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*Expanding family planning  
and reproductive health  
services in Africa*

# Family Planning and the Prevention of Mother-to-Child Transmission of HIV: Technical and Programmatic Issues

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# **FAMILY PLANNING AND THE PREVENTION OF MOTHER-TO-CHILD TRANSMISSION OF HIV:**

## **Technical and Programmatic Issues**

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## ACRONYMS

AIDS	acquired immunodeficiency syndrome
ANC	antenatal care (or antenatal clinic)
ART	antiretroviral therapy
ARV	antiretroviral
CDC	Centers for Disease Control and Prevention (US)
CHW	community health worker
CONRAD	Contraceptive and Research Development Program
CTA	Call to Action
EGPAF	Elizabeth Glaser Pediatric AIDS Foundation
FP	family planning
GHESKIO	Haitian Study Group on Kaposi's Sarcoma and Opportunistic Infection
HAART	highly active antiretroviral therapy
HIV	human immunodeficiency virus
IEC	information, education and communication
IPPF	International Planned Parenthood Federation
IUD	intrauterine device
IVDU	intravenous drug user
LAM	lactation amenorrhea
MTCT	mother-to-child transmission (of HIV)
N-9	nonoxynol-9
NGO	non-governmental organization
PAF	population attributable fraction
PEP	post-exposure prophylaxis
PID	pelvic inflammatory disease
PMTCT	prevention of mother-to-child transmission (of HIV)
RH	reproductive health
STD	sexually transmitted disease
STI	sexually transmitted infection
TFR	total fertility rate
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNGASS	United Nations General Assembly Special Session
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VCT	voluntary counseling and testing
WHO	World Health Organization



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## EXECUTIVE SUMMARY

UNAIDS estimates that about 2.6 million children (aged 0-14) were living with HIV/AIDS in sub-Saharan Africa at the end of the year 2001, and most of these HIV infections were a result of mother-to-child transmission (MTCT) of HIV. In the same year, about 11 million children aged 0-14 were orphans as a result of their parent or parents' AIDS-related death.

In addition to the well-accepted health benefits of family planning (FP) for the African population *in general*, there are additional benefits of FP for *HIV-infected* women. HIV-infected African women (and their families) begin a pregnancy in an even more precarious position than their uninfected counterparts.

Strengthening family planning (FP) referral and/or services in programs designed to prevent MTCT (PMTCT), programs to care for those already affected (MTCT-plus) and into voluntary counseling and testing (VCT) services can have an important impact on:

- reducing MTCT
- reducing the number of HIV-infected and HIV-uninfected AIDS orphans
- improving families' ability to plan for their future


Despite these convincing arguments, FP counseling and services have not yet been offered systematically to HIV-infected women in Africa. Family planning has fallen between the cracks of HIV/AIDS prevention education; HIV voluntary counseling and testing (VCT) services; PMTCT services; and new MTCT-plus services (which will provide HIV-related care for mother, child, and possibly the entire family).

***To date, the FP/HIV discussion has centered primarily around the need for dual protection to protect women who are HIV-negative from acquiring HIV infection, rather than on preventing future pregnancies in women who are already HIV-infected. The latter approach urgently needs to be strengthened.***

Considerations *specific to HIV-infected women* that should be addressed include:

- undocumented level of demand for FP
- complex social, HIV, and pregnancy-related issues that make FP counseling especially difficult
- guidelines for contraceptive methods that are safe and effective for women with HIV infection
- the special contraceptive needs of HIV-infected mothers who do not choose to breastfeed
- the potential effect of access to ARV treatment, considering the choice of FP method for women on treatment as well as their desire for children
- the potential impact of pregnancy on maternal health






Operational and programmatic considerations to enhance access to FP *by HIV-infected women* include:

- deciding the optimal venue for FP services (on site, by referral to FP clinics, or by community health workers (CHWs))
- ensuring FP and MTCT staff are adequately trained (in both FP and HIV/AIDS)
- assuring postpartum follow up of HIV-infected women
- involving men in FP counseling and contraceptive use
- being certain that infection control practices are followed to protect both FP clients and FP workers from HIV infection
- avoiding negative attitudes (stigma and discrimination) by FP workers against HIV-infected clients

In light of these technical and operational considerations, it is recommended that Advance Africa take the following steps to improve access to FP for HIV-infected African women:

1. Hold a senior level meeting of relevant FP, HIV/AIDS, MTCT, and MTCT-Plus organizations to discuss the technical and programmatic issues of strengthening FP counseling and services for HIV-infected women.
2. Conduct a rapid situation analysis in 3-4 sites in Africa, focusing on detailed implementation issues, including:
  - data collection on HIV status and desire for contraceptive use among HIV-infected vs. HIV-uninfected women
  - rapid, focus group research on reproductive choice related to known HIV infection status
  - identification of interested, capable program partners to implement enhanced FP
  - discussions with Ministry of Health on relevant policy and program issues
  - identification of training needs of FP, MTCT and MTCT-PLUS staff
  - assessment of physical space requirements for enhanced FP services
  - establishment of supervisory and reporting systems that need to be established
  - determination of the ideal site for FP services for HIV-infected women (on site at VCT centers or referred to existing FP services elsewhere)
  - address the adequacy of contraceptive supply if more HIV-infected women adopt FP
3. Establish pilot projects to integrate FP into MTCT and MTCT-PLUS services.
4. Evaluate pilot projects and demonstrate which approaches (to improve access to, and uptake of, FP by HIV-infected women) work in various settings.

- 
5. Develop program guidelines for the integration of FP into PMTCT, MTCT-plus, VCT and other relevant training curricula and program guidelines.
  6. Develop advocacy materials about the importance of FP for PMTCT (and for other health reasons), for use in senior level discussions with decision makers.





# 1. BACKGROUND

## Magnitude of the problem of MTCT in Africa

The severity of the problem of mother-to-child transmission (MTCT) of HIV in sub-Saharan Africa is due to high rates of HIV infection in women of reproductive age, the large total population of women of reproductive age, high birth rates, and the lack of effective MTCT prevention interventions (Preble & Piwoz, 2001). Rates of HIV infection in women are high in sub-Saharan Africa, rates are still growing rapidly in many African countries, and rates in women now surpass infection rates in men. Seroprevalence rates (among adults aged 15-29) have reached over 30 percent in Botswana (38.8%), Lesotho (31%), Swaziland (33.4%), and Zimbabwe (33.7%) (UNAIDS, 2002b).

UNAIDS estimates that about 2.6 million children (aged 0-14) were living with HIV/AIDS in sub-Saharan Africa at the end of the year 2001, and that between 380,000 and 650,000 AIDS-related deaths occurred to children (aged 0-14) in that region in the same year (UNAIDS, 2002a). Most of those child deaths occurred under the age of five, dramatically increasing infant and child mortality rates that were already unacceptably high in Africa.

HIV/AIDS, FP, and relevant demographic data for the sub-Saharan African countries most affected by HIV/AIDS are found in Annex A.

## Using family planning to reduce MTCT


The increased infant and child mortality caused by HIV/AIDS has not reduced the unmet need for FP services, which remains high in Africa, both for spacing and for limiting the number of children. Rather, the rapid and extensive spread of HIV in Africa, and the problem of MTCT, have made the provision of FP counseling and voluntary, safe and effective methods of contraception even *more* critical (Preble & Piwoz, 2002).

Introducing FP referrals and/or services into programs designed to prevent MTCT (PMTCT) can have an important impact on the reduction of MTCT by:

- a) avoiding unplanned and unwanted pregnancies to women who are HIV-infected, and
- b) reducing number of HIV-infected babies born to HIV-infected women.

It can also reduce the number of children orphaned by HIV/AIDS.

In Haiti, where seroprevalence rates are as high as in many African countries, a UNFPA-funded project has demonstrated that FP *can* be integrated into an STD/HIV clinic and that the uptake of FP *can* be significantly increased among HIV-infected women who are offered VCT and FP (Deschamps et al, 2002). This model will be introduced nation-wide in Haiti.



***To date, this strategy has been underutilized in Africa, and links between FP services and other HIV/AIDS-related services (such as PMTCT) have rarely been made operational.***

The reasons for this are varied. Offering FP counseling and services was considered unimportant, or even "politically incorrect" in HIV/AIDS programs during the early years of the African HIV/AIDS epidemic, because it was felt that HIV-infected women had the right to have children, and FP could become coercive. Now, on the contrary, FP is now seen as a basic right of HIV-infected women, to voluntarily control their fertility.

