



Research to Prevention

# FAMILY PLANNING COUNSELING FOR WOMEN LIVING WITH HIV

Rigorous Evidence – Usable Results

July 2013

*Sixth in a series, this summary fact sheet presents existing evidence from rigorously evaluated interventions to prevent HIV transmission in developing countries. Results are presented here from the systematic review of studies that provide family planning counseling to women living with HIV published in leading scientific journals. In contrast to the many anecdotal reports of best practices, this series provides readers with the strongest evidence available in a user-friendly format. The evidence provides program planners, policy makers, and other stakeholders with information about “what works.”*

**Family Planning (FP) Counseling** occurs when health care providers inform clients about their family planning options and help them make informed decisions regarding their reproductive wants and needs. Women who are living with HIV, like all women, have reproductive rights. As stipulated in the United Nations’ Convention on the Elimination of All Forms of Discrimination against Women, all women, in equality with men, have “rights to decide freely and responsibly on the number and spacing of their children and to have access to the information, education and means to enable them to exercise these rights.”<sup>1</sup> In many cases, women living with HIV desire additional pregnancies and should be assisted to conceive, carry a pregnancy to term, deliver, and care for the resulting child safely. However, in other cases, women living with HIV become pregnant despite not desiring a pregnancy. Globally, many women lack access to FP information and modern contraceptive methods; as a result, many pregnancies are unintended. In countries with the highest HIV burden, it is estimated that unintended pregnancies account for 14-58% of all births, and rates of unintended pregnancy among women living with HIV are high.<sup>2</sup> Preventing unintended pregnancies by providing FP counseling to women living with HIV could lead to significant decreases in mother-to-child transmission of HIV. One cost-effectiveness study found that moderate decreases in the number of unwanted pregnancies among women living with HIV could avert as many newborn HIV infections as antiretroviral drugs.<sup>3</sup>

In 2003, the United Nations adopted a comprehensive approach to preventing mother-to-child

transmission of HIV (PMTCT) involving four major elements: (1) Primary prevention of HIV among women; (2) Prevention of unintended pregnancies among women living with HIV; (3) Preventing HIV infection from being transmitted from women living with HIV to their infants through administering antiretroviral drugs and providing guidance on breast-feeding; and (4) Providing care and support for women living with HIV and their families.<sup>4</sup> Providing FP counseling for women living with HIV directly addresses the second element of the comprehensive strategy. Many studies reviewing PMTCT focus on preventing HIV transmission through administering antiretroviral drugs, such as nevirapine, to the mother during labor and the infant following birth. However, recent studies have illustrated the value of FP as an HIV prevention strategy and have advocated for increased FP services for women living with HIV.<sup>5</sup> Therefore, a recent systematic review was conducted to assess the effectiveness of FP counseling interventions in changing contraceptive use and pregnancy incidence.<sup>6</sup>

## Effectiveness of Family Planning Counseling Interventions for Women Living with HIV

The O’Reilly et al. systematic review<sup>6</sup> examined the state of the evidence for the effect of FP counseling interventions on increasing contraceptive use and decreasing the incidence of pregnancy. The nine studies included in the review involved participants who were either (1) HIV-infected women only or (2) both HIV-infected women and HIV-uninfected women if the study presented pre/post or multi-arm data separately for HIV-infected women.



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All nine studies reported changes in contraception use over time and varied in the type of contraceptive use outcome reported. Only four studies additionally reported pregnancy incidence outcomes.

### Contraceptive Use

- Seven studies presented evidence that interventions increased contraception use by women living with HIV, either compared to a baseline measurement, to women who were not infected with HIV, or to women of similar serostatus from different settings with less intense interventions.<sup>7-13</sup>
- Only one study found a decrease in hormonal contraceptive use measured from baseline to a 12-month follow-up, possibly reflecting a shift away from hormonal contraception towards barrier methods and spermicides in women after testing positive for HIV.<sup>14</sup>
- Studies found that intervention effects decreased over time. Contraception use at 24 months post-intervention was generally lower than at earlier follow-up periods in all cases except one.<sup>12</sup>

### Pregnancy Incidence (4 studies)

Of the nine studies described above, four reported on pregnancy incidence outcomes. They presented comparisons between pre- to post-intervention for seropositive women, between seropositive and seronegative women, or between seropositive women at intervention to non-intervention sites. The studies reported overall pregnancy rates and did not report specifically on unintended pregnancies.

