

**KNOWLEDGE AND CONCERNS ABOUT HIV/AIDS AMONG CHILDBEARING
WOMEN IN MAHALAPYE, BOTSWANA.**

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**A report submitted to the Faculty of Health Sciences in partial fulfilment of the
requirement for the degree of Master of Science in the field of Midwifery at the
University of the Witwatersrand, Johannesburg, 1999.**

DECLARATION

I declare that this research report is my own unaided work. It is being submitted for the degree of Master of Science (Nursing) in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in any other university.

A handwritten signature in cursive script, appearing to read 'Didi', written over a horizontal dashed line.

Date: 15.09.99

DEDICATION

I would like to dedicate this work to my mother and father, my brothers, sisters and their children for their support and encouragement during the difficult years of studying. To my daughter Lorato who will always be my source of hope and inspiration for a brighter future.

ABSTRACT

The aim of the study was to determine the knowledge and concerns about HIV/AIDS among childbearing women in Mahalapye, Botswana.

A descriptive study design using an interview schedule was used. The sample of 166 respondents (aged 18-29 years) was drawn from a population of women who attended Mahalapye clinics. Data were analysed by use of a computer and descriptive statistics including frequencies and percentages.

The demographic data showed that the majority (85.5%) of the respondents were not married, of whom 78% had partners and 9% were cohabiting. Seventy percent had secondary education and 70.4% were unemployed, hence their dependence on their partners and relatives for economic support.

The results showed that the respondents had a high level of knowledge about HIV/AIDS including risk factors, mode of transmission and prevention. All respondents (100%) seem to be aware that a person can contract HIV through having multiple sexual partners. The majority (98%) stated that HIV can be transmitted sexually and 97% said that infected pregnant women can transmit HIV to their babies. Ninety seven percent of women said that the spread of HIV can be prevented by using condoms, 21.1% said by having sex less frequently and 98.8% said people can protect themselves from contracting HIV by

through sharing utensils and food with an infected person, 38% believed that mosquitoes and insects can transmit HIV and 41.6% did not believe that a person infected with HIV might look healthy. Thirty six (21.7%) women perceived themselves not to be at risk of HIV owing to current monogamous relationships and their trust in their partners. Radio and health personnel were mentioned as the main sources of information about HIV/AIDS.

All (100%) respondents revealed that they were afraid of becoming infected with the virus and 98.2% said that they were concerned that men do not like using condoms. Even though 93.4% said that they were free to discuss sexual activities with their partners, 83.7% said that they would not find it easy to reveal their HIV status to their partner for fear of rejection and stigmatisation. The results showed that knowledge was related to education level. All women who had post secondary education indicated that AIDS cannot be cured by consulting traditional doctors ($p=0.037$) and Western doctors ($p=0.046$) as compared with those who did not have post secondary education. Age and marital status seem not to be related to knowledge ($p>0.05$).

Educational programmes targeted at these women should address the misconceptions about the mode of transmission. Women should be equipped with effective communication and decision making skills that will empower them to adopt behaviours that will protect them from becoming infected or infecting others. Further research is needed to determine the extent to which concerns expressed by women in this study are expressed by other groups of women.

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CHAPTER 1

1.0 INTRODUCTION

Acquired Immuno Deficiency Syndrome (AIDS) is a serious world-wide problem particularly in the sub-Saharan countries including Botswana. According to the World Health Organization (WHO 1996), the AIDS epidemic is more prevalent among women aged 15-25 years. Quinn (1996 : 101) states that, as many as two thirds of all new human immunodeficiency virus (HIV) infections are expected to occur in this age group. Most newly infected adults in Africa will be those engaged in unprotected heterosexual activities. The author goes on to say that it is estimated that sexual transmission accounts for 75% of all HIV infections and as a result the pandemic in women is rising sharply.

Botswana with a population estimated at 1,5 million people (1991 population census projections) is among the countries worst hit by the HIV/AIDS epidemic. According to the Botswana HIV Sentinel Survey (1997), approximately 207, 000 persons are infected with HIV and 25% of the sexually active and economically productive age group (15-49 years) are infected. The Sentinel Survey results also showed that the percentage of pregnant women with HIV increased by over 50% in both urban and rural areas between 1992 and 1997, with the highest incidence being among women aged 15-29 years.

The transmission of HIV like that of other sexually transmitted diseases, results from sexual behaviours that are rooted in social and cultural values that are not easily changed.

Women's generally low status both within the family and society at large makes them vulnerable to HIV infection. Women have less access to education and information and they are often illiterate, which makes them harder to reach with information about precautions about HIV/AIDS infection (Mwale & Burnard 1992). The same authors continued to say that cultural expectations of female submissiveness and male dominance prevent women from actively making choices and decisions about their lives, particularly with regard to limiting sexual risks and protecting their and their families health.

Mann (1994) argued that the global strategy to combat the AIDS epidemic is missing an essential element – the promotion of human rights and in particular the empowerment of women in decision making. He suggested that a social strategy to combat AIDS would have to incorporate programmes aimed at promoting the education of women and the elevation of their status in society. He recalled that monogamous women in East Africa continued to contract the disease because even in cases where they knew that their husbands were infected, they could not refuse their advances including their demands for unprotected sex. Women need to know their HIV status in order to make informed choices about their sexual activities and whether or not to terminate pregnancy in countries where such an option is legal and safe. Perinatal transmission can be minimised by preventing HIV infection in women and by making voluntary contraception available to infected women.

1.1 Statement of the Problem

Women have been shown to be at greater risk of contracting HIV/AIDS than men. They constitute the fastest growing category of people with HIV/AIDS. WHO (1996) estimated that about 42% of all AIDS cases reported are women. In 1996 the 15 – 29 year age group accounted for 56% of the reported cases of HIV/AIDS in Botswana, of which 68% were females (Seboni 1997).

Vertical transmission of the virus from mother-to-foetus is one of the major concerns throughout the world. The estimated rate of vertical transmission varies from 25% to 35% in Africa (Johnstone 1996). Pregnant women infected with HIV/AIDS are more prone to the complications of pregnancy and may even die before or after delivery. It is estimated that by the year 2000 there will be over 65, 000 AIDS orphans (i.e. children under 15 years whose mothers have died from AIDS) in Botswana (AIDS/STD Unit (ASU) 1997).

1.2 Significance of the Study

The findings of the study will be used to facilitate the development of educational programmes in terms of appropriate and relevant content for HIV/AIDS for peri-urban women. The results of the study will be used to increase nursing personnel's awareness of women's concerns regarding HIV/AIDS. In this way education of women may be improved.

1.3 Purpose of the Study

The purpose of the study was to describe the knowledge and concerns of childbearing women about HIV/AIDS. Data collected will be used to develop appropriate educational programs for childbearing women. The main aim is to equip women with effective communication and decision making skills that will help them adopt behavioural stances that will protect them from becoming infected or infecting others if already infected.

1.4 Research Objectives

The objectives of the research are to:

- Describe the knowledge of HIV/AIDS including risk factors, mode of transmission and prevention among childbearing women.
- Describe the concerns of childbearing women about HIV/AIDS.
- Determine whether demographic variables affect the knowledge and concerns related to HIV/AIDS among childbearing women in Mahalapye, Botswana.

1.5 Operational Definitions

For the purpose of this study the following definitions apply:

Knowledge – having information about HIV/AIDS including risk factors, mode of transmission and prevention.

Concerns – include feelings, beliefs and attitudes about HIV/AIDS.

Acquired Immuno Deficiency Syndrome – an illness caused by HIV which makes a persons body unable to fight any disease that attacks it.

Human Immunodeficiency Virus – a virus that infects a person's body systems which may lead to AIDS.

Childbearing women – women between the ages 15 and 29 years.

Cohabiting - has a partner and they are living together.

Single - has a partner but they are not living together.

High knowledge – giving correct responses asked about HIV/AIDS.

1.6 Limitations Of The Study

- This descriptive study was limited to women aged 18 – 29 years who attended the clinics.
- Generalization cannot be drawn about the entire population of women because the sample was drawn from a limited area.
- The interviews were conducted personally by the researcher who introduced herself as a nurse. This might have created a bias in the responses.

1.7 Conclusion

In this chapter the statement of the problem, the significance and the purpose of the study have been discussed. The research objectives and operational definitions have been outlined. The limitations of the study have been explained.

CHAPTER II

2.0 LITERATURE REVIEW

AIDS is a pandemic problem which could have a devastating impact on nations' health and social life especially among women. In this chapter the literature in relation to:

- The impact of AIDS
- Epidemiology of the virus
- Gender issues
- Types of occupation
- Knowledge and concerns about HIV/AIDS, is reviewed.

2.1 The Impact of AIDS

2.1.1 The global incidence

The United Nations AIDS Information Dissemination Service (UNAIDS)/WHO global AIDS statistics (1997) showed that in November 1997 it was estimated that there were 30.6 million people living with HIV/AIDS, of which 5.8 million had been newly infected during 1997. Of these 590, 000 were children. Since the beginning of the epidemic it is estimated that 12,9 million adults and children have developed AIDS and 11,7 million of

them have died. Forty-six percent of the infected were women and a further 460, 000 were children under 15 years.

2.1.2 Incidence in Sub-Saharan Africa

According to WHO (1996), most persons living with HIV/AIDS are in the developing world especially sub-Saharan Africa (20.4 million). Forty two percent of those infected are estimated to be women, mainly adolescents and young adults between 15 and 25 years of age. WHO estimates that by the year 2000 the cumulative total of AIDS cases may reach 50 million in the sub-Saharan region. Already it has been found that AIDS is a leading cause of death in sub-Saharan Africa (WHO 1996).