FP has only recently been articulated as an important strategy to reduce MTCT, and was recently added to the World Health Organization's (WHO) "four prong approach" to the prevention of MTCT (WHO, 2002a). The four prongs now include:

- Primary prevention of HIV infection
- ***Prevention of unintended pregnancies among HIV-infected women***
- Prevention of HIV transmission from HIV-infected women to their infants
- Provision of care and support to HIV-infected women, their infants and family

#### Family planning can reduce the number of African AIDS orphans

In the year 2001, UNAIDS estimates that 14 million children aged 0-14 were orphaned by the AIDS-related deaths of their parents. Of these, the vast majority (11 million) were found in sub-Saharan (UNAIDS, 2002a). These include children whose mothers or fathers have died from HIV/AIDS, whose children who have lost both parents to the disease. Losing a mother, in Africa, can have dramatic psychosocial as well as health and nutritional consequences. Losing a father often results in severe economic deprivation (Hunter and Williamson, undated). Finally, AIDS orphans are, themselves, at greater risk of HIV infection if they are forced to live in dire poverty on the streets.

Providing family planning to HIV-infected women can reduce the number of HIV-infected, and HIV-uninfected, children who will be orphaned by HIV/AIDS in Africa.

#### The benefits of family planning

It has been long been accepted that voluntary family planning offers significant benefits for women and families (CDC, 2000):

- the health of women and children is improved by reducing the risks associated with age at pregnancy (too young or too old), too many pregnancies or pregnancies spaced too closely together
- family planning allows families to better plan their lives
- individuals can achieve greater prosperity and security for the family

- 
- women can fulfill a number of roles for which they are ultimately capable

African women who are HIV -infected (and their families) begin a pregnancy in an even more precarious position than their uninfected counterparts:

- their own health may be already be impaired by AIDS-related symptoms
- their partner/spouse is likely already infected with HIV, may have AIDS, or may have already died from AIDS-related symptoms
- they may already have borne other children HIV -infected children
- in the absence of ARV therapy and treatment for secondary infections, their length and quality of life will be severely compromised
- they may have already exhausted the family's limited financial assets by caring for the medical needs of their own, or other family members', AIDS-related conditions
- their ability to call on others to help care for the family may be compromised by AIDS-related stigma and discrimination


Offering FP counseling and services to HIV -infected women has the following additional benefits:

- reduction of the number of HIV -infected (and uninfected) infants born to them
- reducing the number of babies who will be orphaned by HIV/AIDS
- provision of an entry point for HIV prevention education and MTCT information to a wide audience of women (and men) of reproductive age
- ensuring that messages given in FP settings (about contraceptive choice, MTCT, infant feeding, etc.) are consistent with those given in MTCT settings

In addition, adoption of barrier contraceptive methods has benefits for HIV -infected women beyond the contraceptive effects:

- prevention of HIV transmission from HIV -infected women to their (HIV -uninfected) sexual partners
- the theoretical possibility of protection against reinfection with the HIV virus, acquiring other strains of the HIV virus (superinfection) or other STDs

Finally, using FP to reduce unwanted pregnancies among HIV -infected women is likely to be cost-effective, especially in Africa, where both HIV prevalence and birth rates are



high. The FP cost per birth averted will be low since clients using voluntary counseling and testing (VCT) and PMTCT services have a high probability of a birth in the near future (Stover, 2002).

### Family planning for PMTCT: missed opportunities

Despite these convincing arguments, the reality in most African countries, to date, is that FP counseling and services have not yet been offered systematically to HIV-infected women. FP has fallen between the cracks of the following HIV/AIDS-related services:


- HIV/AIDS education services (which aim primarily to prevent sexual, and injection-drug-related transmission in adult men and women)
- VCT services
- MTCT services (which have focused almost exclusively on VCT, administration of nevirapine and infant feeding)
- MTCT-plus services (which are not operational yet, but intend to provide HIV-related care for mother, child, and possibly full family) (Columbia University, 2002).

### Challenges

To realize the goal of using FP to reduce MTCT, a number of challenges will have to be met:

- coordination between pre-pregnancy, ANC and postpartum services
- providing FP counseling and services to HIV-infected women *before* they become pregnant.
- marrying the two highly vertical programs of FP and HIV/AIDS and foster functional integration.
- ensuring that PMTCT services continue to follow HIV-infected women through the postpartum period to be able to offer FP.
- finding ways to increase the uptake, or utilization, of FP services by HIV-infected women and couples, once the FP services are in place.

Factors that work for the reduction of unintended pregnancies by HIV-infected women:

- 
- evidence of sub-fertility

Several studies in Africa have demonstrated decreased fertility among HIV-1-infected women (Glynn et al, 2000; Desgrees et al, 1999; Gray et al, 1998; Ross et al, 1999). Possible reasons given for this sub-fertility are lower rates of conception, increased rates of pregnancy loss, coinfection with other STDs and preexisting sub-fertility.

- evidence of an unmet need for FP in Africa in general

Factors that work *against* the reduction of unintended pregnancies by HIV -infected women:


- PMTCT services promote the idea that babies born to HIV -infected mothers have a good chance of being born HIV -negative if these mothers use PMTCT services -- hence there may be both decreased emphasis on, and demand for, FP to prevent additional (HIV-infected) babies.
- PMTCT services may encourage women to avoid breastfeeding, and some programs provide free infant formula. Formula feeding eliminates the lactational amenorrhea effect of breastfeeding, reducing natural birth spacing.
- FP services are often reluctant to serve HIV-infected women, are unaware of their special HIV-related needs, and/or overtly discriminate against them.
- FP services are often difficult to obtain, prohibitively expensive, not "user friendly", and may be perceived as not respecting confidentiality (regarding HIV status).

## **2. REVIEW OF EXISTING SERVICES IN AFRICA**

### **A. Family Planning**

Sub-Saharan Africa has the lowest rate of contraceptive use in the world, due to difficulty in accessing contraceptive supplies, insufficient FP clinics, a large rural population, low socioeconomic status, high rates of infant and child mortality, and the high value many cultures place on large family size (CDC, 2000). The total fertility rate (TFR) in sub-Saharan Africa is the highest in the world -- 5.4 (1999) as compare with the global TFR of 2.6 (UNICEF, 2001). The contraceptive prevalence rate (irrespective of HIV) in sub-Saharan Africa is the lowest in the world -- 18 percent compared to the rate of 24 percent for all least developed countries (UNICEF, 2001). See Annex A for country-specific data.





At the same time, HIV prevalence rates among women of reproductive age are higher in sub-Saharan Africa than any other region in the world -- 9 percent overall, compared with the global rate of 1.2 percent (UNAIDS, 2002a). See Annex A for country-specific data.

Donors have historically supported FP services in sub-Saharan Africa to reduce maternal and infant mortality, and promote women's rights. Support has included reproductive health services, procurement and distribution of contraceptives, training of health care providers (including CHWs), and information, education and communication (IEC) about FP.

In response to the HIV/AIDS pandemic, FP programs have added behavior change communication about prevention of sexual transmission of HIV among sexually active adults of reproductive age to their range of services. The AIDS epidemic also necessitated incorporation of a new dimension to contraceptive advice -- that of preventing sexually transmitted infections (STIs) (see Chapter 3.C. Contraceptive options for HIV-infected women).

Incorporation of FP into PMTCT programs will require yet another shift in program focus, since it will need to reduce unwanted pregnancies among women *already known to be infected with HIV* -- women with special family and health-related problems and needs. Such an approach will need to take into account new counseling techniques, an understanding of the interactions between selected contraceptives and HIV, issues of stigma and discrimination, links with VCT, new prevention education strategies, etc.


## **B. Voluntary Counseling and Testing**

African governments, non-governmental organizations (NGOs) and donors are according VCT a high priority in the range of HIV/AIDS prevention and care interventions and are making VCT available to more and more men and women in sub-Saharan Africa. VCT assistance includes counselor training, salaries and supervision, rapid test kits, physical space, and referrals.

