

PLEASE QUOTE THE PROJECT NUMBER IN ALL ENQUIRES



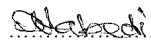
APPENDIX C: DECLARATION FOR FUNDING

6

Student number : 32401760

DECLARATION

I declare that A COMPARATIVE ANALYSIS OF FIXED & MOBILE CLINIC HIV / AIDS SERVICES IN MADIBENG SUB-DISTRICT is funded by myself but it will be highly appreciated if any assistance can be provided.


DEBBIE S.K HABEDI
(SIGNATURE)

06/02/2007
DATE

Student number : 32401760

DECLARATION

I declare that A COMPARATIVE ANALYSIS OF FIXED & MOBILE CLINIC HIV / AIDS SERVICES IN MADIBENG SUB-DISTRICT is funded by myself but it will be highly appreciated if any assistance can be provided.

Debbie S.K Habedi
DEBBIE S.K HABEDI
(SIGNATURE)

06/02/2007
DATE

APPENDIX D: NWDOH LETTER OF APPROVAL TO CONDUCT RESEARCH

01838/2611



HEALTH
DEPARTMENT:
HEALTH
NORTH WEST PROVINCE

2nd Floor Tirelo Building
Dr Albert Luthuli Drive
Mafikeng, 2745
Private Bag X2068
MMABATHO, 2735

**Directorate: Policy,
Planning & Research**

Eng. S. Malakane
Tel: (018) 331 5747/6
Fax: (018) 387 5617
E-mail
smalakane@nwpg.gov.za

To : Ms D.Habedi
Madibeng Sub-District
Date : 08 Aug 2007

From : Mr K.Rabanye
Director: Policy, Planning & Research

Subject: Approval for Research: **A comparative analysis of HIV and AIDS Services on fixed clinics and mobile points in Madibeng**

Approval is granted to conduct the above study in the North West Province, kindly make relevant arrangements with the management for suitable dates and times. Detail at the bottom of this letter has to be completed by you and returned to Policy, Planning and Research Directorate before your study may commence.

With kind regards

.....
Mr K.Rabanye
Director: Policy, Planning and Research
North West Dept of Health

The NWDoH will be furnished with final report by

31 December 2007
Submission date of the final report

D.Habedi
D.Habedi 24/08/2007

APPENDIX E: APPLICATION TO CONDUCT STUDY

5

1178 UNIT X EXT
MABOPANE
0190
17 May 2007

The Provincial office
North West Department of Health
Private Bag x 2068
MMABATHO
2735

Dear Sir or Madam

APPLICATION TO CONDUCT A STUDY

I hereby apply to conduct a study for MA (Public Health), at UNISA. Title is as follows
-: A comparative analysis of fixed & mobile clinic HIV / AIDS services in Madibeng
SUB-DISTRICT.

I am a chief professional Nurse working at Jericho Mobile clinic in Madibeng Sub-
District in Bojanala District. I am a part-time student at UNISA. Letter to Madibeng
Sub-District submitted in 2005.

I promise to ask information without any force and respect basic rights of participants.

I hope my application will be successful.

Your's faithfully
Debbie Habedi

APPENDIX F: INFORMED CONSENT FORM

8

**NORTH WEST PROVINCE
DEPARTMENT OF HEALTH**

**HIV TESTS. INFORMED CONSENT
HIV TOETS. INGELIGTE TOESTEMMING
UXILONGO. GAZI MALUNGA NESIFO SE AIDS IMVUME
HIV TESTS TETLA YA TLHALOSO**

Ihereby give written consent, after being fully informed regarding the implications of a positive test, to have the necessary blood tests performed on me to determine my HIV status.

Ekverleen hiermee skriftelik toestemming, nadat ek volledig ingelig was oor die implikasies van 'n positiewe toets, tot die uitvoering van die nodige bloedtoetse om my HIV status te bepaal.

Mina emveni kokuba ndicaciselwe ngokuzeleyo ngazo inkukaca neziphuma, indinika imvume ebhaliweyo okokuba igazi lam lingatsalwa lixilonggelwe intsholongwane I-HIV.

Nna ke fa tetla ka kwalo ya go tsewa madi go tihatlhobelwa ditwatsi tsa AIDS, morago ga tshaoso e e tletseng ka go ditlamorago tsa madi a a naleng ditwatsi tsa AIDS.

