

# Factors Affecting Uptake and Use of Family Planning Services among HIV Positive Clients in Nyakitunda

Sub-county, Isingiro district

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## **Abstract**

Access to family planning services provides reproductive resources such as birth control, contraceptives and prevention of STDS and HIV. It is a cost effective strategy for prevention of mother to child transmission of HIV and reduction of infant mortality. Despite availability, access and training on different family planning methods in Isingiro district, uptake and use of these methods among HIV positive patients of Nyakitunda Sub-county has remained low due to un-known factors. The study was conducted to assess the factors affecting uptake and use of family planning services among HIV positive clients and establish strategies for promoting contraceptives among HIV positive patients. The specific objectives were to; find out the various family planning methods used by HIV positive patients, determine the role of contraceptives in fighting the spread of HIV among both positive and non-positive people, establish the psychosocial and economic factors leading to low uptake and use of contraceptives among HIV positive patients, and suggest the possible strategies for promoting the uptake and use of contraceptives among HIV positive patients. The study was cross-sectional in nature employing qualitative and quantitative techniques to capture data from 358 respondents using questionnaires and interview guide. The study indicate that condom, breastfeeding, withdraws and injectables/inject plan were the common FP methods used among HIV patients. Contraceptives most especially condoms were believed to reduce new HIV infections, help women to control unwanted pregnancies and properly space their children. The rate of contraceptive use among persons living with HIV was low due to factors like; age, level of education (secondary), religion, fear for discrimination, and HIV stigma. Promoting contraceptives use among HIV positive clients require strategies like; integrating contraceptive use as part of HIV control program, fighting patient stigma and discrimination, reaching vulnerable populations, making services more accessible to HIV patients, mass sensitization and awareness creation. The study concluded that there are significant factors affecting uptake and use of family planning services among HIV positive patients in Nyakitunda Sub-county and recommends the need to strengthen and integrate FP services into HIV services and development of a strategic approach that conveys HIV prevention messages and ensure continuous education for patients living with HIV on the role of contraception in prevention of the epidemic.

**Key words:** Factors, Uptake and Use, Family Planning, HIV, Positive Patients, Isingiro and, Uganda.

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## **Introduction**

According to Dr Louis Kabwine (2010), family planning covers a wide range of services concerning women, children, and their families. It is a cost effective strategy for prevention of mother to child transmission of HIV and reduction of maternal/infant morbidity and mortality (Antelman et al., 2015).

Globally, family planning has proven to be an effective way of controlling fertility and spacing births (Cooper et al., 2007). The benefits of family planning are numerous as family planning is a unique and widely advantageous method (The outcomes of this method include: “reduction of poverty, reduction of maternal and child mortality; empowerment of women by lightening the burden of excessive childbearing; and enhancement of environmental sustainability by stabilizing the population of the planet” (Chibwasha et al., 2011).

Sub-Saharan Africa is home to 68% of the global population living with HIV/AIDS (Angela et al., 2014). Given the vulnerabilities of community to HIV-infection, World Health Organization (WHO) and the Joint United Nations Programme on HIV/AIDS (UNAIDS) set goals to scale up HIV testing and comprehensive services for all people, including vulnerable populations facing humanitarian crisis (Hanson & Burke, 2010). In addition, the Inter-Agency Standing Committee has published guidelines recognizing that HIV prevention, treatment, care and support are essential parts of preparing for and responding to crisis and are services that can be provided in humanitarian settings (Homsy et al., 2013).

Several decades after the introduction of modern family planning methods, Uganda’s population is still growing and is projected to exceed 49 million by 2025. Although fertility, declined between 1980 -1997, it has leveled off in recent years (Jeyapaul & Kalyanwala, 2016). This stall is attributed to a number of factors including reduced availability of modern contraceptive methods, diversion of resources to HIV/AIDS, and inadequate support for family planning programs (Perry et al., 2014). According to the Uganda Demographic Health Survey (DHS) 2011–14, total fertility rate (TFR) was 4.6, while 42% of married women reported their current pregnancies as unintended. Contraceptive prevalence was found to be 46%; a result that did not meet the 2010 target of 62% set by the Kenya National Population Policy for Sustainable Development (El-Ibiary & Cocohoba, 2016). McCarty et al., (2011) argued that across all age groups, perceived and actual side effects of contraceptive methods emerged as a primary barrier to use. Uganda’s DHS (married women only) found that non-users who did not intend to use contraception in the future most commonly cited fear of side effects and health concerns. Side effects are also the most common reason for method discontinuation. Mutiso et al., (2012) cited that even when awareness is high, poor knowledge of contraceptive methods and their side effects has been associated with poor uptake. This finding may be related to the myths and misconceptions that many women hold about potential side effects and negative outcomes. Myths are heard about from peers and partners, whose influence on contraceptive demand and uptake is well documented in Kenya.

