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The perceptions and practices of pregnant women towards prevention of mother-to-child transmission of HIV and AIDS in the Capricorn District, Limpopo Province, South Africa

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Abstract

Despite the fact that testing for HIV is voluntary and free of charge in public health centres, the majority of people including pregnant women are still reluctant to be tested. Many people are ignorant of their HIV status. The purpose of this study was to explore the perceptions and practices of pregnant women towards prevention of mother-to-child transmission of Human Immunodeficiency Virus and Acquired Immunodeficiency Syndrome (HIV and AIDS). A quantitative study applying the cross-sectional design was conducted in the 14 clinics of the Capricorn District of the Polokwane municipality in the Limpopo province, South Africa. A random sample of 73 pregnant women who were seeking antenatal care for the first time were selected and interviewed. The age group of 20-24 years had the highest pregnancy rate of 39% followed by teenagers aged 15-19 years (27%). Three-quarters (74%) of the pregnant women were learners and 68% of them were willing to take the HIV test. Those who were unwilling to take the test cited various fears, 78% knew about mother-to-child transmission (MTCT) of HIV and AIDS and 53% did not know how it occurs. Over a year 3948 pregnant women were counselled and 79% accepted to be tested; out of which 16% tested HIV-positive. It is recommended that awareness campaigns about MTCT prevention of HIV be intensified even amongst students as young as 12 years. More resources are needed to deal with the stigma still attached to being HIV-positive.

Keywords: Perceptions, practices, prevention of mother-to-child transmission, pregnant women.

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Introduction

The prevalence of HIV infection among pregnant women is likely to remain high for at least the next two decades because the number of people receiving lifelong antiretrovirals therapy (ART) in South Africa is still increasing (Barron et al., 2012). Furthermore, it is predicted to plateau at around 3 million in 2016 (Johnson, 2012). Despite the fact that testing for HIV is voluntary and free of charge in public health centres, the majority of people are reluctant to be tested. Many people are ignorant of their HIV status. Such individuals are usually in

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denial of their positive status hence they inadvertently continue to spread the virus, whenever they engage in risky behaviour such as having unprotected sex. Women who are HIV-positive and are pregnant or lactating carry the increased risk of infecting their infants. It has been estimated that 25-30% of HIV-infected mothers will transmit the HIV to their infants (Evian, 2003).

The prevalence of mother-to-child transmission (MTCT) of the HIV is on the rise, as one-third of people living with HIV and AIDS have been identified to be in the 15-24 years age group (UNAIDS/WHO, 2001). As this group of people are in the prime of their child-bearing period they are therefore most likely to infect their offspring. In South Africa it was estimated that between 3- and 4 million children were infected with HIV through MTCT annually. Mother-to-child transmission of HIV is reportedly one of the major means of HIV infection in children (UNAIDS/WHO, 2001). Piot and Coll-Seek (1999) cited in Rosenfield and Figdor (2001) have reported that, in 1999, 50% of all the deaths among children five years and younger in developing countries such as South Africa and Zimbabwe, were from HIV and AIDS.

A study conducted by Makhubele (2004) about the impact of culture on the prevention and treatment of HIV/AIDS in one of the low-resourced villages of the Limpopo Province found that polygamy was still commonly practised and acceptable to the majority of people. Young people were socialized to believe that having multiple partners was a sign of maturity and being macho. Makhubele (2004) found that the respondents in his study were in denial about the existence of HIV and AIDS and were unwilling to refrain from the unsafe practice of sex with multiple partners.

In South Africa, especially in the rural areas of the Limpopo Province, many people still believe in witchcraft as a source of their problems and also as a cause of their diseases. HIV and AIDS is viewed as "isidliso" or "black poison," an evil work of people who are close to the patient, who are called witches. Those who accept that AIDS does exist believe that it has been sent by the witches (Ashforth, 2001). Many black people in South Africa consult first with the traditional and/or faith healers before they consult medical practitioners. The traditional healers and/or faith healers reinforce the belief that other people (witches) have caused the problem/disease. The 'witches' who are suspected of causing diseases are often killed, especially in the Limpopo Province. Witchcraft is likewise blamed for people's HIV-positive status and full-blown AIDS (Ashforth, 2001).