VCT is increasingly offered in a variety of sites and services. However, the FP components of VCT services continue to be weak, or non-existent. While all types of VCT sites can theoretically refer clients to other FP services, most VCT sites will require significant upgrading to be able to offer technically-sound, detailed counseling on specific contraceptive methods, and/or to offer a range of contraceptive services at the VCT site itself.

### Types of VCT sites

*Freestanding VCT services* (also referred to as stand-alone or direct services) cater to both men and women, but not necessarily pregnant women.



*Antenatal clinics (ANC)* serve primarily pregnant women and are the usual site for PMTCT services. Issues related to offering FP to HIV-infected women in the context of ANC are discussed throughout this report. A number of models of VCT within ANC exist, and include, for example, "opt in" vs. "opt out" approaches<sup>1</sup>, requiring or not requiring informed consent, etc.

Most ANC/PMTCT sites throughout Africa have faced disappointing uptake of VCT from clients, at least in the early phases. Reasons may include:

- logistics -- test results not available the same day, high cost of services, etc.
- fears that test results will not remain confidential
- belief that the benefits of learning an HIV -positive result do not outweigh the risks (e.g. violence from partner/spouse if an HIV -positive test result were disclosed)
- belief that there is no additional medical care or cure available to them for AIDS, so there is no advantage in knowing the one's HIV status

*Premarital VCT services* are being widely promoted in sub-Saharan Africa, especially by churches and religious groups (FHI, 2001). In Zambia, for example, in the early 1990s, people came for VCT because they were sick. Now, more than 20 percent of the clients (at one major VCT site) come for marriage-related reasons (as individuals or as couples) (Chama & Kayawe 2001). Premarital VCT settings could be a natural site for FP information, and theoretically very effective in reducing unplanned pregnancies to HIV-infected women. While the notion of HIV -infected African couples (whether discordant or not) remaining childless is unlikely, at least their families could be planned in terms of timing and number of pregnancies, and MTCT services could be systematically utilized.


*Other venues* for VCT include mobile services, workplace-based services, youth-friendly health services, STI services, TB services, FP clinics and health centers or hospitals that perform HIV tests to confirm a diagnosis of HIV/AIDS or to determine a patient's HIV status before certain (usually surgical) procedures are performed.

### Family planning guidance in the context of VCT

Few operational procedures, training curricula, and guiding principles for VCT in African VCT sites include FP. Irrespective of official guidance on FP, again, FP is not systematically offered in PMTCT settings, nor do PMTCT staff receive detailed training in FP counseling or contraceptive services.

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<sup>1</sup> With "opt in" VCT services, women need to request VCT, implying that they are at special risk. With "opt out" VCT services, VCT is offered as a routine and expected part of antenatal care, although women may decline HIV testing ("opt out").




In Kenya, the National Guidelines for Voluntary Counseling and Testing (Republic of Kenya, 2001) provide an example of very articulate guidance for FP services:

"Basic family planning information should be incorporated into all VCT counseling sessions, for both HIV-positive and HIV-negative clients. Especially for HIV-positive clients, the risks of mother-to-child transmission should be explained and the benefits of family planning should also be explained. "Dual protection", which is use of condoms for HIV and STI prevention and a hormonal contraceptive for family planning, should be emphasized in the counseling session. When possible, family planning services should be provided at the VCT site. If family planning services are not available, or if the VCT counselor does not have adequate time for family planning counseling, VCT clients should be referred for family planning services. Both men and women should be encouraged to use family planning services to make informed decisions about contraceptive measures appropriate to their HIV status. Staff of the family planning programme should be trained in maintaining confidentiality of HIV test results and the importance of maintaining a respectful attitude to all family planning and HIV clients."

UNAIDS offers the following guidance on information and counselling about fertility regulation in the context of VCT (UNAIDS, 2001):

- While women and couples should be free to make their own decisions about child-bearing, counselors should ensure that women are aware of the risks inherent in any future pregnancies, as well as the risk of passing on the virus during unprotected sex.
- Counselors should make it clear that even where interventions are available, all pregnancy carries some risk of HIV transmission from mother to child. And the risk of transmission grows as the mother's infection progresses, so it is likely to grow from one pregnancy to the next.
- The effectiveness of antiretroviral (ARV) therapy for PMCT (as opposed to ARV for long-term treatment of AIDS patients) in successive pregnancies is unknown.
- Women who choose to avoid pregnancy in the future because of their HIV infection should be referred to FP services.
- Women who choose replacement feeding should also receive advice on contraception to replace the birth spacing effect of breastfeeding.
- If women choose to bear more children, they should be encouraged to delay the pregnancy for at least two years.



## Evolving approaches/unanswered questions

A number of issues related to how VCT services are offered (within and outside PMTCT settings) are under continuing discussion. Many of these issues have relevance for FP, and include<sup>2</sup>:

- what are the minimum requirements for informed consent?
- advantages/disadvantages of "opt in" and "opt out" approaches?
- negative outcomes of VCT - how to prevent and address them?
- how to balance client vs. community/child/partner's needs?
- how does the type of site where VCT is offered affect the counseling and testing provided?
- how should partner (especially male partner) notification be handled?
- are Western (e.g. CDC) models of VCT appropriate for resource-constrained settings?

### **C. Prevention of Mother-to-Child Transmission**

#### International assistance and policy guidance for PMTCT

Programs to prevent MTCT have expanded rapidly in recent years in Africa, especially with country-level financial assistance from the Elizabeth Glaser Pediatric AIDS Foundation (EGPAF) Call to Action (CTA) programme, United Nations Children's Fund (UNICEF) and the United States Agency for International Development (USAID).

Globally, once all its sites are operational, EGPAF hopes to reach more than half a million women per year with VCT, and interventions to reduce the rate of MTCT. EGPAF currently provides PMTCT assistance, in Africa, to Angola, Cameroon, Congo, Kenya, Malawi, Rwanda, South Africa, Thailand, Uganda, Zambia, and Zimbabwe.


UNICEF began its assistance with pilot projects in Botswana, Cote d'Ivoire, Kenya, Rwanda, Tanzania, Uganda, Zambia and Zimbabwe. Many more UNICEF country offices in Africa now support PMTCT, together with other donors.

The United Nations General Assembly Special Session (UNGASS), in June 2001, pledged to: "by 2005, reduce the proportion of infants infected with HIV by 20 percent, and by 50 percent by 2010..." (United Nations General Assembly, 2001).

FP is not currently included in either the EGPAF or UNICEF comprehensive packages of interventions for PMTCT assistance, although in some cases, counselors may refer

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<sup>2</sup> Some of these issues were drawn from a WHO presentation made at the meeting, "Increasing access to knowledge of HIV serostatus", Geneva, December 3-4, 2001.



women elsewhere for FP. FP is also not included in the goals or strategies committed to by the UNGASS.

In almost all cases, PMTCT services in Africa are ANC clinic-based or hospital-based ANC services and the majority of PMTCT services are still available only in urban areas.

#### Family planning guidance for PMTCT programs

PMTCT services in Africa vary in terms of the attention they actually give, or are mandated to give, to FP.

In Kenya, as in most African countries, FP is mentioned only briefly in the clinical guidelines for PMTCT (Ministry of Health, 2001). In this set of guidelines, it is suggested that the topic of "issues on future fertility" be mentioned at session five after the initial post-test counseling session, for HIV -positive clients. In reality, it is unlikely that HIV -positive individuals will receive five post-test counseling sessions. Detailed guidelines are, however, offered for contraception in the postpartum period for HIV -infected women.


In contrast, in the Cameroon "Technical Guide for the Prevention of Mother-to-Child Transmission of HIV in Cameroon" (National AIDS Control Committee, undated), FP is hardly mentioned. In the section on counseling content for the HIV positive pregnant woman, it is stated, "it should be explained to the woman that she could still bear children but that it will pose problems. Such problems could be resolved jointly with her partner with the help of a specialist".

### **3. TECHNICAL ISSUES RELATED TO IMPROVING FAMILY PLANNING ACCESS FOR HIV-INFECTED WOMEN**

#### **A. Potential Uptake of Family Planning**

Initial studies on fertility preferences of HIV -infected women from the United States showed poor family planning uptake. However, women from the US cohort were often intravenous drug users with a multitude of social and psychological conditions, and had little in common with most of their HIV -infected African counterparts.