## **Statement of the Problem**

Despite increasing contraceptive availability in Isingiro district and Nyakitunda Sub-county in particular, unintended pregnancies and HIV have remained a problem in the area representing as much as 15% of the known pregnancies and a 2.6% HIV prevalence (Ministry of Health Uganda,

2011). Although various strategies like health education, community sensitization among others have been proposed and introduced in the study area to reverse this disturbing trend (Marissa et al., 2012), there are a number of un-known factors limiting the uptake and use of contraceptives among HIV positive patients. A few studies have been conducted in Isingiro district particularly Nyakitunda sub-county to establish these factors; therefore this study was conducted to investigate the underlying factor affecting the uptake and utilization of family planning services specifically among HIV positive patients.

**Research Objective**

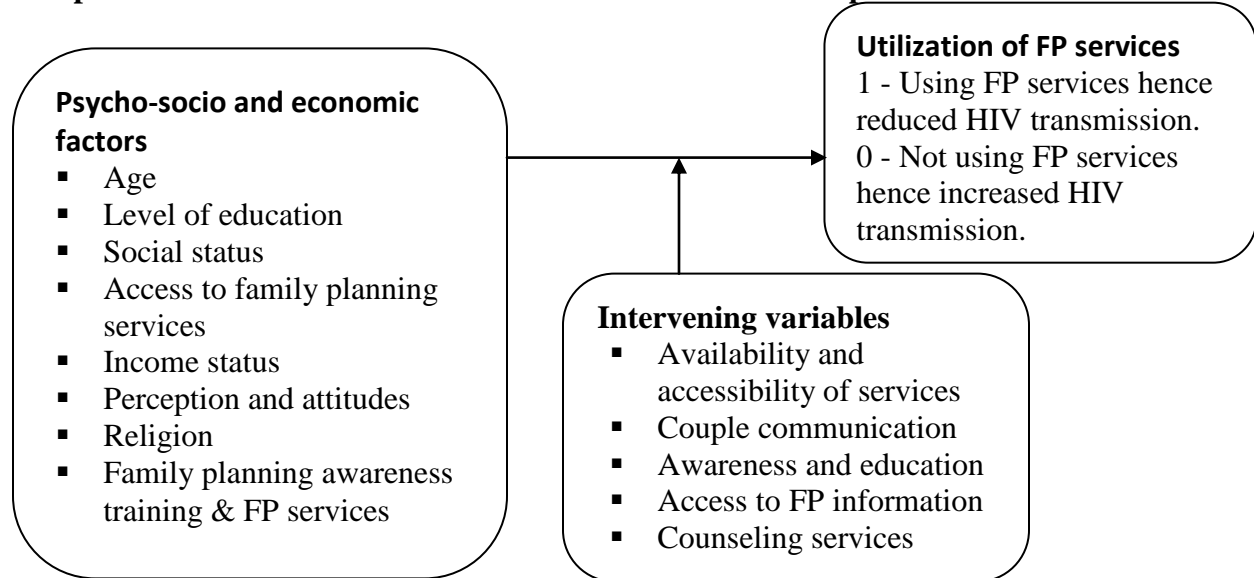
The study intended to investigate the underlying factors affecting utilization of family planning services among HIV positive clients in Nyakitunda sub-county, Isingiro district. The specific objectives were to; find out the various family planning methods used by HIV positive patients, determine the role of contraceptives in fighting the spread of HIV among both positive and non-positive people, establish the psycho-social and economic factors leading to low uptake and use of contraceptives among HIV positive patients, and suggest the possible strategies for promoting the uptake and use of contraceptives among HIV positive patients.

**Conceptual framework scheme**

The conceptual frame work illustrates the relationship between different variables and how they impact/influence uptake of family planning services among HIV infected people. Use of contraceptive methods among HIV positive clients is influenced by a number of factors including psycho-socio and economic factors such as age, level of education, social status, access to family planning services, income status, perception and attitudes as well as religion. Proper use of contraception among HIV patients improves their standards of living, health, reduces new infections, give them chance to have planned families as well as reduces expenditure on health. Use of contraceptive is also dependent on factors such as spousal communication, availability of family planning services, conducive health laws, awareness and education, access to FP information and availability of counseling services.

**Independent variables**

**Dependent variables**



## Methodology

The study was carried out in Nyakitunda sub-county located in Isingiro district western Uganda where the native inhabitants are mixture of Banyankole, Bakiga and some refugees from Rwanda. Majority of the people are peasants, some are small scale business owners. Nyakitunda sub-county has been chosen as a study area because it is one of the sub-counties in Isingiro district where HIV prevalence is high at 6.2% (Isingiro Health Data 2016) and family planning has been implemented since 2012. However no study has been conducted to assess factors affecting uptake of family planning services among HIV patients. Isingiro District is located in south Western Uganda where contraceptive use among persons living with HIV stands at only 55.1%.