From the moment HIV/AIDS was identified by scientists, social responses such as fear, denial, stigma and discrimination have accompanied the epidemic (Fredriksson & Kanabus, 2003). HIV/AIDS has been a highly stigmatised illness because of its association with sexual behaviour and intravenous drug

abuse, men who have sex with other men, sex workers and migrant workers (Visser, 2007). According to Visser (2007) the stigma is expressed across the world in a variety of ways including: Ostracism and rejection by family, loved ones and their communities, discrimination of people living with AIDS, violence against persons who are perceived to have AIDS or to be infected with HIV, and quarantine of persons with HIV.

In 1998 in South Africa, a woman by the name of Gugu Dlamini was stoned to death by neighbours after disclosing her HIV status on World AIDS Day (Fredriksson & Kanabus, 2003). In developing countries HIV-positive women have been more discriminated against and stigmatised compared to children and men. Men are likely to be excused for the behaviour that could have led to them being HIV-positive whereas women are not (Visser, 2007).

Accessing health care can be a challenge for people who are HIV-positive because the health care system could be a source of stigma. The stigma amongst the health care providers is fuelled by ignorance and lack of knowledge about how HIV is transmitted. The stigma could be in the form of withholding treatment, non-attendance to HIV-positive patients by health care providers, conducting HIV test without consent and lack of knowledge about appropriate procedures for maintaining confidentiality (Fredriksson & Kanabus, 2003; Brimlow, Cook & Seaton, 2003). A survey conducted in 2002 in Nigeria among 1000 physicians, nurses and midwives found very disturbing results. One in ten (10%) of doctors and nurses admitted having refused to care for HIV/AIDS patients or denied them admission to a hospital. Twenty percent (20%) felt that people living with HIV/AIDS had behaved immorally and deserved their fate. The study also found that lack of protective equipment appears to fuel the stigma amongst the doctors and nurses (Brimlow, Cook & Seaton, 2003).

To reduce the rate of MTCT of HIV in South Africa, the National Department of Health has embarked on the prevention of mother-to-child transmission (PMTCT) intervention project for pregnant women in all the nine provinces of the country. This intervention project caters for all pregnant women who present at public hospitals and clinics for antenatal care. When pregnant women report for antenatal care at public clinics or hospitals, they are offered voluntary counselling and testing (VCT) for PMTCT of HIV and AIDS. Not all pregnant women who attend antenatal clinics agree to be counselled and tested for HIV. The purpose of this study was to determine and describe the perceptions and practices of pregnant women with regard to HCT for PMTCT of HIV and AIDS programme in the clinics of Polokwane municipality, Limpopo province.

Methodology

A quantitative study applying the cross-sectional design was conducted to determine the perceptions and practices of pregnant women towards PMTC of HIV and AIDS in the clinics of Polokwane municipality, Limpopo Province. The cross-sectional design was used because data were to be collected on many variables of interest (perceptions and practices) simultaneously and at once (Bryman, 2012).

Population and sampling

In this study, the target population consisted of all pregnant women who sought antenatal health care services for the first time. Sampling for this study was done at two levels namely, sampling clinics and participants, respectively. The Polokwane municipality has a total of 30 clinics which are far from one another. In view of the difficulty of including all the 30 clinics in the study, the researchers randomly selected half (15) of the clinics. To avoid bias and ensure that all the clinics had an equal chance of being selected a simple random sampling method was used to select the 15 clinics where data were collected.

Data collection

Data were collected over a period of 9 months from March to November 2006. The researchers spent approximately 12 days at each clinic. All 73 pregnant women who were seeking antenatal care for the first time and agreed to participate in the study completed a structured questionnaire with closed-ended items (UNAIDS, 2000). The questionnaire covered the following areas: Demographic data on the pregnant women, perceptions and practices regarding HIV transmission, testing, disclosure of HIV status and stigma.

The questionnaire was validated by pre-testing the instrument on 20 women in four clinics which did not form part of the study. Content validity was ensured by conducting an intense literature review, consultation of experienced HIV and AIDS researchers, lay counsellors and professional nurses working in the clinics.