For years, in the absence of systematic research, and based on African data about family size preference (before the HIV/AIDS epidemic), it was widely accepted that HIV -infected African women would always want more children, even if they were aware of their HIV status. This assumption, usually based on weak anecdotal evidence, may very likely be untrue and even paternalistic.



Acceptance of FP for spacing or limitation reasons among HIV -infected African women may well depend upon a number of factors including how sensitively, systematically and intensely FP and VCT counseling is offered, how many children the woman already has, whether FP services are accessible, acceptable and affordable, and whether her partner is involved in, and supportive of, her decision.

In Uganda, it has been observed that HIV-infected women with no children will quite often want to become pregnant. However, HIV-infected women who already have some children almost universally want to avoid pregnancy (and the risk of having a baby who will eventually become an orphan) (Marum E, 2002).

### Anecdotal reports

Reasons that HIV -infected women *may not want* another pregnancy:

- they wish to give priority to children they already have
- fear that pregnancy will make the disease progress
- concern about who will care for their orphaned children
- a wish to plan their future
- perception that health workers will disapprove


Reasons that HIV -infected women *may want* another pregnancy:

- wish to leave behind a "legacy" if they are going to die
- fear of impending infertility related to HIV infection
- belief that with PMTCT the chance of having a HIV-infected child is decreased (PMTCT promotes this message)
- expectation that they (mothers) will get antiretroviral therapy (ART) for their own treatment, and hence will be alive throughout the baby's childhood
- offering HIV testing for babies may improve uptake of FP services. If the new baby is confirmed HIV-negative, the mother/couple may be less inclined to have additional children

### Selected research on family planning use by HIV -infected women

A preliminary literature review of reproductive choice among African women who know they are HIV-infected revealed only a very few studies and publications, with conflicting results:

Burkina Faso: This retrospective follow-up study of a cohort of 306 HIV -infected women concluded that the women showed: "poor use of contraceptive methods despite regular advice and counseling. Pregnancy incidence remained comparable with the pregnancy rate in the general population. To improve this situation, approaches for involving husband or partners in VCT and prevention of MTCT interventions should be developed, evaluated, and implemented" (Nebie Y, et al. 2001).



Kenya: A study investigating the impact of maternal HIV infection on pregnancy outcomes at a large maternity hospital in Nairobi, followed up both HIV infected women and a comparison group of uninfected women matched for pregnancy outcome, at the interval of one year. It was found that a single session of counseling on contraception and reproductive behavior for HIV -positive women did not seem to influence decisions on reproductive behavior (Temmerman et al, 1990).


Kenya and Tanzania: This longitudinal study (of HIV-infected women and men) investigated the impact of HIV voluntary counseling and testing on planning for reproduction among 1,634 adults. The study found that diagnosis with HIV may have precipitated a reduction in fertility among less healthy women, independent of the effects of relationship status, number of children, and frequency of sexual activity. In addition, it found that men's awareness of their HIV serostatus and baseline intention to reproduce were unrelated to partner pregnancies reported six months later (Forsythe et al, 2002).

Rwanda: In a longitudinal cohort study, 502 women who were not pregnant or infertile and who had been previously HIV tested and counseled were shown a video on contraception followed by a facilitated discussion. 330 HIV -infected women and 172 HIV -uninfected women received the intervention and were followed up. The study concluded that, "access to and information about hormonal contraceptives resulted in increased use and reduced attrition among both HIV -positive and HIV -negative women. The reduction in incident pregnancy was greatest among HIV -positive women, suggesting that factors other than access to hormonal contraceptive may have influenced fertility outcomes. Knowledge of HIV serostatus may have an important influence on family planning decisions" (King et al, 1995).

Zimbabwe: A survey of 209 HIV-infected women indicated that 64 percent thought that their communities and relatives did not expect HIV-positive women to bear children. 89 percent of those believed that HIV-positive women should not bear children (Feldman et al, 2002).

## **B. Family Planning Counseling**

The choice by an HIV -infected African woman of whether or not to use contraception, which method to use, or whether to use sterilization or to terminate a pregnancy, are complex, and her decision is likely to be influenced by a number of factors. These factors can complicate what would otherwise be a straightforward FP counselling session. To illustrate the circumstances clients may present with for FP counseling, and the range of referral options, see Annex B, Pregnancy status, HIV status and service delivery needs.



Because of the special circumstances of HIV -positive clients, FP counselling should be conducted with particular sensitivity. The International Planned Parenthood Federation (IPPF) maintains that whenever possible, the partners should be counseled both separately *and* together (IPPF, 1997).

### **C. Contraceptive Options**

***To date, FP/HIV discussion has centered primarily around the need for dual methods to protect women who are HIV-negative from acquiring HIV infection, rather than on preventing future pregnancies in women who are already HIV-infected. The latter approach urgently needs to be strengthened.***

#### Criteria for contraceptive method choice

Contraception for HIV -infected women (as with all women) must be voluntary, and contraceptive methods chosen by HIV -infected women should ideally:

- be highly effective in preventing pregnancy
- not be contraindicated for women with HIV infection
- prevent women from acquiring STIs (other than HIV) and new strains of HIV
- prevent transmission of HIV to HIV -negative sexual partners
- not worsen their disease or impact on their AIDS -related treatment
- be able to be used without the knowledge of husband or partner, if necessary

#### HIV infection and specific contraceptive methods

The major resource on contraceptive use among HIV -infected women is the WHO document, "Improving access to quality care in family planning: medical eligibility criteria for contraceptive use" (WHO, 2000). This manual, prepared in collaboration with CDC and others, evaluates each major contraceptive method (and sterilization) for suitability for family planning clients in three categories:


- clients with high risk of HIV
- clients who are HIV -positive
- clients with AIDS

In this manual, women in all categories were determined to be eligible for most major methods in *any* circumstances<sup>3</sup> (with the exception of intrauterine devices and nonoxynol-9).

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<sup>3</sup> Low-dose combined oral contraceptives, combined injectable contraceptives, progestogen-only contraceptives (including progestogen-only pill, depot medroxyprogesterone acetate, norethisterone enanthate, and Norplant implants I and II), condoms and diaphragms, fertility awareness-based methods and coitus interruptus.





WHO has determined that copper intrauterine devices and levonorgestrel-releasing **intrauterine devices** (IUDs) are "not recommended" (in a setting with limited clinical judgment) and "not usually recommended unless other more appropriate methods are not available or acceptable" (in settings where clinical judgment was present).

With IUDs, WHO cites "theoretical concerns about increased risks of STIs and PID and increased risks of transmission to uninfected partners, particularly for immunosuppressed women." IPPF also holds this view, stating that immunodeficiency might enhance the risk of pelvic inflammatory disease (IPPF, 1997).

The WHO recommendation (against IUD use in HIV-infected women) is controversial, and many experts no longer believe that the theoretical concerns should preclude this method from being recommended to HIV-infected women.

Other experts believe that levonorgestrel intrauterine systems might actually have a number of potential advantages for HIV-infected women. These include reduced menstrual blood loss, possible reduction in risk of pelvic inflammatory disease (PID), lack of interactions with ARV drugs and fewer clinic visits. In any case, the cost and difficulty in insertion of these devices may make them inappropriate for widespread use in Africa (McIntyre J, 2002).

IUDs have been used in Nairobi with a similar rate of complications among HIV-positive and HIV-negative women (Sinei et al, 1998; Morrison et al, 2001).


The WHO recommendation on IUDs will be reconsidered at the Fall, 2004 meeting of the contraceptive working group.

**Oral contraceptives** (both low-dose combined oral contraceptives and progestogen-only contraceptives) are the most commonly used contraceptive in sub-Saharan Africa and can be used safely by women who are HIV-infected. Theoretical risks of increased susceptibility to HIV infection have also been reported for oral contraceptives, however the studies are conflicting and vary in design and quality. Again, these issues are less relevant for women who are already HIV-infected.

In addition, oral contraceptives (as well as injectable progestogens) have a theoretical, but unproven effect on immune function (McIntyre J, 2002).

It should be noted that there are some negative interactions between some contraceptives and highly active antiretroviral therapy (HAART) drugs and other drugs (such as Rifampin, Rifabutin and Flucanazole) that are used for the treatment of AIDS-related opportunistic infections (McIntyre, 2002). Rifampin, for example, which is used in the treatment of tuberculosis, renders birth control pills and implants less effective. Women who take rifampin are advised use another form of birth control (CDC, 2002).

