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**FAMILY PLANNING AND SAFER SEX PRACTICES AMONG HIV INFECTED WOMEN RECEIVING PREVENTION OF MOTHER-TO-CHILD TRANSMISSION SERVICES AT KITALE DISTRICT HOSPITAL**

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**FAMILY PLANNING AND SAFER SEX PRACTICES AMONG HIV INFECTED WOMEN RECEIVING PREVENTION OF MOTHER-TO-CHILD TRANSMISSION SERVICES AT KITALE DISTRICT HOSPITAL**

S.C. BII, B. OTIENO-NYUNYA, A. SIIKA and J. K. ROTICH

**ABSTRACT**

**Objectives:** To determine the usage of family planning services and safer sex practices among HIV infected mothers who had gone through the prevention of mother to child transmission (PMTCT) process.

**Design:** Descriptive cross-sectional study.

**Setting:** The maternal and child health and family planning (MCH-FP) clinics in Kitale District Hospital, Western Kenya.

**Results:** A total of 146 respondents were recruited for this study. Only 44% of the respondents were using some form of family planning. The most popular method of contraception was the hormonal injectable contraceptives. Although 73% of respondents were no longer planning to have more babies, only 45% of them were using a family planning method. Only 38% of respondents reported condom use with their partners for safe sex. Married women and those who had revealed their HIV status to their partners were more likely to use condoms ( $p < 0.05$ ).

**Conclusions:** Usage of family planning services in this study was low. A large percentage of the women were still planning to have more babies and very few women were using condoms for safe sex. Women who had informed their partners about their HIV status were more likely to use condoms than those who had not. Male partner involvement is crucial in decisions pertaining to family planning use and safe sex practices.

**INTRODUCTION**

Family planning is an important component of prevention of mother to child transmission (PMTCT). The women are advised on family planning options available during the antenatal and postnatal period. The aim is to prevent unintended pregnancies and therefore reduce the risk of mother to child transmission of HIV. In the general population, family planning usage is still very low. The Kenya Demographic and Health Survey (KDHS) 2003 found that only 40% of urban and 29% of rural women aged 15 to 49 years uses any modern method of family planning (1). If this

figure is also true for HIV positive women who have gone through the PMTCT programme, then there is an increased risk of HIV-positive women getting pregnant with the risk of transmitting HIV to their babies.

Antenatal mothers who are HIV-positive should be counselled on family planning options available during the antenatal period and after delivery. Making available safe and effective contraception and high quality reproductive health counselling can help a woman practice safer sex, determine her future child bearing patterns on a more responsible and informed basis and potentially reduce the number of HIV-infected births.

Women who learn that they are HIV-infected may have a strong desire to avoid bearing additional children who may be born HIV-infected and may become orphaned at an early age. HIV-positive women who opt not to breastfeed have a higher need for family planning services as they miss the birth spacing effect of lactational amenorrhoea. Family planning counselling and services is therefore a key component of a PMTCT.

Very little emphasis has been focused on the prevention of unintended pregnancies in HIV infected women. Pregnancy and postpartum period are associated with health risks especially in HIV infected women. Increases in HIV prevalence in women of childbearing age have been accompanied by increases in maternal mortality ratio in several sub-Saharan African countries such as Malawi (ratio in 1992: 620 per 100,000 live births and 1120 per 100,000 in 2000) and Zimbabwe (283 per 100,000 in 1994 and 695 per 100,000 in 1999) (3). In many areas of sub-Saharan Africa where HIV infection is high among women of reproductive age, there are many unintended pregnancies among the HIV-infected women. The KDHS 2003 survey reported that only 55% of births in Kenya are planned (1).

Male involvement should be one of the key components of PMTCT. Decisions pertaining to safer sex and family planning can hardly succeed without the involvement of the male partner. HIV discordance has also been reported in 7.5% of couples (4). It is therefore important for couples to know the HIV status of their partners so that they can practice safer sex in situations where one is infected in order to prevent transmitting HIV to the uninfected partner.

**MATERIALS AND METHODS**

*Study area and study design:* This study was carried out at the Kitale District Hospital between April 2005 and July 2005. This was a cross-sectional study. Quantitative techniques were used. A structured questionnaire was administered to the clients. The information collected was based on self-reporting by the study participants.

*Target population and inclusion criteria:* All HIV positive postnatal mothers who had been enrolled in the PMTCT programme at the hospital were requested to participate in the study. A written consent was obtained from the participants. The criteria used in the recruitment of the study participants was that they were HIV-positive and knew their HIV status, were postnatal between six weeks and one year of delivery, had undergone PMTCT at ANC or maternity at Kitale District Hospital and had been given single dose nevirapine at ANC or maternity and/or delivered in hospital.

*Sampling and sample size:* The minimum sample size was statistically determined for this study. A total of 146 mothers were recruited within the study period. All clients who met the recruitment criteria and consented to join the study were recruited.