- In two studies, the pregnancy incidence rate was presented as a pre- to post-intervention comparison, and significant decreases in pregnancy incidence among HIV-positive women were found in both studies.<sup>10,12</sup> One study also provided a comparison with HIV-negative women that showed a significant decrease in pregnancy incidence among this population as well.<sup>12</sup>
- Two studies presented post-intervention pregnancy incidence only.<sup>9,11</sup> In one of these studies, the incidence of pregnancy increased slightly (but not significantly) in the group receiving the intensified intervention.<sup>11</sup>



A billboard shows family planning methods near the Plassac Health Clinic in rural Haiti. Credit: © 2008 Margaret McCann, Courtesy of Photoshare.

### How is the Effectiveness of a Family Planning Counseling Intervention for Women Living with HIV Determined?

All nine studies included in the systematic review were conducted in sub-Saharan Africa. Two took place in Rwanda,<sup>10,14</sup> two in Zambia,<sup>8,13</sup> two in Kenya,<sup>11-12</sup> and one each in Côte d'Ivoire,<sup>7</sup> Malawi,<sup>9</sup> and Uganda.<sup>15</sup> Although FP counseling is a broad topic, for the purposes of this review the researchers defined FP counseling as "one-on-one counseling" that was "more than information or education about contraception."<sup>6</sup> FP counseling could be linked to or part of VCT activities or HIV care and treatment, or it could be provided independently.

### Selection Criteria and Rigor Criteria of Studies Included in the O'Reilly et al. Meta-analysis<sup>6</sup>

A study had to meet five criteria to be included in the systematic review:

1. Published in a peer-reviewed journal between January 1990 and December 31, 2011.
2. Intervention provided family planning counseling (one-on-one counseling, not just health education) to HIV-infected women. Studies could fall into one of two categories: (1) articles including data from only HIV-infected women or (2) articles including data from both HIV-infected and HIV-uninfected women if the study presented pre/post or multi-arm data separately for HIV-infected women.

3. Used either a pre-/post- or multi-arm design comparing individuals who received family planning counseling to those who did not to assess post-intervention outcomes of interest.
4. Measured at least one HIV-related behavioral, psychological, social, care or biological outcome.
5. Conducted in a low-, lower-middle-, or upper-middle-income country, according to the World Bank country classification scheme.

Studies that did not meet these criteria were excluded.

### **What Do the Data Tell Us about Implementing Family Planning Counseling for Women Living with HIV as Part of a Prevention Program?**

In order to implement a FP counseling intervention targeting women living with HIV, participants must already know their HIV status. Therefore, counseling interventions often take place in conjunction with HIV testing or treatment services. Of the nine studies included in the overall review, three studies took place at antenatal clinics where women were offered PMTCT services, including HIV testing.<sup>7,10,14</sup> The other studies offered FP counseling services integrated with home-based HIV care services;<sup>15</sup> to women in HIV serodiscordant relationships at HIV clinics;<sup>12</sup> to HIV positive women at FP, VCT, or STD clinical sites;<sup>9</sup> to HIV positive women at HIV clinics,<sup>8,11</sup> and to HIV serodiscordant and concordant couples at couples' VCT clinics.<sup>13</sup> In addition to offering counseling, several studies provided a full range of contraceptive supplies for free,<sup>7-8,10-13</sup> while others offered a reduced range of contraceptives on site,<sup>15</sup> provided referrals to FP services,<sup>14</sup> or did not address the issue of contraceptive access.<sup>9</sup> The one study showing a negative relationship between FP counseling and hormonal contraceptive use provided only free condoms and spermicide to participants; the cost of receiving hormonal contraception was not reported.<sup>14</sup>

The intensity of interventions varied. One set of interventions involving videos that ranged from providing a 35-minute video with demonstrations of condom and spermicide use (FP counseling was provided only if requested),<sup>14</sup> to a 15-minute video

and group discussion,<sup>10</sup> to randomization of one of four conditions that could include zero, one, or two 30-minute videos.<sup>13</sup> One intervention had limited counseling and focused more on the effects of anti-retrovirals on fertility and sexuality,<sup>15</sup> while another provided FP counseling more intensively during post-test HIV counseling, pre-natal, and post-natal visits.<sup>7</sup> The most intensive intervention employed a multi-component strategy that included extensive staff training and weekly meetings on FP for all staff, use of checklists to prompt FP discussions, discussions of challenges to use with participants individually and in groups, inclusion of male partners, and review of unintended pregnancies to identify ways to improve the intervention.<sup>12</sup>

