CATHOLIC RELIEF SERVICES

Effects of a faithfulness-focused curriculum on HIV-positive couples from four regions in Ethiopia

Cover photo: Faithful House participants attend church in their community. The Faithful House program is a three day workshop where couples are counseled to listen and work with each other, making their life together in faith the most important aspects of their lives so they can better provide for their children and community. *Photo by Karen Kasmauski for CRS.*

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ABSTRACT

Background

As the evidence increasingly reveals that much of the heterosexual HIV transmission in southern and east Africa takes place within marriage or cohabitation, there is growing recognition of the need for culturally sensitive, evidence-based HIV prevention programs that address the needs of couples in long-term relationships. Currently, "Positive Health, Dignity, and Prevention" (PHDP) models focus primarily on the individual. Catholic Relief Services (CRS) aims to contribute to the evidence base for couples-centered PHDP programming by evaluating a recently modified version of The Faithful House (TFH) curriculum, which was tailored to focus on strengthening the relationships of couples living with HIV.

Methodology

The evaluation population consisted of 378 individuals from the Addis Ababa, Oromia, Tigray, and Dire Dawa Regions of Ethiopia. A convenience sampling method was used to gather names of interested couples enrolled in the HIV care and support programs of six community organizations. The couples were then randomly and equally distributed between the intervention and control groups. Before the distribution assignments, focus group discussions were conducted with nine couples to provide qualitative baseline information and common responses for the survey answer choices. In June 2011, both groups completed a quantitative baseline survey. A workshop was provided to the intervention group. Both groups were surveyed again at the three-month follow-up period, in September 2011. All data was entered into a Microsoft Access database and then cleaned and analyzed using Excel and Stata. Statistical analysis was conducted, comparing matched baseline and three-month follow-up changes between the control and intervention groups.

Results

The average age of male participants was 39.4 years and of female participants, 31.1 years. Educational attainment was higher in men, and most couples were either married traditionally or cohabitating. Ninety percent of participants had received a positive HIV test result. Statistically significant changes ($p<0.01$) from baseline to three-month follow-up among workshop participants included: quality of relationship and couple communication; joint decision making for care of children, financial matters, and sexual activity; and comfort level in discussing sexual issues with their sons. Also, among the workshop participants adherence to medication improved, number of opportunistic infections decreased, percentage of participants diagnosed with sexually transmitted infections (STIs) decreased, percentage of participants missing clinical appointments decreased, and health facility visits outside scheduled appointments increased. While some of these indicators

improved in the control group as well, the improvements were stronger in the intervention group. Relative to males in the control group at the three-month follow-up survey, males with pregnant partners in the intervention group were reporting attendance to antenatal care (ANC) and Preventing Mother-to-Child Transmission (PMTCT) services. Reported partner violence decreased between the two collection periods in both groups, but more dramatically in the intervention group.

Conclusions

Overall, the initial findings show that "The Faithful House, Couples Affirming Life and Love" (TFH-CALL) curriculum positively impacted the perceptions, attitudes, and determinants of behaviors within HIV-positive couples' relationships and regarding their health status. Qualitative findings suggest that improved couple communication, outlook on life, and conflict resolution skills were the three key benefits of TFH-CALL workshop attendance. Acknowledging the need for evidence for couples-centered PHDP interventions, this first in a series of evaluations indicates the potential of TFH-CALL as a resource to the international community committed to providing more holistic programming for People Living with HIV. Continued evaluations will be critical in determining sustained impact on health status outcomes, attitudes, and actual behavior change.

PROJECT BACKGROUND

As of 2010, an estimated 34 million people worldwide were living with HIV11. Today, there are new reasons for a sharper focus on prevention of HIV transmission, as it applies to people already living with the virus, because advances in HIV treatment have dramatically improved the life expectancy and quality of life of people living with HIV (PLHIV). In some settings, expanded access to HIV testing and antiretroviral therapy (ART) has helped the transformation of HIV into a chronic disease. These advances magnify the urgent need to decrease HIV transmission, especially for serodiscordant couples (couples in which one partner is infected with HIV and the other is not). Additionally, while an often forgotten notion, PLHIV still desire intimacy, pregnancy, and a healthy sexual life. PLHIV have always played an essential role in preventing new infections, but throughout most of the epidemic, the emphasis of care communities and funding streams has been on providing care, treatment, and support services to those already infected with HIV, whereas prevention efforts have been focused on persons who were HIV-negative—with little interconnection between the two populations. Thus, there is need to move forward with interventions that focus on helping PLHIV live positively and on preventing further vertical or horizontal infection—interventions that are both culturally sensitive and address the needs of couples in long-term relationships.

As PLHIV live longer, it becomes increasingly important to reinforce the role of every individual, HIV-positive or HIV-negative, in preventing the spread of HIV. To best use limited resources, prevention efforts should focus intensively on smaller groups and should be integrated into clinical care for PLHIV[2]. Although experience in implementing the "Positive Health, Dignity and Prevention" (PHDP) program is limited, a number of pilot and qualitative studies support the effectiveness of these interventions. A recent study in Uganda found that individuals who learned they were HIV-positive were three times as likely to use protective measures as those who did not know their HIV status, suggesting that testing can aid in reducing HIV transmission[3,4]. The World Health Organization (WHO) revised the Preventing Mother-to-Child Transmission (PMTCT) guidelines in 2010, responding to evidence on the use of antiretroviral (ARV) prophylaxis to prevent MTCT[5].