The study was a cross sectional in nature applying a quantitative approach to data collection and analysis. Data was captured from mothers who were living with HIV, health workers and District Health Officer of Isingiro district. Mothers without HIV were excluded from the study. The quantitative approach enabled exactness and clarity in the measurement of the variables.

A population of 358 HIV mothers was drawn using a formula by Kish and Leslie (1965) at 95% confidence interval and 5% error term.

All mothers who living with HIV constituted the sampling frame. The study adopted both purposive and simple random sampling techniques to arrive at the respondents. Simple random sampling technique was applied in the selection HIV positive mothers. Key informants such as health workers and District Health Officer were chosen on purpose because their position and additional information they had on the subject matter.

A semi-structured questionnaire in English language was translated in local languages and then administered to mothers. The questionnaire gathered information on socio-demographic characteristics like gender, age, level of education in years, house hold size, source of income. The tool was checked for completeness, coded and entered into STATA version 13 computer program for cleaning and analysis. Both descriptive and inferential statistics were generated and used to summarize the findings. Results were presented in tabular form.

## RESULTS

**Table 1: Socio-demographic and socio-economic characteristics (358)**

	<b>Classification</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Gender</b>	Male	155	43.30
	Female	203	56.70
<b>Marital status</b>	Married	167	46.6
	Single	152	42.5
	Separated	39	10.9
<b>Age bracket</b>	18 - 29 years	158	44.1
	30 - 40 years	146	40.7
	41 and above	54	15%
<b>Level of education</b>	None	32	8.9

	Primary	104	29
	Secondary	84	23.4
	Diploma	76	21.2
	Degree	62	17.3
<b>Religion</b>	Catholic	162	45.3
	Protestant	196	54.7
<b>Employment status</b>	Employed	156	43.5
	Un-employed	202	56.4

The table 4.1 indicates that 56.7% of respondents were females where as 43.3% were males. Married respondents were the majority at 46.6%, followed by single 42.5%, and the separated who accounted for 10.9%. 44.1% of the respondents were aged 18 - 29 years, 40.7% aged 30 - 40 and 15% aged 41 years and above.

Most 29% of the respondents had primary education, 23.4% secondary education, 21.2% diploma, 17.3% university degrees and 8.9% had never attended school. 54.7% of the respondents were Protestants and 45.3% Catholics respectively. Final 56.4% of the respondents were un-employed and only 43.5% employed respectively.

**Table 2: Family planning methods used by HIV positive patients.**

<b>Methods</b>	<b>Frequency</b>	<b>Percentage</b>
Implants	13	3.6
Condoms	210	58.7
Withdraw (pulling out)	43	12.0
Breastfeeding	60	16.8
Injectable birth control	10	2.8
Calendar (counting day's method)	9	2.5
Emergency contraceptive pills	13	3.6
<b>Total</b>	<b>358</b>	<b>100.0</b>

Results indicate that 58.7% of the respondents used condoms as a contraceptive method, 16.8% breast feeding, 12% withdraw (pulling out) and 2.5% calendar method. In an interview conducted with one of the nurses at Ruhiira HC III one of the sub-county health centers, she had to say this;

*“.....we receive quite a big number of HIV patients in this health center and they do not only come for HIV treatment and care services but also family planning services as well. Condoms are the most FP method taken by patients and this has caused shortage in stocks at times”.*

In another interview conducted with a counselor at a health center III, he revealed;

*“.....for the years I have been an employee at this facility, I have provided services to many HIV patients. Among the services I have offered include advising HIV infected people to use condoms as one of the ways to prevent transmission of IV from one person to another through sexual intercourse or advising them to abstain completely from sex for those who can”.*

**Table 3: Perceived role of contraceptives in fighting HIV**

<b>Roles of contraceptives</b>	<b>Frequency</b>	<b>Percentage</b>
Condoms reduce new HIV transmissions	117	32.7
Contraceptives help eliminate co-infections	80	22.3
Contraception is an integral component of primary and preventive health care	34	9.5
They aid in controlling number of births and child spacing	39	10.9
They help in promoting and ensuring reproductive health	38	10.6
Contraceptives help in addressing issues of infant, child mortality and maternal mortality	25	7.0
Control of unwanted pregnancies	25	7.0
<b>Total</b>	<b>358</b>	<b>100.0</b>

