Family Planning In The Context Of HIV Infection

Wapmuk AE, Gbajabiamila TA, Ohihoin AG, Ezechi OC

Department of Clinical Sciences, Nigerian Institute of Medical Research, Yaba Lagos

Correspondence: Dr. Agatha E. Wapmuk; email: agathawapmuk@yahoo.com

Summary

The World Health organisation identified family planning as a cost effective means of preventing unintended pregnancies in HIV infected women and also a means of preventing mother to child transmission of HIV. Hence the adoption of family planning as one of the four pillars of the comprehensive approach to the prevention mother to child transmission of HIV. In order to actualize this plan, the global health community embarked on creating stronger linkages between family planning and HIV policies, programs, and services. These linkages are essential to meet the needs of women and their families and to achieve international development goals, such as the millennium development goals (MDG 4, 5 and 6), an AIDS-free generation and greater access to reproductive health services. Thus, the birth of integrating family planning to HIV prevention, treatment and care programs. This strategy was aimed at improving access and uptake of family planning services by HIV infected women, bearing in mind its contributions to maternal and child health. However, rates of unintended pregnancies remain alarmingly high in women with HIV, and family planning interventions have been underutilized in HIV Prevention, care, and treatment programs. This is not surprising in a country like Nigeria whose current overall prevalence rate of family planning use is 15% (1). This reflects a low utilization rate of family planning despite its immense benefits.

Keywords: HIV/AIDS, Family Planning, Women, contraception, PMTCT

Introduction

Family planning refers to a conscious effort by a couple to limit or space the number of children they want to have through the use of contraceptive methods. Failure to use any family planning method will result in an unintended pregnancy. Unintended pregnancies are more likely than intended pregnancies to end in negative health outcomes, such as low birth weight, infant and child mortality, and maternal morbidity and mortality. Worldwide, as many as one third of the 357,000 annual maternal deaths are attributable to unintended pregnancies; the majority of these mortalities occur in low- and middle-income countries. In Sub-Saharan Africa, an estimated 39% of pregnancies are unintended, and 33% of these ends in abortion, most of which are unsafe. Enhanced access to family planning services particularly modern contraceptives, in sub-Saharan Africa, would result in marked reductions in unintended pregnancies and unsafe abortions, a projected 69% decrease in maternal deaths, and a 57% decrease in new born deaths.
The practice of Family planning among HIV infected women is of great importance especially in this era of feminization of the HIV Epidemic in Africa where over 60% of HIV infections occur in women of reproductive age group. Even though family planning contributes to both mitigating the HIV epidemic and improving women’s health, the country’s contraceptive prevalence rate for modern methods among married women remains low (8%) and unmet need for contraception is high (17%).

Family planning amongst HIV infected women can be provided either within the treatment programs or by active referral to routine family planning providers. This would reduce number of pregnancies among HIV positive women and reduce the number of HIV infected infants. The Millennium Development Goals, adopted in New York in 2000, aims to promote universal education and gender equality, maternal and child health, and prevention and treatment for HIV/AIDS. The attainment of these goals can be possible through provision of comprehensive reproductive health care.

In addition to substantial risks of dying from pregnancy complications, women in sub-Saharan Africa are also at increased risk of HIV infections. Providing safe, effective contraception to HIV infected women who desire it has also been identified by the World Health Organization as a primary strategy for prevention of paediatric infections.

Global epidemiology of HIV/AIDS
Human immunodeficiency virus which is the causative organism of acquired immunodeficiency syndrome (AIDS) has since attained the status of a pandemic since its discovery in 1983 that it earned global attention and was made one of the millennium development goals to be achieved by 2015, that is to halt and begin to reverse the AIDS epidemic. The WHO reports that about 78 million people have been infected with the HIV and about 39 million people have died of HIV since discovery. Global report by UNAIDS on the global AIDS epidemic for 2013 reports that an estimate of 35.2 (32.2-38.8) million people were living with HIV in 2012. There were also 2.3 (1.9-2.7) million new infections globally which showed a marked decline in the number of new infections when compared to reports in 2001 which recorded 3.4 (3.1-3.7) million new infections. In 2012, total number of AIDS related deaths globally amounted to 1.6 (1.4-1.9) million which is a lesser figure when compared with reports of 2005 which reported 2.3 (2.1-2.6) million AIDS related deaths.