Regarding **nonoxynol-9 (N-9)**, WHO notes that "repeated and high-dose use of the spermicide nonoxynol-9 can cause vaginal and cervical irritation or abrasions which may increase the risk of HIV transmission" but nevertheless generally endorses its use



for contraceptive purposes (WHO, 2000). A WHO/CONRAD consultation held in 2001 recommended against N-9 for STI or HIV prevention however stated that among women at low risk of HIV infection, the use of N-9 remains a contraceptive option (WHO and CONRAD, 2001). WHO and CONRAD observed that there are currently no published studies on the effect of N-9 among women with HIV infection.

The **lactational amenorrhoea method** (or LAM) is not contraindicated for women with HIV infection who breastfeed. However, full or exclusive breastfeeding<sup>4</sup> is required to achieve lactational amenorrhea, and LAM requires the use of another contraceptive method once ovulation resumes or full breastfeeding is no longer practiced. Sexually active women who do not breastfeed at all, who do not practice exclusive breastfeeding, or who stop breastfeeding early will require another contraceptive method to prevent, delay or limits future births.

Women in all three HIV/AIDS categories were deemed by WHO to be eligible for **female surgical sterilization**, however infection control procedures must be observed, the use of condoms is recommended following sterilization, and the procedure should be delayed if the woman is currently suffering an AIDS-related illness.

### Dual protection

With the spread of HIV, FP staff began to promote the concept of "dual protection" or "dual method use". This is often understood to mean the use of a hormonal contraceptive method for pregnancy prevention and a barrier method for disease prevention. The International Planned Parenthood Federation (IPPF)'s International Medical Advisory Panel has broadened the definition somewhat:

"...the simultaneous prevention of STI/HIV infection and unwanted pregnancy. This can be achieved by the consistent use of condoms alone or by the simultaneous use of two methods - one of which must be condoms. A avoidance of penetrative sex, particularly in situations of high risk, is another means of achieving dual protection (IPPF, 2000)".

The concept of **dual protection** has generally been recommended in the context of preventing HIV-negative women from acquiring HIV through sexual transmission. However, dual protection may be important for HIV-infected women as well, to help them avoid acquiring other STI/STDs, or from transmitting their HIV infection to HIV-negative sexual partners<sup>5</sup>.

Microbicial products may also protect HIV-infected women against STIs (McIntyre, 2002).

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<sup>4</sup> Exclusive breastfeeding means the infant consumes only breast milk and no other liquids, milks or solid foods except vitamins, minerals, or prescribed medicines. Full breastfeeding means the infant may infrequently consume small amounts of non-milk liquids, such as water or juice, in addition to breast milk.

<sup>5</sup> There is also a theoretical risk that women who are already infected with one strain of HIV could, during unprotected sex, acquire another strain of the virus, referred to as "reinfection" or "superinfection".



## D. Impact of Pregnancy on Maternal Health

The issue of the adverse impact of maternal HIV infection on *pregnancy outcome* has been well studied. There is general agreement that adverse outcomes do exist, and are associated with low maternal CD4 cell count and pediatric HIV infection. These adverse pregnancy outcomes constitute one rationale for HIV-infected women to adopt family planning; however, access to PMTCT services can reduce these risks.

There has been less conclusive evidence, however, on the issue of whether or not pregnancy has a negative impact on *maternal health* in women who are themselves HIV-infected -- that is, whether or not pregnancy in HIV-infected women results in lower CD4 cell counts, or acceleration of disease progression (from HIV to AIDS or from AIDS to death). This issue is also important to understand, to help guide HIV-infected women in their fertility planning.

A review of the literature and meta-analysis on the effect of pregnancy on survival of women infected with HIV was published in 1998, based on an analysis of seven qualifying studies published between 1983 and 1996 (French R and Brocklehurst P, 1998). This meta-analysis concluded that "there may be an association between HIV disease progression and pregnancy, although this association is not strong".

Studies and analyses published after 1998, however, almost universally conclude that pregnancy does *not* have a statistically significant effect on HIV disease progression or mortality among HIV-infected women. These studies include, for example: two Swiss studies (Weisser et al, 1998 and van Benthem et al, 2002); a French study (Saada et al, 2000); two Italian studies (Alliegro et al, 1997 and Vimercati et al, 2000); a Mexican study (Figueroa-Damian, 1999); and a U.S. study (Bessinger et al, 1998). One exception is a small Indian study (Kumar et al, 1997) that *did* report an increase in maternal mortality related to pregnancy among HIV-infected women.

Two other peer-reviewed analyses published after 1996, also concluded that pregnancy does not have a significant, adverse effect on maternal health among HIV-infected women (Ahdieh, 2001 and Landers et al, 1997).

While negative outcomes among HIV-infected pregnant women are more likely among women with clinical AIDS than among women with asymptomatic HIV infection, most pregnant women in Africa will not have progressed to AIDS yet at the time of the pregnancy. Although there is some evidence that fertility is reduced with declining CD4 cell counts, women who *do* have clinical AIDS have a special need for FP on health grounds.

Most of the studies on this subject have been conducted in developed countries, and the extent to which their results are relevant to resource-constrained settings is not known. More studies are needed on this topic, in the African context, to appropriately advise FP messages for HIV-infected women.



## **4. OPERATIONAL CONSIDERATIONS FOR IMPROVING FAMILY PLANNING ACCESS FOR HIV-INFECTED WOMEN**

### **A. Optimal Venue for Family Planning Services**

FP providers planning to increase access for HIV-infected women will need to determine the most feasible and effective venue for those FP services. Services that offer VCT, such as freestanding VCT centers and ANC/MCH centers that offer PMCTC, could theoretically expand their own services to include FP. Alternatively, VCT and PMTCT services could refer HIV-infected women elsewhere to existing FP clinics and/or incorporate HIV/AIDS-related issues into the training and job descriptions of community health workers who provide FP<sup>6</sup>.

Some options for FP venues, with a discussion advantages and disadvantages, are found in Annex C: Increasing access to family planning for HIV-infected women.

Assuming that HIV-infected women *do* receive thorough counseling on the importance of FP, the location of FP services (whether offered at the testing site or referrals made elsewhere) will be important. ANC services are notoriously overcrowded, understaffed, with insufficient physical space for group or individual counseling. Many ANC staff have already expressed resentment at having to take on additional PMTCT responsibilities, let alone FP demands as well. More staff could be hired specifically for FP in ANC settings, however that has budgetary, sustainability, space and other implications.

Each VCT setting may need to be assessed individually to achieve the most optimal and feasible site for FP service delivery; and strong follow-up systems will need to be put in place to ensure that women who desire these FP services indeed receive them.


### **B. Staff Training Needs**

If FP staff are going to be asked to counsel HIV-infected women referred from PMTCT sites, they will need to be trained in various aspects of HIV/AIDS and MTCT, including:

- basics of HIV/AIDS and HIV counseling
- contraceptive methods appropriate for HIV-infected women
- how to counsel HIV-infected women who do wish to become pregnant
- how to counsel HIV-discordant couples on fertility planning
- basics of MTCT and PMTCT
- avoidance of stigma

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<sup>6</sup> In some settings, such as Zimbabwe, women *only* have access to FP through CHWs. Advance Africa is currently supporting CHWs, and trains them to refer women of reproductive age for VCT.

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- needs of special groups of HIV+ women (unmarried women, adolescents, IVDU, sex workers, etc.)
  - universal infection control precautions
  - post-exposure prophylaxis (PEP)

If FP counseling and services are to be added to existing PMTCT or VCT services, staff will need to be trained in various aspects of FP, including:

- importance of FP as a PMTCT intervention
- basics of contraception, sterilization and post-abortion care
- available referral sites for FP (including community-based systems such as CHWs)

At present, PMTCT and VCT curricula do not typically cover FP<sup>7</sup>.

### **C. The Importance of Postpartum Follow-Up**

Since women who attend ANC and PMTCT services are *already pregnant*, the key to using FP to reduce MTCT is dependent upon systematic family planning and care of HIV-infected women *after* they deliver, during the postpartum period. While many PMTCT programs now pledge to follow up women, test their babies, and refer them FP, ARV and other AIDS-related care, etc., this is not yet happening on a wide scale in African PMTCT settings. It may be more feasible through MTCT-plus programs, as they begin to be established.