Ethical considerations

Permission to conduct the study was sought from and granted by the University of Limpopo Research Ethics Committee (Turfloop Campus), the Limpopo Provincial Department of Health and Social Development and the supervisors at the clinics. The respondents were informed that participation in the project was voluntary and that each participant could terminate her participation at any stage without repercussion. Only respondents who signed the letter of consent were included in this study. Anonymity was ensured by not using names and

confidentiality by allowing only the people who were involved in the research to have access to the data.

Results and Discussion

Demographic data

The ages of pregnant women

The age distribution of pregnant women who sought antenatal health care services are presented in Figure 1. The incidence of teenage pregnancy among the age group of between 15-19 years was 27%. The pregnancy incidence rate is higher than that reported in 2000 by Malema (2000), which was 24% in one of the villages in the Polokwane municipality. It is of concern to the researchers that so many teenagers fell pregnant while they were still studying. According to the findings of a study conducted by Hassim (2005), teenagers fall pregnant so that they could get the Child Support Grant provided by the government.

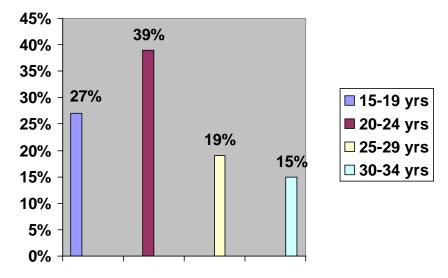


Figure 1: The age groups of respondents

Data on the occupation of the respondents are displayed in Figure 2. Almost half (49%) of the respondents were still learners/students. The added burden of testing HIV-positive would compound their problems as they would find additional expenses to their own needs and those of their infants unaffordable. Only 10% of the respondents had some form of employment. Of the latter group, 7% were labourers whose wages may be low and 3% were doing other jobs.

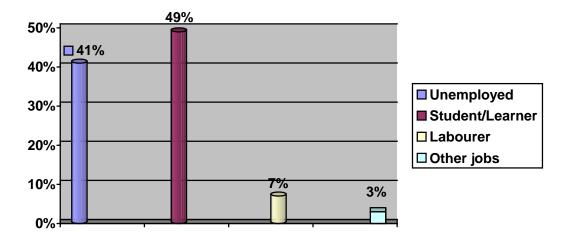


Figure2: Occupation of respondents

The level of education of the respondents is indicated in Figure 3. Almost three-quarters (74%) of the respondents were learners in grades 9-12 and only 7% were at tertiary level.

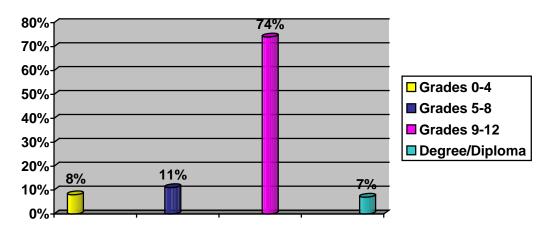


Figure 3: Educational level of respondents

Table 1 indicates that the majority of the respondents (71%) had either a first or second pregnancy, while 19% had either a third or fourth pregnancy. Table 2 indicates that 47% of the respondents already had one or two children, while 10% were already on their fifth to sixth baby. With the growing rate of HIV and AIDS in South Africa, it is of concern that more than half (53%) of the respondents were already on the third or higher parity thus exposing children to the MTCT, especially in view of the observation that 33% were not willing to take the HIV test.

Table	1:	Gravida	hv	age	group

		Age Group in Years								
	15-1	19	20-2	24	25-2	9	30+	-	Tota	al
Gravida	Count	%	Count	%	Count	%	Count	%	Count	%
1-2	19	26	25	34	7	10	1	1	52	71
3-4	1	1	3	4	6	8	4	6	14	19
5-7	0	0	0	0	1	1	6	8	7	10
Total	20	100	28	100	14	100	11	100	73	100

n=73(100%)

There were also major differences in the 3 to 4 number of pregnancies (gravida) (Table 1) and the number of children (parity) (Table 2). In this study, the respondents were not required to indicate whether they had a termination of pregnancy, miscarriage or whether their babies were still alive.