The HIV/AIDS epidemic is now well established in Southern Africa. South Africa is likely to experience one of the worst HIV epidemics in Africa (Williams & Campbell 1998). UNAIDS/WHO (1997) estimated that the number of adults and children infected with HIV/AIDS in South Africa is about 2.9 million and that the number of deaths due to AIDS is about 140, 000. The HIV prevalence among antenatal clinic attenders aged 20 to 24 years increased from 3 to 14 percent between 1991 and 1995. Williams & Campbell (1998) further state that in Kwazulu/Natal, which is believed to have the highest incidence rate, the epidemic is likely to peak at a prevalence of about 23%.

The United States (US) Bureau of the Census cited in Varga and Makubalo (1996) shows varying results of small scale surveys conducted among antenatal clinic attenders. The

rates of infection among these women is as follows: Swaziland 18 percent, Malawi 6-11 percent (rural sample) and 13 –20 percent (urban samples), and Zimbabwe 32-38 percent (urban sample). The data collected through annual antenatal clinic surveys represented the most important source of information in most countries as it is used to determine the growth rate of the epidemic.

2.1.3 The incidence of HIV/AIDS in Botswana

The presence of HIV was first noticed in Botswana in the early 1980's. The first case was reported in 1985 followed by four cases in 1986, and since then the presence of the virus has spread at an alarming rate. Botswana is now among the most infected countries in the African region (AIDS/STD Unit 1993).

According to the Botswana AIDS/STD Unit National AIDS Control Programme (NACP) report, there was an increase of over 148, 000 infected persons between 1992 and 1997. It is projected that by the year 2000, there will be more than 332, 000 people infected with HIV in Botswana.

Estimates based on the Annual Sentinel Surveillance Surveys by Botswana ASU show that in Gaborone, the capital city, seroprevalence increased from 14.9% to 34% between 1992 and 1997 while in Francistown, the second largest city, the increase was from 23.7% to 43%. Initially the epidemic was concentrated in urban areas but it has rapidly spread to the rural areas. Seroprevalence in Gantsi and Chobe/Kasane (rural areas) doubled from

9.5% to 18.9% and from 18.3% to 37.9% respectively between 1993 and 1995. The above estimates are the results of the surveys of pregnant women attending clinics in several sentinel sites in Botswana. It is estimated that about 95% of pregnant women in Botswana attend antenatal clinic at least once during pregnancy so the high attendance makes the surveillance data representative of the HIV status of pregnant women.

2.2 Epidemiology of the Virus

2.2.1 Modes of transmission

Epidemiological studies have shown that HIV has three major modes of transmission: heterosexual, perinatal and parenteral, with heterosexual transmission becoming more important than the others (Newell & Thorne 1997).

2.2.1.1 Heterosexual transmission

Heterosexual intercourse has become a significant means of HIV transmission even in countries where this was previously not the case (Newell & Thorne 1997). In America the epidemic initially affected mainly homosexuals and male intravenous drug users but women of childbearing age are now one of the fastest growing groups with HIV/AIDS (Rogers 1997). The greatest majority of HIV infected adults in sub-Saharan Africa are believed to have acquired the virus through heterosexual intercourse. In Botswana it is believed that 94% of the reported AIDS cases have contracted the virus through heterosexual intercourse (UNAIDS/WHO 1997).

2.2.1.1.1 Relationship between HIV and STDs

As stated by Quinn (1996) heterosexual transmission is accelerating mainly among individuals who are also at risk of other sexually transmitted diseases (STDs). Women have a much higher prevalence of STDs and untreated STDs facilitate the sexual transmission of HIV. WHO (1995) reported that the prevalence of curable STDs – gonorrhoea, chlamydia, syphilis and trichomonas was estimated at 250 million individuals worldwide.

Botswana ASU (1993) reported 135, 543 outpatient consultations for STDs. An etiological survey of asymptomatic STD infections among women conducted in Gaborone clinics revealed that 71% of women with STDs have multiple infections. In Zambia it was reported that at a Lusaka STD clinic the percentage of women who had a previous STD rose from 17.7% in 1985 to 49% in 1992 (Campbell & Kelly 1995).

It is believed that the use of condoms and the appropriate management of STDs at the primary care level can reduce the rate of HIV transmission. A study by Grosskurth, Mosha and Todd (1995) reported that improved STD case management at primary care level reduced HIV incidence by 40% in the Mwanza community in Tanzania.

2.2.1.2 Perinatal transmission

The rate of perinatal transmission of HIV from the mother to the fetus is on the increase. The epidemic in children is closely linked to the epidemic in women (Boland 1996). This is becoming of increased interest to researchers (Boland 1996; Johnstone 1996 & UNAIDS/WHO 1997).

According to the WHO (1994), if a woman is infected with HIV and becomes pregnant her risk of having an infected child is approximately one in three. WHO (1995) estimated that world wide, 5-10% of all HIV infections in 1993 are thought to have been acquired through perinatal transmission. Newell and Peckham (1993) stated that the estimated rate of vertical transmission varies from 15% to 20% in Europe, 15% to 30% in the United States of America (USA) and 25% to 35% in Africa. In Botswana it is estimated at 30% (ASU 1997).

Perinatal transmission may occur in utero during delivery or postnatally through breast-feeding. It is not clear when the infection occurs. However, attention is being focussed on events surrounding delivery (Johnstone 1996). Lindberg (1995); WHO (1996) and Gray (1997) argue that the rate of transmission seems to be higher in women who are newly infected and in those who already have the symptoms of AIDS. They are supported by Quinn (1996) who further said that maternal stage of disease, high viral titres, low vitamin A concentration, chorioamnionitis and premature rupture of membranes are associated with increased perinatal transmission.

2.2.1.3 Breastfeeding

Breastfeeding may explain the higher transmission rate in Africa. It is believed that breastfeeding may double the risk of transmission of HIV. In most developing countries, like Botswana, infant mortality is estimated to be 5-10 times higher than in developed countries (WHO 1996). Diarrhoeal diseases, malnutrition and respiratory tract infections account for most of the deaths amongst children. Therefore, WHO and UNICEF encourage breastfeeding by the baby's own mother regardless of her HIV status. But UNAIDS now "encourages as much information as possible on the relative risks of breastfeeding and infant formula feeding to be made available to HIV positive mothers, requiring that they be tested to enable them to decide for themselves whether to breastfeed or not. Countries are therefore encouraged to make voluntary testing and counselling more widely available so that women can find out if they are HIV positive and thus make more informed choices on issues such as breastfeeding" (Foster 1997 : 9).

2.3 Gender Issues

Women are a disadvantaged group whose status and position in society is low in comparison with men. This places women at high risk of acquiring sexually transmitted diseases including HIV (Vos 1994; Danziger 1994; Campbell & Kelly 1995; MacDonald 1996). The subordinate position of women differs from place to place but its impact is similar throughout the world. However, the question of gender inequality must be addressed seriously if women are to play an active and meaningful role in curbing the rapid spread of HIV.

2.3.1 Socio-cultural factors

There are socio-cultural factors that put women at risk. These include attitudes that devalue women and give men power and control and reduce women to subservient states in all human relations (Campbell & Kelly 1995). This predisposes women to violence which includes rape, sexual harassment, battering and assault. Violence can also result from inequitable power relationships between men and women and hence lack of power to negotiate for safer or protected sexual practices (Varga & Makubalo 1996). Culturally women are not permitted to discuss sexual practices including condom use. To do so, risks accusations of infidelity and may result in stigmatisation, violence, rejection and even divorce in some instances, which may in turn result in poverty since most women are economically dependent on their male partners (Mwale & Burnard 1992).

2.3.2 Cultural beliefs

In Botswana there is a belief that a man should have more than one partner. If a woman denies her partner or husband sex, then the man is likely to seek a sexual relationship elsewhere (MacDonald 1996). This behaviour can therefore promote spread of the infections. Women are quite often blamed for spreading the infections because it is believed that STDs are women's diseases (Danziger 1994). Thus they may suffer violence or rejection once their HIV status is known (Ditirwa 1994). This could be the reason why some women decide not to reveal their HIV status hence spreading the infection.

Men also believe that if they have sexual activities with teenage girls their blood will be cleansed. Young women are often coerced into such activities by older men. This again is closely aligned to the economically disadvantaged status of women in the society since such women are often enticed by small monetary and material rewards (Danziger 1994). As a result of early sexual encounters women are exposed to social problems such as teenage pregnancy, early parenthood and unprecedented levels of school drop out. They fall pregnant despite the fact that family life education is taught in schools. Seboni (1997) stated that in Botswana pregnancy accounts for 60% of the girls who drop out of schools. All of these problems further reduce women's status. This further influences their position in decision making processes in the society. Overby and Kegeles (1994) and Varga and Makubalo (1996) established that young women may be powerless in negotiating for safer sexual practices in any type of relationship. The authors further suggest that females initiate sexual activity at an early age and go through a series of monogamous relationships with older men, hence their failure to negotiate for safer sex. Despite limited control over when, with whom and how they engage in sexual activity, women are at the same time expected to assume responsibility for the prevention of both pregnancy and STDs including HIV infections (Bobak, Lowdermilk & Jensen 1995).

2.4 Types of Occupation

It may also be that some occupations put women at greater risk of HIV infection (WHO 1995).

2.4.1 Commercial sex

While commercial sex seems to be a very old social problem for all human society, its continued practice and the advent of HIV/AIDS is a very serious health concern particularly with reference to the status of women. Most of the women who are involved in sex work do so as a source of income to support themselves and their families.

Commercial sex often puts women's lives at risk of infection as most of the clients refuse to use condoms, especially when they are paying a lot of money for their service. A study done by Karim, Karim, DipData, Soldan and Zondi (1995) among South African sex workers aged 17 to 34 years revealed that if women insisted on condoms being used by their clients, they experienced physical abuse and had their earnings reduced. Therefore, enabling sex workers to get their clients to use condoms can help in the prevention of HIV infection, but is a behavioural risk not easy to change.

2.5 Knowledge and Concerns About HIV/AIDS

Women constitute the fastest growing category of people diagnosed with HIV/AIDS (Nyamathi, Flaskerud & Leake 1997). As more and more women are becoming infected attention should be given to understanding women's knowledge and concerns about HIV/AIDS.

