

Uptake of Family Planning methods and unplanned pregnancies among HIV infected individuals in Uganda

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BACKGROUND

Developed countries have reduced Mother-to-Child HIV Transmission (MTCT) to <1%. However, low resource countries still grapple with high rates of MTCT¹. In Uganda MTCT contributes up to 18% of all new HIV infections, translating into over 20,000 babies born with HIV each year². Prevention of unplanned pregnancies among HIV infected individuals is critical to Prevention of mother-to-child HIV transmission (PMTCT). However, the unmet need for FP among women in Uganda remains generally high, estimated at 41% of women of reproductive age-group³.

Delivery of FP services for HIV infected individuals in Uganda is still inadequate largely due to the parallel nature of FP and HIV services. The Uganda National Strategic Plan⁴ highlights integration of sexual and reproductive health (SRH), including FP with HIV services, as a key intervention to reduce HIV transmission. The Uganda PMTCT policy guidelines (2006) also recommend a comprehensive four pronged PMTCT strategy approach which includes prevention of unintended pregnancies among women living with HIV⁵. However, most PMTCT interventions have largely focused on the provision of ARVs for prophylaxis with limited interventions for prevention of unintended pregnancies. Uganda has recently developed a scale-up plan “towards virtual elimination of mother-to-child HIV transmission” (reducing transmission rates to below 5%) by 2015⁶. This plan emphasises scaling up interventions for all the four PMTCT prongs. However, the uptake of FP among HIV infected individuals, their preferences and hindrances in uptake and utilisation of FP services were not fully understood.

METHODS

Between September and November 2009, we conducted a cross-sectional study to evaluate the uptake and utilization of FP services among HIV infected men and women in Uganda, to inform the integration of FP into HIV services. We conducted exit interviews with 1,100 HIV infected individuals including 441 men and 659 women from 12 HIV clinics in three districts in Uganda, including Gulu, Kabarole and Kampala districts. The clinics included a HIV clinic within the national referral hospital in Mulago, three regional referral hospitals, four level IV health centers and four NGO facilities.

Data collection procedures

Interviews were conducted with patients attending the selected facilities on the day of the interview. The inclusion criteria were: 1) age (15-49 year age group), 2) clients who had attended the health facility for at least six months, and 3) possessing sufficient cognitive ability to provide informed consent and participate in the interviews. The study was approved by the Mengo Hospital ethics committee and the National Council for Science and Technology (UNCST).

Measures

In addition to the socio-demographic characteristics, interviews elicited information on the number of pregnancies (current and previous, and pregnancies since the respondents were diagnosed with HIV). Other variables included knowledge and use of FP, preferred contraceptive options for future use (for both the respondents who were using and those who were not using FP), number of live biological children, fertility desires and intentions of the respondent and their sexual partner, discussion of the number of children as well as timing of childbirth with sexual partners, and disclosure of HIV status to their sexual partner.

Data analysis

We conducted univariate and bivariate analysis to determine the proportion of men and women who reported current use of FP methods by gender. We also calculated the proportion of men and women who used dual methods (condoms and other methods) as well as those who used other methods without condoms. We conducted analysis for unplanned pregnancies and fertility desires among men and women. Additionally, we calculated the proportion of women who were married or in consensual union and not pregnant, that was currently using FP methods, by socio-demographic and other characteristics. We calculated the proportion of women that was currently using any FP method, the proportion that was currently using effective methods (excluding lactational amenorrhoea, rhythm, and withdrawal), and the proportion that was using effective FP methods (excluding condoms). The outcome variable for the bivariate and multivariate analysis was current use of effective FP methods (including condoms). Variables that were significant or with borderline significance ($p \leq 0.1$) were included into the multivariate model.

RESULTS

Overall, 485 (44%) of the respondents were from the urban and peri-urban areas. The majority of the respondents (659, 60%) were women. Five hundred and six respondents (46%) were within the 30 - 39 year age group. Adolescents (15-19 years) constituted 69 (6%) of the respondents; 20 of the 69 adolescents had ever had sexual contact. Most of the respondents were married (505, 46%) or in consensual union (140, 13%). Respondents had various low paying jobs like casual labour, small business but peasant farming was the commonest job 385 (35%). The majority of the respondents, 679 (62%), reported earning < 100,000 Uganda shillings (<50USD) a month

Fertility desires and intentions, and unplanned pregnancies

Overall, 31% (339) reported that they or their partner had been pregnant since they were diagnosed with HIV; 33% of the women had been pregnant and 28% of the men reported that their partners had been pregnant since they were diagnosed with HIV. Of these, 43% (105) said they did not plan their current or last pregnancy; 53% (80) among women compared to 26% (25) among men. Among respondents who had ever had children in their lifetime (629) 12% (77) were either pregnant or their partner was pregnant at the time of the interview. Overall, 20% (180) of the respondents that already had children desired to have more children.

