Contraceptive use, pregnancy negotiation and associated challenges among HIV-discordant couples in Moshi Urban, Tanzania: mixed method study.

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Abstract:

Background: HIV is a public health problem in sub Saharan African countries. In this setting with generalized epidemic, HIV discordant partnerships are prevalent and there is high transmission risk. Modern contraceptive use is one of key intervention in prevention of vertical and horizontal transmission of HIV, and in improving maternal health and child survival. There is limited information on contraceptive use and pregnancy decisions among discordant couples in SSA. The paper aimed to assess pregnancy negotiation, contraceptive use and associated challenges among HIV discordant couples in Moshi urban district, Northern Tanzania.

Methods: A longitudinal study involving 40 discordant couples was conducted at primary health care setting (Majengo Health Centre) from 2002 to 2013. The couples are part of a larger cohort of 1682 women who were enrolled as part of PMTCT program when they were in third trimester of pregnancy and followed over time to determine disclosure patterns and incidence of HIV. Questionnaires were used to collect socio demographic, partner information, reproductive and contraceptive use information at enrolment and follow up and in-depth interviews were conducted to explore pregnancy and FP use negotiations and challenges.

Results: The mean age of the women was 25.0 years (SD 5.2). The couples have lived together for a median of 3 years (range 2-10 years). Forty percent of the couples were using dual contraceptives method, 18% used condoms alone and 7% were neither using condoms nor modern contraceptives. Twelve (30%) of the couples had second or third pregnancy, intended, except in two. Different strategies of risk reduction were described with prevention fatigue as a key challenge.

Conclusion: Strategies to improve 100% condom use among discordant couples are needed, as well as couple counselling interventions and early entry into HIV-care and treatment. Simplified medical explanation on how HIV discordance can happen among partners is required.

Key words: HIV, sero-discordant couples, contraceptive use, pregnancy intentions, Tanzania

Introduction

HIV/AIDS and mother-to-child transmission of HIV (MTCT) are still major public health problems in sub Saharan Africa (SSA). It is estimated that 68% of the 33 million people living with HIV (PLWHIV) and 70% of the new infections globally are in SSA. In SSA, 60% of PLWHIV are women of reproductive age (WRA) (UNAIDS, 2013). With high number of HIV infected women globally, the region is home to nearly 90% of pregnant women living with HIV, and in 2013 more than 90% of the 270,000 new HIV infections among children < 15 years globally occurred in this epicentre (UNAIDS, 2013).

Tanzania is among the 22 countries with high HIV burden. The HIV prevalence among adults is 5.1%, with women of reproductive age having a higher prevalence (6.2%) compared to men (3.8%) (THMIS, 2011-2012). MTCT of HIV is still high, estimated to be 15% (UNAIDS, 2013).

Discordant partnerships are an increasing problem in generalized and mature HIV epidemic found in most SSA countries. The prevalence HIV-serodiscordance ranges from 5 -14% in Eastern Africa and 14 -27% in Southern Africa (Lingappa et al, 2008; THMIS, 2011-2012). HIV negative partner in discordant couples have 10-100 times higher the risk of getting HIV in a year compared to general population (Lingappa et al, 2008; Dunkle et al, 2008). Several countries have reported that most of the new HIV infections in SSA occur in couples/stable partnership because of high discordance rates (Chomba et al, 2008; Dunkle et al, 2008).

The desire to have children, societal expectations and stigmatization of both HIV and infertility, all put pressure on a sero-discordant couples to practice unsafe sex in order to conceive (Beyeza-Kasheysa et al, 2009). Dual contraceptive use is recommended for HIV-positive people i.e. use of condoms to prevent horizontal HIV transmission and use of effective contraceptives for prevention of unwanted pregnancies and ultimately prevention of MTCT of HIV. Thus while it is undisputed contraceptive use is one of key intervention in prevention of vertical and horizontal transmission of HIV, and in improving maternal health and child survival, these HIV discordant couples have to navigate/balance safe sex and desire to have children.

There is limited published information in SSA on contraceptive use among discordant couples, negotiations or actions used when pregnancy is desired and associated challenges. We had a chance to have 40 discordant couples among a cohort of 1682 women who were part of the PMTCT intervention program which started in 2002 at Majengo Health Centre and is on-going. The paper describes the prevalence of contraceptive use and types among discordant couples. We also explored negotiations between couples when pregnancy is desired and describe general challenges associated in condom and other contraceptive use among the couples.