Providing care for HIV-infected women after delivery presents a number of challenges, as revealed in an evaluation of the PMTCT pilot program in South Africa (Health Systems Trust, 2002):

- poor access to health facilities due to long distances and a lack of affordable transport
- poor patient records which make it difficult to maintain continuity of care
- long waiting times and queues


These, and other obstacles, will have to be overcome to achieve the goal of making FP widely available for HIV-infected women.

### **D. Involvement of Men**

The involvement of men has long been accepted as key to FP acceptance and adherence in Africa, and is increasingly coming to be appreciated as important for successful uptake and utilization of PMTCT interventions as well (Baggaley R et al,

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<sup>7</sup> This includes, for example, the new WHO manual on "Preventing mother-to-child transmission of HIV; A manual for training of trainers" (presently in draft and under review).



2002). Men are, indeed, still the decision makers in many of the African settings where PMTCT is offered. Despite this, studies from sub-Saharan Africa have found the proportion of HIV-infected women who are able to, or willing to, disclose their HIV-status to their husbands or partners is extremely low. Fears of violence or stigmatization against women are a main factor in women not disclosing their HIV status to their male partners.

For FP to be successfully introduced to HIV-infected women, the issue of male involvement will need to be addressed.

## **E. Infection Control**

Infection control (universal precautions) is important in health care settings to protect women who receive various health care services (some family planning methods, sterilization, delivery, and other invasive procedures) from becoming HIV-infected through unsterile equipment or procedures. Infection control is also important to protect health workers from similarly becoming HIV-infected from their clients (commonly referred to as occupational transmission).

While it was commonly accepted in the first two decades of the HIV/AIDS epidemic that over 90 percent of HIV transmission was of sexual origin, this theory is now being challenged. A recent review claims that as much of two-thirds of HIV transmission in Africa may actually be attributed to unsafe health care, primarily unsterilized blood and reused needles (Gisselquist et al, 2002).


In Congo, for example, one study showed that among 1,770 women at an antenatal clinic in 1987-88, 17 of 282 with a history of induced abortions were HIV-positive vs. 54 of 1,488 without, for a crude population attributable fraction (PAF) of HIV associated with induced abortions of 10%. Complications from abortions were a common cause of hospitalization, which was also associated with HIV infection (study cited in Gisselquist, 2002).

Infection control during sterilization and post-abortion care is particularly important. Infection control equipment and training has to be in place for FP clients and FP workers. Where FP services offer IUDs, implants or sterilization, the availability of post-exposure prophylaxis (PEP) for occupationally exposed health/family planning workers should be considered.

## **F. Attitudes of health workers**

Anecdotal evidence suggests that FP staff have not always enthusiastically embraced taking on HIV/AIDS prevention work, for a number of reasons including:

- fear that scarce FP funds would be diverted to HIV/AIDS programs
- fear of occupational transmission of HIV (by serving persons living with HIV/AIDS)

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- fear that HIV could discredit the "family" nature and legitimacy of FP, that has taken years to build
  - stigmatization of cohorts that were often associated with the spread of HIV (homosexual men, IVDU, and commercial sex workers)
  - hesitation to deal with single women, or adolescents
  - heavy existing workloads

Where present, these attitudes need to be reversed, for FP programs to be truly successful in reaching HIV-infected women (and their partners).

## **G. Potential Impact of Increased Access to ARV Treatment**

A number of global initiatives now seek to offer wider access to effective, yet expensive, antiretroviral treatment drugs for persons living with HIV/AIDS in developing countries, including Africa. It is not known how rapidly or completely this goal will be achieved, but it could affect the demand for, and logistics of delivery of, FP services for HIV -infected women in a number of ways:


1. WHO's ARV guidelines stipulate that women who are receiving ART should have access to effective and appropriate contraceptive methods to reduce the likelihood of unintended pregnancies (WHO, 2002b). This could reinforce the importance of FP as a part of follow-up care for women found to be infected with HIV.

However, at the same time, from a technical point of view, WHO states that pregnancy, or the desire to become pregnant, should not preclude the use of optimal antiretroviral therapy<sup>8</sup> (WHO, 2002b). Therefore, use of contraception should not be a *precondition* for otherwise eligible African women to receive ART.

2. Programs to provide ARV treatment to HIV -infected African women (for example, MTCT-Plus) should be accompanied by a strong infrastructure for follow-up than is currently provided by MTCT programs alone. A strong infrastructure will help ensure that women receive FP counseling and services before pregnancy and postpartum.
3. HIV-infected women may have less motivation to adopt family *specifically as a result of their HIV-positive status* because their own health status, quality of life and survival are in less jeopardy on ARV treatment. However, the conventionally held advantages of FP (irrespective of HIV status), outlined in Chapter 1, will still be relevant.

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<sup>8</sup> Although pregnancy will influence which specific ARV drugs are recommended, especially during the first trimester of pregnancy.



It is critical that the role of FP be included in emerging discussions about the delivery of comprehensive care for HIV -positive women. Many FP staff fear that the pressure to provide expensive ARV drugs might reduce the level of funding available for FP.

## **5. PROPOSED NEXT STEPS FOR ADVANCE AFRICA**

1. Hold a senior level meeting of relevant FP, HIV/AIDS, MTCT, and MTCT-Plus organizations to discuss the technical and programmatic issues of strengthening FP counseling and services for HIV -infected women.
2. Conduct a rapid situation analysis in 3-4 sites in Africa, focusing on detailed implementation issues, including:
  - data collection on desire for contraceptive use among HIV -infected vs. HIV -uninfected women
  - rapid, focus group research on reproductive choice related to known HIV infection status
  - identification of interested, capable program partners to implement enhanced FP
  - discussions with Ministry of Health on relevant policy and program issues
  - identification of training needs of FP, MTCT and MTCT-PLUS staff
  - assessment of physical space requirements for enhanced FP services
  - establishment of supervisory and reporting systems that need to be established
  - determination of the ideal site for FP services for HIV-infected women (on site at VCT centers or referred to existing FP services elsewhere)
  - address the adequacy of contraceptive supply if more HIV -infected women adopt FP
3. Establish pilot projects to integrate FP into MTCT and MTCT-PLUS services.
4. Evaluate pilot projects and demonstrate which approaches (to improve access to, and uptake of, FP by HIV-infected women) work in various settings.
5. Develop program guidelines for the integration of FP into PMTCT, MTCT-plus, VCT and other relevant training curricula and program guidelines.
6. Develop advocacy materials about the importance of FP for PMTCT (and for other health reasons), for use in senior level discussions with decision makers.







## **REFERENCES:**

Ahdieh L. 2001. Pregnancy and infection with human immunodeficiency virus. *Clin Obstet Gynecol* 2001 Jun;44(2):154-66.

Alliegro MB, Dorrucchi M, Phillips AN et al. 1997. Incidence and consequences of pregnancy in women with known duration of HIV infection. Italian Seroconversion Study Group. *Arch Intern Med* 1997 Dec 8-22;157(22):2585-90.

Baggaley R, Gaillard P, Sigxashe T et al. Men make a difference: involving fathers in the prevention of mother-to-child HIV transmission. <http://www.developmentgateway.org/node/171389>.

Bessinger R, Clark R, Kissinger P et al. 1998. Pregnancy is not associated with the progression of HIV disease in women attending an HIV outpatient program. *Am J Epidemiol* 1998 Mar 1;147(5):434-40.

Columbia University. 2002. MTCT-PLUS: Spearheading HIV/AIDS Prevention & Care for Mothers & Children. [http://chaos.cpmc.columbia.edu/sph/mtct\\_plus\\_brochure.pdf](http://chaos.cpmc.columbia.edu/sph/mtct_plus_brochure.pdf).

CDC. 2000. Family Planning Methods and Practice: Africa. Second Edition, 1999, updated January 2002.

CDC. 2002. Questions and Answers about TB - 2002. <http://www.cdc.gov/nchstp/tb/faqs/pdfs/qa.pdf>.

Chama S & Kayawe I. 2000. Sharing HIV test results with future and current marriage partners in Zambia. *Sex Health Exch* 2000;(1):7-8.