Critical epidemiological trends, such as those emerging from the recent national studies in Uganda and Kenya, indicate that half of new HIV infections are occurring in married people[1.] Studies in Zambia and Rwanda have found similar results[6]. It is abundantly clear that "going outside" the relationship or marriage or, in other words, not being faithful or monogamous with your current partner remains a key area of concentration for HIV prevention programming. This is of further importance in the context of HIV-positive couple relationships. Strengthening the relationship or marriage is one way to address the data trends. However, HIV prevention interventions generally focus on individuals rather than specifying couples as a unit of change and analysis, neglecting the potentially crucial role of *the partner in sexual behavior*[7,8.] Examination of the broader literature on partner influences in health behavior demonstrates that partners and accompanying relationship factors need to be included in how we conceptualize health behavior change[9]. This may be especially relevant regarding HIV-related prevention with HIV-positive persons[10]. Leveraging our collective experience with couples HIV testing and counseling, couples-focused HIV prevention programs provide an opportunity to tackle the dynamic and interactional forces that contribute to sexual risk behavior, including gender roles, power imbalances, communication styles, child-bearing intentions, and quality of relationship issues (e.g., commitment, satisfaction, intimacy) [6.]

Across populations, one in three persons with HIV continues practicing HIV transmission risk behaviors at least intermittently. According to the 2008 study in Uganda, 40% of cohabitating PLHIV had an HIV-negative spouse. Most of the HIV-infected adults had been sexually active in the last year, and the overwhelming majority reported having unprotected sex with their married or cohabiting partner. Well over half of new HIV infections occurred among serodiscordant marital or cohabiting relationships. This is attributed to relationship factors, economic

conditions, emotional states, violence in the home, substance abuse, and personality dispositions[11,12]. High-risk behaviors are more likely with another infected person, but alarming rates of risk behaviors are observed with HIV-negative partners and partners of unknown HIV status. Risk practices are also affected by disclosure of HIV status and by perceptions of how anti-HIV medications may affect infectivity[11.] The Ethiopia Demographic and Health Survey (DHS) 2005 found that 2.1% of married individuals were HIV-positive, and of these, 85% were in discordant couple relationships[13]. Experts recognize that there is a critical need for new behavioral and sociocultural intervention models that blend HIV prevention strategies with HIV care and treatment services. ART programs should extend their reach in favor of a more holistic view of the illness by addressing disclosure, partner testing, reproductive health, and behavioral risk reduction to prevent transmission of the virus to others, including their primary partners.

The majority of women living with HIV are in their reproductive years[14.] While research, programmatic, and policy communities have often taken as their point of departure that HIV-positive women do not wish to or should not become pregnant, studies have shown that as the health status of HIV-positive women improves in response to treatment, they may return to the level of sexual activity experienced before HIV diagnosis[15,16]. Like their HIV-negative peers, HIV-positive women's desire to bear children is known to be influenced by a range of factors, including age; health status; cultural significance of motherhood; number of living children; previous experience of a child's death from HIV-related causes; the availability of HIV treatment and PMTCT programs; the attitudes and influence of male partners, family, and healthcare workers; and stigma and discrimination on the basis of HIV status[17.] In fact, among serodiscordant couples, the desire for pregnancy has been shown to outweigh concerns about horizontal transmission[18.] HIV-positive women have also expressed concern that, once pregnant, they may be more vulnerable to violence and abandonment by their partners, family, and community[19,20]. HIV treatment and PMTCT programs have actually documented high rates of unintended pregnancies among HIV-positive women[21]. A recent conference on "*The Pregnancy Intentions of HIV-Positive Women: Forwarding the Research Agenda,"* held in March 2010, highlighted six key areas relevant to safer reproductive choices for HIV-positive women. The international community should focus more efforts in those areas (i.e., desired pregnancy, labor and safe delivery, access to ART, health during the post-partum period, breastfeeding, and the role of the community in supporting HIV-positive women through their pregnancies and childbirth)[14.]

Patients enrolled in HIV care and treatment programs are a logical focus for PHDP programs. Supporting these patients to disclose their HIV status, especially to their

partners, also strengthens broader public health goals and builds psychosocial support systems to reduce feelings of isolation and discrimination. It is important to note that those who need PHDP programming most of all—PLHIV who are not yet eligible for ART—are generally the most difficult to reach and retain in care. Therefore, a concerted effort is needed to engage and support them. Toward this end, Catholic Relief Services (CRS) aims to contribute to building the case for couples-centered PHDP programming by evaluating a recently modified version of The Faithful House curriculum that focuses on strengthening the relationship of couples living with HIV.

Justification for Curriculum Modification

CRS has been working with community organizations and faith-based institutions to address HIV since 1986. In Ethiopia specifically, CRS has been working since 1958. The Faithful House (TFH) curriculum was created collaboratively by CRS and Maternal Life International/Uganda, and includes skills building, positive peer mentoring, and creation of a safe environment for couple dialogue around quality-of-relationship issues and the attitudes and behaviors that contribute to sexual risk behavior. Over the course of TFH program implementation, pre- and post-workshop surveys have demonstrated improvements in communication between partners in areas such as finance, gender roles, power imbalances, sexual intimacy, parenting, and communication with children around sex-related issues.