Table 2: Parity by age group

	Age Group in Years									
	15-1	9	20-2	.4	25-2	29	30-	+	Tota	al
Parity	Count	%	Count	%	Count	%	Count	%	Count	%
1-2	16	22	15	21	3	4	0	0	34	47
3-4	4	6	12	16	9	13	2	3	27	38
5-7	0	0	1	1	2	3	8	11	11	15
Total	20	100	28	100	14	100	11	100	72	100

n=72(100%)

Perceptions of Respondents Towards HIV Testing

Willingness of other women to be tested

Figure 4 shows that 63% of the respondents thought that other women were not willing to take the HIV test, whereas 21% thought that they were willing and 16% agreed that they did not know.

Table 3 indicates the reasons behind the willingness of other women to take the HIV test as stated by the respondents. Less than half (45%) of the respondents believed that other women were willing to take the HIV test because they wanted to know their HIV status, whereas 41% thought they were willing to take the test in order to prevent infecting their babies. It is encouraging to learn that quite a substantial number (41%) of women were aware of PMTCT of HIV and AIDS, and were concerned that MTCT of HIV and AIDS should be avoided.

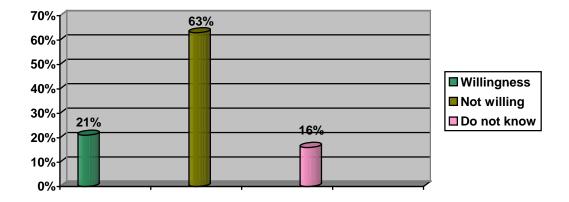


Figure 4: Willingness of other pregnant women to take the HIV test

Reasons for willingness of other women to test

Table 3: Reasons for willingness of other pregnant women to take the HIV test

Reasons for Willingness to Take HIV Test	Frequency	Percentage
Do not want to infect baby	9	41
Want to know their status	10	45
Do not know	3	14
Total	22	100

n=22 (100%)

Reasons for unwillingness to take the HIV test

Table 4 summerises the reasons advanced by women for refusing to take the HIV test. Fear seems to be the main reason for declining to take the HIV test. The fear is expressed in many ways. Thirty two percent (32%) of the respondents feared that they might be positive, while another 32% feared stress if they were found to be positive, 12% were worried that the baby might have AIDS at birth, whereas only 3% feared rejection by partners if they were found to be positive.

Table 4: Reasons for unwillingness of other pregnant women to take the HIV test

Reasons for Unwillingness to Take the HIV Test	Frequency	Percentage
Do not want to know their status	5	7
Fear of knowing that one might be HIV-positive	22	32
Needed partner to give them permission to be tested	3	5
Fear of rejection by partner if found to be positive	2	3
Fear of stress if positive	22	32
Do not trust their partners	2	3
Fear of bearing a child who has AIDS	12	18
Total	68	100

n=68 (100%)

Willingness to take the HIV test

Figure 5 shows that 67% of the respondents were willing to take the HIV test. It is interesting that the results in Figure 3 indicated that 63% of the respondents thought that other women were not willing to take the HIV test. Although 67% of the respondents indicated that they were willing to take the HIV test, the statistics for the testing rate for the period of one year (from May 2006 to June 2007) in Figure 11 was 79% of those who had been counselled which is higher than 67% of those who stated that they were willing to take the HIV test. It is not surprising that 79% of the respondents had agreed to be tested later. It is suspected that they could have refused to be tested when they visited the clinic for the first time but agreed to be tested as the pregnancy progressed.

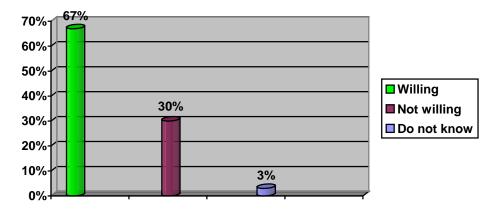


Figure 5: Willingness of the respondents to take the HIV test

Reasons for willingness to be tested

Table 5 shows that the majority (63%) of the respondents who were willing to take the HIV test wanted to be aware of their own HIV status whereas 30% took the test to ensure that they could protect their children, as they did not want to infect their babies. The researcher assumes that the latter group knew about PMTCT. The respondents' main reason for agreeing to be tested, which was because they did not want to infect their babies, is inconsistent with reports by DePaoli, Manongi and Klep (2002) that some women are more concerned about their infants and are quite informed about PMTCT.