2.5.1 Knowledge

Knowledge is a necessary prerequisite to make informed and responsible behaviour choices and decisions. Lack of information might expose people to HIV/AIDS.

Matthews, Kuhn, Metcalf, Joubert and Cameron (1990) argue that knowledge about AIDS and safer sexual practices is necessary. Several researchers (Stiffman, Earls, Dore & Cunningham 1992; Griffin & Brecht 1995 & Matthews et al 1990) however argued that knowledge alone is not sufficient since it does not necessarily lead to the behaviour change required. Knorr, Tlou and Elmurry (1996) reported however, that women in their study revealed that knowledge about AIDS made them change their behaviour.

2.5.2 Concerns

According to Williams (1990) concerns of becoming infected and infecting others with HIV is a powerful motivator to change behaviour. Overby and Kegeles (1994) reported that participants in their study expressed a high degree of concern about AIDS. The authors further reported that individuals who had regular partners expressed less concern about acquiring the disease. If people are less concerned about HIV/AIDS they might not see the need to talk about it, and hence the risk of acquiring the infection may be increased.

To understand and address the above concepts the following will be reviewed:

- Knowledge and beliefs about AIDS
- Misconceptions relating to HIV/AIDS
- Knowledge and prevention measures
- Concerns about HIV/AIDS

2.5.3 Knowledge and beliefs about AIDS

Studies done by the AIDS/STD Unit (1993); Knorr et al (1996); Mbengashe (1996) and Varga and Makubalo (1996) among various groups of people especially women, revealed that women had high levels of knowledge. Areas in which women were especially knowledgeable were that AIDS is incurable that it is spread by sexual intercourse, and that it is preventable.

However, it has been found that women have incorrect knowledge and are deterred by some cultural taboos and beliefs in their effort to curb the spread of HIV. Knorr et al (1995) reported that one third of women in their study had incorrect knowledge about transmission and 34% expressed incorrect beliefs about AIDS. In their study, 21% of women denied the existence of AIDS but were able to say that AIDS was caused by sexual contact. Furthermore, 46% of the same women said that AIDS knowledge helped them to change their behaviour. Their findings showed that less educated women were less informed.

Some participants in Varga and Makubalo's (1996) study also expressed the belief that AIDS does not exist because they had never seen anyone with AIDS. As a result they felt that there was no need to discuss AIDS related issues. Mbengashe (1996) reported that some respondents in his study showed lack of knowledge about the difference between being infected with HIV and being ill with AIDS because they were not sure whether a healthy looking person could harbour the virus or not.

2.5.4 Misconceptions about HIV/AIDS

In order to be able to prevent infection, individuals must have knowledge about transmission and preventive measures. Despite good knowledge about HIV/AIDS, misconceptions still prevailed over the mode of transmission of HIV through casual contact. Mbengashe (1996) reported that participants believed that HIV could be transmitted through direct contact, for example, kissing. Some revealed that they were scared to interact with infected persons as they might become infected by them. Knorr et al (1996) reported that in Botswana many women also lack an understanding of the mechanism of sexual transmission. This misunderstanding may be reinforced by traditional belief that equates AIDS with boswagadi (an illness that affects a woman who has lost her husband and who was not treated traditionally afterwards). In the same study women also held a belief that AIDS is caused by the mixing of body fluids of multiple partners and not necessarily by the transmission of a virus present in a particular individual. Other misconceptions about HIV transmission held by women are that one can get infection from toilet seats, sharing utensils, mosquito bites, coughs and sneezes.

(Chang & Hill 1996; Knorr et al 1996; Mbengashe 1996; Govender, Bhana, Pillay, Panchia, Padayeechee & De Beer 1992).

2.5.5 Knowledge about method of prevention

The commonly mentioned methods of prevention are using condoms, having only one partner, abstinence and avoiding contaminated blood.

Most of the studies done in Botswana revealed that knowledge of methods of prevention is high. The three main identified methods were: using condoms, having only one partner and abstaining from sexual activities (Knorr et al 1996; Bagwasi 1994; AIDS/STD Unit 1993). Even though women maintained monogamous relationships, 70% perceived themselves to be at risk because they did not trust their partners. Despite their not trusting their partners and their high level of knowledge about HIV/AIDS, condoms were infrequently used (Knorr et al 1996). In the Botswana AIDS/STD Unit (1994) study, females revealed that they felt powerless in demanding the use of condoms while males agreed that they dominate relationships and lack respect for women. In contrast to this, women in Korea mentioned that they give their husband condoms when they leave their homes and also discuss with their husbands the importance of avoiding extra marital relationships (Chang & Hill 1996).

In the Mbengashe (1996) and Overby and Kegeles (1994) studies, adolescents revealed that condoms should be used but not in a committed relationship as this makes partners

feel hurt, insulted and angry. It is believed that men have greater power over women in relationships which makes it difficult for many to ascertain the risky behaviours their partners may engage in outside of their own relationships (Knorr, Tlou, Elmurry & Moeti 1992). The belief that initiating condom use could be met with adverse consequences including abandonment and violence, may further inhibit self protection behaviours.

Rapinyana's (1995) and Bagwasi's (1994) studies in contrast with previous studies found that not all women are scared to discuss sexual practices including condom use. Both studies revealed that women were comfortable with the use of condoms. They went on to show that there are cases where women have asked their partners to use condoms.

2.5.6 Concerns about HIV/AIDS

The concerns commonly expressed by women about HIV/AIDS include mother to child transmission, fear of getting infected and someone they know acquiring AIDS. In Rapinyana's (1995) study, 84% of the women expressed the fear of having children as they might infect them. Furthermore, 70% of them indicated that they were willing to have an HIV test before falling pregnant. In the same study, women were concerned that men do not like using condoms. However, 88% believed that both men and women should carry and use condoms all the time to prevent infections. The women believed that they should reveal their HIV status to their partners.

Overby and Kegeles (1994) reported that adolescents in California expressed a high degree of concern which included someone they knew acquiring AIDS and getting infected themselves. Though they were concerned, they perceived themselves not to be at risk because they trusted their partners.

Women are also concerned about stigmatisation and discrimination of AIDS victims which results in them not revealing their status. This may contribute to an increase in incidence. Ditirwa (1994) reported in her study that women withheld their HIV results because they were aware of and feared the AIDS stigma. Chang and Hill (1996) stated that women expressed the concern that persons infected with AIDS were rejected by their families.

2.5.7 Conclusion

The literature shows that AIDS is a world-wide problem. Furthermore, it appears that women are increasingly becoming affected. Socio-cultural factors like poverty, the status of women in society and gender inequalities put women at increased risk of becoming infected.

Studies done on knowledge about HIV/AIDS revealed a high level of knowledge among women. Women's misconceptions about the mode of transmission of HIV and their lack of power in sexual relationships enhance their risk of contracting the virus.

CHAPTER III

3.0 METHODOLOGY

This chapter discusses the method of the study including the design, the setting, population, sampling procedure, data collection procedure, the research instrument and ethical considerations.

3.1 Research Design

The study design is a descriptive survey. Descriptive surveys serve the purpose of describing characteristics, opinions, attitudes or behaviours as they currently exist in a population. Descriptive surveys do not require any experiments because the aim is not to explain or to understand the underlying causes of the variables of interest. One of the limitations is that the researcher has no control over the independent variables (Polit & Hungler 1991) and therefore there is a problem of biases.

3.2 Setting

Mahalapye was chosen as a study setting because there were no active programmes on education and prevention of HIV/AIDS in the area. Mahalapye is a peri-urban area with a population of 28078 (according to 1991 population projections). Of this number 15308 are women. Furthermore, 11674 are between 12 and 49 years of age. Women head nearly

50% of the households which generally have lower incomes and a higher number of economic dependants than male headed households (Botswana 1991 Population Census). The working population is estimated at 12579.

Mahalapye is situated in the eastern part of the country in which most of the country's population is concentrated. The town is midway between the two cities of Gaborone and Francistown (see Appendix 1).

There are six clinics in Mahalapye. Women attend these clinics on a daily basis for comprehensive health services.

3.3 Population

The study population consisted of all women who attend the six clinics.

3.4 Sample

All clinics were included in the study because women from different locations may have different levels of knowledge and concerns.

A sample of 166 was drawn from a population of women aged between 18 and 29 years. A systematic method of sampling was employed to interview participants who attended the clinics. According to Polit and Hungler (1991) systematic sampling is a probability

sampling approach that involves the selection of every K^{th} case from some list or group, such as every 10th person on a patients list. The advantage is that the results are obtained in a more convenient and efficient manner.

3.5 Sampling Technique

The number of women aged 15-29 years, who attended the six clinics was collected over the period of one month. In consultation with a statistician a sample size of 5-10% was considered appropriate. Thus a sample size of 7,5% for each clinic was determined from a population of 2184 women.

Every third woman in the study population who came to the clinics was chosen. Women were given numbers from one to three and the one who had number three was chosen for interview. If the chosen one was not able to be interviewed the procedure was started again from one. The first woman who came to the clinic and met the criteria of the study population was given a number and the first one with number three was interviewed.

3.6 Inclusion Criteria

All clinics in Mahalapye and every third woman between 18 and 29 years regardless of her HIV status and parity were included in the study.

3.7 Research Instrument

A structured interview schedule with close ended questions was used to collect data (see Appendix 2). An open ended question was used to allow the respondents to express their views. Closed ended questions are appropriate for gathering factual information and are easy to administer and analyse. The interview schedule was developed by using some of the questions from the Botswana AIDS/STD Unit studies about monitoring trends in youth sexual behaviours. Written permission was obtained from the unit to use the instrument (see Appendix 3). The researcher included other questions to meet the needs of the study, for example, the questions pertaining to the concerns about HIV/AIDS in section III of the interview schedule.

The schedule was divided into sections: demographic data, knowledge and concerns questions about HIV/AIDS. The schedule was written in English, but the actual interviews were conducted in Setswana and translated back into English. Women who understood English were interviewed in English. The interview method was chosen in order to get a higher response rate and to make it possible for the researcher to clarify and explain questions immediately.