While the short-term findings for TFH were positive, the program lacked evidence of sustained behavior change. Thus, a large multi-country evaluation was designed to bridge that evidence gap. This was carried out from September 2010 to September 2011. During the course of the evaluation, it was apparent that a curriculum tailored to the needs of couples *already* living with HIV or in HIV discordant relationships was needed. In-depth discussions with local community partners confirmed the existence of this gap area. Therefore, TFH curriculum was modified to produce "Couples Affirming Life and Love" (TFH-CALL), which addresses issues of concern to HIV-positive couples through a five-day PHDP workshop, including: encouraging discussion around sex, fertility desires, children, and disclosure in the context of HIV; enhancing couple awareness about HIV risk and also building skills to address those risks; and stressing the importance of involvement of PLHIV and linkages to appropriate clinical, prevention, psychosocial, spiritual and other community resources[1]*. In addition to the workshop, couples are invited to participate in regular traditional coffee ceremonies, where discussion fosters peer support.

* The curriculum adaptation was carried out with in-country partners (CRS Ethiopia and church and community partners), the original developers of The Faithful House (including Maternal Life Uganda), and CRS Headquarters and East Africa Regional staff. Field testing was conducted through one workshop with 10 couples. Quantitative surveys associated with TFH (baseline and post-test) were also tested. FGDs with the workshop participants, recommendations from Master Trainers and workshop participants and a revision process culminated in a complete TFH-CALL workshop package.

METHODOLOGY

Quantitative data methods were used to assess the effectiveness of the TFH curriculum on behavioral attitudes and (intended) practices related to couple relationship satisfaction, mutual respect and fidelity, partner communication, and HIV risk. Qualitative research, in the form of focus group discussions (FGDs), were conducted with 8–10 couples at baseline, immediately following the workshop, and at the nine-month follow-up survey. The qualitative methods focused on key topic areas that were uncovered in the quantitative data analysis, offering a complementary view of the data. Data presented reflects participants' feedback (perceptions, attitudes, and intentions) in response to TFH curriculum.

The evaluation was conducted in four regions (Addis Ababa, Oromia, Tigray, and Dire Dawa) where CRS Ethiopia works with partner organizations. Through six partner organizations, a convenience sampling method was used, with each partner mobilizing 30 self-selecting couples from their ongoing HIV care and support program. Eligibility criteria included: 1) couples that identified as being in a long-term cohabiting or married relationship, 2) at least one partner in the couple relationship was HIV-positive, and 3) both partners were willing to participate in the evaluation. Lists of 30 couples from each partner organization were sent to the local consultant and a randomized sampling method using Microsoft Excel was used to divide the couples into intervention and control group members. Written consent was collected from each participant at the outset and unique identifiers (IDs) were used on the surveys to maintain confidentiality.

Goal of the Evaluation

This report consists of an assessment of the adapted curriculum. The specific goal of this evaluation was *"to assess the impact of the adapted TFH curriculum on participant couples living with HIV,"* specifically investigating:

1. Couples' communication, quality of relationship issues and interactional forces that contribute to sexual risk behavior.
2. Family strengthening attitudes and behaviors.
3. Couples' health maintenance behaviors, such as adherence to medication and health visit completion and follow-up.

Training, Data Collection, and Analysis

Enumerators were competitively hired and were provided a daylong training by the local consultant in Ethiopia on how to conduct the surveys. Workshop facilitators were provided a weeklong training on the modified TFH curriculum by the TFH trainer of facilitators couple from Uganda.

Baseline survey data collection for workshop participants occurred at the workshop site the day before the workshop was to begin. The corresponding control group was interviewed on the first day of the workshop, while the intervention group was attending TFH. All workshop attendees returned to the workshop site for the post-test survey, conducted the day after the workshop ended. For the three-month follow-up survey, the control group was gathered on one day and the intervention group on another, and participants were interviewed in the same fashion as the two prior surveys. Participants who had not completed both a baseline and three-month follow-up survey were not included in the analysis (N = 30 individuals).

All data from the Microsoft Access databases was exported and manipulated in Microsoft Excel for the initial frequency analyses and unique patterns or associations. All cleaned data was then entered into Stata and statistical analysis was run on comparisons of baseline and three-month follow-up scores between both the control and intervention groups.

FINDINGS

Sample Characteristics

A total of 378 participants from the control and intervention groups completed both a baseline and three-month follow-up survey and, therefore, were the participants used for the analysis below (See Table 1 for breakdown of the sample between regions and evaluation groups).

Table 1: Breakdown of Couples/Individuals in the Sample

TARGET ZONES	INDIVIDUALS IN CONTROL GROUP (#)	INDIVIDUALS IN INTERVENTION GROUP (#)	TOTAL INDIVIDUALS SAMPLED (#)
`	78	80	158
Oromia	54	59	113
Tigray	26	26	52
Dire Dawa	27	28	55
Total	**185**	**193**	**378**

Control and Intervention groups were found to be comparable on all demographic characteristics. Summary demographics were as follows: Men were older than women ($p<0.001$), with men on average 39.4 years compared to women, 31.1 years. Forty-five percent of couples were cohabiting, and 43% were married

traditionally[2]*. Eighty-nine percent reported to be Orthodox Christian, 6% Protestant, and 6% Muslim. Males were more educated than the females on average ($p \leq 0.01$), with 19% compared to 38%, respectively, having received no formal education; 22% of men had completed secondary school in comparison to only 7% of women.