Methods

Study Setting

The study was conducted at Majengo Health Centre, situated in Moshi Municipal, in northern Tanzania. Moshi Municipality is among the 7 districts of Kilimanjaro region. The region is multicultural in that it has people from nearly all the tribes in the country (Census Report, 2013). The key economic activities are agriculture and livestock keeping. Other economic activities include tourism, manufacturing, fishing and on a small scale beekeeping. The region has a population of 1,376,702, of whom 335,790 are women of reproductive age (15-49 years). The region has an annual population growth rate of 1.6% (Census Report, 2013). The HIV prevalence of Kilimanjaro is 3.8%, slight lower than the national level of 5.1% (THMIS, 2011-2012). The prevalence of contraceptive use is 51%, higher than the nation level of 27% (TDHS, 2011).

Study participants and data collection.

The study participants were recruited at Majengo health centre, one of the largest primary health care facility (PHC) in Moshi Municipal between June 2002-2013. A total of 1682 pregnant women were recruited in their third trimester and followed up to 24 months after delivery (Msuya et al, 2011). HIV-positive women and exposed infants have been followed for a longer period, for an average of seven years. During enrolment and throughout the follow up, women were encouraged to bring their partners for testing. During follow up, information on contraceptive use and HIV disclosure patterns was collected at 1, 3, 6 and 12 months after delivery, thereafter after every 6 months by using a short questionnaire.

Out of 303 who brought partners, there were 40 discordant couples; in 37 couples a woman was HIV-positive while the partner was negative and in 3 couples the man was HIV-positive while the woman was negative. In addition to brief questionnaire, in-depth interviews were carried out with all the discordant couples who came at any time during follow up. Interviews explored the following issues; partner support after knowing their HIV status, communication between couples, discussion and practice on condoms and other contraceptive use, pregnancy intention and overall challenges in being in such partnership.

Data analysis

All quantitative data were entered in PASW version 18 and means and frequencies on contraceptive use were derived. Proportions were used to summarise the data. For the qualitative data; thematic framework was used for analysis. Scripts were thoroughly read and emerging themes were categorized. Summarization of themes was done and participant's narrations are used to bring meaning in the paper.

Ethical consideration

Ethical permission for the study was given by the Tanzanian Ministry of Health and by the Norwegian Ethical Committee (East Region). Permission to conduct the study was also sought from the district medical officer and leader of the respective clinics. Signed informed consent was obtained from every participant.

Results:

A total of 1682 were recruited from 2002 to 2013. There were 399 HIV positive women and 1283 HIV-negative women. Eighteen percent (303) women brought their partners for HIV counselling and testing. There were 40 HIV-discordant couples; in 37 women were HIV-positive while their partners were HIV-negative. All the couples have shared the results.

The mean age of the women was 25.0 years (SD 5.2) and mean age for their partners was 31.7 years (SD 4.4). The couples have lived together for a median of 3 years (range 2-10 years).

Proportion using contraceptives

The majority of the couples (40%) were using dual contraceptives i.e. both condoms and other modern contraceptive method. Eighteen percent used condoms alone and 7% of the couples were neither using condoms nor modern contraceptives, Table 1.

Table 1: **Patterns of contracetive use among discordant couples (N=40) in Moshi urban 2002-2013**

Type of method	Number	Percent
Modern contraceptives and condoms	16	40.0%
Modern contraceptives alone	14	35.0%
Condoms alone	7	17.5%
None	3	7.5%

Condoms (59%) and depo-provera (51%) were the most common methods of contraceptives used, Figure 1. Long term contraceptives like Intrauterine device (IUCD) and implants were the least used methods.

Proportion with pregnancies

Nine couples had second pregnancy during the follow up period ranging from five to ten years, while three couples had third pregnancy during the follow up period. All the 2nd and 3rd pregnancies except two were desired and planned.

Strategies used when intend to become pregnant

Couples described different ways of tackling the risk of HIV transmission at the same time attain pregnancy. "*We use condoms nearly all the times. But when I want my wife to get pregnant, because I know her cycle very well, those 2-3 days are the only ones we have sex without condoms'* Discordant couple where a male partner was-HIV positive.

Some described strategies that target biological means of transmission. One woman reported avoiding abrasions during sex which may increase transmission risk. "*I use lubricant 'for example vaseline' to make sure there will not be abrasions or ulcers during sex during the times we are looking for pregnancy and we are not using condoms"*

Others described that they don't think anymore of HIV risk as there are ART drugs in the clinics. '*Now days there are drugs you use for a long period when you are pregnant. Many women have children who are not infected including my first child, so I am not afraid anymore to become pregnant while I have HIV'*

Some reported they do not want children anymore because those 18 months of waiting before knowing your child status is too much for them. '*I don't want to live 18 months of*