Table 5: Reasons for willingness to take the HIV test

Reasons for Willingness to Take HIV Test	Frequency	Percentage
Do not want to infect the baby	18	30
Do not doubt my status	1	2
Want to know my status	38	63
I trust my partner	3	5
Total	60	100

n=60 (100%)

Reasons for unwillingness to be tested

Table 6 shows that fear seemed to be a dominant factor for unwillingness to take the HIV test. The majority (68%) of respondents expressed fear in different forms. The fears expressed by respondents for refusing to take the HIV test agree with the findings by Temmerman et al. (1995) and Cartoux et al. (1998) who reported that women refused to take the HIV test for fear of discrimination, domestic violence, murder and abandonment by their partners.

Table 6: Reasons for unwillingness to take the HIV test

Reasons for not willing to take the HIV test	Frequency	Percentage
Do not want to know my status	4	18
Fear of being killed by partner if I were found to be positive	8	36
Fear of knowing that I might be positive	5	23
Fear that I might get a heart attack if I were to know that I am positive	2	9
Not yet ready	3	14
Total	22	100

n=22 (100%)

Knowledge about how HIV and AIDS is transmitted

Almost all (97%) of the respondents knew how HIV and AIDS is transmitted. It is encouraging that the efforts of the government to create HIV awareness had some measure of success. However, the problem is that despite having the knowledge about how HIV and AIDS is transmitted, the rate of infection continues to increase unabated.

Knowledge about MTCT of HIV and AIDS

The respondents were further asked how MTCT of HIV and AIDS occurs because their knowledge in this area is crucial. Knowing how MTCT of HIV occurs could motivate them to comply with taking nevirapine and use of formula feeding for their infants, should they test HIV-positive.

Figure 6 summarizes the responses on how MTCT of HIV and AIDS may occur. Although 18% of the respondents knew about MTCT of HIV and AIDS, more than half (53%) did not know how MTCT occurs. An insignificant percentage (3%) knew that MTCT of HIV and AIDS occurred through breastfeeding. Therefore, it is very important that respondents should be educated about how MTCT occurs so that they could take precautionary measures or comply when advised about formula feeding instead of persisting to breastfeed their infants for cultural or economic reasons.

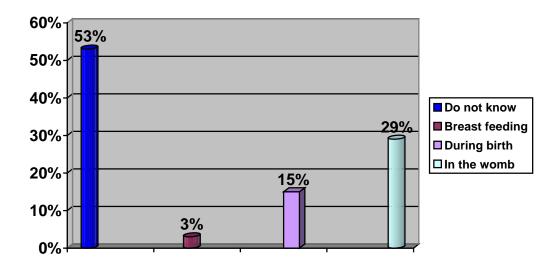


Figure 6: Knowledge about how MTCT occurs

Ever tested for HIV

Only 40% of the respondents had previously been tested for HIV, as compared to 60% who had never been tested. Campaigns should be intensified to encourage people to be tested because testing is the entry point to the prevention of HIV transmission and care of those who are already infected (UNAIDS, 2004). Testing should, however, not be a once-off activity, but must be done regularly with every pregnancy.

Willingness to disclose HIV-positive status to nurses

Figure 7 shows that more than three quarters (78%) of the respondents were willing to disclose their HIV-positive status to nurses, whereas 21% were unwilling. The 21% of the respondents who were unwilling to disclose their status were afraid of the stigma attached to being HIV-positive. In order to establish why they were unwilling to disclose their status, they were asked if they thought that the nurses would inform other people about their HIV-positive status.