*Data management and analysis:* Data from the structured questionnaires were analysed using the Statistical Package for Social Sciences (SPSS) software. Cross tabulations were derived and chi-squares used to test significance of relationships between variables. Logistic regressions were also used to compare several variables. Statistical significance was taken as P<0.05. Tables and graphs were used to present the data.

**RESULTS**

Only 63 out of 146 (44%) of the respondents were using any modern method of family planning. The most popular method was hormonal injectable contraceptive which 22 out of 146 (15%) of the women were using. Still 19 out of 146 (13%) of the women had undergone bilateral tubal ligation because they no longer wanted to have children. This was done after the delivery of their last baby. Sixteen (11 %) women were on oral contraceptive pills while the most unpopular method of contraception was the intra uterine contraceptive device which was being used by only one woman.

There was a relationship between the use of a family planning method and marital status and age of respondents (Table 1). Those who were married were more likely to be on family planning than those who were single (P<0.05). Only 14.8% of the single women were on some form of family planning. Those who were widowed, separated or divorced were also less likely to be on family planning as were those who were young (less than 25 years of age) (P <0.05).

**Table 1**  
*Comparison between marital status and family planning use*

| Marital status                     | On family planning |                | Total      |            |
|------------------------------------|--------------------|----------------|------------|------------|
|                                    | Yes<br>No. (%)     | No<br>No. (%)  | No.        | (%)        |
| Single                             | 4 14.8             | 23 85.2        | 27         | 100        |
| Married                            | 56 55              | 46 45          | 102        | 100        |
| Widowed/<br>divorced/<br>separated | 4 23.5             | 13 76.5        | 17         | 100        |
| <b>Total</b>                       | <b>63 43.8</b>     | <b>81 56.3</b> | <b>146</b> | <b>100</b> |

P<0.05

The choice of family planning method was more likely to be affected by the age of the respondent ( $p < 0.05$ ). Most young women under the age of 35 years opted for hormonal contraceptives while older women preferred mechanical barriers or surgical methods of contraception. There was no relationship between spouse's awareness of HIV status and family planning use. The duration since delivery did not seem to affect the use of family planning (Table 2).

**Table 2**  
*Family planning usage in comparison to duration since delivery*

| Duration since delivery | On family planning |     |     |     | Total |     |
|-------------------------|--------------------|-----|-----|-----|-------|-----|
|                         | Yes                |     | No  |     |       |     |
|                         | No.                | (%) | No. | (%) | No.   | (%) |
| 6wks-3 months           | 22                 | 45  | 27  | 55  | 49    | 100 |
| 4-6 months              | 12                 | 34  | 23  | 66  | 35    | 100 |
| 7-9 months              | 15                 | 47  | 17  | 53  | 32    | 100 |
| 10-12 months            | 14                 | 48  | 15  | 52  | 29    | 100 |
| Total                   | 63                 | 43  | 82  | 57  | 145   | 100 |

P = 0.645

About a third of the women were not using any protection when having sex with their spouses, however 55 out of 146 (38%) said that they use condoms while 41 out of 146 (28%) reported secondary sexual abstinence. There was a strong relationship between safer sex practices and marital status (Table 3).

**Table 3**  
*Correlation between marital status and safer sex practices among the respondents*

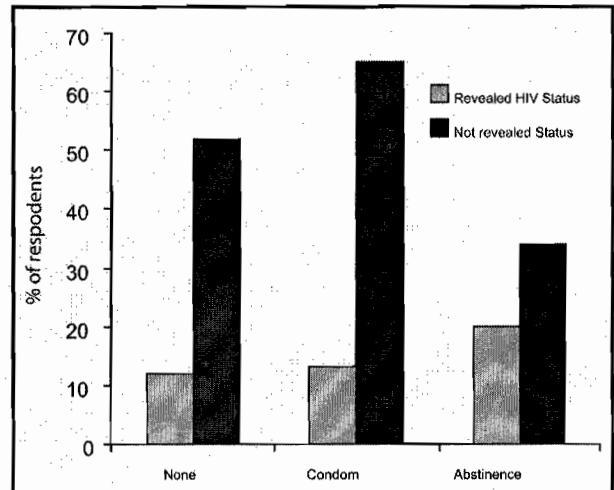
| Marital status             | Protection when having sex |     |        |     | Abstinence | Total |         |         |
|----------------------------|----------------------------|-----|--------|-----|------------|-------|---------|---------|
|                            | None                       |     | Condom |     |            |       | No. (%) |         |
|                            | No.                        | (%) | No.    | (%) |            |       |         | No. (%) |
| Single                     | 8                          | 27  | 2      | 7   | 17         | 63    | 27      | 100     |
| Married                    | 40                         | 39  | 51     | 50  | 11         | 11    | 102     | 100     |
| Widowed/Divorced/Separated | 2                          | 12  | 2      | 12  | 13         | 76    | 17      | 100     |
| Total                      | 50                         | 34  | 55     | 38  | 41         | 28    | 146     | 100     |

P < 0.05

Most of the married women reported condom use while single women and those who were divorced, separated or widowed preferred abstinence. Women who were 20 to 34 years of age were more likely to use condoms than those who were younger or older ( $p < 0.05$ ).