As shown in table 3 above, 32.7% of the respondents reported that condoms reduce new HIV transmission cases, 22.3% mentioned that contraceptives help control co-infection risks among HIV patients, 10.9% reported that contraceptives not only help in the fight against HIV but also help HIV patients to properly space their children, 10.6% revealed that contraceptives are part of promoting and ensuring reproductive health, 9.5% reported contraceptives as an integral component of primary and preventive health care and 7% stated that they help in control of unwanted pregnancies among patients and also helps in addressing issues of infant, child mortality and maternal mortality. In an interview with the District Health Officer, he stated;

*“.....as a district health department representing the district, my office has been working hand in hand with central government to successfully implement health programs across all sub-counties in Isingiro district. Among the programs being implemented is the fight against HIV using specific contraceptives and other abstinence approaches. We are mainly promoting condom use so as to reduce new cases of HIV infection as well as eliminating the rate of co-infections among the patients already infected”.*

**Table 4: Factors associated with low uptake and use of contraceptives among HIV positive patients**

<b>Factors</b>	<b>Contraceptive uptake and use</b>	
	<b>Chi-square (<math>\chi^2</math>)</b>	<b>p-value</b>
Age	0.3917	0.822
Level of education	3.2731	0.043
Religion	1.9334	0.164
Employment status	0.0013	0.971
Social status	3.9805	0.012
Access to FP services	0.1485	0.700
Income status	1.5291	0.216
Perception about FP	0.0956	0.757
Awareness on FP	0.2531	0.615
Lack of confidentiality	2.3766	0.045

Fear for discrimination	2.1476	0.047
Depression	0.0093	0.923
HIV stigma	4.7233	0.009

At bivariate analysis (Table 4) showed the relationship between use of contraceptives among HIV positives people and independent factors like fear of discrimination, lack of confidentiality, awareness on FP, among others. Factors were examined using Pearson’s Chi-square and the results were regarded as statistically significant when P-value was less than 0.05 level of significance.

A Pearson chi-square of ( $\chi^2$  0.3917,  $p$  .822) showed that there was no statistically significant association between age and contraceptive use among HIV positive patients; that is, patients use or lack of contraceptive use was irrespective of age.

Results from table 4 further indicates that Pearson’s chi-square test (Pearson’s chi-square 3.2731,  $p$  0.043) indicates that there is a significant relationship between level of education and use of contraceptives use among people infected by HIV. Therefore we reject the null hypothesis  $H_0$ : There is no association between level of education and use of contraceptives. In an interview with one of the sub-county health centre III Clinician, he stated;

*“.....education level is among the key factors that determine the health seeking behavior of HIV patients in this area. It is on record that most of the HIV patients seeking for health services have at least studied past senior two, the un-educated patients tend to be reluctant in seeking for health services which isperhapsexplained by their levels of illiterately and inability to get the right information”.*

Pearson’s chi-square test (Pearson’s chi-square 3.9805,  $p$  0.012) indicates that there is significant relationship between social status and contraceptive use among HIV positive patients. Therefore we reject the null hypothesis  $H_0$ : There is no association between social status and use of contraceptives.

Pearson’s chi-square test (Pearson’s chi-square 2.3766,  $p$  0.045) indicates that there is significant relationship between confidentiality and contraceptive use among HIV positive patients. Therefore we reject the null hypothesis  $H_0$ : There is no association between confidentiality and use of contraceptives.

Pearson’s chi-square test (Pearson’s chi-square 2.1476,  $p$  0.047) indicates that there is significant relationship between discrimination and contraceptive use among HIV positive patients. Therefore we reject the null hypothesis  $H_0$ : There is no association between discrimination and use of contraceptives. In an interview held with the district health officer, he reported;

*“.....cases of discrimination among HIV patients have been reported, where at times members of the community fear touching them fearing that they may contract the deadly disease. More to that HIV is perceived as a curse and therefore anyone who gets close to patient is believed to risk getting a curse. Therefore patients fear to use contraceptives results from fear to being discriminated at health facility level and CSOs level where they can receive psychosocial support and other services”.*

Pearson`s chi-square test (Pearson`s chi-square 4.7233, p 0.009) indicates that women who are stigmatized are less likely to use uptake family planning. Therefore we reject the null hypothesis Ho: There is no association between discrimination and use of contraceptives. Thus patients who were stigmatized by their HIV status feared to use contraceptive and vice versa. In this case the null hypothesis was rejected.