3.8 Pilot Study

Five women from one of the clinics were interviewed to determine the clarity of the questions. No changes were made as the questions seemed clear to the respondents.

3.9 Data Collection

Data was collected during a three week period in July. All interviews were carried out personally by the researcher. Women who agreed to participate in the study were interviewed in private.

3.10 Validity And Reliability

The tool was given to the supervisor and colleagues for face validity. The tool and the protocol were submitted to the research office in the Ministry of Health (Botswana) for comments. As a result of their comments and suggestions a number of changes were made to the interview schedule. This involved the rephrasing of certain questions and addition of others. For instance in the demographic data, under “marital status” the researcher added, if single, separated, divorced or widowed do you have a partner? yes/no; Under “religion” the churches were categorised into protestant (for example, United Congregational Church of Southern Africa, Anglican and Seventh Day Adventist), Spiritual (for example, St John & St Gabriel). Roman Catholic and others. Under method of family planning the duration of using the method was added.

Under “knowledge” variables the following were added - Have you known any person with HIV/AIDS and were you related to that person?

Under concerns the following were added:

- Would you worry if your partner does not use condoms?
- Is there anything you would like to ask or discuss with me about HIV/AIDS?

The structure of the schedule and the fact that the researcher conducted the interviews and asked questions in the same order enhanced reliability.

The issue of content and construct validity was not addressed.

3.11 Ethical Considerations

- Approval from the committee for Research on Human Subjects was obtained (see Appendix 4).
- Permission was also obtained from the Botswana Ministry of Health, Medical Officer in charge of Mahalapye clinics and the Chief Medical Officer in charge of Mahalapye hospital clinic to conduct the study in Mahalapye (see Appendix 5-10).
- Participants' informed consent was obtained and verbal consent was obtained after explaining the purpose of the study and assuring them of confidentiality and anonymity.
- The information sheet (see Appendix 11) was read to every participant selected into the study and who agreed to participate.

- Participants were also told that participation was voluntary and they were free to discontinue the interview at any stage. Those who were unable to participate were attended to by the clinic staff as usual and left.

3.12 Data Analysis

Descriptive statistics were used to describe and summarise data. Statistics are described in frequency distributions, graphs and tables. Further analysis, such as bivariate analysis was done in consultation with a statistician and with the use of a statistical package for social sciences (SPSS).

3.13 Conclusion

In this chapter the study methodology has been discussed. The population and sampling procedure have been described. The development and testing of the data collection instrument have been explained. Ethical considerations have been explained and the relevant permissions sought and obtained have been included. Finally, data analysis has been explained.

CHAPTER IV

4.0 FINDINGS AND DISCUSSION OF FINDINGS

4.1 Introduction

In this chapter the findings will be presented and discussed. Data was coded and analysed by computer. Narrative and descriptive statistics such as frequencies and percentages are used to present the data.

One hundred and sixty six women who attended clinics in Mahalapye were interviewed.

Table 4.1 Distribution of the respondents according to clinics (n = 166)

Name of Clinic	Frequency	Percentage
Airstrip	31	18.7
Baitiredi	32	19.3
Leetile	21	12.7
Madiba	29	17.5
MCH	27	16.3
Xhosa	26	15.7
Total	166	100.0

4.2 Demographic Data

4.2.1 Age of the respondents

The table below shows the frequency distribution of age of the respondents.

Table 4.2 Distribution of age of the respondents (n = 166)

Age	Frequency	Percentage
15-18	22	13.3
19-22	63	38.0
23-26	51	30.7
27-29	30	18.1
Total	166	100.0

Just over half (51.3%) of the respondents were between 15 and 22 years of age. This group is the group which is most affected by HIV/AIDS (WHO 1996).

4.2.2 Marital status

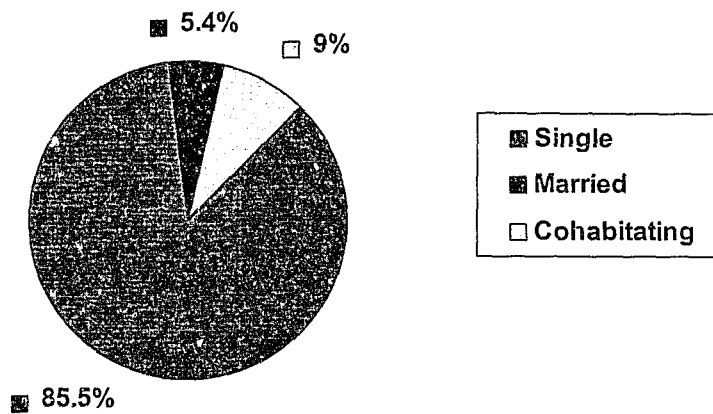


Figure 4.1 Marital status of the respondents (n = 166)

The majority (85.5%) of the respondents were single and 9.0% were cohabiting.

4.2.2.1 Partners

Table 4.3 Number of respondents who had partners (n = 166)

Response	Frequency	Percentage
Yes	155	93.4
No	11	6.6
Total	166	100.0

Data shows that most (93.4%) of the respondents had partners. Of the 85.5% single women, only 11 had no partners. The results may suggest that if women in the study are sexually active, they may be at risk of contracting HIV through heterosexual intercourse if they do not take preventive measures.

4.2.3 Number of children

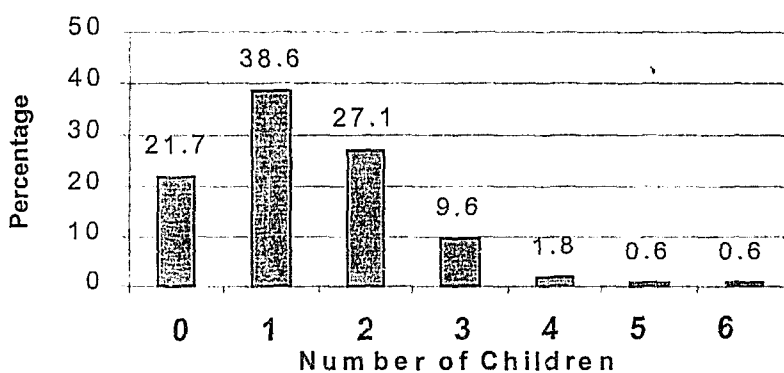


Figure 4.2 Number of children of respondents (n=166)

Sixty-four (38.6%) respondents had one child. Only 12.6% of the respondents had three or more children.

4.2.4 Level of education

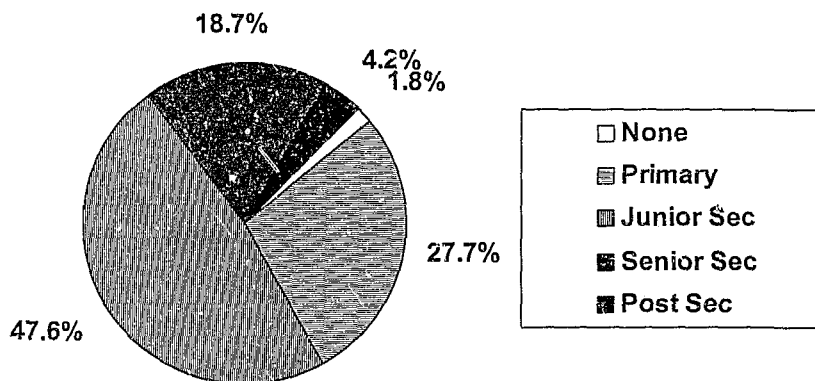


Figure 4.3 Level of education of the respondents (n = 166)

The majority of the respondents (70.5%) had secondary education. The respondents who had a post secondary education gave a greater number of correct answers.

4.2.5 Employment

Table 4.4 Employment status of the respondents (n = 166)

Employed	Frequency	Percentage
Yes	30	18.1
No	121	70.4
Other	15	11.5
Total	166	100.0

One hundred and twenty one (70.4%) respondents were not employed. Fifteen (11.5%) were still attending school.

Of the 30 respondents who were employed 12 (40%) were professional workers, 10 (33.3%) were domestic workers, 6 (20%) were shop assistants and 2 (6.7%) were manual workers.

4.2.6 Income

Table 4.5 Income of the respondents who were working (n = 30)

Income in Pula	Frequency	Percentage
> 250	10	33.3
250-499	8	26.7
500-999	7	23.3
1000-1999	3	10.0
2000 & over	2	6.7
Total	30	100.0

The employment status of respondents in the study revealed that most of them were not employed (81.9%) and so it is possible that they may rely on their parents, relatives, partners and other sources for economic support. The majority (60%) of the respondents who were employed earn less than five hundred Pula (P500.00) per month. Four Pula is equivalent to about one US dollar. Women generally have a low socio-economic status in Botswana. Households headed by women are much more likely to be financially poor than those in which there is a working resident male. They are likely to be economically

dependent on men and as a result, may be in a less powerful position to negotiate issues with their partners concerning sexual activities. The cultural expectations to provide sexual satisfaction to sexual partners put women at risk of infection. Unemployment might also force women to seek new partners for support especially young women who are not attending school and not working.

4.2.7 Religion

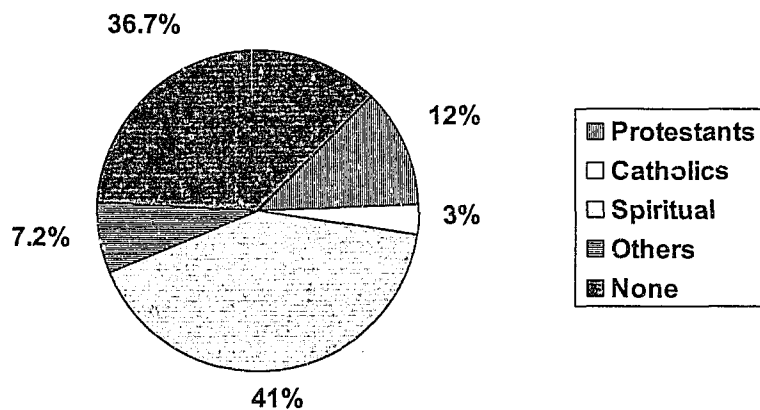


Figure 4.4 Religion of the respondents (n = 166)

The majority (63.3%) of the respondents had a religious affiliation. In Botswana churches help in the dissemination of information about HIV/AIDS, motivate women not to engage in risk taking behaviours and prevent HIV infection.