* There are three legally accepted forms of marriage in Ethiopia: traditional, religious, and civil. Traditional marriage is done by the community; religious marriage is done by religious leaders; and the civil marriage is done by local government municipalities. "Traditional marriage" customs vary by ethnic group in Ethiopia, but there are commonalities: First, the man's family sends selected, respected leaders (usually three men) to the woman's family to make a request for marriage. Next, if the woman's family accepts the request, the wedding day is decided upon. Finally, on or before the wedding day, the husband and wife sign a written contract in the presence of three witnesses. Most of the time, religious leaders (whether Christian or Muslim) are not involved in traditional marriages.

Table 2: Sample Demographics

DEMOGRAPHIC CHARACTERISTICS	PEOPLE LIVING WITH HIV			
	CONTROL N = 185		INTERVENTION N = 193	
Average age of all participants (years)	**35.5**		**34.9**	
Average age males (years)	39.8		38.9	
Average age females (years)	31.1		31	
Employment status:	**M**	**F**	**M**	**F**
Housewife, never employed outside the home	–	49%	–	33%
Housewife, looking for employment/currently employed outside the home	–	11%	–	22%
Employed (government or business)	18%	2%	21%	4%
Self-employed	48%	21%	40%	27%
Unemployed	16%	11%	19%	6%
Type of marriage/union:				
Cohabitating	49%		41%	
Church/religious marriage	5%		7%	
Civil/municipality marriage	6%		6%	
Traditional marriage	40%		45%	
Average # of years married or cohabiting	**7.8**		**9.1**	
Place of residence Urban	100%		97%	
Highest level of education:	**M**	**F**	**M**	**F**
No formal education	22%	45%	16%	30%
Uncompleted primary	27%	25%	27%	37%
Primary	30%	24%	26%	23%
Secondary	16%	5%	27%	9%
Preparatory, vocational, or tertiary level institution	5%	1%	4%	1%
Religion:				
Orthodox	84%		93%	
Catholic	1%		1%	
Protestant	8%		4%	
Muslim	8%		3%	
Has biological children	**86%**		**88%**	
Has children from other than current partner	**38%**		**33%**	
Caring for other, nonbiological children	**23%**		**18%**	
Average # nonbiological children	1.4		1.7	

Note: Some indicators do not total 100% due to exclusion of "other," "don't know," and "no response" choices.

A current health status of the participants is presented in the following section, as well as the baseline health-seeking behaviors. All results were self-reported and were not verified through other sources, such as clinical records. All findings were calculated based on the number of responses to each question (excluding skipped or blank responses), which equals unless otherwise noted the total number of participants surveyed (see Table 1).

Improving Current Health Status and Health-Seeking Behaviors

All participants (100%) had been tested for HIV in their lifetime, and 90% had received a positive test result. The vast majority (97%) of those with HIV report having known their status for six months or longer. More women reported being HIV-positive than men, 92% versus 87%, but the difference was not significant. At baseline, only 22% of participants who had never received a positive HIV test result (HIV-negative) had been tested within the past four months; 60% had not taken an HIV test in over a year. At the follow-up survey, five of the 17 reportedly HIV-negative participants in the control group had gone for HIV testing in the last three months (four were male); in the intervention group, 16 of the 24 HIV-negative participants went for testing in the last three months (10 were male). Table 3 provides an overview of their health/HIV status and health-seeking behavior indicators.

Table 3: Indicators for Health/HIV Status, Service-Related, and Health-Seeking Behavior

	CONTROL GROUP		INTERVENTION GROUP	
Health status and service-related indicators	**Baseline**	**3-Month**	**Baseline**	**3-Month**
% currently accessing HIV care and treatment services	**93%** N = 168	**95%** N = 171	**95%** N = 169	**93%** N = 167
% currently not taking any medication for HIV	**6%** N = 157	**6%** N = 171	**12%** N = 163	**10%** N = 166
% that self-report as nonadherent to their regimen^	**18%** N = 147	**16%** N = 159	**18%*** N = 147	**10%** N = 152
% that have had an opportunistic infection (OI) in the last three months+	**34%*** N = 167	**19%** N = 168	**32%*** N = 167	**19%** N = 165
% of all participants (HIV-negative and -positive) that have been diagnosed with a sexually transmitted infection (STI) in the last three months	**8.7%** N = 185	**9.3%** N = 183	**7.3%** N = 193	**4.7%** N = 193

* = statistically significant change ($p<0.05$)
^ Nonadherent defined by three or more missed doses in the last month
+ Of those with OIs in both groups, 33% had diarrhea, 30% had herpes zoster, and 25% had tuberculosis at baseline. At three-month follow-up, these were 34%, 18%, and 16%, respectively.