**Table 5: Psycho-social and economic factors associated with use of contraceptives among HIV Patients**

<b>Variable</b>	<b>Values</b>	<b>OR</b>	<b>95% CI.</b>	<b>p-value</b>
Age	18 – 29	.958	.460 -1.967	.907
	30 – 40	1.960	.470 -3.962	.005
	41 and above	1		
Level of education	None	1.315	.486-3.563	.590
	Primary	.823	.399-1.695	.597
	Secondary	2.051	.985 - 4.270	.000
	Diploma	.749	.345 - 1.626	.465
	Degree	1		
Religion	Catholic	.666	.402 - 1.105	.001
	Protestant	1		
Employment status	Employed	1.008	.649-1.567	.971
	Un-employed	1		
Social status	High	.954	.593 - 1.536	.848
	Low	1		
Access to FP services	Yes	.864	.532 - 1.402	.554
	No	1		
Income status	High	1.781	.475 - 2.285	.331
	Low	1		
Perception about FP	Positive	.733	.434 - 1.238	.245
	Negative	1		
Awareness on FP	Yes	.747	.449 - 1.243	.262
	No	1		
Confidentiality	Yes	.761	.471 - 1.229	.264
	No	1		
Fear for discrimination	Yes	1.109	.672 - 2.830	.005
	No	1		
Depression	Yes	.918	.553 - 1.526	.743
	No	1		
HIV stigma	Yes	1.426	.884 - 2.300	.046
	No	1		



At multivariate analysis, age [OR 1.960; 95% CI: .470 -3.962; p .012], level of education [OR 2.051;95% CI: .985 - 4.270; p .000], religion [OR 0.666; 95% CI: .402 - 1.105; p .001], fear for discrimination [OR 1.109; 95% CI: .672 - 2.830; p .005] and HIV stigma [OR 1.426; 95% CI: .884 - 2.300; p .046] remained significantly associated with the use and uptake of contraception among HIV positive patients.

Study results indicate that a proportion of respondents aged 30 to 40 years were twice more likely to use contraceptives than those aged 41 years and above and this was found to be statistically significant Pearson's [OR at 95% CI 1.960; 95% CI: .470 -3.962; p .012]. However, there was no significant difference in the use of contraceptives among those aged 18 – 29 years compared with those aged 41 years and above. This was presented by the odd [OR 0.958, OR 0.46-1.97 CI P 0.907]. In an interview conducted with one of the nurses in one of the sub-county health centers, he had this to say;

*“.....most of the HIV patients I handle in the sub-county range between 28 – 40 years. This age group seem to mind a lot about seeking for health services compared to other groups in the community”.*

Similarly, a higher proportion of respondents with secondary level of education were twice times likely to use contraceptives compared to those who never attended school and those with other educational levels. This was found to be statistically significant [OR 2.051 ;( 95% CI: .985 - 4.270); p .000]. Results indicate that there was no significant difference in the use of contraceptives among those who never attended school, those with primary, diploma and those with university degrees [OR 1.315, 0.486-3.563 CI, P value 0.590]. In an interview with one of the sub-county health centre workers, he stated;

*“.....education level is among the key factors that determine the health seeking behavior of HIV patients in this area. It is on record that most of the HIV patients seeking for health services have at least studied past senior two, the un-educated patients tend to be reluctant in seeking for health which is perhaps explained by their levels of illiterately and inability to get the right information”.*

In terms of religion, Catholics were 0.66 times less likely to use contraceptives than protestants and this was found to be significant [OR 0.666; (95% CI: .402 - 1.105); p .001].However, there was no significant difference in use of contraceptives by other religions compared to Protestants

A higher proportion of respondents who feared discrimination were 1.1 times more likely to use contraceptives than those who never feared and this was found to be significant at [OR 1.109; (95% CI: .672 - 2.830); p .005].

Similarly those who were stigmatized were 1.4 times more likely to use contraceptives than those who never experience stigmatization and this was significant at [OR 1.426;(95% CI: .884 - 2.300); p .046]. In an interview with one of the doctors, he stated;

*“.....stigma is one of the challenges among most HIV patients seeking for health services from health facilities. These patients are usually stigmatized by community, relatives and in most cases health workers who are supposed to be handling them professionally”.*

**Table 6: Strategies for boosting use of contraceptives among HIV positive patients**

<b>Strategies</b>	<b>Frequency</b>	<b>Percentage</b>
Promoting contraceptive use as part of HIV control program	23	6.4
Engaging male spouses in family planning programs	44	12.3
fighting stigma and discrimination	41	11.5
Reaching vulnerable populations especially in rural areas	70	19.6
Making family planning services more accessible to HIV patients	54	15.1
Empowering health centers with more medical personnel and supplies	26	7.3
Sensitizing the people about the importance of contraception use	20	5.6
currying out more education and awareness	62	17.3
Promoting a home delivery of contraceptives model	18	5.0
<b>Total</b>	<b>358</b>	<b>100.0</b>