Key features are discernible from the systematic review, despite variation in the included studies' populations, interventions, definition of and access to contraception, research designs, and measures of outcomes. Providing concerted information and support for FP use, coupled with ready access to a wide range of contraceptive methods, seemed most effective in increasing use. Intensity of the intervention mattered, as women receiving more intensive interventions were more likely to use contraception. Additionally, interventions needed to be repeated or reinforced over time to avoid a waning effect. Though significance figures for pre- to post- changes in contraception use by women living with HIV were not always presented, all but two studies<sup>14-15</sup> presented clear evidence of increases in contraception use by women living with HIV, either compared to a baseline measurement, to women who were not infected with HIV, or to women of similar serostatus from different settings with less intense interventions. Finally, a change in the understanding of what motivates or facilitates contraception use in women living with HIV is apparent when examining these studies by year of publication. Earlier studies provided basic interventions dealing with knowledge of serostatus and how to avoid transmission in pregnancy. Later studies offered more nuanced interventions, attempting to remove potential barriers to accessing contraception and continuing its use, often through integration of HIV treatment and care.

## What More Do We Need to Know about the Effectiveness of Family Planning Counseling for Women Living with HIV?

This systematic review revealed there is not enough evidence to draw a firm conclusion about the effectiveness of family counseling interventions for women living with HIV as part of an HIV prevention strategy. Some of these studies used a pre/post study design with no control or comparison group, which further limits the strength of the conclusions that can be drawn. The studies integrated FP counseling with other HIV-related interventions, such as HIV testing, home-based care, and antenatal care services—all of which can influence behavior. Therefore, it is difficult to know what effects these additional interventions had on women's uptake of hormonal contraception. For example, simply learning one's HIV status could directly lead to changes in behavior, such as initiating contraception use. Despite these uncertainties, the World Health Organization acknowledges the life-saving benefits of providing women with FP methods and information on how to use these methods, regardless of their HIV status.<sup>16</sup> The inconclusive results from the O'Reilly et al.<sup>6</sup> systematic review reveal the need to conduct more rigorous research on providing FP counseling to women living with HIV in order to determine its effectiveness.

Preventing unintended pregnancies is the goal of increasing contraceptive use among women living with HIV. Only four of the nine studies reported pregnancy incidence; none reported on unintended pregnancies. Modeling has long suggested that the effect of preventing unintended pregnancies in women living with HIV can be equal to or greater than the contribution of the provision of antiretroviral drugs to pregnant women living with HIV in preventing HIV in infants,<sup>3,17</sup> even with the adoption of more effective antiretrovirals for the prevention of vertical transmission.<sup>18</sup> With renewed commitment to eliminating HIV in infants, a corresponding increase in attention paid to FP for women living with HIV is needed.<sup>19-20</sup>

Despite increased recognition of the need for greater integration of sexual and reproductive health services and services for HIV prevention, care and

### Terminology & Acronyms

#### ART

Antiretroviral therapy

#### FP

Family Planning

#### Person-years

The total number of years per person contributed by participants in a study

#### Seroconcordant

A term describing the similar serostatuses of two partners (both are either HIV+ or both are HIV-)

#### Serodiscordant

A term describing the differing serostatuses of two partners (one is HIV+ and the other is HIV-)

#### Serostatus

The presence or absence of antibodies in the blood serum, here denoting HIV+ or HIV- status

#### STI

Sexually transmitted infection

#### PMTCT

Prevention of mother-to-child transmission of HIV

treatment,<sup>21-22</sup> most of these studies were based on secondary analyses of data collected for other primary purposes. As the need to integrate services for sexual and reproductive health with services for HIV prevention becomes stronger,<sup>23</sup> and especially as the need for greater attention to preventing unintended pregnancies in women living with HIV increases, it will become more important to better understand the provision of integrated services and to design and implement high-quality evaluations of their effectiveness.<sup>24</sup> Studies of interventions that are informed by the reproductive desires and perspectives of women on living with HIV, the barriers and challenges they face and their need for long-term support will be valuable. Studies that measure not only contraception use at one point in time but over time, that address not only pregnancy incidence but the incidence of unintended pregnancy, and that assess the effects of treatment availability and use on women's perspectives and understandings of mother-to-child transmission are also essential.

Finally, it is important to review these results in light of the study limitations. Results from this review may be subject to publication bias, i.e., studies showing positive results are more likely to be published than studies showing negative results. In addition, there is the possibility that some articles that should have been included in the review were not identified by the search methods used.

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## Additional Resource

Knowledge for Health (K4H) Family Planning and HIV Services Integration Toolkit:

<http://www.k4health.org/toolkits/fphivintegration/about-family-planning-and-hiv-services-integration-toolkit>

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