Health-seeking behavior indicators	**Baseline**	**3-Month**	**Baseline**	**3-Month**
# of health-related medical appointments scheduled by a health facility (for participant) in the last three months	**1.95** N = 151	**1.89** N = 162	**1.96** N = 154	**2.1** N = 155
% of participants that missed at least one of these (above) visits	**5%** N = 155	**4%** N = 171	**12%** N = 161	**7%** N = 167
% of participants that visited the health facility more times than their Number of regular, scheduled medical appointments	**23%** N = 133	**29%** N = 141	**15%** N = 142	**25%** N = 152

Of those participants who reported not taking any medications for HIV at baseline, 50% from the intervention group and 47% from the control group reported taking medications (either antiretrovirals [ARVs], co-trimoxazole preventive therapy [CPT], or both) at the three-month follow-up survey collection.

The results presented in the following sections reflect perceptions and determinants of behaviors; these perceptions and determinants either affect the particular attitudes and behaviors or address barriers to behavior change. All findings were self-reported and were not verified through other sources.

Enhancing the Quality of the Couple Relationship

The perceptions and attitudes measured on the quantitative surveys and explored in the FGDs are centered on factors that affect the couple relationship (see Table 4). These factors were identified through prior assessments, FGDs, and interviews (outside this evaluation) as having an effect on relationship satisfaction, which can lead to detrimental or risky behaviors, such as unfaithfulness.

Table 4: Indicators that Reflect and Affect Couple Relationship Satisfaction

INDICATOR	CONTROL GROUP		INTERVENTION GROUP	
	BASELINE N = 185	3-MONTH N = 185	BASELINE N = 193	3-MONTH N = 193
PARTICIPANTS WERE ASKED TO RATE THE FOLLOWING VARIABLES:				
Quality of relationship ◊	**7.3****	**8.0**	**7.3****	**8.6**
Quality of communication ◊	**7.3****	**8.1**	**7.5****	**8.7**
Level of respect received from partner ◊	**7.5****	**8.3**	**8.0****	**9.0**
Level of sharing of personal income and financial assets ◊	**7.4***	**8.1**	**7.5****	**9.0**
Level of adequate knowledge, values, skills to be faithful ◊	**7.6****	**8.6**	**7.9****	**9.0**
Confidence level in ability to maintain happy, strong union◊	**7.6****	**8.5**	**7.7****	**8.9**
Ability to have an open/frank discussion with partner about sex ◊	**7.5** N = 151	**7.2** N = 185	**7.9*** N = 158	**8.4** N = 193
% OF PARTICIPANTS THAT:				
Will confide in partner for personal problems	**82%**	**89%**	**85%**	**84%**
Believe a man can be faithful to one partner his entire lifetime	**69%**	**68%**	**66%***	**78%**
Believe a woman can be faithful to one partner her entire lifetime	**80%**	**76%**	**75%**	**82%**

** = statistically significant change (p<0.05)*
*** = statistically significant change (p<0.001)*
◊ = on a scale from 1 to 10 (with 1 the lowest and 10 the highest)

In the pre-workshop FGD, the group unanimously felt that unfaithfulness was a problem in their communities; survey responses indicated that this struggle was also evident in their own relationships. In the quantitative survey, participants were asked directly about unfaithfulness in their current relationships. Men reported significantly ($p<0.01$) higher rates of unfaithfulness than the women, 10% compared to 2% (both groups). Additionally, 30% of men in both groups reported to have ever paid someone for sex.

Providing relevant strategies for strengthening the bond between couples and breaking barriers to faithfulness are two key objectives of TFH curriculum. Pre-workshop FGDs conducted to inform curriculum development revealed "economic reasons," lack of communication, and sexual dissatisfaction as the top three reasons identified for both HIV-positive men and women's infidelity in relationships. FGDs also revealed that unfaithfulness of one partner was often blamed for how HIV was "brought into the home." Of concern, among those male participants that reported a second long-term partner (34%), over one-third reported that they did not know this second partner's HIV status (on the three-month follow-up survey).

Surprisingly, many FGD participants felt the blame of unfaithfulness was placed on the *faithful partner: that the partner did not care enough, could not provide enough (financially), did not pay enough attention to or did not satisfy the spouse sufficiently, and therefore caused him/her to seek a relationship outside the marriage/partnership. On the survey, 9% of male participants and 5% of female participants reported having ever had sex with someone in order to receive money, gifts, or other financial incentives.*

Strengthening the Family Unit of People Living with HIV

Family strengthening and addressing gender norms are important desired outcomes of TFH program because as the curriculum addresses issues that act as stressors between partners and between the couple and their children. Those stressors sometimes derive from the social and gender norms in the country context. Guided discussions examine gender roles in the marriage and whether or not those roles promote equality. TFH curriculum also discusses issues such as abstinence before marriage, delaying sexual debut, and struggles that youth are facing. Parents are coached on how to talk to their children about these issues and encouraged to do so. See Table 5 for results from the survey questions regarding factors that affect the family unit.