Regarding how best to promote the uptake and use of contraceptives among HIV positive patients, 19.6% of the respondents talked of reaching out to vulnerable populations in rural areas, 17.3% education and awareness through community outreaches and media platforms, 15.1% making family planning services more accessible to HIV patients by re-stocking sub-county health centers, 12.3% engaging male spouses in family planning programs, 11.5% called for government interventions in fighting HIV stigma and discrimination, 7.3% empowering health centers with more medical personnel and supplies, 6.4% promoting contraceptive use as part of HIV control programs, 5.6% called for sensitizing the community about the importance of contraception use and 5% promoting a home delivery of contraceptives model that can see the patients receive contraceptives from their places of residence. In an interview with the District Health Officer, he revealed;

*“.....our vulnerable populations in the district especially in the rural areas suffer a lot when it comes to accessing medical services, first of all they lack awareness about the services due to low educational levels, secondly they have to move extra miles to reach the nearest health centers and when at the health they face the worst discrimination from the health the health workers. I think government needs to address such key issues if uptake and use of contraceptives among HIV positive patients must be achieved”.*

## **Discussion**

The study contained more women than men. This was an indication that contraceptive use has attracted women than men. Although the study results for the population discovered a high contraceptive use among women, different studies in other parts of Uganda have indicated the rate of contraceptive use among women nationally as much lower. Currently there has been scale up of inclusion of contraceptive services in HIV care across the Ugandan health system, hence improved access. More so the increased sensitization about benefits of using contraceptives during client follow-up visits in HIV care facilities could explain the higher rate of contraceptive use since more women visit than men.

The biggest part of the population studied was aged between 18 – 40 years. This is the sexually active group society which perhaps justified their willingness to participate in the study. This finding is comparable to findings by (McCoy et al., 2014) who in his study discovered that contraceptive use was common among HIV positive sexually active youth. In his study, use of condoms by HIV positive males aged 20 to 40 years; injectable by females aged 36 to 49 years; implants and tubal ligation by females aged 26 to 35 years was higher than for those aged 19 to 25 years.

The study came up with different family planning methods used by HIV positive patients. Male condoms were the commonly used family planning method by HIV positive patients. A large proportion of women and men reported using condoms alone for contraception. The effectiveness of condoms in preventing sexually transmitted diseases was seen as important, particularly in this setting where HIV is slightly prevalent. Although this study revealed that more women used condoms with their partners compared to men, the decision to use a condom was largely influenced by men. This study finding is in line with findings by McCoy et al., (2014) who in his study discovered male condoms to have a high degree of protection against HIV and STI sexual transmissions. According to him dual protection, the simultaneous use of an effective contraception method with consistent condom use, has been advocated to reduce the risk of unplanned pregnancy, horizontal transmission of HIV to a non-infected partner, transmission of resistant virus to an partner with HIV infection, and the risk of acquisition of other STIs including high risk Human Papilloma Virus (HPV).

Breastfeeding was another natural contraceptive method used by HIV patients specifically women. This is normally used in the first 6 months after birth, however it is not a hundred percent accurate. It has become more scientific that most women who breastfeed in the first 6 months after birth do not release eggs from their ovaries and this perhaps give them an opportunity to avoid un-planned pregnancies. This study finding can be compared to the findings by WHO, (2011) which discovered that breast feeding; in the first 6 months after birth, most women who breastfeed do not release eggs from their ovaries, so they cannot get pregnant when they have sex. Women usually do not get pregnant if they are breastfeeding and; the baby is less than 6 months old, the woman has not had any monthly bleeding since giving birth, the woman is giving the baby only her breast milk. If you want to use this method of family planning, you must remember that you can easily get pregnant if you are giving your baby formula, water, other drinks, or if you are removing your breast milk by hand to feed the baby with a cup.

The third commonly used family planning method is withdraw (pulling out). This was performed by men when they reach climax, this method involves ejaculating outside other than inside of females' vagina. The decision to put out during a males' climax is always determined by a male and on rare occasions can be initiated by a female. This finding is in agreement with findings by Darroch et al., (2011) who in their study also talked about coitus interruptus that is popularly known as the withdrawal or pull out method as way of practicing birth control. They stated that during sexual intercourse if the man pulls out his penis just before ejaculating, he can prevent any sperm from entering the woman's vagina). However, this is not a foolproof method, as the fluid which is secreted before ejaculation also contains sperms, and are sufficient to fertilize an ovum. Its effectiveness is 75-80%.

The study further identified emergency contraceptive pills as another contraceptive method though not commonly used because of being inaccessibility and expensive given that most HIV

positive patients were relatively poor. This finding collaborates with findings by WHO, (2011) which talked about birth control pills, also known as oral contraceptives, stop the development of the egg, and also helps in the thickening of the cervical mucus in the uterus, thus restricting the passage of sperms to the egg. This can be an effective method if the pills are taken regularly, and in the correct manner. If they do not work out, another way of precluding pregnancy is to take emergency contraceptive pills. If a couple has indulged in unsafe sex, the woman can take emergency pills to reduce her chances of getting pregnant.