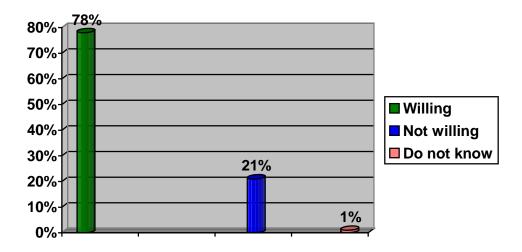


Figure 7: Willingness to disclose HIV-positive status to nurses

Disclose of their HIV-positive status by nurses to other people

Figure 8 shows that most of the respondents (76%) believed that the nurses would never disclose their HIV-positive status, whereas 20% believed that the nurses would disclose their status to other people. These findings are in contrast with those of Cartoux et al. (1998) and Maman et al. (2001) who reported that women refused to be tested because they feared that the maternity staff would disclose their status to other people. The respondents were further asked to give the reasons for disclosing their status to the nurses. The results are summarized in Table 7.

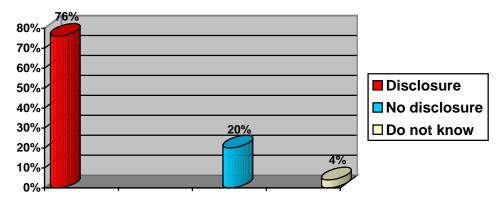


Figure 8: Disclosure of HIV-positive status by nurses to other people

Reasons for disclosure of HIV-positive status to nurses

Table 7 shows that more than half (62%) of the respondents indicated that they would disclose their status to the nurses, so that they could get advice from them.

A small percentage (5%) would disclose their status in order to prevent infecting the nurses. It is worrying that 22% of the respondents reported that they would disclose their status in order to get food parcels. This reason is disturbing and needs to be addressed immediately because food parcels are not a means to PMTCT. It is not clear why 11% of the respondents were unwilling to give reasons for their willingness to disclose their status to nurses. Presumably, they could have been afraid to provide a reason that might embarrass them.

Table 7: Reasons advanced for disclosing HIV-positive status to nurses

Reasons Advanced for Disclosing HIV- positive Status to Nurses	Frequency	Percentage
Do not know	7	11
To get help/ advice on health matters	40	62
To prevent infecting them	4	5
To get food parcels	14	22
Total	65	100

n=65 (100%)

Reasons for non-disclosure of HIV-positive status to nurse

Table 8 indicates that more than half (61%) of the respondents would not disclose their status to the nurses because they feared being discriminated against, whereas, 22% feared that the nurses might tell other people and an insignificant percentage (6%) said it was not easy. The 11% of the respondents who said they did not know could have felt shy to give their reasons. Fear of discrimination and the need for confidentiality expressed by the the participants concur with the findings by Cartoux et al. (1998); Maman et al. (2001), Fredricksson and Kanabus (2007) and Bromlow, Cook and Seaton (2003). The fact that one's results are kept confidential needs to be emphasised during counselling and even during awareness campaigns. Considering that there is still a stigma attached to being HIV-positive, it would not have been easy to ask women a direct question about disclosure to their partners. The respondents were asked about other pregnant women in order to reduce the sensitivity of the question.

Table 8: Reasons advanced for failure to disclose HIV-positive status to nurses

Reasons Advanced for Failure to Disclose HIV-	Frequency	Percentage
positive Status to Nurses		
Do not know	2	11
Will tell other people	4	22
Not easy to disclose	1	6
They will discriminate against me	11	61
Total	18	100

n=18 (100%)

The results on difficulty to disclose HIV status to one's to partner are reflected in Figure 9.

Many of the respondents (64%) reported that they do not think that other women had a problem of disclosing HIV status to their partners whereas, 19% believed that other women had a problem of disclosing the staus to their partners and 17% said they did not know.

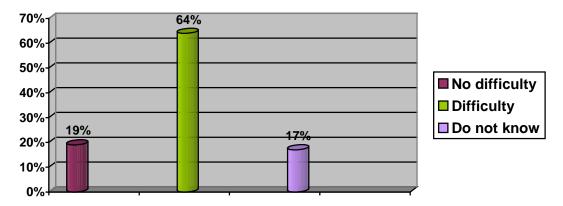


Figure 9: Difficulty to disclose HIV-positive status to partner

Figure 10 covers information about disclosure of HIV-positive status to partner. Almost all the respondents (85%) indicated that they would disclose their HIV-positive status to their partners compared to 14% who stated they would not disclose their status to their partners.