Deschamps M, GrandPierre R, Verdier R et al. Interventions to integrate HIV counseling testing and family planning (FP) and treatment to prevent mother to child transmission. XIV International AIDS Conference, Barcelona, Spain, July 7-12 2002. Abstract ThPeD7653.

Desgrees du Lou A, Msellati P, Yao A et al. 1999. Impaired fertility in HIV-1 infected pregnant women: a clinic-based survey in Abidjan, Cote d'Ivoire, 1997. *AIDS* 1999 Mar 11;13(4):517-21.

Family Health International. 2001. Voluntary counseling and testing: A reference guide. Responding to the needs of young people, children, pregnant women and their partners. December 2001.


Feldman R, Manchester J, Maposhere C. Positive women: voices and choices. Zimbabwe Report. A project led by positive women to explore the impact of HIV on their sexual behavior, well-being and reproductive rights, and to promote improvements in policy and practice. International Community of Women living with HIV/AIDS. Harare: June, 2002.

Figuerola-Damian R. 1999. Pregnancy outcome in women infected with the human immunodeficiency virus. *Salud Publica Mex* 1999 Sep-Oct;41(5):362-7.

Forsythe AD, Coates TJ, Grinstead OA et al. 2002. HIV infection and pregnancy status among adults attending voluntary counseling and testing in 2 developing countries. *Am J Public Health* 2002 Nov;92(11):1795-800.

French R and Brocklehurst P. 1998. The effect of pregnancy on survival in women infected with HIV: a systematic review of the literature and meta-analysis. *British Journal of Obstetrics and Gynaecology*. August 1998. Vol. 105. p. 827-835.

Gisselquist D, Rothenberg R, Potterat J, et al. 2002. HIV infections in sub-Saharan Africa not explained by sexual or vertical transmission. *Int J STD AIDS* 2002 Oct;13(10):657-66.



Glynn JR, Buve A, Carael M et al. 2000. Decreased fertility among HIV-2-infected women attending antenatal clinics in three African cities. *J. Acquir Immune Defic Syndr* 2000 Dec 1; 25(4):345-52.

Gray RH, Wawer MJ, Serwadda D et al. 1998. Population-based study of fertility in women with HIV-1 infection in Uganda. *Lancet* 1998 Jan 10;351(9096):98-103.

Health Systems Trust and Department of Health, Republic of South Africa. 2002. Interim findings on the national PMTCT pilot sites: Lessons and recommendations. [www.hst.org.za](http://www.hst.org.za).

Hunter S and Williamson J. Undated. *Children on the Brink: Strategies to support children isolated by HIV/AIDS*. Washington DC: USAID.

IPPF International Medical Advisory Panel. 1997. Statement on HIV infection and AIDS [http://www.ippf.org/medical/imap/statements/eng/1997\\_09a.htm](http://www.ippf.org/medical/imap/statements/eng/1997_09a.htm).

IPPF International Medical Advisory Panel. 2000. Statement on Dual Protection against Unwanted Pregnancy and Sexually Transmitted Infections, including HIV. [http://www.ippf.org/medical/imap/statements/eng/2000\\_05a.htm](http://www.ippf.org/medical/imap/statements/eng/2000_05a.htm).

King R, Estey J, Allen S et al. 1995. A family planning intervention to reduce vertical transmission of HIV in Rwanda. *AIDS* 1995 Jul;9 Suppl 1:S45-51.

Kumar RM, Uduman SA, Khurrana AK. 1997. Impact of pregnancy on maternal AIDS. *J Reprod Med* 1997 Jul;42(7):429-34.

Landers DV, Martinez de Tejada B, Coyne BA. 1997. Immunology of HIV and pregnancy. The effects of each on the other. *Obstet Gynecol Clin North Am* 1997 Dec;24(4):821-31.

Marum, E. 2002. Personal communication with Douglas Huber.

McIntyre, J. 2002. Personal communication.

Ministry of Health, Republic of Kenya. 2001. Clinical Guidelines for the Management of Human Immunodeficiency Virus (HIV) Infected Pregnant Women and Prevention of Mother to Child Transmission (MTCT) of HIV in Kenya.

Morrison CS, Sekadde-Kigonda C, & Sinei SK. 2001. Is the intrauterine device appropriate contraception for HIV-1-infected women? *BJOG* 2001 Aug;108(8):784-90.


National AIDS Control Committee, Ministry of Health. Undated. Technical Guide for the Prevention of Mother-to-Child Transmission of HIV in Cameroon.

Nebie Y, Meda N, Leroy V et al. 2001. Sexual and reproductive life of women informed of their HIV seropositivity: A prospective cohort study in Burkina Faso. *JAIDS Journal of Acquired Immune Deficiency Syndromes*. 2001 Dec 1;28(4):367-372.

Preble EA and Piwoz EG. 2001. *Prevention of MTCT in Africa: Practical Guidance for Programs*. Washington DC: Academy for Educational Development. June, 2001. English version is found at: [www.dec.org/pdf\\_docs/PNACM052.pdf](http://www.dec.org/pdf_docs/PNACM052.pdf).

Republic of Kenya, Ministry of Health. 2001. National Guidelines for Voluntary Counseling and Testing, national AIDS and STD Control Program (NASCO) in collaboration with the National AIDS Control Council.

Ross A, Morgan D, Lubega R et al. 1999. Reduced fertility associated with HIV: the contribution of pre-existing subfertility. *AIDS* 1999 Oct 22, 13(15):2133-41.



Saada M, Le Chenadec J, Berrebi A et al. 2000. Pregnancy and progression to AIDS: results of the French prospective cohorts. SEROGEST and SEROCO Study Groups. *AIDS* 2000 Oct 20;14(15):2355-60.

Sinei SK, Morrison CS, and Sekadde-Kigundu C. 1998. Complications of use of intrauterine devices among HIV-1-infected women. *Lancet* 1998 Apr 25;351(9111):1238-41.

Stover, John. 2002. The benefits of providing family planning services at VCT and PMTCT sites. Powerpoint presentation. October, 2002.

Temmerman M, Moses S, Kiragu D et al. 1990. Impact of single session post-partum counselling of HIV infected women on their subsequent reproductive behavior. *AIDS Care* 1990;2(3):247-52.

UNAIDS. 2001. Counselling and voluntary HIV testing for pregnant women in high HIV prevalence countries: Elements and issues. Geneva, 1999, revised in 2001.

UNAIDS. 2002a. Report on the global HIV/AIDS epidemic. Geneva: UNAIDS.

UNAIDS 2002b. AIDS Epidemic Update. December, 2002.  
[http://www.unaids.org/worldaidsday/2002/press/update/epiupdate2002\\_en.doc](http://www.unaids.org/worldaidsday/2002/press/update/epiupdate2002_en.doc).

UNICEF. 2001. State of the World's Children Report. New York: UNICEF.

United Nations General Assembly. 2001. Global crisis - global action: Declaration of commitment on HIV/AIDS. 26th Special Session. Doc: A/s-26/L.2. Adopted June 20, 2001. New York.

van Benthem BH, Vernazza P, Coutinho RA, et al. 2002. The impact of pregnancy and menopause on CD4 lymphocyte counts in HIV-infected women. *AIDS* 2002 Apr 12;16(6):919-24.

Vimercati A, Greco P, Lopalco PL et al. 2000. Immunological markers in HIV-infected pregnant and non-pregnant women. *Eur J Obstet Gynecol Reprod Biol* 2000 May;90(1):37-41.

Weisser M, Rudin C, Battegay M et al. 1998. Does pregnancy influence the course of HIV infection? Evidence from two large Swiss cohort studies. *J Acquir Immune Defic Syndr Hum Retrovirol* 1998 Apr 15;17(5):404-10.

WHO Reproductive Health and Research. 2000. Improving access to quality care in family planning: medical eligibility criteria for contraceptive use. Second Edition WHO: Geneva.  
[http://www.who.int/reproductive-health/publications/RHR\\_00\\_2\\_medical\\_eligibility\\_criteria\\_second\\_edition/index.htm](http://www.who.int/reproductive-health/publications/RHR_00_2_medical_eligibility_criteria_second_edition/index.htm).

WHO and CONRAD. 2002. WHO/CONRAD Technical Consultation on Nonoxynol-9: Summary Report. World Health Organization, Geneva, 9 – 10 October 2001.

WHO. 2002a. Prevention of HIV in infants and young children: Review of evidence and WHO's activities. Geneva: WHO. WHO/HIV/2002.08.