The study came out with what were perceived to be the roles of contraceptives in fighting the spread of HIV among both positive and non-positive people. Respondents reported that contraceptives specifically condoms reduced chances of co-infections, controlled of unwanted pregnancies, and helped parents in child spacing. Condom use helps reduce the risk of new HIV infections between an infected and non-infected person. When used properly, condoms have proved to reduce the risk of unplanned pregnancy, horizontal transmission of HIV to a non-infected partner, transmission of resistant virus to a partner with HIV infection, and the risk of acquisition of other STIs including high risk Human Papilloma Virus (HPV) types. Condoms have a potential to avert HIV infections and is also a significant tool that can help HIV-positive patients fulfil their responsibility not transmitting the infection to HIV-negative people especially when used. This study finding is comparable with findings by Lopez et al., (2013) who in their study affirmed that condoms play a vital part in preventing transmission of HIV. Contraception is more cost-effective than prophylaxis with antiretroviral drugs for the prevention of mother-to-child transmission. The addition of family planning to programs designed to prevent such transmission in settings with a high prevalence of HIV could halve the number of infant infections compared to use of prevention of mother-to-child transmission strategies alone.

Respondents revealed that contraceptives such as condoms play a pivotal role in fighting co-infection among patients already infected with HIV. Condoms prevent horizontal HIV transmission and are evident in the dual protection model. The simultaneous use of an effective contraception method with consistent condom use has been advocated to reduce the risk of unplanned pregnancy, horizontal transmission of HIV to a non-infected partner, transmission of resistant virus to a partner with HIV infection, and the risk of acquisition of other STIs. Contraception is therefore a key strategy in prevention of both vertical and horizontal transmissions of HIV infection. This study finding is comparable to findings by Hanson & Burke., (2010) who in their study mentioned that family planning reduces the risk of un-intended pregnancies among women living with HIV, resulting in fewer infected babies and orphans. In addition, male and female condoms provide dual protection against unintended pregnancies and against STIs including HIV.

Respondents further indicated that contraception is an integral component of primary and preventive health care. Contraception has been called the best-kept secret of mother-to-child HIV transmission. The need for contraceptives is high among HIV-positive women, particularly those in Uganda. Meeting this need could improve HIV women's reproductive health, their autonomy, as well as preventing some cases of vertical transmission of HIV. This study finding is comparable to Hanson & Burke., (2010) who in their study argued family planning can prevent closely spaced and ill-timed pregnancies and births, which contribute to some of the world's highest infant mortality rates. Infants of mothers who die as a result of giving birth also have a greater risk of death and poor health.

Respondents reported that contraception helps in addressing issues of infant, child mortality and maternal mortality. Adding family planning services to prevention of mother-to-child transmission (PMTCT) programs could prevent almost twice the number of infections among children as PMTCT programs efforts alone without family planning. This finding is comparable to findings by Matthews & Crankshaw, (2011) who in their study mentioned that increasing support for contraception as HIV prevention means preventing unintended pregnancies in HIV-infected women and is an essential component of a comprehensive PMTCT program. This shows the benefits of contraception use in HIV-positive women.

Respondents further mentioned that contraception helps in control of unwanted pregnancies. Preventing unintended pregnancies among women living with HIV constitutes the element 2 of World Health Organization recommended approach. The only way to prevent unintended pregnancies is the use of contraception whether barriers, hormonal (pills and injection), IUCD or any other method. Contraception is a beneficial HIV prevention. This study findings is in line with findings by Matthews & Crankshaw, (2011) who in their study mentioned that family planning enables women to make informed choices about their sexual and reproductive health. Family planning represents an opportunity for women to pursue additional education and participate in public life, including paid employment in non-family organizations. Additionally, having smaller families allows parents to invest more in each child. Children with fewer siblings tend to stay in school longer than those with many siblings.

The study came up with psycho-social and economic factors leading to low uptake and use of contraceptives among HIV positive patients. Although different age groups did not show an association with contraceptive use, those in the age bracket (30 – 40) was found to use contraceptives than other groups, this is because contraceptive use increases with increase in age and therefore older patients are more likely to use contraceptives as compared to the young.

Contraceptive use was more in Catholic HIV patients that Protestants despite the Catholic Church being against the artificial methods of contraception. These findings can be compared with findings by Polis et al., (2011) who in their study revealed that religious and cultural factors have the potential to influence the acceptance and use of contraception by couples from different religious backgrounds in very distinct ways. Many religions are against unnatural means of contraception. Cultural factors are equally important in couples' decisions about family size and contraception; for some cultures, family, marriage are important in the fulfillment of cultural expectation and each sexual act need to be for the exclusive purpose of procreation.