The burden of the HIV epidemic varies across regions with Sub-Saharan Africa being the worst hit. Sub-Saharan Africa contributes only over 12% to the world’s population but accounts for about two-thirds of global HIV infection. In 2010, Sub-Saharan Africa accounted for 68% (22.9million) of all HIV cases and 66% of all HIV related deaths making it the leading cause of death in this region. Currently, Sub-Saharan Africa accounts for nearly 71% of the global burden of HIV i.e 1 in 20 persons are infected. With South Africa having the largest population of people living with HIV followed by Nigeria in West Africa. HIV prevalence rates in
North Africa and Horn of Africa are quite low when compared to south, East and the West African sub-region as they do not engage in high-risk cultural practices which have also been implicated in the spread of the virus in Sub-Saharan Africa.\textsuperscript{15}

Globally, women account for 52\% of all people living with HIV in low and middle income countries, Sub-Saharan Africa which bears the greatest burden of the HIV epidemic has its women accounting for approximately 60\% of the infection. This development is multifactorial in origin ranging from physiological vulnerability of women to HIV, gender inequalities, vulnerability to rape, sex with older men, male dominance unequal access to education, and economic opportunities that are prevalent in sub-Saharan Africa.\textsuperscript{16-18} As such, women are more likely to acquire HIV at an early age which translates to global HIV prevalence rate in women that is double or greater than that of men.

The Nigerian HIV/AIDS epidemiology
The HIV/AIDS pandemic has far reaching negative effects in many countries of the world. Sub-Saharan Africa is most affected as it is home to over 60\% of HIV infected persons. Nigeria is not spared in this regards as it has the second highest burden in the number of people infected with HIV in the world after South Africa. Since HIV was first diagnosed in 1986 in Nigeria, the National prevalence of HIV had increased steadily from 1.8\% in 1991 to 5.8\% in 2001 with a decline to 5.0\% and 4.4\% in 2003 and 2005 respectively.\textsuperscript{19}

Currently the prevalence rate of HIV stands at 4.1\% with over 3.5 million people infected. However, prevalence rates vary among age groups and geographic locations across the country with North central states more affected especially Benue state with the highest prevalence of 12.7\%. Kebbi state is the least affected with a prevalence rate of 1\%.\textsuperscript{20} In Nigeria, women below the age of 49 years have the highest HIV prevalence rates and mother to child transmission now accounts for 10\% of new infections. The North central zone has the highest prevalence rates per zone while urban areas had more HIV prevalence than rural.\textsuperscript{20} Despite the current decrease in National prevalence rate, HIV/AIDS remains a threat to the survival of the country Nigeria as it poses a big challenge to health and development. In Nigeria, the estimated number of people living with HIV increased from 2 980 000 in 2008 to 3 459 363 in 2012, annual deaths due to HIV/AIDS increased from 192 000 in 2008 to 217 148 in 2012 and also new HIV infections increased from 336 379 in 2008 to 388 864 in 2012.\textsuperscript{20} This figure shows that newer strategies need to be implored to ensure a meaningful decrease in HIV infections. The integrated biological Behavioural surveillance survey of 2007 emphasizes the role of risky sexual behaviour, high rate of unsafe sex practices and low utilization of condom as the key drivers of the epidemic as such programs aimed at promoting behavioural change should be encouraged. Female sex workers, Men having sex with men and intravenous drug users have been identified as most at risk population as they have prevalence rates well above
national prevalence rates and also contribute significantly to new infections. Although most-at-risk populations contribute to the spread of HIV, heterosexual sex, particularly of the low-risk type, still makes up the bulk of infections (about 80 percent). Mother-to-child transmission and transfusion of infected blood and blood products are generally estimated as ranking next as common routes of infection.