4.2.8 Method of family planning

Table 4.6 Method of family planning of the respondents (n = 166)

Method	Frequency	Percentage
None	36	21.7
Condom only (always)	28	16.9
Condom only (not always)	16	9.6
Condom always + other method	21	12.7
Condom not always + other method	29	17.5
Other method	36	21.7
Total	166	100.0

Forty-nine (29.6%) respondents used condoms regularly while 43.4% did not use condoms at all. Other methods used by the respondents were the Pill, Depo provera and an intra uterine device.

4.3 Knowledge About HIV/AIDS

In this section questions were categorised into three groups: knowledge about risk factors, knowledge about mode of transmission and knowledge about prevention of HIV/AIDS.

4.3.1 Knowledge about risk factors

Table 4.7 Knowledge of the respondents about risk factors (n = 166)

Statement	True		False		Don't know		Total	
	N	%	N	%	N	%	N	%
A person can get HIV/AIDS through:								
- Having multiple sexual partners	166	100	-	-	-	-	166	100
- Contaminated needles and razor blades	151	91	8	4.8	7	4.2	166	100
- Commercial prostitution	160	96.4	3	1.8	3	1.8	166	100

All respondents (100%) indicated that a person can get HIV infection through having multiple sexual partners. Only 4.8% of women did not agree that a person can become infected through contaminated needles and razor blades. Seven (4.2%) respondents did not know that a person can get HIV/AIDS through contaminated needles and razor blades, while three (1.8%) did not know that AIDS can be contracted through commercial prostitution.

The results provide evidence that women are aware of their own risks as a consequence of their heterosexual relations. The Tswana culture allows men to have more than one partner (MacDonald 1994). This custom increases both men's and women's contact with infected persons and subsequently increases partners' exposure to STD's and HIV.

4.3.2 Knowledge about modes of transmission

Table 4.8 Knowledge of respondents about modes of transmission (n = 166)

Statement	True		False		Don't know		Total	
	N	%	N	%	N	%	N	%
HIV can be transmitted through sharing utensils and food with an infected person	48	28.9	106	63.9	12	7.2	166	100
HIV can be transmitted sexually	163	98.2	-	-	3	1.8	166	100
Infected pregnant women can transmit HIV to their babies	161	97	3	1.8	2	1.2	166	100
Mosquitoes and insects can transmit HIV	63	38	80	48.2	23	13.8	166	100
A person can get HIV through one sexual contact with an infected person	143	86.1	4	2.4	19	11.4	166	100
A person can get HIV through sexually transmitted diseases	152	91.6	4	2.4	10	6.0	166	100
A person with HIV might look healthy	91	54.8	69	41.6	6	3.6	166	100
The spread of HIV can be prevented by using condoms	161	97	3	1.8	2	1.2	166	100
AIDS is a result of witchcraft	9	5.4	155	93.4	2	1.2	166	100

The majority (98.2%) of the respondents agreed that HIV can be transmitted sexually.

The generally high level of knowledge about modes of transmission in the study is similar to other studies in Botswana (Knorr et al 1994), South Africa (Mbengashe 1996, Varga & Makubalo 1996) and the United States of America (Overby & Kegeles 1994). However, misconceptions prevailed over the mode of transmission. Women were not sure about direct or indirect transmission of HIV. Less than one third (28.9%) of women believed that HIV can be transmitted through indirect contact such as sharing utensils and food with an infected person and 38% said HIV can be transmitted by mosquitoes and insects.

A small percentage (11.4%) did not know that a person can get HIV through one sexual contact with an infected person. Sixty nine (41.6%) women disagreed with the statement which said a person infected with HIV might look healthy. Mbengashe (1994) found similar results. Misunderstanding of the mechanism of HIV transmission may be reinforced by the belief that AIDS is a result of witchcraft. Nine women (5.4%) stated that this was possible and two did not know. These findings may suggest that women in the study have not received adequate information about the spread of HIV. Education about modes of transmission may therefore benefit these women.

4.3.3 Knowledge about prevention

Table 4.9 Knowledge of the respondents about prevention of HIV (n = 166)

How can people protect themselves from getting HIV?	Yes		No		Don't know		Total	
	N	%	N	%	N	%	N	%
Condom use with any partner	162	97.6	2	1.2	2	1.2	166	100
Condom use with a usual partner	159	95.8	3	1.8	4	2.4	166	100
Abstaining from sexual relationship	164	98.8	1	0.6	1	0.6	166	100
Consulting traditional healers	10	6.0	138	83.1	18	10.8	166	100
Having sex less frequently	35	21.1	116	69.9	15	9.0	166	100
Sticking to one partner	135	81.3	28	16.9	3	1.8	166	100
Consulting western doctors	32	19.3	98	59.0	36	21.7	166	100
Women taking birth control pills	10	6.0	147	88.6	9	5.4	166	100

The majority (98.8%) of the respondents agreed that HIV infection can be prevented by abstaining from sexual relations. There were some respondents who believe that HIV can be prevented by having sex less frequently (21.1%), consulting medical doctors (19.3%), consulting traditional healers (6%) and women taking birth control pills (6%).

The majority (95.2%) of the respondents agreed that a person with HIV can ultimately die of AIDS and 82.5% believe that AIDS cannot be cured.

Women should know appropriate methods of prevention of HIV in order to protect themselves from being infected. The respondents in the study said that HIV can be prevented by using condoms and by abstaining from sexual relations. However, 36

(21.7%) women mentioned that they were not using any method of family planning and 36 (21.7%) mentioned that they used other methods beside condoms (see Table 4.6). Forty-five (27.1%) women who used condoms used them infrequently. Knowledge alone is not sufficient for behaviour change. Therefore it is important to enhance women's perceptions of risk. Lack of understanding about methods of prevention can increase women's risk of infection. Health education and promotion of safe sexual practices need to be extensively targeted at these women.

4.3.4 Source of information

Table 4.10 Sources where respondents mostly got information about HIV/AIDS (n = 166)

SOURCE	FREQUENCY	PERCENTAGE
Friends	79	47.6
Parents	59	35.5
Relatives	40	21.1
Papers	111	66.9
Health Personnel	149	89.8
Radio	160	96.4
Television	48	28.9
Schools	85	51.2
Church	43	25.9
Other	29	13.9

The two main sources of information about HIV/AIDS were radio (96.4%) and health personnel (89.8%)

Health education programmes are an important strategy for the primary prevention of HIV infection (Nolte, Sohn & Koons 1992). Providing accurate information regarding the epidemiology and transmission of AIDS as well as discussing risk reduction behaviour, can assist in correcting misconceptions and providing prevention methods. Women need to be provided with factual information to enable them to integrate HIV prevention into their daily lives.

4.4 Concerns about HIV/AIDS

Table 4.11 Concerns of respondents about HIV/AIDS (n = 166)

Question	Yes		No		Total	
	N	%	N	%	N	%
Are you afraid of getting AIDS?	166	100	-	-	166	100
Do you feel you are at risk of getting HIV/AIDS?	130	78.3	36	21.7	166	100
Would continue having children if you are found to be HIV positive?	4	2.4	162	97.6	166	100
Would you take an HIV test before pregnancy?	149	89.8	17	10.2	166	100
Are you worried that men do not like using condoms?	163	98.2	3	1.8	166	100

Question	Yes		No		Total	
Would you worry if your partner does not use condoms?	152	91.6	14	8.4	166	100
Would you feel comfortable asking your partner to go for an HIV test?	152	91.6	14	8.4	166	100
Would you find it difficult to reveal your HIV status to your partner?	27	16.3	139	83.7	166	100
Are you free to discuss sexual activities including condom use with your partner?	155	93.4	11	6.6	166	100
Do you feel people who are HIV positive are discriminated against?	28	16.9	134	80.7	166	100

All (100%) respondents indicated that they are afraid of getting AIDS and 98.2% said that they were worried that men do not like using condoms. Surprisingly 155 (93.4%) respondents said that they were free to discuss sexual activities including condom use with their partners. Interestingly, 139 (83.7%) respondents said that they would freely reveal their HIV status to their partners. This finding is in contrast to the literature which revealed that women are scared to reveal their HIV status if they are positive in fear of rejection and discrimination (Ditirwa 1994). Findings from AIDS/STD Unit (1994) study also revealed that young women felt that they had little power to determine whether or not condoms should be used. Males in the study also agreed that men dominate relationships. The Tswana custom that regard women as minor and socially inferior to men (Schapera 1970) make women submissive to men.

The open ended question allowed the women to express their concerns. Concerns expressed could be grouped into the following:

Concerns	% answering
I am scared of AIDS	93.3
Young women are dying of AIDS	24.7
Pregnant mothers infected with HIV pass it to their unborn babies	23
HIV testing should be done before pregnancy	23
I trust my partner	21.7
Women should stop having children until there is cure for AIDS	21
Men are not faithful	13.2
Pregnancy activates the AIDS virus	10
I am not going to have children anymore	9.6
My partner does not want to use condoms	8.4
I do not trust my partner	7.2
Young people like having multiple sexual partners	5.4
I have been tested for HIV	5.4
I want to go for an HIV test	1.8

The majority (93.3%) of the women in the study indicated that they were afraid of contracting HIV/AIDS. The other concern raised by women was that their partners do not want to use condoms. A few who said they insisted on condom use were quite often physically abused by their partners. One woman said, "if I insist on condom use during sexual activities my partner beats me, forces me into having unprotected sexual activities". Karim et al (1995) found similar results in South Africa. The findings of this study are in contrast to Rapinyana (1995) and Bagwasi's (1994) findings which revealed that women were free to use condoms with their partners.