Use of family planning methods and contraceptive preferences for future use

Knowledge of FP methods was very high with over 98% of men and women having heard of methods used to prevent conception. The majority (87%, 958) had ever used FP and 58% (640) of respondents were currently using a FP method. The most commonly used FP method was male condoms (48%, 530); 62% of the men and 39% of the women were using male condoms. Overall,

11% (125) of the respondents reported using dual methods (condoms and other FP methods); 12% of the men (54) and 11% of the women (71) used dual methods. On the other hand, 10% (112) used only other FP methods, without condoms; 6% (28) men and 13% (84) women used other methods without condoms. In terms of preferred FP methods for future use, the majority (70%, 774) still preferred the male condom; 81% of the men and 64% of the women preferred male condoms. Other preferences included injectables (31%), female condoms (21%) and implants (18%). Preference for male and female sterilisation was also fairly high at 14% and 16% respectively (Table 2). A significant proportion said they preferred withdrawal (24%), rhythm (22%) and lactational amenorrhea (19%).

Among the women who were married or in consensual union and not pregnant, 80% (242) were currently using any FP method while 68% (207) were currently using effective FP methods. When condoms were excluded, the current use of effective methods among women dropped from 68% to 15%.

Predictors of current use of effective Family Planning methods

At bivariate analysis, women from Gulu were less likely to use FP than those from Kampala district OR 0.53 (0.30-0.94), Moslem women were more likely to use FP than the Catholic women (OR 3.41 (1.12-10.35) and women who did not discuss the number and timing of children with sexual partners were less likely to use FP OR 0.53 (0.31-0.93). There was no significant association between desire to have children by respondent or sexual partner, number of live children and current use of FP. Similarly, there was no significant association between the health status, being on ARVs, duration on treatment, and current use of FP. At multivariate analysis, women who had not disclosed their HIV status to their sexual partners and those who did not discuss the number and timing of children with their sexual partners were less likely to use effective FP methods Adj OR 0.30 (0.10-0.97) and 0.40 (0.20-0.81), respectively (Table 1).

DISCUSSION

These findings show a higher rate of current use of FP methods among HIV infected individuals than the general population in Uganda, which is estimated at 24%. The higher uptake of FP among this population was due to high condom use rates. Condom use is encouraged by providers for prevention of sexual transmission among HIV infected individuals. However, despite the reported high rates of current use of FP methods, the proportion of individuals reporting unintended pregnancies was high. In this population, preference for and use of less effective FP methods including withdrawal, lactational amenorrhea and rhythm and a very low proportion using dual contraceptive methods may be partly responsible for the large number of unintended pregnancies.

These findings highlight the need for integration and strengthening of FP services for PHAs. HIV care and treatment services should incorporate sexual and reproductive health services, including FP as an integral component. The preferred FP methods should be available at HIV care and treatment sites or through linkages with other providers. The integration efforts should address increased uptake of contraceptives coupled with selection of more effective methods as well as support to ensure correct and consistent use of the user-dependent methods and issues of dual protection against unwanted pregnancies and HIV transmission.

Table 1: Predictors of current use of Effective FP method among HIV-infected women (married or in consensual union and not pregnant)

Variable	Un adjusted		Adjusted	
	OR	95%CI	OR	95%
Age (Base=15-24)				
25-34	1.21	0.61-2.42	0.18	0.03-0.97
35-49	1.31	0.63-2.69	0.21	0.04-1.11
District (base=Kampala)				
Gulu	0.53	0.30-0.94*	0.42	0.15-1.15
Kabarole	1.18	0.63-2.21	0.97	0.42-2.21
Religion (base=Catholic)				
Protestant	1.31	0.74-2.32	1.48	0.68-3.21
Muslim	3.41	1.12-10.35*	3.18	0.77-13.10
Other	1.14	0.54-2.39	1.49	0.51-4.36
Time since start on ARVs+ (base <1)				
1-4	1.13	0.49-2.59	1.32	0.54-3.24
5+	0.49	0.17-1.43	0.45	0.13-1.53
Disclosed HIV status (base=Yes)				
No	0.76	0.38-1.52	0.30	0.10-0.85*
Low	0.48	0.22-1.02	0.34	0.12-0.97*
Medium/High	0.61	0.34-1.10	0.45	0.20-1.03
Discussion on timing of children (Base=Yes)				
No	0.53	0.31-0.93*	0.40	0.20-0.81*

* $p \leq 0.05$

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