Table 5: Indicators that Affect the Family Unit

	CONTROL GROUP		INTERVENTION GROUP	
INDICATOR	**BASELINE N = 185**	**3-MONTH N = 185**	**BASELINE N = 193**	**3-MONTH N = 193**
% of participants that reported BOTH partners:				
Responsibility for looking after the children	**57%**	**51%**	**60%***	**70%**
Decision-making power on important family matters	**55%**	**63%**	**53%***	**71%**
Decision-making power on when to have sex	**37%***	**56%**	**43%****	**71%**
Decision-making power on accessing HIV services	**65%**	**71%**	**67%**	**75%**
% of participants that "agree/strongly agree":				
Boys can abstain from sex until marriage	**49%**	**44%**	**52%**	**53%**
Girls can abstain from sex until marriage	**58%**	**52%**	**57%**	**59%**
Comfort level in discussing sexual matters:				
With sons (10–18 years old) ◊	**4.3** N = 58	**4.8** N = 60	**3.9*** N = 70	**5.7** N = 71
With daughters (10–18 years old) ◊	**5.2** N = 58	**5.4** N = 62	**5.6** N = 71	**6.4** N = 73

** = statistically significant change ($p < 0.01$)*
*** = statistically significant change ($p < 0.001$)*
◊ = On a 10-point scale (with 1 the lowest and 10 the highest)

Additionally, 87% of control and intervention group participants had children younger than 18 years, and in 88% of those households, all the children had been tested for HIV. On the follow-up survey, there was no difference between control and intervention group participants in their increased level of HIV testing for their previously untested children: 26% of control group participants and 24% of intervention group participants reported testing at least one of their children for HIV for the first time in the last three months.

On the survey, women were asked about the roles of their male partners in family caretaking, particularly for sick children or other members of their family. On the three-month follow-up survey, 79% in the intervention group compared to 26% in the control group reported their male partner had started new caretaking behaviors in the household in the last three months. Also, 58% in the intervention compared to 13% in the control wrote a will between the baseline

and three-month follow-up survey collections. This is an important document for all families to have, but particularly for those whose family members have HIV.

Reducing Risk-taking and Stigma, Addressing Disclosure

TFH-CALL curriculum calls for couples to live positively with HIV and brings into discussion the psychosocial factors that affect health status, attitudes, behaviors, and practices. These factors include disclosure to partners (and children, if appropriate), stigma, involvement in social and community support structures, protective measures for children (such as will-writing and guardianship), violence, and drug/alcohol consumption. Each of these sensitive topics is addressed through facilitated discussion. On the post-test, 100% of participants reported that their partner knew their HIV status; however, triangulation questions on the survey revealed that a few couples were still unaware of their partner's true status. At the three-month follow-up survey, two participants (one in each group) had not yet disclosed their true status to their partners (according to other questions on the survey, both partners were HIV-positive).

Disclosure to children is also an emphasized component of positive living. Of those participants that had not previously disclosed their HIV status to their children older than 13 years of age, 45% of the control group participants (17 individuals) and 49% of the intervention group participants (29 individuals) reported on the follow-up survey that they had disclosed their status to their children in the last three months.

Participation in community support structures is one way of dissolving stigma and reducing isolation. Active involvement in support groups is encouraged by this modified TFH program. After the workshops, participants are invited to participate in support groups, which are structured around traditional coffee ceremonies, to continue discussion about TFH-CALL messages. At baseline, 54% of both control and intervention group participants reported being a part of a support group and 83% had attended the last scheduled meeting. At the three-month follow-up survey, 25% and 23% of control and intervention group participants, respectively, reportedly joined a *new support group in the last three months. See Table 6 for the types of support groups the sample is participating in.*

Table 6: Types of Support Groups

	CONTROL GROUP		INTERVENTION GROUP	
Type of Support Group	**Baseline** N = 70	**3-Month*** n = 36	**Baseline** N = 67	**3-Month*** N = 36
Savings and internal lending communities	39%	42%	32%	40%
Coffee ceremony	46%	47%	60%	29%
Women's/men's group	24%	26%	30%	13%
Anti-AIDS clubs	25%	–	28%	–
TFH support groups	–	2%	–	38%

** = Support groups joined in the last three months (new attendees)*

Fertility desires among HIV-positive couples are often disregarded or overlooked. TFH-CALL discusses pregnancy and encourages open dialogue about options for having children when one or both partners are HIV-positive. Eight women in the intervention group reported being pregnant at baseline compared with seven in the control group. See Table 7 for details on increased participation in ANC and PMTCT services among the pregnant couples in both groups. It is clear from Table 6 that at the three-month follow-up, more men from the intervention group were attending ANC and PMTCT services with their pregnant partners than men in the control groups. It is important to note that qualitative discussion indicated that most men consider accompanying their wives to ANC/PMTCT a good practice but, in reality, only a few men actually do this. Also, as in our sample, women's intentions to access services do not turn into actual service uptake. One reason for that may be related to a barrier mentioned in the baseline FGD. Women described the propensity for hiding pregnancies as a barrier to adhering to PMTCT protocols and participating in ANC services because they fear their husbands will force termination of the pregnancy if he does not want more children; the secrecy will often last up to six months, or until the pregnancy is noticeable. There was evidence of this practice in both groups, with men reporting their wives not to be pregnant while their wives reported that they were indeed pregnant[3]*.

[*] In the control group at baseline, in one of the six pregnant couples, the man did not know his partner was pregnant; at the three-month follow-up, in two of the five newly pregnant couples, the man did know his partner was pregnant. In the intervention group at baseline, in three of the eight pregnant couples, the man did not know the woman was pregnant; at the three-month follow-up, all the men in the five newly pregnant couples knew about their partner's pregnancy.