Family planning methods

Contraceptive methods are classified as modern or traditional methods. Modern methods include female sterilisation, male sterilisation, the pill, intra-uterine device (IUD), injectables, implants, male condom, female condom, standard days method (SDM), and lactational amenorrhoea method (LAM). Methods such as rhythm (periodic abstinence) and withdrawal are grouped as traditional methods.

**Combined Oral contraceptives**

This contains two hormones, oestrogen and progestogen. It prevents the release of eggs from the ovaries (ovulation). With correct and consistent use it is likely to prevent pregnancy by >99% but 92% effective in preventing pregnancy when used commonly. It is known to reduce risk of endometrial and ovarian cancer; It is advised not to be taken while breastfeeding.

**Progestogen-only Pills**

Contains only progestogen. Thickens cervical mucous to block sperm and egg from meeting and prevents ovulation. It is 99% effective in preventing pregnancy with correct and consistent use but effectiveness reduces to 90-97% when commonly used. It can be used while breastfeeding and must be taken at the same time each day.

**Implants**

These are Small, flexible rods or capsules placed under the skin of the upper arm; contains progestogen hormone only. Thickens cervical mucous to block sperm and egg from meeting and prevents ovulation. It is >99% effective in preventing pregnancy. Health-care provider must insert and remove; can be used for 3–5 years depending on implant; irregular vaginal bleeding is common but not harmful.

**Progestogen only injectables**

It is injected into the muscle every 2 or 3 months, depending on product. Thickens cervical mucous to block sperm and egg from meeting and prevents ovulation. It prevents pregnancy by >99% with correct and consistent use but decreases to 97% when commonly used. It is known to be associated with delayed return to fertility (1–4 months) after use and irregular vaginal bleeding is also common.

**Combined injectable contraceptives**

It is injected monthly into the muscle. It contains estrogen and progestogen. It prevents the release of eggs from the ovaries (ovulation). It prevents pregnancy by >99% when used inconsistently. Irregular vaginal bleeding is common with this type of method.

**Intrauterine device**

The intrauterine device (IUD) is a small flexible plastic device containing either a copper (Cu T) or levonorgestrel and
inserted into the uterus. The CU T is made of a copper sleeves or wire. The Copper component damages sperm and prevents it from meeting the egg. It is effective in preventing pregnancy by 99%.\textsuperscript{23} It is known to cause longer and heavier periods during first months of use. It can also be used for emergency contraception. The levonorgestrel IUD is a T-shaped plastic device that steadily releases small amounts of levonorgestrel each day. It prevents pregnancy by suppressing the growth of the endometrial lining of uterus. It is effective in preventing pregnancy by >99%.\textsuperscript{23,24} It reduces menstrual cramps and symptoms of endometriosis; It causes amenorrhea in a group of users.

**Condoms**

The male and female condoms are sheaths or coverings that either fit over a man's erect penis or fit loosely inside a woman's vagina. It is made of thin, transparent, soft plastic film and forms a barrier to prevent sperm and egg from meeting. While the male condom is 98% effective in preventing pregnancy with correct and consistent use (85% effective with inconsistent and incorrectly use), the female condom is 90% effective in preventing pregnancy with correct and consistent use (79% effective when inconsistently used)\textsuperscript{(24)}. Condom is also known to provide protection against sexually transmitted infections, including HIV.

**Male sterilization (vasectomy)**

This is a permanent contraception to block or cut the vas deferens tubes that carry sperm from the testicles. It keeps sperm out of ejaculated semen. It prevents pregnancy by >99% after 3 months semen evaluation while 97–98% effective with no semen evaluation (23). It is known to have 3 months delay in taking effect while stored sperm is still present. It does not affect male sexual performance. It should be voluntary and informed choice is essential.