The high degree of concern of acquiring HIV and the risk of being infected suggests that the epidemic has had a great impact on the lives and community of these women. Despite expressing significant concern about becoming infected, 21.7% of respondents perceived themselves not to be at risk owing to their current monogamous relationships and implicit trust in their partners' safety. Overby & Kegeles (1994) found similar results in America. From the women who felt at risk, 7.2% emphasized lack of trust in their partners, 8.5% mentioned infrequent or lack of condom use and 13.2% said men are unfaithful.

Women need to be provided with the necessary communication skills to effectively discuss these issues with their partners. Even though some women claim that they are free to discuss sexual activities with their partners they are not always successful in negotiating for safer sexual practices (Varga & Makubalo 1996).

The majority (97%) of the respondents know about mother to fetus transmission, and 23% felt that HIV testing should be done before pregnancy to prevent transmission to the baby during pregnancy. Ten percent of the respondents believed that pregnancy aggravates the progression of AIDS. Thirty four (21%) respondents said that women should stop having children until there is treatment for AIDS. One respondent said that pregnant women who are found to be HIV positive should have an abortion. Even though it remains uncertain whether pregnancy further increases the risk of deterioration for women with marked immuno suppression (Newell & Thorne 1997) preventive measures need to be taken to prevent perinatal transmission.

The majority (89.8%) of the women said that they were willing to be tested before pregnancy and 97% said they would not continue having children if they were found to be HIV positive. However, 16.3% said that they are scared of being tested for the virus and would not reveal their HIV status to their partners if positive because they fear rejection and stigmatization. This might imply that HIV infected persons are stigmatized and discriminated against. Twenty eight (16.9%) women in the study indicated that people who have HIV/AIDS are discriminated against. Ditirwa (1994) reported that women in her study withheld their HIV positive results because they feared rejection and stigmatization. This may contribute to the increasing incidence.

Sherr (1997) argued that the best way to prevent perinatal transmission is to reduce HIV transmission to women. Women need balanced and comprehensive information concerning all aspects of perinatal HIV transmission. HIV testing should be encouraged to help women make informed choices.

4.5 The Association of the Demographic Variables With Knowledge and Concerns

To determine whether demographic variables had any impact on women's knowledge and concerns, age, marital status and education were analysed against knowledge and concerns. The contingency co-efficient was used to determine the relationship between the variables. The contingency coefficient equals 0 when the variables are independent; however, its maximum value is always less than 1. The p value less than 0.05 was set as

the level of significance indicating that the variables are dependent.

The results showed that age and marital status were not related to knowledge and concerns ($p>0.05$). The majority of the respondents were single and this could have led to the insignificant results. The findings show that even though the level of knowledge was high among women, accurate knowledge of AIDS was related to education level. Women with post secondary education were more knowledgeable than other women in the study. All women with post secondary education knew that: HIV cannot be transmitted by mosquitoes and insects ($p=0.001$), HIV cannot be cured by consulting traditional doctors ($p=0.007$) and western doctors ($p=0.046$) and that a person with HIV might look healthy ($p=0.004$). Knorr et al (1995) also found that women who had secondary level education had better knowledge though it was in no way unique to this particular classification of women.

Rapinyana (1995) reported that the level of education made no difference in opinions of respondents. The way women responded to the questions did not differ because they indicated that they heard AIDS messages from the radio, traditional meeting places and health facilities.

4.6 Conclusion

In this chapter the findings of the study were presented and discussed. The results showed that the majority of the women in the study were not married and not working. Of the 30 respondents who were working 18 (60%) earn less than five hundred Pula per month. This implies that they are probably dependent on their partners and relatives for economic support. This sample of women could be considered to be relatively well educated as 70% of the respondents had a secondary education.

Knowledge of respondents about risk factors, modes of transmission and methods of prevention of HIV was also discussed. The majority of the women (98.2%) knew that HIV can be transmitted sexually and that the spread of HIV can be prevented by using condoms (97.6%) and abstaining from sexual relations (98.8%). However, misconceptions about the mode of transmission prevailed. There was a belief that HIV can be transmitted through indirect contact like sharing utensils and food with an infected person. Lack of knowledge about the mode of transmission and prevention can put women at risk of HIV infection.

The greatest concern that women expressed was fear of contracting AIDS. However, 21.7% of women said they were not at risk of becoming infected with HIV because they trusted their partners. Those who felt at risk did not trust their partners and said they used condoms infrequently. Women were aware of perinatal transmission and felt that HIV testing should be done before pregnancy. Women were also concerned that men do not

like using condoms, but they did not have difficulties in discussing their sexual activities including condom use with their partners. Despite this, 83.7% of women said they would not feel comfortable revealing their HIV status to their partners.

Educational programmes should provide these women with accurate information about the modes of transmission and also address the misconceptions about HIV transmission.

Women need to be provided with information and techniques to use in order to negotiate for safer sexual activities.

CHAPTER V

5.0 SUMMARY, LIMITATIONS, RECOMMENDATIONS AND CONCLUSIONS.

5.1 Summary

This study was undertaken with the main aim of providing information for the AIDS/STD Unit in the development of appropriate educational programmes for childbearing women.

The objectives of the study were to:

- describe knowledge about HIV/AIDS including risk factors, mode of transmission and prevention among childbearing women.
- describe the concerns of childbearing women about HIV/AIDS.
- determine whether demographic variables affect the knowledge and concerns related to HIV/AIDS among childbearing women.

The study design was a descriptive survey. A sample of 166 women was selected from women aged 18-29 years attending Mahalapye clinics. Data was collected by the researcher in a period of three weeks. The instrument used for data collection was a structured interview schedule with close and an open ended question.

The demographic data showed that 51.3% of the respondents were between the ages 18 and 22 years. The majority (85.5%) of the respondents were not married, but 78.3% stated that they had partners. This may put these women at an increased risk because they are likely to change partners which might predispose them to HIV infection.

The majority (70.5%) of the respondents had secondary education. The level of education influenced the way women responded to questions. These findings are in contrast with Mwale & Burnard's (1992) findings which stated that women have less access to education and are often illiterate.

Of the 166 respondents, 70.4% were not employed. These women relied on their partners, relatives and other sources for economic support. Unemployment can influence women to look for new partners. Only 30 respondents were employed of whom 60% were earning less than five hundred Pula (P500) per month. This demonstrates the low socio-economic status of these women.

The level of knowledge of participants in this study, like in other studies, was high. In response to questions about the risk factors, all women (100%) stated that a person can contract HIV through having multiple sexual partners. Seven (4.2%) women did not know that HIV can be contracted through contaminated needles and razor blades. Women were aware that they can get infected. A small percentage (21.7%) of the respondents felt that they were not at risk of becoming HIV infected because of their monogamous relationships and their trust in their partners. Those who felt at risk said their partners

were not faithful so they did not trust them. The Tswana culture that allows men to have multiple partners and the subservient role of women place women at increased risk of acquiring HIV infection.

Knowledge of the respondents about modes of transmission was also high. One hundred and sixty three (98.2%) women agreed that HIV can be transmitted sexually, 97% agreed that infected pregnant women can transmit HIV to their babies and 97% said that the use of condoms can prevent the spread of HIV. As in Mbengashe's (1996) and Knorr et al's (1996) studies women in the study had some misconceptions about the modes of transmission. Thirty-eight percent of the respondents believed that mosquitoes and insects can transmit HIV, 28.9% believed that HIV can be contracted through sharing food and utensils with an infected person. These beliefs may suggest that women were not adequately informed about HIV. Therefore, educational programmes targeted at these women should address these misconceptions.

One-hundred and sixty-four (98.8%) women agreed that abstaining from sexual relations can prevent the spread of HIV and 97.6% said HIV can be prevented by using condoms. Stiffman et al (1992) argued that knowledge alone cannot lead to behavioural change. Forty-five (27.1%) respondents mentioned that they used condoms infrequently. Lack of knowledge about the prevention of HIV infection may prevent women from protecting themselves against becoming infected. It is important to help women to promote safe sexual practices.

The concerns expressed by women were that they were afraid of getting AIDS because men do not like using condoms. Even though 93.4% of the respondents said they were free to discuss condom use with their partners, those who insisted on using condoms said they were physically abused. Women further said that they would feel uncomfortable to reveal their HIV status to their partners because they feared rejection and stigmatization. Another major concern among women was that of perinatal transmission. One hundred and forty-nine (89.8%) said they would go for an HIV test before pregnancy. One hundred and sixty-two (97.6%) women said they would not have children if they are found to be HIV positive. Twenty-one percent felt that women should postpone having children until there is a cure for AIDS. They believe that pregnancy activates the AIDS virus. As stated in the Safemotherhood Newsletter (1994-95) pregnant women infected with HIV are more prone to the complications of pregnancy. It is also stated in the Newsletter that if an infected women falls pregnant the risk of having an infected child is one in three. Women need careful counselling and advice in order to protect themselves and to enable them to make informed decisions about HIV testing and having children.

Programmes aimed at AIDS prevention among these peri urban women need to take into consideration the socio cultural context in which these women make decisions about their health.

5.2 Limitations

- The small and skewed sample limited the researcher's ability to detect significant intervariable relationships.
- The interview schedule was written in English but the interviews were conducted in Setswana and translated back into English. Therefore, the possibility of reporting inaccuracies and biases cannot be excluded.
- The study was confined to women who attended the clinics. These women are likely to be better informed than those who did not attend the clinics.
- The study did not include women in the rural areas. It is not known how similar this sample is to women from the rural areas where HIV is said to be on the increase.
- The study did not include behavioural questions. Therefore, it was difficult to know the sexual behaviours of women.

5.3 Recommendations

Recommendations with regard to nursing education, nursing practice and nursing research are suggested.