Table 7: Pregnancies in the Sample and Increased Antenatal Clinic/Preventing Mother-To-Child-Transmission Services

	CONTROL GROUP		INTERVENTION GROUP	
Type of Support Group	**Baseline** N = 7 couples	**3-Month** N = 7 couples*	**Baseline** N = 8 couples	**3-Month** N = 9 couples*
Pregnant females attending ANC visits	4	7	5	8
Males attending ANC visits with partner	5	3	5	8
Pregnant females accessing PMTCT services	3	7	5	6
Males accessing PMTCT service with partner	5	2	3	9

**Five of these couples were newly pregnant in the last three months*

The participants were also asked 18 questions about the types and frequency of physical abuse or threats of physical violence in the household. At baseline, among all participants, 47% reported living in a household where some form of violence or threat of violence had taken place in the last three months. At the three-month follow-up survey, this decreased to 39% in the control group and 31% in the intervention group. Of those participants who reported being victims of physical violence at baseline, 77% and 56% in the control and intervention group, respectively, were women (see Table 8). Also, while statistical differences were observed among control group participants, the following incidents statistically decreased ($p < 0.05$) from baseline to three-month follow-up among intervention group participants: partner insulting respondent; partner pushing, shoving, or throwing something at respondent; partner forcing respondent to have sex; and respondent swearing at partner. The reports on these incidents were amalgamated into two higher-level indicators (see Table 8).

Table 8: Indicators for Partner Violence

INDICATOR	CONTROL GROUP		INTERVENTION GROUP	
	BASELINE N = 185	3-MONTH N = 185	BASELINE N = 193	3-MONTH N = 193
% of participants that report violence or threats of violence in their household in the last three months	46%	39%	47%	31%
% participants reporting to be victims of physical violence by their partner in the Last three months	14%	10%	17%	6%

In the FGD, both men and women named alcohol or drug abuse as a reason for unfaithfulness. From the baseline to three-month follow-up, "regular" consumption of alcohol decreased among both the control (6% to 3%) and intervention group (5% to 2%), predominantly among males; "casual" consumption of alcohol (at social events only) subsequently increased in both the control (29% to 32%) and intervention (37% to 43%) groups.

There were also questions regarding attitudes toward cultural norms that lead to multiple concurrent partnerships (MCP), as well as perceived risk of HIV. These questions asked participants to "strongly agree, agree, strongly disagree, or disagree" with specific statements (see Table 9).

Table 9: Questions on Cultural Norms and Views on HIV Risk

% OF PARTICIPANTS WHO AGREED WITH STATEMENT	CONTROL GROUP		INTERVENTION GROUP	
STATEMENTS:	BASELINE N = 185	3-MONTH N = 185	BASELINE N = 193	3-MONTH N = 193
Woman is justified in refusing sex with partner if she knows he has had sex with someone else.	81%	86%	86%	89%
A married man having concurrent partners is not harmful as long as he is discrete/provides for family.	10%*	3%	11%**	3%
There are exceptional cases where a man should be allowed to have sex with another woman.	23%	22%	22%	16%
There are exceptional cases where a woman should be allowed to have sex with another man.	20%	19%	17%	12%
A man should be allowed to produce children with another partner if his wife is infertile.	38%	38%	40%	32%
A woman should be allowed to produce children with another partner if her husband is infertile.	19%	24%	26%	23%
Once infected, the chances of a person living with HIV transmitting it to someone else are always the same.	52%	61%	52%	46%

***** = *statistically significant increase ($p<0.05$)*
*** = statistically significant change ($p<0.01$)*

At baseline and the three-month follow-up survey, participants were asked if they had shared information, both on how to strengthen spousal/partner relationships and on the HIV risk associated with MCP, with their neighbors, family members, friends, etc., in the last three months. While the intervention group reported an increase in the highest frequency response ("at least once a week") for both topics, the control group reported a decrease in sharing.

DISCUSSION

The evaluation of this modified TFH curriculum has shown positive benefits for couples attending the workshop. Couples communication and quality of relationships issues both improved over the three-month evaluation period. Specifically, statistically significant increases occurred among perceptions of quality of relationship, quality of communication, level of respect received from and shown to partner, and ability to be faithful. Specific communication skills also increased significantly, with participants reporting a higher perceived comfort level in discussing and sharing financial information and discussing sexual matters with their partner. Attitudes towards lifetime faithfulness for men were changed

positively. Interestingly, many of these indicators were also positively affected among control group participants, which warrants investigation into the types of services provided by the local community and clinic partners.

Family strengthening attitudes and behaviors among workshop participants showed positive change from baseline to the three-month follow-up survey. Perceived equal decision-making power on important family or couple issues were statistically improved, as well as views on cultural norms, which encourage sexual partners outside the primary partner. Significant gains were observed in communication around sexual matters with their children who were older than 10 years of age. The curriculum did not, however, affect couple's views on youth's abstinence. TFH-CALL also improved conflict resolution techniques among workshop participants, and this was reinforced in the FGDs and reports of intimate partner violence on the surveys: there were statistical decreases (for some indicators) in reported intimate partner violence among the intervention group. While both groups reported decreases overall in households experiencing violence or threats of violence, workshop participants reported a larger decrease in violence.