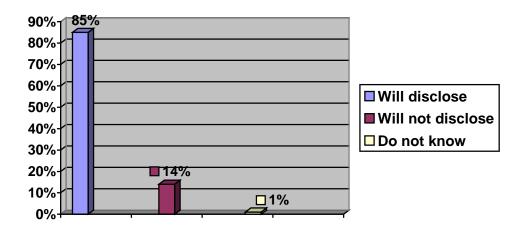


Figure 10: Disclosure to partner if HIV test is positive

Reasons for disclosing HIV-positive status to partner

In Table 9 the reasons for disclosing HIV-positive status to partner is reflected. Twenty five of the respondents indicated that they will disclose their status so that the partner too should know, 13 wanted the partner to know and take treatment and 5 cannot hide from him. The reasons advanced for disclosing the HIV status to the partner could be due to the fact that they had a better understanding of HIV and AIDS transmission, and could be aware of the nature of it being a sexually transmittable disease.

 Table 9: Reasons advanced for disclosing HIV-positive status to partner

Reasons Advanced for Disclosing HIV-positive Status to	Frequency	Percentage
Partner		
Do not know	2	4
He must know so that he too can take the test	25	54
Cannot hide anything from him	5	12
Afraid that if he finds out, he will chase me away	1	2
He must know so that he can go for treatment	13	28
Total	46	100

n=46 (100%)

Reasons cited for not disclosing to partner

Table 10 indicates that almost all the respondents (94) would not be willing to disclose their HIV status because of fear of the reaction from the partner. Fear of being left by the partner seemed to be the most dominant (47%) persuasion, followed by fear that the partner might blame them for having infected them (28%). It is not surprising that women have expressed such fears because of the oppression and abuse of women by their partners which is still prevalent in the country.

Table 10: Reasons advanced for difficulties in disclosing HIV-positive status to partner

Reasons Advanced for Difficulties in Disclosing HI	V- Frequency	Percentage
positive Status to Partner		
Do not know	4	6
Fear partner may leave them	30	47
Fear partner may kill them	7	11
Fear partner may tell other people	5	8
Fear that partner will think I brought the virus	18	28
Total	64	100

n=64 (100%)

Statistics of counselling and testing

Figure 11 indicates that 3948 pregnant women had over a 12-months period (June 2006 to May 2007) been counselled, that is, an average of 19 clients counselled per month by each counsellor. Of the 3948 women who had been

counselled, 3124 (79%) had accepted the test whereas 826 (21%) had refused to be tested. Of the total number of women who had agreed to be tested 3121, 2030 (84%) tested negative and 499 (16%) were positive.

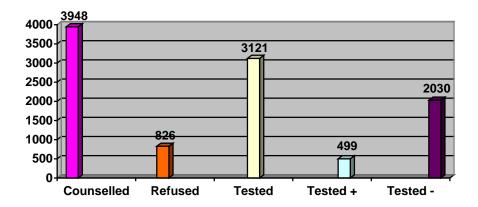


Figure 11: Number counselled, refused to test, tested and HIV staus from June 2006 to May 2007

Recommendations

- The National Department of Health in South Africa and NGOs should allocate more resources towards reducing stigma, discrimination and non-disclosure of HIV-positive status.
- An evaluation of all the HIV and AIDS awareness and prevention materials should be done to remove stigma, discrimination and negative attitudes associated with HIV discoolsure.
- HIV and AIDS awareness campaigns should now focus on PMTCT of HIV and AIDS targeting women between the ages of 15 to 24 years.
- Testing before getting married should be included in the HIV and AIDS education material and must be advocated.
- Marriage counsellors should be encouraged to counsel clients on testing for HIV and AIDS before marriage.
- More resources should be allocated to the public clinics to realize PMTCT.

Conclusion

It is of concern that 21% of the pregnant women declined to be tested for HIV and AIDS. Therefore, a lot must still be done regarding the need to eradicate the myths that still exist in the rural communities about the pandemic. The stigma of being HIV positive is still responsible for preventing most pregnant women from accessing the services intended to reduce MTCT of HIV and AIDS. Although the pregnant women had adequate knowledge about PMTCT of HIV and AIDS more than half did not know how MTCT of HIV and AIDS occurs.

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