Those who had revealed their HIV status to their spouses were more likely to use condoms (65%) as opposed to those who had not (13%) (Figure 1). However, 20% of clients whose spouses were HIV-negative were not using any form of protection when having sex despite awareness of HIV status.

**Figure 1**  
*Relationship between spouse's awareness of HIV status and safe sex practices*



Women who were using family planning methods were also more likely to use condoms for safer sex, a form of dual protection ( $p < 0.05$ ). Fifty five percent of the women who were on a family planning method were also using condoms for safer sex.

Most of the respondents (73%) were no longer planning to have more babies. For those who still wanted babies, most were under 30 years of age,

married and had less than three children. The most important predictor for need for another baby was the number of children a woman had. Women with one child or none had the greatest need for another baby (OR 33.452,  $p < 0.05$ ) in comparison to women who had more than three children.

**Table 4**  
Comparison between use of family planning and need for another baby

| On family planning | Planning to have another baby |          | Total |     |
|--------------------|-------------------------------|----------|-------|-----|
|                    | Yes                           | No       | No.   | (%) |
|                    | No. (%)                       | No. (%)  | No.   | (%) |
| Yes                | 16 25                         | 48 75    | 64    | 100 |
| No                 | 24 29.3                       | 58 70.7  | 82    | 100 |
| Total              | 40 27.4                       | 106 72.6 | 146   | 100 |

Married women were also four times more likely to want another baby as compared to those who were either divorced, separated or widowed (OR 4.152,  $P=0.126$ ). Fifty eight out of 106 (55%) of the respondents were no longer interested in having babies yet they were not on any family planning method (Table 4).

## DISCUSSION

During the PMTCT process, the HIV-infected women are advised on family planning to avoid subsequent unintended pregnancies and prevent mother to child transmission of HIV. They are taken through the various methods of family planning available. Usage of family planning services in this study was low. The probable reason for the low usage of family planning services in this group is that family planning services have not been fully integrated into the PMTCT services. They are still being offered as a separate service where women requiring family planning services are referred to. As such, the issue of family planning is not sufficiently emphasised among HIV-infected women.

Despite the risk of transmitting HIV to their babies, HIV-infected women may want to have more children even after they have been advised against doing so. This is especially true in African cultures which are pronatalist. A strong desire for children may reduce the HIV-infected individuals' acceptance of family planning services. In this study, a large percentage of the women were still planning to have more babies. Married women and those with fewer than two children were the ones who were particularly interested in having more babies. Couple counselling and testing especially among married couples may be useful in reducing the need for more babies considering that in most cases, women are secondary decision-makers as far as reproductive health issues are concerned. Decisions pertaining to the number of children a woman

wants to have cannot be made without the involvement of the male partner. There are however the group of women who do not necessarily want to have more children but are not on any family planning method. This represents unmet need for family planning services. Women may not use family planning services and yet may not desire to have more children for various reasons. Women may not make decisions regarding the use of family planning services on their own without the involvement of their partners. In this study, women who had informed their partners about their HIV status were more likely to use condoms than those who had not. Married women were also more likely to be on family planning than single women. Single women were less likely to have regular partners and that is why family planning usage in that group is low.

In our set-up, HIV discordance among couples has been found to be high (4). In this study about 20% of women who were aware of the HIV status of their spouses said that their partners were HIV-negative. Because of the high level of discordance, HIV seropositive women are advised on safe sex practices during PMTCT counselling in order to avoid infecting their partners and avoid re-infecting themselves with a different strain of the virus. Condom use among the women in this study however was low. Women who had revealed their HIV status to their partners were more likely to use condoms than those who had not. Most of those who preferred to use condoms were married women. It is important to note that the majority of women whose partners were HIV seronegative reported condom use. The most disturbing finding in this study was the low condom usage among young women. These are women in their early 20s and who are already HIV-infected and yet are not ready to use condoms.

The results obtained in this study are comparable to those obtained by Desgrees *et al* (2) on adherence of the HIV-positive women to the counselling provided after the HIV test during pregnancy. In that study, which looked at contraceptive use and safe sex among the HIV-positive women, only 39% of the women used contraceptives at the time of the survey.

The PMTCT programme should therefore address the issue of family planning and safer sex practices particularly among the HIV-positive women. Prevention of unintended pregnancies will have the effect of reducing the number of children infected with HIV and contribute to quality of life for many HIV-positive women and reduce the prospect of creating more orphans. Promotion of dual protection should be a key component of the PMTCT family planning strategy. Condom use should be encouraged among HIV-positive women in order for

them not to spread the infection. Couple-counselling and testing should also be encouraged because it emerged that there is a big percentage of discordant couples. The PMTCT programme should therefore adopt the concept of couple-counselling and testing and not the current approach where when a woman is found to be HIV-positive she is encouraged to bring the partner and where the woman is HIV- negative nothing is done.

#### ACKNOWLEDGEMENTS

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