**SIGNATURE
HANTEKENING**

**OR THUMP PRINT
OF DUIM AFDRUK**

**WITNESS
GETUIE**

**CLINIC
KLINIEK**

**DATE
DATUM**

APPENDIX G: LABORATORY FORM

NATIONAL HEALTH LABORATORY SERVICE

PATIENT	IDENTITY NO.				ACCOUNT	NAME			
	HOSPITAL NO.					ADDRESS			
	HOSP./CLINIC					TEL. NO.	H		W
	WARD					CELL			
	SURNAME					EMPLOYER			
	FIRST NAMES					HEALTH CARE WORKER			
	ADDRESS					TEL. NO.		FAX	
	DATE OF BIRTH	GENDER		ETHNIC GROUP		PR #			
	SPECIMEN TYPE			ICD CODE		ADDRESS			
	DATE TAKEN	TIME TAKEN		HOSP CLASS		COPIES TO			
	MED. AID NAME					ADDRESS			
	MED. AID NO.			DEP CODE		HEALTH DISTRICT		RESP. CODE	
	PRINCIPAL MEMBER								
	PROJECT AC DETAILS								

CLINICAL INFORMATION

NORTH WEST ZAMBIA

COMPREHENSIVE CARE, TREATMENT AND MANAGEMENT PROGRAMME SPECIFIC TESTS

- | | | | | |
|--|----------------------------------|---|--|-------------------------------------|
| <input type="checkbox"/> HIV EIA (ELISA) | <input type="checkbox"/> HIV PCR | <input type="checkbox"/> Differential | <input type="checkbox"/> Cryptosporidium | <input type="checkbox"/> TB Culture |
| <input type="checkbox"/> HIV RAPID | <input type="checkbox"/> ALT | <input type="checkbox"/> Lactate (on ice) | <input type="checkbox"/> Isospora belli | <input type="checkbox"/> TB Sens |
| <input type="checkbox"/> CD4 (PLG) | <input type="checkbox"/> AST | <input type="checkbox"/> Cholesterol | <input type="checkbox"/> Hepatitis B sAg | |
| <input type="checkbox"/> VIRAL LOAD | <input type="checkbox"/> FBC | <input type="checkbox"/> Triglyceride | <input type="checkbox"/> TB Direct (AFB) | |

OTHER TESTS:

THE FOLLOWING DETAILS MUST BE COMPLETED

ID Number:

Current HIV intervention <input type="checkbox"/> Patient on PMTCT programme <input type="checkbox"/> Patient has never been on antiretrovirals <input type="checkbox"/> Patient has been on antiretrovirals but is currently no longer on them <input type="checkbox"/> Patient is currently on the antiretrovirals marked alongside <input type="checkbox"/> Patient has attended a VCT centre for HIV testing <input type="checkbox"/> Patient is currently attending a CHC for CD4 staging <input type="checkbox"/> Patient is about to start ART	Current HIV treatment <input type="checkbox"/> 3TC <input type="checkbox"/> d4T <input type="checkbox"/> NVP <input type="checkbox"/> KLT (Kaletra) <input type="checkbox"/> ddi <input type="checkbox"/> AZT <input type="checkbox"/> EFV <input type="checkbox"/> SQV <input type="checkbox"/> ABC <input type="checkbox"/> RTV <input type="checkbox"/> TDF <input type="checkbox"/> INH <input type="checkbox"/> RIF <input type="checkbox"/> Cotrimoxazole <input type="checkbox"/> Other _____ Please state: _____
---	--

Has this patient been transferred in from another program, e.g. TBCP YES NO

Months since first enrolling on ART at this facility irrespective of stops and restarts

PLEASE NOTE

Please note that only the tests listed above may be requested for the Comprehensive Care, Treatment and Management Programme. You need to also provide the correct project account (if applicable)



APPLY BAR CODE LENGTHWISE DO NOT WRAP AROUND



APPENDIX I: ANTENATAL CHART FOR CLIENT HISTORY

G.P.S. 811530383

ANTENATAL CARD

DEPARTMENT OF HEALTH
PROVINCIAL GOVERNMENT

NAME: BIRTH DATE:
 HOSPITAL NUMBER:
 ADDRESS: TEL (H): TEL (W):
 CLINIC/DOCTOR: TEL:

HISTORY: *L = Live END = early neonatal death
 MIS = miscarriage LND = late neonatal death
 IUD = intra-uterine death ID = infant death

Year	Gest Wks	Delivery	Sex	Weight *	Complications

Age: P: G: Cycle:
 LMP: sure/unsure
 Contraception: Stopped:
 Future family planning:

Social:

MEDICAL AND GENERAL HISTORY

Hypertension Fernal Epilepsy TB
 Cardiac Diabetes Asthma

 Medication:
 Operations:
 Allergies:
 FAMILY HISTORY: Twins Diabetes Congenital abnormality

EXAMINATION Date: D | M | Y | Y | Y | Y | Y | Y
 Height: cm Weight: kg
 Blood pressure: Urine:
 General: Breasts:
 Thyroid:
 Heart:
 Lungs:
 Abdomen:
 Other: fundal height: cm
 VAGINAL EXAMINATION: V + V
 * Cervix:
 Uterus:
 Address:
 Doctor/Midwife:
 SPECIAL INVESTIGATIONS date: result:
 Hb:
 Rh: Antibodies:
 RPR: FTA: Rx 1: 2: 3:
 HIV consent: Tel. box:
 Cx. cytology:
 MSU:
 PLAN: ANC: midwife/doctor Labour: midwife/doctor
 Normal Moderate High risk Normal Moderate High risk

SONAR

Date	Best Gest.	Presentation	Placenta	Liquor	F. Heart	F. Mov.	B.P.D.	FL	AC	Spine	Stomach	Kidneys	Bladder	Head	Sonar Gest	Weight	UARI	NAME	

Date: Notes:

TPH 261 A (811530383)

(c)

APPENDIX J: ANTENATAL GRAPH

DEPARTMENT OF HEALTH / PROVINCIAL ADMINISTRATION																				ANTENATAL CARD																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
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APPENDIX K: SHARE CODE SECRET TABLE

SHARE CODE SECRET TABLE – DO NOT RELEASE OUTSIDE HEALTH FACILITIES

Version 1

ASK THE CLIENT (OR CAREGIVER OF AN INFANT)

MESSAGE	Client's own mother's first name begins with: (=name of maternal grandmother of infant)																									
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Refused to test	E	A	W	T	J	E	T	J	W	T	X	F	L	Z	F	H	R	B	R	A	E	S	F	M	E	T
HIV+	X	H	A	S	K	R	B	Z	L	R	M	H	B	K	B	W	F	L	H	W	S	H	J	T	R	E
HIV-	Z	K	T	E	L	B	X	E	F	A	S	E	J	T	M	I	H	K	A	H	F	A	E	S	K	R
HIV+ child, but age < 18 months	T	S	F	J	Z	S	E	X	K	L	R	L	A	H	A	A	M	T	M	K	M	B	M	L	W	W
Affected child (mother +ve)	L	B	X	R	E	L	A	S	X	B	J	W	T	L	H	X	J	F	Z	T	J	R	W	K	Z	S
Unaffected child (mother HIV-ve)	H	L	M	W	A	T	Z	L	B	K	W	R	W	B	X	F	W	E	F	E	B	T	A	J	S	H
Not known(use(U, V, C, D, G or Q	U	D	C	V	Q	G	U	G	U	V	U	D	G	Q	C	U	G	V	G	Q	C	U	G	D	V	G

Security rules

- Give SHARE codes to every patient – write one on each ANC card, Women's Health Card, and each RTH card issued.
- Write a code letter in a box (or boxes) near the top right corner of the patient's - retained record front page.
- Write clearly one CAPITAL LETTER in a box. Use a pen
- If the patient's status changes, join on another box. Do not erase old codes
- Never just make codes (not applicable 'USE ANY ONE LETTER FROM :U,V,C,D,G or Q
- Find out the usual first name that is, or was used at home for the client's mother (i.e. grandmothers for infants)
- Do not tell clients letters to use – it must be something they already know
- Do not look up the table using the client's own name by mistake.
- Never write anywhere the mother's name or first letter used for the code. This SHARE part belongs to the client only.
- Remind the clients that the same originally given name must be supplied each time they tell a health worker.
- Patients have the right to refuse to give the name if they don't want the health worker to find out their status
- Keep this table safe in the health facility