**Female sterilization (tubal ligation)**

This is a permanent contraception to block or cut the fallopian tubes as such eggs are blocked from meeting sperm. It prevents pregnancy by >99%. It should be voluntary and informed choice is essential.

**Lactational amenorrhea method (LAM)**

Temporary contraception for new mothers whose monthly bleeding has not returned; requires exclusive breastfeeding day and night of an infant less than 6 months old. It prevents the release of eggs from the ovaries (ovulation). It is capable of preventing pregnancy by 99% with correct and consistent use and 98% when commonly used. It is a temporary family planning method based on the natural effect of breastfeeding on fertility.

**Emergency contraception (levonorgestrel 1.5 mg)**

It is a progestogen-only pill which is usually taken to prevent pregnancy up to 72 hours after unprotected sex. It prevents ovulation and reduces risk of pregnancy by 60–90%.\textsuperscript{23} It is important to note that it does not disrupt an already existing pregnancy.

**Withdrawal method (coitus interruptus)**

This method has to do with a man withdrawing his penis from his partner's vagina, and ejaculates outside the vagina, keeping semen away from her external
genitalia. The man tries to keep sperm out of the woman's body, thereby preventing fertilization. It is 96% effective in preventing pregnancy with correct and consistent use but decreases to 73% when commonly used. It is one of the least effective methods, because proper timing of withdrawal is often difficult to determine.

**Fertility awareness methods (natural family planning or periodic abstinence)**

This includes Calendar-based methods, monitoring fertile days in menstrual cycle, symptom-based methods: monitoring cervical mucus and body temperature. The couple prevents pregnancy by avoiding unprotected vaginal sex during most fertile days, usually by abstaining or by using condoms. This method prevents pregnancy by 95-97% with correct and consistent use but drops to 75% when commonly used. 24 It can be used to identify fertile days by both women who want to become pregnant and women who want to avoid pregnancy. Correct, consistent use requires partner cooperation.

**Benefits of family planning**

Family planning no doubt is a very important aspect of a woman's reproductive health. Promotion of family planning and ensuring access to preferred family planning methods for women and couples is essential to securing the well-being and autonomy of women, while supporting the health and development of communities. Some benefits have been identified with the use of family planning especially when used consistently and correctly. Family planning though mainly known to protect against unintended pregnancy no doubt has many other benefits. In order to maximise the benefits of family planning, a correct and consistent use of the family planning methods should be adopted. The benefits of family planning include the following:

- Preventing pregnancy-related health risks in women 22
- Reducing infant mortality 11
- Helping to prevent transmission of STI as well as HIV/AIDS 25
- Empowering people and enhancing education 23
- Reducing adolescent pregnancies 24
- Slowing population growth 23

**Global unmet need for Family Planning**

An estimated 222 million women including those infected with HIV in developing countries would like to delay or stop childbearing but are not using any method of contraception. Reasons for this include limited choice of methods, limited access to contraception, fear or experience of side-effects, cultural or religious opposition, poor quality of available services and gender-based barriers.

The unmet need for contraception remains too high. This inequity is escalated by the growing population, and a shortage of family planning services as well as religious and cultural beliefs. Unmet need for family planning is lowest in countries where contraceptive prevalence rate is high. The level of unmet need for family planning varies from 4% in
Mauritius to 48% in Samoa. Globally, 143 million married or in-union women of reproductive age are estimated to have an unmet need for family planning\textsuperscript{26}, thus the chances of unintended pregnancies remain high. In Africa, 53% of women of reproductive age have an unmet need for modern contraception. In Europe, Asia, and Latin America and the Caribbean which are regions with relatively high contraceptive prevalence – the levels of unmet need are below 20%.\textsuperscript{26}

Family planning in the context of HIV infection
A decreasing trend of HIV infection is observed in sub-Saharan Africa among young women and men as prevalence fell by 42% from 2001 to 2012, however, HIV prevalence among young women remains more than twice as high as among young men in sub-Saharan Africa, thus the feminization of HIV especially in sub-Saharan Africa. This trend is possible and driven by, physiological susceptibility to HIV acquisition by women, gender inequalities, harmful gender norms that promote unsafe sex and decreased access to HIV and reproductive health services and in addition social, economic, educational and legal disadvantages faced by women which further reduces their ability to protect themselves from HIV infection.