This evaluation also revealed the effects of TFH-CALL on health maintenance behaviors related to HIV status. Among the workshop participants, adherence to medication improved, number of opportunistic infections decreased, percentage of participants diagnosed with STIs decreased, percentage of participants missing clinical appointments decreased, and health facility visits outside scheduled appointments increased. While some of these indicators also improved in the control group, the improvements were not to the same extent as in the intervention group. Lastly, intervention group males with pregnant partners reported higher attendance to ANC visits and PMTCT services than males in the control group. Given the importance of male attendance and involvement in these services, this initial finding should not be overlooked. While the sample size on this indicator was small in the evaluation, the observed difference between the groups commands further evaluation.

Evaluation and Survey Limitations

One limitation resulted from a lack of time to translate the English version of the surveys into Amharic or even a few of the local languages. It is very possible that differences in interpretation or translation occurred. As there were different surveyors for the baseline and three-month follow-up, the interpretations and explanations may not have been consistent across survey collections.

Positive effects were exhibited among many indicators for the control group. This could be evidence of a type of measurement bias called "attention bias," where the survey informs the participants about which indicators the program wishes

to improve and thus, the respondent will report improvements accordingly. More information is needed from local partners and the services provided to the control group to better understand the reported improvements.

Other Considerations

Note the convenience sampling methodology for the evaluation. All couple participants were self-selecting, already enrolled in HIV treatment and care services, and only eligible if both partners could attend. Thus, the results in this study may not be representative of all HIV-positive and discordant couples in Ethiopia because the couple participants in this evaluation would be different than those who would not come to a "couples" intervention. This would introduce a voluntary response bias (also known as volunteer or referral bias) into the results, which must be considered when applying these findings to the whole of Ethiopia's HIV-positive population.

CONCLUSIONS

This adapted curriculum aimed to reach couples that were struggling with a positive diagnosis and help them in their journey toward acceptance, reaffirm their commitment to each other (through faithfulness), and build a strong family for the future. The evaluation revealed that couples' confidence level in ability to maintain a happy and strong union with their current partner significantly increased. TFH-CALL curriculum might be incorporated into the package of services offered for recently diagnosed individuals. To determine discordancy and the most appropriate guidance for living positively together, couples HIV testing should be a recommended part of the program. From this first in a series of evaluations on the program, TFH-CALL has the potential to help couples overcome the diagnosis together and hopefully avert the relationship/marriage dissolution and family separation that has been the norm.

FUTURE DIRECTIONS, NEXT STEPS

To many couples in Ethiopia, a diagnosis of HIV is an indicator of unfaithfulness and a sure sign that your partner will leave whenever your status is discovered. In a review of the HIV care and support enrollment lists of seven local partner treatment facilities (LPTF), it was noted that the majority of clients are abandoned or "recently single" women and mothers. The couples in this evaluation were only a small portion of these overall care and support lists. Fear of abandonment and marriage dissolution is a major barrier to treatment access, disclosure, and adherence, and it illuminates a significant gap in programming for HIV-positive people. Given TFH-CALL's focus on keeping the couple and the family unit together, healthy, and living a positive life, the curriculum could be integrated into the myriad of options presented at the

post-test HIV counseling stage. The counselor usually encourages disclosure to partner and family in the counseling session, and the option of attending TFH-CALL as a couple could be offered as a next step.

Given the number of couples in the evaluation that reported that the man is with more than one woman and the percentage of these participants who do not know this "second" partner's HIV status, it is important to tailor risk reduction information to these couples in a way that addresses this situation directly.

The secrecies of pregnancy among HIV-positive mothers pose significant risk to the mother and infant because they cripple efforts to increase PMTCT services for HIV-positive women and thus decrease rates of vertical transmission to the baby. Guidance and support must be strengthened for HIV-positive couples as a way of assisting HIV-positive mothers with fertility needs/desires, promoting healthy child spacing, and ultimately improving uptake of ANC/PMTCT services. This should be further emphasized in future workshops, in addition to the promotion of increased male involvement in family health services. Also, while the sample size for the findings found in Table 8 were small, the positive results warrant further evaluation within a program context targeting a larger number of pregnant women and their partners/families.

Given the increased willingness to share information regarding family strengthening and HIV risk (including MCP) with friends and communities, equipping couples with information in the form of an easy-to-understand handbook of key messages could help increase their effectiveness. Additionally, certificates of completion could be given out to those that have completed the workshop. If these certificates were displayed in the homes of the graduate couples, they could serve to prompt discussion with neighbors and other visitors, and help to reduce stigma and discrimination. Model positive couples should be considered for future TFH-CALL workshop facilitation.

Finally, prevention is a lifetime activity for HIV-positive persons. In the "Healthy Living Project," the National Institute of Mental Health (NIMH) study that followed HIV-positive individuals in the United States over 25 months, the most significant differences in control and intervention groups emerged 20 months after an intervention took place2222. The support group formation that occurs after a TFH workshop will hopefully support this sustained attitude and behavior change. To determine long-term changes, continued evaluations are necessary, with recommendations of follow-up surveys on this initial cohort after one and two years. Also, if the program or study is able to continue, collaborating with other in-country Prevention with Positives players should be considered to maximize effects for these positive couples.

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