WHO. 2002b. Scaling up antiretroviral therapy in resource-limited settings: Guidelines for a public health approach. Geneva: WHO. June, 2002.

## ANNEX A: HIV/AIDS, FAMILY PLANNING AND DEMOGRAPHIC DATA FOR SUB-SAHARAN AFRICAN COUNTRIES MOST AFFECTED BY HIV/AIDS

COUNTRY	HIV prevalence rate in adults (15-49) <sup>a</sup>	No. of women (15-49) living with HIV/AIDS (end-2001) <sup>a</sup>	No. of children (0-14) living with HIV/AIDS (end-2001) <sup>a</sup>	AIDS Deaths in children (0-14) <sup>a</sup>	Children orphaned by AIDS, currently living, (2001) <sup>a</sup>
Botswana	38.8	170,000	28,000	3,900-5,900	69,000
Cameroon	11.8	500,000	69,000	11,000-17,000	210,000
Central Af. Rep.	12.9	130,000	25,000	3,900-5,900	110,000
Kenya	15.0	1,400,000	220,000	33,000-50,000	890,000
Lesotho	31.0	180,000	27,000	3,100-6,500	73,000
Malawi	15.0	440,000	65,000	16,000-24,000	470,000
Mozambique	13.0	630,000	80,000	10,000-25,000	420,000
Namibia	22.5	110,000	30,000	2,600-3,900	47,000
South Africa	20.1	2,700,000	250,000	26,000-48,000	660,000
Swaziland	33.4	89,000	14,000	2,000-3,000	35,000
Zambia	21.5	590,000	150,000	22,000-34,000	570,000
Zimbabwe	33.7	1,200,000	240,000	35,000-52,000	780,000
Sub-Saharan Af (ave)	09.0	15,000,000	2,600,000	380,000-650,000	11,000,000

COUNTRY	Knowledge of MTCT <sup>a</sup>	Know a place to get tested <sup>a</sup>	Total fertility rate (1999) <sup>b</sup>	Contraceptive prevalence (%) (1995-2000) <sup>b</sup>
Botswana	81	47	4.2	48
Cameroon	63	58	5.1	19
Central Af. Rep.	45	26	4.8	15
Kenya	85	N/A	4.2	39
Lesotho	62	N/A	4.6	23x
Malawi	77	70	6.5	22
Mozambique	N/A	N/A	6.1	10
Namibia	N/A	79	4.7	29x
South Africa	N/A	N/A	3.1	56
Swaziland	72	60	4.5	21x
Zambia	88	59	5.3	26
Zimbabwe	84	43	3.6	66
Sub-Saharan Af (ave)	N/A	N/A	5.4	18

a) UNAIDS. Report on the global HIV/AIDS epidemic. 2002.

b) UNICEF. The State of the World's Children 2001.

x) indicates date that refer to years or period other than those specified in the column heading, differ

from the standard definition or refer to only part of a country.

## ANNEX B: PREGNANCY STATUS, HIV STATUS AND SERVICE DELIVERY NEEDS

HIV STATUS OF WOMAN	PREGNANCY STATUS OF WOMAN				
	NOT PREGNANT		PREGNANT	POST-PARTUM	
	WANTS FUTURE PREGNANCY	DOES NOT WANT FUTURE PREGNANCY		WANTS FUTURE PREGNANCY	DOES NOT WANT A FUTURE PREGNANCY
<b>CONFIRMED HIV+</b>					
Spouse/partner is confirmed HIV+	C, D,H	E,H	F, I, H	D, H	E, H
Spouse/partner is confirmed HIV -	C, D,G,H	C, E,G,H	C,F, G, I, H	C, D, G, H	C, E, G, H
Spouse/partner's HIV status unknown	B, C, D,H	B, E,H	B, F, I, H	B, D, H	B, E, H
<b>CONFIRMED HIV-</b>					
Spouse/partner is confirmed HIV+	C, D,G,H	C, E,G,H	C,G,H,I	C, D, G, H	C, E, G, H
Spouse/partner is confirmed HIV -	D	E	G,I	D	E
Spouse/partner's HIV status unknown	B, D	B, E	B, I	B, D	B, E
<b>UNKNOWN HIV STATUS</b>					
Spouse/partner is confirmed HIV+	A, D,G,H	A, E,G,H	A, G, H,I	A, D,G,H	A, E,G,H
Spouse/partner is confirmed HIV -	A, D	A, E	A, G,I	A, D	A, E
Spouse/partner's HIV status unknown	A, B, D	A, B, E	A, B, I	A, B, D	A, B, E

### POSSIBLE INTERVENTIONS:

- A. Suggest VCT for woman
- B. Suggest VCT for spouse/partner
- C. Suggest couple counseling
- D. Offer FP counseling & services for spacing
- E. Suggest FP counseling & services for limitation
- F. Offer PMTCT services
- G. Offer HIV/AIDS education to prevent spouse/partner from HIV infection
- H. Refer for HIV/AIDS-related social and/or health services, if needed
- I. Refer for ANC care

## ANNEX C: INCREASING ACCESS TO FAMILY PLANNING FOR HIV-INFECTED WOMEN

OPTION	POTENTIAL ADVANTAGES	POTENTIAL DISADVANTAGES
<p><b>Option 1:</b></p> <p>Offer FP on-site at free-standing VCT centers</p>	<ul style="list-style-type: none"> <li>Men (as well as women) can be reached with FP.</li> <li>Couples who appear together at VCT can be counseled together on FP.</li> <li>Fewer HIV+ individuals may be "lost to follow-up" for FP services.</li> </ul>	<ul style="list-style-type: none"> <li>Requires additional skills, space &amp; staff capable of dispensing contraceptives.</li> <li>Unclear how FP follow-up will be achieved, when needed.</li> <li>VCT counselors need to be trained in FP.</li> <li>A full range of contraceptive services may not be available.</li> </ul>
<p><b>Option 2:</b></p> <p>Offer FP on-site at PMTCT centers</p>	<ul style="list-style-type: none"> <li>Where FP services are already located in the same physical facility as ANC/MCH services that offer PMTCT, this is very feasible and desirable.</li> <li>Fewer HIV+ individuals will be "lost to follow-up" for FP services.</li> <li>FP, HIV/AIDS and PMTCT counseling and referrals for social &amp; health services could be integrated.</li> </ul>	<ul style="list-style-type: none"> <li>Where FP services are <u>not</u> already located in the same physical facility as PMTCT services, adding FP may be difficult. ANC services are usually overcrowded, understaffed, with limited physical space.</li> <li>Requires additional skills, space &amp; staff capable of dispensing contraceptives.</li> <li>Men rarely attend ANC/MCH services &amp; therefore couple counseling would be difficult here.</li> <li>VCT counselors need to be trained in FP.</li> </ul>
<p><b>Option 3:</b></p> <p>Refer HIV+ women from VCT or PMTCT sites to external FP services (Planned Parenthood, govt. FP services, private practitioners, etc.)</p>	<ul style="list-style-type: none"> <li>A full range of contraceptive services is likely to be offered in a FP facility.</li> </ul>	<ul style="list-style-type: none"> <li>Many women will not follow-up on the FP referral, and will not obtain FP services.</li> <li>FP providers may require training to address HIV-related FP needs.</li> <li>FP counselors may resist taking on complex HIV-related counseling issues and/or clients.</li> <li>Confidentiality of HIV status needs to be respected at FP sites.</li> </ul>
<p><b>Option 4:</b></p> <p>Link services from VCT or PMTCT sites to CHWs to provide FP services &amp; guidance on seeking higher level care for appropriate conditions</p>	<ul style="list-style-type: none"> <li>Provides source of FP services and counseling at community level for women who have no access to ongoing higher level FP services</li> <li>Offers ongoing contraceptive supply for women who will have difficulty returning to clinics</li> <li>FP/RH care will be strengthened &amp; more cost-effective by linking care between clinics and community</li> <li>CHWs can be a valuable source of client and community feedback for clinical staff</li> </ul>	<ul style="list-style-type: none"> <li>Training will be required for CHWs to guide FP use for HIV+ women &amp; appropriate referrals back to clinic</li> <li>Maintaining linkages between clinical staff and CHWs will require staff time &amp; resources</li> </ul>