In this era of feminization of HIV where women of reproductive age account for 52% of people living with HIV globally, and in Sub-Saharan Africa women account for about 60% of HIV infections, this translates to increased numbers of HIV positive pregnancies and subsequent HIV positive birth, thus increasing the number of new HIV infections inform of new paediatric HIV infections. Paediatric HIV infections account for 10% of the global prevalence of HIV infection and 90% of such infections are as a result of Mother to child transmission of HIV.\textsuperscript{27} Faced with such facts, it has therefore become imperative to emphasize the importance of family planning in HIV infected women to reduce both vertical and horizontal transmission of HIV. It has been established that family planning is effective in preventing HIV positive births as such family planning among HIV infected persons is critical to the success of prevention of mother to child transmission of HIV and also ensure that the woman’s reproductive health needs are well taken care of.

The Global plan for PMTCT is aimed at eliminating new HIV infections in children and keeping their mothers alive. The second prong of this global plan is aimed at supporting women living with HIV to make informed choices about their future reproductive life, with special attention to preventing unintended pregnancies.\textsuperscript{12} However, unintended pregnancies are noted to be still high among HIV infected women, thereby presenting the likelihood of HIV positive births and other unfavourable outcomes of unintended pregnancies. A study in Asia reports disproportionately high rates of unintended pregnancies and abortion among HIV infected women and this resulted from lack of access to family planning services.\textsuperscript{28} Unintended
pregnancy among women living with HIV carries significant risks for mothers and children. The utilization of family planning among HIV infected women has helped in reducing those risks, however utilization still remains low.

**Family planning and the HIV infected woman**

The benefits of Family planning among HIV positive women cannot be overemphasized as earlier studies carried out in this cohort has confirmed the importance of family planning in HIV infected persons. A meta-analysis of 23 studies found that HIV-positive women have eight times the risk of a pregnancy-related death compared to women without HIV, and that an estimated one in four pregnancy-related deaths in sub-Saharan Africa are attributable to HIV.29 Studies have also shown that HIV-positive women are at greater risk of anaemia and spontaneous abortion during pregnancy30, and possibly infection or haemorrhage after delivery. During pregnancy, malarial infections carry a greater risk for HIV-positive women than for HIV-uninfected women.31 HIV-positive women who seek induced abortion may be at greater risk of morbidity than HIV-uninfected women.32 Therefore in a resource poor setting like ours where HIV prevalence is high, management of sexual and reproductive health of HIV-infected women is critical to reduce HIV transmission and maternal mortality.

**Family planning and the child of an HIV infected woman**

An analysis of the focus countries in the President’s Emergency Plan for AIDS Relief (PEPFAR) found that Family planning prevents a wide range of HIV-positive births every year—from 178 in Guyana to 120,256 in South Africa.33 It has also been reported that family planning is a cost-effective way to avert HIV infections in infants. A study reported that family planning programs have the potential to prevent nearly 30 percent more HIV-positive births than PMTCT programs that provide Nevirapine prophylaxis which is accessed by only 18 percent of HIV positive women in Nigeria.35 An analysis in Uganda estimates that even with a projected scale up of antiretroviral (ARV)-based PMTCT, unwanted pregnancies among women with HIV may account for almost a quarter of all HIV-positive infants and about a fifth of paediatric AIDS deaths.36 Babies born to HIV-positive women are at greater risk of being born preterm, stillborn, or at low birth weight.37 And antiretroviral therapy (ART) may have a negative effect on birth outcomes, such as prematurity or low birth weight.38

**The determinants of family planning use among HIV Infected Women**

Family planning practice and factors associated with the practice of family planning have not been well understood in resource limited settings like Nigeria. Women who are infected with HIV have different reasons and factors influencing their practice of family planning unlike their negative counterparts. Factors influencing the practice of family planning among women who are positive for HIV
Family planning use among HIV infected Women