Education level was significant at secondary than being in other levels, this implied that an HIV patient having completed secondary education increased her/his chances of using contraceptive that those who never attended school and others with different levels of education like primary and university. The study findings are in consistent with findings by Polis et al., (2011) who revealed that education has been seen as a key determinant of contraceptive. Better-educated women and men are argued to be more willing to engage in innovative behavior than are less educated women, and in many Third World contexts, the use of contraception remains innovative.

Stigmatization was also significantly associated with contraceptive use as in those patients who feared shame about the disease were much less likely to seek for family planning services than those who never feared. This finding can be compared to findings by Jeyapaul&Kalyanwala., (2008) who in the study in Uganda discovered that nurses sometimes attempts to stigmatize

teenage sexuality, their scolding and harsh treatment of adolescent girls, and their unwillingness to acknowledge adolescents as contraceptive users, also undermines the effective use of contraception by girls.

To promote the uptake and use of contraceptives among HIV positive patients, a number of strategies were highlighted including; promoting contraceptive use as part of HIV control program, engaging male spouses in family planning programs, fighting stigma and discrimination among the patients, reaching vulnerable populations especially in rural areas, making family planning services more accessible to HIV patients through sub-county dispensaries, empowering local health centers with more medical personnel and supplies, sensitizing the people about the importance of contraception use, carrying out more education and awareness creation and promoting a home delivery of contraceptives model. These findings can be compared to findings by Darroch et al., (2011) who in their study argued that integration of family planning services with HIV services utilizing a multi-level approach to improve the uptake is paramount in SSA region. Family planning programs should cater to PLHIV who wish to limit their family size, and also to those who wish to continue to have more children with a goal of achieving better health outcomes for the PLHIV through birth spacing and use of effective and safe contraception. Such integration has potential not only to improve reproductive health outcomes, but also to ultimately reduce pediatric HIV infections and hence reduce the amount of antiretroviral therapy needed. This is particularly important in countries such as Uganda where MTCT at 18% of new infections is a major route of HIV transmission.

Marissa et al., (2008) recommended that to promote the uptake and use of contraceptives among HIV positive patients, there is need to establish effective programs that promote increased utilization of maternal health services as well as improving the quality of services. Activities to promote awareness of maternal and reproductive health services are needed to increase the demand for services. Well-informed and educated families and communities will take responsibility for the health of women in their community by supporting and encouraging them to seek good maternal health care and nutrition and will recognize the danger signs in pregnancy and act quickly to transport women with complications to appropriately trained health professionals.

## **Conclusions**

Based on the study findings, the following were conclusions made; condoms, breastfeeding, withdraw and injectable are the commonly used contraceptive methods among HIV patients. These contraceptives specifically condoms are used because they reduce new HIV infections and co-infections, help women to control unwanted pregnancies hence achieving proper spacing of children and are also an integral component of primary and preventive health care.

The rate of contraceptive use among persons living with HIV in the study area is still relatively low compared to other parts of Uganda in general, this is due to factors like; age differences, level of education, religious beliefs, fear of discrimination and HIV stigma.

Achieving total uptake and use of contraceptives among HIV positive patients requires; promotion of contraceptive use as part of HIV control program, engaging male spouses in family planning programs, fighting patient stigma and discrimination, reaching vulnerable populations, making services more accessible to HIV patients through sub-county dispensaries, mass sensitization, more education and awareness creation.

## **Recommendations**

The current uptake of modern contraception other than condoms is low and condom, being a contraceptive method that provides dual protection is used inconsistently by some participants. There is need to strengthen and integrate of HIV services into FP services and development of a strategic approach that conveys HIV prevention messages and ensure continuous education for patients living with HIV on the role of contraception in prevention of the epidemic.

Health professionals should encourage HIV positive patient's reproductive choices by increasing counseling and appropriate contraception provision at the time of HIV diagnosis and during follow up.

Contraception counselling should be incorporated into HIV-positive post-test counselling and discussed at each follow up visit with emphasis on safe sex and planned pregnancies to promote family planning practices for HIV prevention.

Increase effort to involve male partners in FP programs and encourage couple counselling on contraception in order to get their approval and fight misconception that prevail about contraception and improve the uptake;

Need for training of medical staffs on integrated approach for provision of HIV and SRH services, and appropriate counselling skills. Training should enable service providers to address the reproductive health needs of women living with HIV by provision of effective, appropriate and adequate contraception, and also discuss options for safe pregnancy where applicable;

Ministry of health to put in place community based motivational structures aimed at sensitization of HIV-positive patients on contraception uptake. Patients using modern contraceptive methods should be encouraged to champion these structures, share experiences and serve as model to their peers;

There is need to increase health education talks in the health facilities and the community emphasizing the importance of family planning and methods available in order to increase uptake and demystify myths and misconceptions.

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