5.3.1 Nursing education

- The nursing education curriculum should incorporate HIV/AIDS programmes to enable the nurses to empower the public (especially childbearing women) about HIV/AIDS.
- The nursing education curriculum should equip nurses with the necessary skills to help women to improve their decision making skills.

5.3.2 Nursing practice

- Provide HIV counselling and testing for women to reduce their risk of becoming infected or if already infected to initiate early treatment, prevent infecting others and also make informed choices.
- Nurses should assist in equipping women with effective communication, assertiveness and decision making skills that will help them adopt behaviours that will protect them from becoming infected or infecting others.
- Traditional beliefs of women should be addressed because knowledge of AIDS may be combined with other beliefs.
- Women should be helped to clear the misconceptions about the modes of transmission of HIV and adopt safer sexual behaviours.
- Women should be taught and encouraged to use female controlled methods available, like the female condom. This method may protect the woman against the spread of HIV and STDs

- Women should be helped to accept those who are infected and know how to relate with them and help them.
- Educational programs should be targeted to differentiate cultural backgrounds to help women assume assertive roles in their own health promotion.
- Men should be included in the education and adoption of safer sexual behaviours.

5.3.3 Nursing research

Further research should be conducted in the following:

- A national study about women's knowledge and concerns about HIV/AIDS should be done in order to generalise the findings.
- A similar study looking at the knowledge and concerns of men regarding HIV should be carried out. This would facilitate comparison between men and women.
- A similar study should be done to determine the knowledge and concerns of teenagers.
- A similar study should be done to compare urban and rural women's knowledge and concerns about HIV/AIDS.

5.4 Conclusions

The objectives of the study were to:

- describe the knowledge of HIV/AIDS including risk factors, mode of transmission and prevention among childbearing women.
- describe the concerns of childbearing women about HIV/AIDS.
- determine whether demographic variables affect the knowledge and concerns related to HIV/AIDS among childbearing women in Mahalapye, Botswana.

The findings of the study demonstrate that these objectives have been met.

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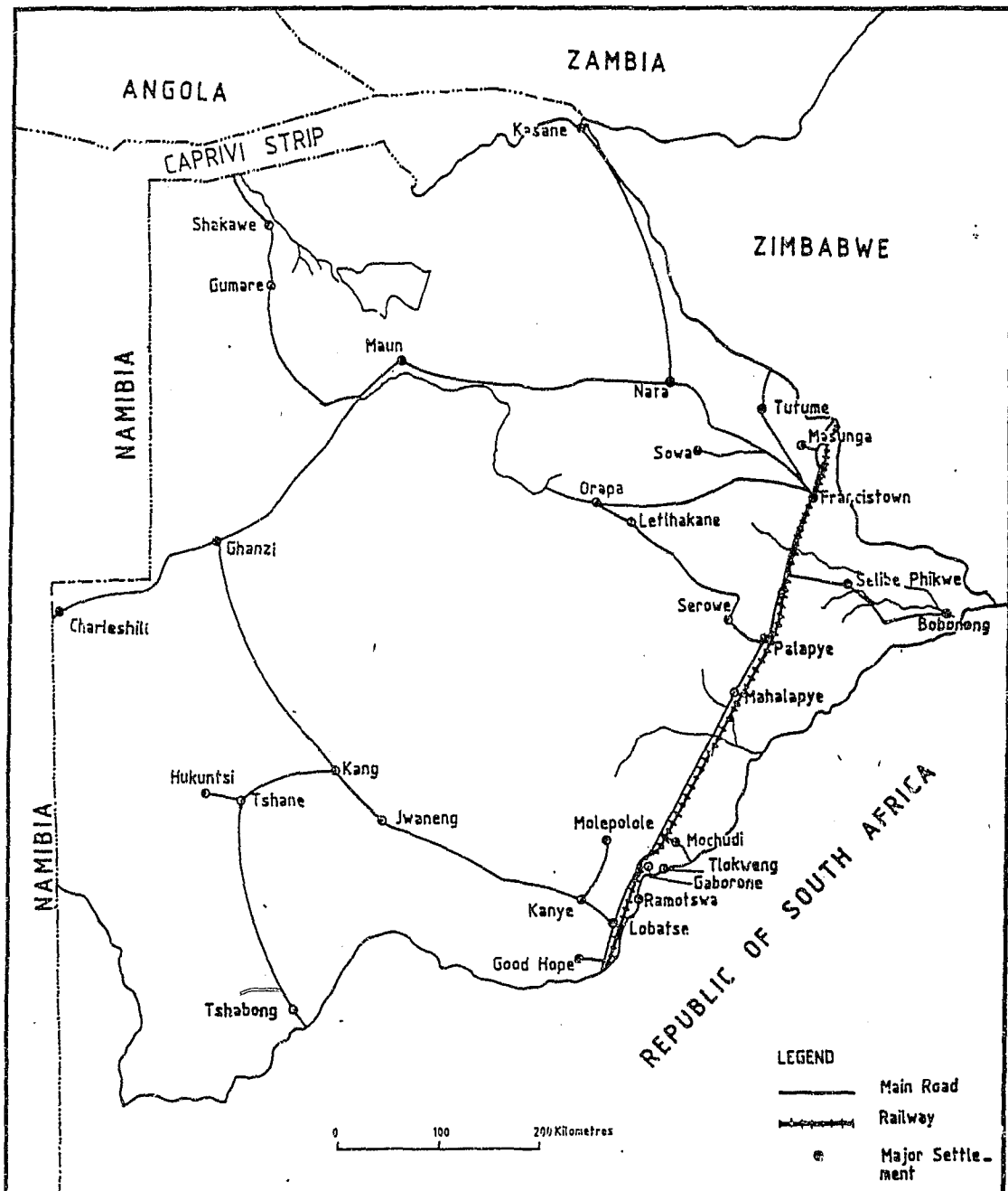
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APPENDICES



INTERVIEW SCHEDULE

Knowledge and concerns about HIV/AIDS among childbearing women.

SECTION 1

Place of Interview:.....

DEMOGRAPHIC DATA

- ```

1. Age:.....

2. Marital Status - Single:.....
 Married:.....
 Divorced:.....
 Widowed:.....
 Cohabiting:.....

```

If single, separated, divorced or widowed, do you have a partner?  
Yes/No

3. Number of children - None:.....  
One:.....  
Two:.....  
Three:.....  
Four:.....  
Five:.....  
Six:.....  
More than Six:.....

4. Level of Education - None:.....  
Primary:.....  
Junior Secondary.....  
Senior Secondary.....  
Post Secondary.....
5. Employed - Yes:.....  
No:.....
6. Occupation:.....
7. Monthly income - below P 250 - .....  
P 250 - 499:.....  
P 500 - 999:.....  
P1000 - 1999:.....  
P2000 - and above:.....
8. Religion - Protestant:.....  
RCC:.....  
Spiritual:.....  
Others:.....  
None:.....
9. Method of family planning:.....
10. Duration:.....
11. Place of Residence:.....

I am going to read some statements about HIV/AIDS. Tell me if you think the statement is true or false or if you do not know.

[illegible]

1. A person get HIV/AIDS by sharing food and utensils with an infected person.
2. HIV can be transmitted sexually
3. AIDS can be cured by taking tablets
4. A pregnant woman who has HIV/AIDS can transmit it to her baby.
5. A person can get AIDS through contaminated needles and razor blades.
6. The spread of HIV/AIDS can be prevented by using condoms.
7. Some one can get HIV/AIDS by having multiple sexual partners.
8. A person with HIV can ultimately die of AIDS.
9. HIV can be transmitted by mosquitoes and insects.
10. AIDS is a result of witchcraft.
11. Someone can get HIV/AIDS by having one sexual contact with an infected person.
12. Women can use birth control pills to protect themselves from getting HIV.
13. A woman can get HIV/AIDS through commercial prostitution. if not using a condom.

14. A person with HIV might look healthy
15. Someone can get HIV/AIDS through sexual transmitted diseases.

| TRUE | FALSE | DON'T KNOW |
|------|-------|------------|
|      |       |            |
|      |       |            |

16. How can people protect themselves from getting HIV/AIDS?

- Condom use with any partner
- Condom use with a usual partner
- Abstaining from sexual relations
- Consulting traditional healers
- Having sex less frequently
- Sticking to one partner
- Consulting western doctors

[illegible]

17. Have you known a person with HIV/AIDS?
18. Have you known any person who has died of AIDS?
19. Were you related to that person?
20. Where do you mostly get information about HIV/AIDS?

- Friends
- Parents
- Relatives
- Papers
- Health personnel

[illegible]

| YES | NO |
|-----|----|
|     |    |
|     |    |
|     |    |
|     |    |
|     |    |

### SECTION III

## CONCERNS ABOUT HIV/AIDS

Please respond to the following question with a Yes and No.

1. You are a woman of child bearing age. Would you tell me if you have any concerns regarding HIV/AIDS and having children?

.....

2. Are you afraid of getting HIV/AIDS?
3. Do you feel you are at risk of getting HIV/AIDS?
4. Would you take an HIV test before falling pregnant?
5. Would you continue having children if you are found to be HIV positive?
6. Are you worried that men do not like using condoms?
7. Would you worry if your partner does not use condoms?
8. Would you feel comfortable asking your partner to go for an HIV test?
9. Would you find it difficult to reveal your HIV status to your partner?
10. Are you free to discuss sexual activities including condom use with your partner?
11. Do you feel people who are HIV positive are discriminated against?

[illegible]

| YES | NO |
|-----|----|
|     |    |
|     |    |
|     |    |
|     |    |
|     |    |

### SECTION III

## CONCERNS ABOUT HIV/AIDS

Please respond to the following question with a Yes and No.

1. You are a woman of child bearing age. Would you tell me if you have any concerns regarding HIV/AIDS and having children?

.....