Studies in Swaziland, South Africa and Uganda reported higher rates of unintended pregnancies among women living with HIV when compared with HIV uninfected women.\textsuperscript{47-49} Unintended pregnancies in women living with HIV carries significant risks for the woman and the child therefore the need for the use of family planning in this cohort. In particular, contraceptive use averts 19.7% of infections and 13.1% of deaths.\textsuperscript{50} A modeling study in Uganda showed that contraception has the potential to avert twice the number of vertical HIV infections and paediatric AIDS deaths as compared to PMTCT interventions initiated among already pregnant women living with HIV.\textsuperscript{50}

The prevalence of family planning practice among HIV infected women vary across regions as well as within countries. Studies in Uganda reported a contraceptive prevalence rate of 28% and 38% respectively among HIV infected women.\textsuperscript{40,45} Another study reported a contraceptive prevalence rate of 44.3% among HIV infected women in Northern Ethiopia (39) while studies in southern Ethiopia reported a prevalence rate of 62.1%.\textsuperscript{51} A contraceptive prevalence rate of 56.2% and 70% was reported in southwestern and North central Nigeria respectively among HIV infected women.\textsuperscript{46,52}

In a study conducted in Ethiopia among women living with HIV, injectable was reported as the most commonly used type
of contraceptive method which accounting for 70.7% of users followed by male condom which accounted for 47.6%. This is also similar with a study conducted in South Africa where 70.2% used injectables while (28%) reported use of male condom at enrolment. The most common methods reported included the use of injectable hormones (52%), condoms (30%), and oral contraceptives (9%). Women were interested in using injectable because it can be used without their partners' awareness and injectable has less tension than pills in terms of swallowing and remembering of timing of pills. However, utilization of injectable method reported was very low in Uganda and Northern Malawi with 4.1% and 19% respectively. This could be due to a high cost of injectable than other methods in these countries. A study from Tigray state also found out that a lower proportion (22.7%) of HIV positive women were using injectable. An earlier study carried out in Northern Ethiopia reported that the male condom was used by 47.6% of HIV positive women (39). This is slightly comparable with two studies in Uganda which reported 54.9% and 39% male condom use respectively. However, this was higher than studies in different parts of the world. Studies in Northern Malawi, Uganda and France, indicated that 19%, 11% and 31% of HIV positive women were using condom respectively. On the other hand, studies in Uganda (90%) and Ethiopia (70%) reported higher proportions of condom use among women. A qualitative study earlier reported that most women preferred condom as a method of pregnancy prevention because they did not want to take more pills in addition to ART. In a study dual method utilization was 14.1% (39) which is comparable with other study conducted among HIV clinic clients in Uganda, 11%. Higher proportions were reported by studies in Tigray state, Ethiopia (59.9%) (43). Condom (52.9%) and injectable contraceptives (31.4%) were the most common methods used by the respondents. Male condom (73.9%) was more commonly used than the female condom (26.1%) (46). A study in Nigeria reported condom use as the most prevalent (67.8%) form of contraceptive method used. Studies in Ethiopia on contraceptive use in HIV infected women reported male condom as the most prevalent (90.7%) form of contraceptive method used in this cohort. The use of dual contraceptive methods which is recommended among HIV positive persons is not so popular as several studies have reported very low dual-method use. A study done in West Ethiopia also reported a low dual method use among women who are positive for HIV. Thus, many women with HIV have an unmet need for family planning and are at risk of unintended pregnancy. However a survey from Uganda reported fairly high dual-method use among women with HIV.

National response to improving family planning utilization in HIV infected women.