APPENDIX: L: GROUP DISCUSSIONS AND INTERVIEW RESULTS OF THE PILOT STUDY

The tape recorder and field notes were the primary instrumentation methods used during the focus group interviews and discussions at the below-cited three primary research sites. The following discussions and interviews are a convenient sample of responses collected from each of the three research sites. This convenient mode of response sampling is in tandem with Polit & Hungler (2001:235) contention that not all interviews of a large population are possible to present in this chapter. The three respondents' views stated below were chosen for presentation in this appendix insofar as each (sampled response) represents the general views prevalent at the particular site; after each group's total responses had been reviewed and collated by the researcher. The respondents' actual statements have been presented without the interviewer's (edited) version. The group interviews were as follows:

Interviewer: What do you know about HIV/AIDS?

Respondent 1: HIV/AIDS is a sexually transmitted disease.

Respondent 2: HIV/AIDS is a disease that can be transmitted through blood and sex.

Respondent 3: HIV/AIDS is a disease that the person can get by nursing the HIV positive person without using gloves.

Interviewer: How are services rendered at the fixed clinic and at the mobile service points?

Respondent 1: Services are good in both clinics.

Respondent 2: Services are not good because of long queue.

Respondent 3: Services are slow, there must be enough staff.

Interviewer: Do you invite your partner to come and test when you book for ANC (antenatal counseling)? Do they come? If not why don't they come?

Respondent 1: Yes, my partner is invited, but he does not come; giving the reason that he is not ill [clinic is for ill people only].

Respondent 2: Yes, [my] partner is invited but unable to come because he is working.

Respondent 3: Yes, but partner fears that confidentiality is not practiced.

Interviewer: How best can the health workers run or improve the HIV/AIDS health services at the fixed and mobile clinics?

Respondent 1: Enough staff should be employed to improve the services.

Respondent 2: Provision of ARVS (Antiretrovirals) must not be in the hospital and ARV centre only, but also be available in fixed clinic and mobile clinic.

Respondent 3: Training of other health workers in HIV/AIDS related issues.

Interviewer: Do you know that when an antenatal patient has tested HIV-positive, nevirapine is available in the clinic to be administered during labour to the mother and the newborn within 2-3 days after birth?

Respondent 1: Yes, but I haven't seen that nor heard any person saying that she did get it.

Respondent 2: Yes, I read about it in the clinic HIV/AIDS leaflets.

Respondent 3: Yes, I was taught in the clinic about it, and it prevents mother to child transmission in most cases.

Interviewer: We can stop here. Thank you all for your participation.

Appendix L Table: Summary of thematic categories of group discussions and interviews

Themes	Frequency	Percentage
Discounting of rumour	10	100%
Voluntary HIV/AIDS testing, to know status	10	100%
Importance of patients' rights	5	50%
The right to confidentiality	5	50%
Fear of HIV/AIDS testing	5	50%
The right to privacy	5	50%
Discouragement amongst the populace	3	30%
Assertiveness by professional staff	2	20%

Themes	Frequency	Percentage
No confidence in local healthcare system	2	20%
Divulging of information	2	20%

Above table represents the identification of themes emanating from respondents' discussions statements, as selected from the multitudinous base of participants. The themes are from conveniently selected participants discussions.

Overview of emergent issues from the group discussions at the three research sites i.e Jericho clinic, Jericho Youth Centre and Jericho Mobile clinic.

As far as the group discussions were concerned, it is apparent that the participants' HIV/AIDS knowledge levels are not totally negligible. Most comforting is the fact that the prevalence of the disease is acknowledged, and not denied. The latter would be a worst-case scenario necessitating aggressive education and awareness interventions to be embarked upon by all stakeholders in the health care sector under whose jurisdiction the Madibeng sub-district falls. Another noteworthy observation is that :

- while service delivery at all facilities clearly needed to be improved (e.g. long queues and understaffed health care facilities); males; partners or spouses appear to be inconspicuous in the prenatal clinical visits.

APPENDICES