1. Are you afraid of getting HIV/AIDS?
2. Do you feel you are at risk of getting HIV/AIDS?
3. Would you take an HIV test before falling pregnant?
4. Would you continue having children if you are found to be HIV positive?
5. Are you worried that men do not like using condoms?
6. Would you worry if your partner does not use condoms?
7. Would you feel comfortable asking your partner to go for an HIV test?
8. Would you find it difficult to reveal your HIV status to your partner?
9. Are you free to discuss sexual activities including condom use with your partner?
10. Do you feel people who are HIV positive are discriminated against?

[illegible]

Is there anything you would like to ask or discuss with me about HIV/AIDS?.

Thank you for your participation. My contact address is Parktown Village 1 House O Room 7, Blackwood Avenue. Johannesburg 2193. Republic of South Africa Telephone Numbers (267 412313) or (011) 4802200.

TELEPHONE: 323148  
FAX LINE: 323147  
TELEGRAMS:  
PLOT: 17866 GABORONE WEST  
REFERENCE NO:



REPUBLIC OF BOTSWANA

MINISTRY OF HEALTH

AIDS/STD UNIT  
PRIVATE BAG 00451  
GABORONE  
BOTSWANA

**To whom it may concern,**

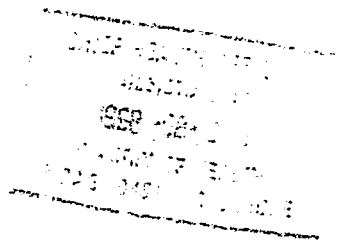
**Re: Study on Knowledge and Concerns about HIV/AIDS among  
childbearing in Mahalapye, Botswana**

This is to certify that Pamela Lebodi who is a student at Wits University, has been granted permission to use the same research questions as contained in the report on 'Youth Sexual Behavior and Practices' for her study mentioned above.

Any support accorded her in this study will be appreciated.

A handwritten signature in black ink, appearing to be 'R.O. Mandevu'.

R.O.Mandevu  
C.H.O AIDS/STD Unit



UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

Division of the Deputy Registrar (Research)

COMMITTEE FOR RESEARCH ON HUMAN SUBJECTS (MEDICAL)

Ref: R14/49 Lebodi

CLEARANCE CERTIFICATEPROTOCOL NUMBER M980525PROJECT

Knowledge and Concerns Of Human  
Immunodeficiency Virus (HIV) Acquired  
Immuno Deficiency Syndrome (Aids) Among  
Child Bearing Women In Mahalapye  
Botswana

INVESTIGATORS

Miss P Lebodi

DEPARTMENT

Dept of Nursing Education, Wits University

DATE CONSIDERED

980529

DECISION OF THE COMMITTEE \*

Approved unconditionally

DATE 980601

CHAIRMAN..........(Professor P E Cleaton-Jones)

\* Guidelines for written "informed consent" attached where applicable.

c c Supervisor: Miss P McInerney

Dept of Dept of Nursing Education, Wits University

Works2\lain0015\HumEth67.wdb\M 980525

DECLARATION OF INVESTIGATOR(S)

To be completed in duplicate and ONE COPY returned to the Secretary at Room 10001, 10th Floor,  
Senate House, University.

I/we fully understand the conditions under which I am/we are authorized to carry out the abovementioned  
research and I/we guarantee to ensure compliance with these conditions. Should any departure to be  
contemplated from the research procedure as approved I/we undertake to resubmit the protocol to the  
Committee.

DATE 06.08.98.....SIGNATURE .....PROTOCOL NO.: M 980525

PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES

Parktown Village 1  
House 07  
Wits University  
Johannesburg 2050

15 April 1998

The Permanent Secretary  
Ministry of Health  
Private Bag 0038  
GABORONE  
Botswana

Dear Sir

**REQUEST FOR PERMISSION TO CONDUCT A STUDY**

I am a Master of Science (Nursing) student at the University of the Witwatersrand conducting a research project in partial fulfilment for my study programme.

I am writing to request for permission to conduct a study in Mahalapye clinics during the month of July 1998.

My study is entitled "Knowledge and concerns about HIV/AIDS among childbearing women in Mahalapye". I need to interview women aged between 15 and 29 years from the clinic utilising the Maternal and Child Health/Family Planning Clinics. The interview will not affect the running of the clinic. Participation in the study is voluntarily and confidentiality will be maintained.

Thanking you in advance.

Yours faithfully

PAMELA LEBODI

House 07  
Wits University  
Johannesburg 2050

15 April 1998

District Medical Officer In Charge  
District Health Team  
P.O. Box 49  
MAHALAPYE  
Botswana

Dear Sir

**REQUEST FOR PERMISSION TO CONDUCT A STUDY**

I am a Master of Science (Nursing) student at the University of the Witwatersrand conducting a research project in partial fulfilment for my study programme.

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Thanking you in advance.

Yours faithfully

PAMELA LEBODI

Parktown Village 1  
House 07  
Wits University  
Johannesburg 2050

15 April 1998

Chief Medical Officer In Charge  
Mahalapye Hospital  
P.O. Box 49  
MAHALAPYE  
Botswana

Dear Sir

**REQUEST FOR PERMISSION TO CONDUCT A STUDY**

I am a Master of Science (Nursing) student at the University of the Witwatersrand conducting a research project in partial fulfilment for my study programme.

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Thanking you in advance.

Yours faithfully

PAMELA LEBODI

TELEPHONE: 352000  
FAX: 353100  
TELEGRAMS: RABONGAKA  
TELEX: 2818 CARE BD  
REFERENCE:

MH 13/18/1



30th June, 1998.

MINISTRY OF HEALTH  
PRIVATE BAG 0038  
GABORONE

REPUBLIC OF BOTSWANA

P Lebodi  
Parktown Village 1  
House 07  
Wits University  
Johannesburg

Dear Lebodi

### **Grant of a Research Permit: P. Lebodi**

Your application for a research permit dated 28/04/97 refers.

I am pleased to inform you that you have been granted permission to conduct research on **"Knowledge and Concerns about HIV/AIDS among childbearing in Mahalapye, Botswana."**

The permit does not give authority to enter any premises, private establishment or protected area without permission of concerned parties. Such permission should be negotiated with those concerned. You may also need to request permission from other relevant authorities, i.e. Chiefs, headmen, etc.

You are also requested to submit at least one copy of the findings of your study to the Ministry of Health, Health Research Unit.

Yours sincerely

A handwritten signature in black ink, appearing to read 'P. Khulunani'.

Pilate Khulunani  
For Permanent Secretary.

Telegrams: "CENDICO"

Telephones:

**Central District Council****MAHALAPYE SUB DISTRICT**  
Private Bag 2, Mahalapye, Botswana

Mahalapye Sub District ..... 410459  
 Fax Line ..... 411123  
 Ass. Council Secretary ..... 410476  
 District Health Team ..... 410234  
 Regional Medical Officer ..... 410234  
 Airstrip Health Post ..... 410589  
 Community Centre ..... 410263  
 Water Unit ..... 410370



In reply please quote

Ref. No.

Health (Clinics) Department

23 June 1998

Parktown Village 1  
 House 0 Room 7  
 Wits University  
 Johannesburg 2050  
 Republic of South Africa

REQUEST TO CONDUCT A STUDY - PAMELA LEBODI

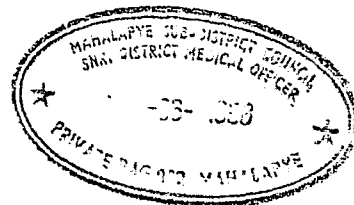
This is in response to your letter dated 15 April 1998 in which you requested our office to grant you permission to conduct a study in our clinics. You are hereby informed that you are at liberty to use our facilities for study.

Hope this will assist you to go on with your studies.

Wish you luck.

G Motlalekgosi  
for/ASSISTANT COUNCIL SECRETARY

*G Motlalekgosi*



GN/MS

TELEPHONE: 410333  
TELEFAX: 411120  
REFERENCE:



REPUBLIC OF BOTSWANA

MAHALAPYE HOSPITAL  
P O BOX 40  
MAHALAPYE

6 July 1998

Ms Pamela Lebodi  
Parktown Village 1  
House 0 Room 7  
Wits University  
Johannesburg 2050

Dear Ms Lebodi

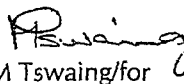
Request to conduct a study

I acknowledge receipt of your letter dated 15 April 1998 with reference to the above mentioned subject.

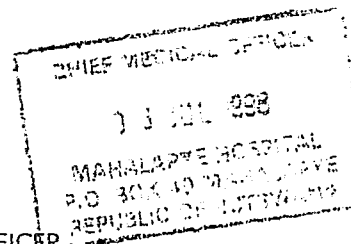
Permission is <sup>granted</sup>grated for you to conduct a study at Mahalapye Hospital.

Thank you.

Yours faithfully

  
M Tswaing/for

ACTING CHIEF MEDICAL OFFICER



### **INFORMATION SHEET**

My name is Pamela Lebodi. I am a 2<sup>nd</sup> year Master of Science (Nursing) student at the University of the Witwatersrand in South Africa. I am conducting a research study in partial fulfilment of my study programme.

I am interested in finding out **Women's Knowledge and Concerns About HIV/AIDS**.

I am therefore, asking for your participation in the study. Your participation is voluntary. I will be asking you some questions from the interview schedule and writing down the answers you give. This will be done in private and will take about 20-30 minutes. Some of the information requested in the interview is quite personal and I promise that it will be kept confidential. Your name will not appear anywhere on the interview schedule and your participating or non-participating in the study will not influence the care you receive in the clinic. You may discontinue the interview at any stage.

Your help is very much appreciated and will help the researcher to communicate the results to AIDS/STD unit and women's organisation for further development of better HIV prevention programmes for women.

Your help is much appreciated and will help the researcher to communicate the results to the AIDS / STD unit and Women's organisations for further development of better HIV prevention programmes for women.

Please feel free to ask questions if you have any.

Thank you.

If you would like to ask me anything about the study in future, please contact me at telephone numbers (267) 412313 or (011) 4802200. My address is Parktown Village, House 07, Wits University, Johannesburg 2050.

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