Historically, family planning services and HIV programs have had separate funding streams and independent operational
The unmet need for family planning and the HIV epidemic are driven by similar root causes, including poverty, poor access to healthcare, gender inequality, and social marginalization of vulnerable populations. Clients seeking HIV services and those seeking reproductive health and family planning services also share many common needs and concerns. It is known that countries with the greatest burden of HIV also have high levels of unmet need for family planning, and many women are simultaneously at risk for both unintended pregnancy and HIV acquisition. However, the integration of family planning and HIV remains an unrealized goal. Integrating family planning services into HIV programs can increase access to contraception among clients of HIV services who wish to delay, space, or limit their pregnancies.

At the country level, some government health leaders have established national coordination efforts between reproductive health and family planning departments and HIV departments, which, in turn, have led to measurable progress in policy and practice. For example, Kenya and Nigeria instituted national RH/HIV strategies in 2009 and 2008, respectively. In 2010, young women aged 15-24 accounted for >64% of HIV infections in the young in sub-Saharan Africa, women within this age group (which is the reproductive age group) were >2 times more likely to be infected with HIV. With the above facts, the country realised that integration of RH/HIV services will help in tackling this problem as integration of these services have been shown to enhance program effectiveness and quality of care. For example, providers can tailor family planning counselling to address questions and concerns that clients may have about the safety and effectiveness of different family planning methods for women living with HIV. Providers can also assist a woman in a serodiscordant couple to achieve pregnancy while minimizing the risk of sexual HIV transmission.

Integration of RH/HIV services also promotes planning and spacing of pregnancy for all women. Integration allows for ongoing family planning management when clients come in for regular HIV-treatment services. Family planning when correctly and consistently used is known to reduce unintended pregnancies, particularly among women at risk of and living with HIV. Therefore, integration of family planning and HIV programs when effectively implemented have the potential to produce tangible gains against the HIV epidemic, as well as to improve the overall health of mothers and their children.

The integration of family planning and HIV service delivery programmes is aimed at supporting women living with HIV to make informed choices about their future reproductive life, with special attention to
preventing unintended pregnancies. The integration of family planning (FP) and HIV services is also known to improve sexual and reproductive health outcomes by providing both services under one programmatic umbrella. At the same time, the integration of HIV messages and services into family planning programs also serves to expand HIV prevention and treatment by capitalizing on an existing service delivery system. The integration of family planning and HIV services also provides both programs an opportunity to reach clients who might not seek stand alone reproductive health or sexually transmitted infection services. Integration can also help to ensure a safe and healthy pregnancy and delivery for those who wish to have a child.\textsuperscript{25}

The integration of these services provides an opportunity for health systems to offer family planning information and services to those at risk of HIV and people living with HIV. Integrated services enable providers to efficiently and comprehensively address an individual’s sexual and reproductive health needs. By contrast, delivering these services in parallel represents a missed opportunity that may weaken the effectiveness or quality of programs and stall progress toward achieving key health outcomes.

**Conclusion**

Family planning is a very important aspect of a woman’s reproductive health. Promotion of family planning and ensuring access to preferred family planning methods for HIV positive women is essential to securing their well-being and autonomy. The integration of family planning and HIV service delivery programmes is aimed at supporting women living with HIV to make informed choices about their future reproductive life, with special attention to preventing unintended pregnancies. HIV positive women should therefore be provided with safe and affordable family services as integral part of their comprehensive HIV care.

**References**

6. Hubacher, D, Mavranezouli, I. and McGinn, E. “Unintended Pregnancy In Sub-Saharan Africa:


17. UNESCO. Global Education Digest 2011; Paris: UNESCO.

18. ILO. Key Indicators on the Labour Market 2012, 7th edn; Geneva: ILO.


25. Integrating Family Planning into HIV Programs: Evidence-Based


46. Ezechi OC, Gbajabiamilla TA, Gab-Okafor CV, Oladele DA, Ezeobi PM, Ujah IA. Contraceptive Behavior,


51. Bekele D. Degefa T. Contraceptive Use Among HIV-Infected Women Attending Treatment and Care at Yirgalem Hospital, Southern Ethiopia; Eastern Africa Social Science Research Review 2014; 30(2):85-102