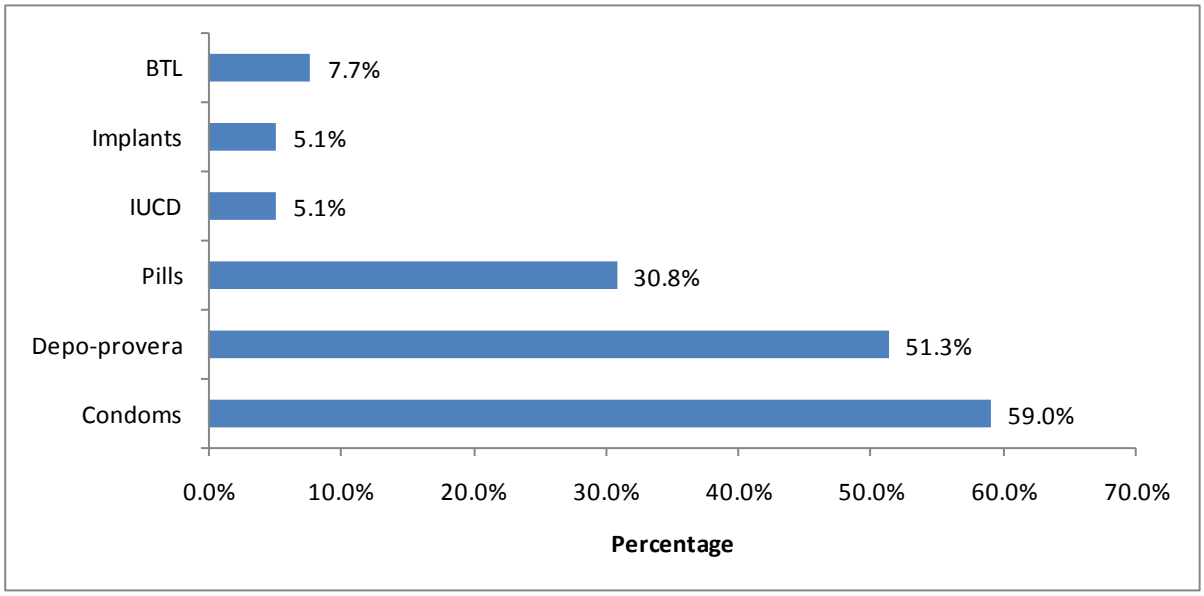
worrying asking if I have infected my child or not. And if the child becomes infected I will blame myself so much'

Challenges in being in discordant partnership

Two common challenges in regular use of condoms or contraceptives were reported. First was fatigue of using condoms every time and couples tend to have unprotected sex. '*You become tired of using condoms every time with your own partner. Sex is not enjoyable anymore, it loose spontaneity if every time you have to produce a condom'* HIV-negative male partner. The same participant reported to test himself frequently.

Second challenge for some HIV-negative partners there is disbelief that they are not infected while they had lived with the HIV-infected partners for some or long time. '*I have lived with you for 5 years now and you are telling me to use condoms every time. Why don't I become infected while we have been together for so long? I am not going to use condoms anymore'* reported by HIV- positive with negative partner. This was reported by several clients whose partners were negative.

Figure 1: Different types of modern contraceptives used by discordant couples in Moshi urban, Tanzania 2002-2013



Discussion

The findings of this study showed that condoms and depo-provera were the commonly used methods of modern contraception. Despite the couples were discordant only 40% used the dual methods of contraception (other method with condoms).

Key finding is that nearly 4 out of 10 discordant couples are not using condoms for prevention of sexual transmission of HIV and 1 in ten couples is not using any preventive method. This increase a risk of HIV acquisition to the couples that are HIV negative. The challenges associated with condom use like fatigue was a barrier to use condom. And also couples had a bad belief that they cannot acquire HIV since they stayed long with the infected partner for so long. According to Tanzania HIV and Malaria Indicator Survey (THMIS) report showed that most new HIV infections occur among discordant couples (THMIS, 2011-2012). There is a need to educate discordant couples on the importance of condom use to avoid HIV acquisition.

The women in this study were using injectables (depo-provera) to prevent pregnancy. The injectables were highly preferred as one shot stays for 3 months without coming to the health facility. In TDHS 2010 report showed Kilimanjaro women preferred to use injectables compared to other region in Tanzania (TDHS, 2010). In Zambia HIV positive women preferred injectables as it lowered the pregnancy rate (Mark et al, 2007).

In our study discordant couples were negotiating in the process of having a new baby. Most of subsequent pregnancies in couples after knowing they are HIV-discordant are wanted. The counselling provided to discordant couples might have helped them in the fertility decision making. In Zambia fertility decision was perceived to be made by men and women were rarely involved (Mark et al, 2007).

Conclusion

Strategies to improve 100% condom use among discordant couples are needed, as well as timely care for HIV-women who will become pregnant to prevent MTCT of HIV. There is a need to emphasize the use of other modern methods in preventing pregnancy and promoting the use of long term methods to prevent pregnancy. Simplified medical explanation on how HIV discordance can happen among partners is required

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