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A NOVEL SAFER CONCEPTION COUNSELING TOOLKIT FOR THE PREVENTION OF HIV: A MIXED-METHODS EVALUATION IN KISUMU, KENYA

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Abstract

Safer conception strategies can prevent HIV transmission between HIV-discordant partners while allowing them to conceive. However, HIV care providers in sub-Saharan Africa report they are not trained in safer conception, and patients are not routinely offered safer conception services. This mixed-methods pilot study evaluated the impact, acceptability, and feasibility of a novel Safer Conception Counseling Toolkit among providers and patients in Kenya. We enrolled 20 HIV-positive women, 10 HIV-discordant couples, and 10 providers from HIV care and treatment clinics. Providers completed questionnaires before/after training, and then counseled HIV-affected

patients. Change in patient knowledge was assessed before/after counseling. Qualitative interviews were conducted among providers and patients. The Toolkit was associated with large, significant increases in patient knowledge, and provider confidence, knowledge, and favorable attitudes toward safer conception counseling; 20% felt confident before versus 100% after training ($p < 0.01$).

There is an urgent need for HIV prevention strategies to address the circumstances and reproductive goals of HIV-discordant couples. Across Kenya and sub-Saharan Africa (SSA), the vast majority of HIV-infected individuals are adults of reproductive age (Joint United Nations Programme on HIV/AIDS [UNAIDS], 2014; National AIDS and STI Control Programme [NASCOP], 2013). Pregnancy and the desire for children are common among HIV-infected individuals (Cooper et al., 2009; Mantell, Smit, & Stein, 2009; Mmeje et al., 2015; Ngure et al., 2014; Taylor, Mantell, Nywagi, Cishe, & Cooper, 2013), and HIV-discordant couples face a difficult choice between attempting pregnancy and risking HIV transmission to their partners (Ngure et al., 2014; Matthews, Smit, Cu-Uvin, & Cohan, 2012). An estimated 30–50% of HIV-infected people in SSA are involved in stable discordant relationships (Allen et al., 2011; Chemaitelly et al., 2012; NASCOP, 2013), and 44–60% of incident HIV infections in parts of SSA occur in married or cohabiting discordant couples (Coburn, Gerberry, & Blower, 2011).

Safer conception strategies can help decrease HIV transmission between HIV-discordant partners while allowing them to conceive, and therefore are critical to the larger public health goal of eliminating sexual transmission of HIV. There are several safer conception strategies: antiretroviral therapy in the HIV-infected partner with the goal of viral suppression, pre-exposure prophylaxis in the HIV-uninfected partner, condomless intercourse timed to ovulation, vaginal insemination timed to ovulation, and semen washing. These strategies can be used in combination or alone, depending on the couples' preferences and clinical scenario (Bekker et al., 2011; Matthews et al., 2012; Mmeje, Cohen, & Cohan, 2012). The choice and availability of safer conception strategies will differ given financial resources, and the social and cultural context (Chadwick et al., 2011; Schwartz et al., 2014).

While evidence-based guidelines for safer conception have been developed and tailored for settings in sub-Saharan Africa, including Kenya (Bekker et al., 2011; British HIV Association & Expert Advisory Group on AIDS, 2013; Loutfy et al., 2012; NASCOP, 2014; Panel on Treatment of HIV-Infected Pregnant Women and Prevention of Perinatal Transmission, 2010; World Health Organization, 2012), HIV care providers in Kenya and throughout the region report they are not trained in safer conception methods or counseling, and HIV-affected patients are not routinely offered safer conception information or services (Crankshaw, Mindry, Munthre, Letsoalo, & Maharaj, 2014; Finocchiaro-Kessler et al., 2014; Goggin et al., 2014; Kawale, Mindry, Phoya, Jansen, & Hoffman, 2015; Matthews et al., 2015). Recent guidance on pre-conception care for HIV-discordant couples in Kenya outlines various safer conception strategies for HIV-discordant couples who desire children, including initiation of antiretroviral therapy at any CD4 count, viral load monitoring and suppression, limiting condomless intercourse to the ovulatory period, semen washing, and vaginal insemination timed to ovulation (NASCOP, 2014). In order to facilitate the provision

of safer conception services, our group developed a patient-centered Safer Conception Counseling Toolkit. The Toolkit consists of (1) provider training, (2) a counseling guide for providers, and (3) safer conception methods brochures for men and women with HIV. The objective of this study was to employ a mixed-methods approach in an HIV-endemic setting in Kenya to evaluate the impact, acceptability, and feasibility of this novel Safer Conception Counseling Toolkit among health care providers and HIV-affected women, men, and couples.

METHODS

STUDY SETTING

The study was conducted in the city of Kisumu, Kenya (Kisumu County, Nyanza region) between June and July 2014. Kisumu County has the highest HIV prevalence in Kenya at 19.3%, compared with 6.0% nationally (NASCOP, 2014), and Nyanza region has the highest prevalence of HIV-discordance in Kenya; approximately one third of Kenya's estimated 260,000 HIV-discordant couples live in this region (NASCOP, 2013). Nyanza has the highest antenatal HIV prevalence in the country, at 15.5% (Kenya National Bureau of Statistics [KNBS] & ICF Macro, 2010), and the overall fertility average is 3.9 children per woman (KNBS & ICF Macro, 2015). At the time of conducting this study, HIV care and treatment providers in Kenya had not received formalized safer conception counseling, and safer conception information and services were not available in the public sector.

SAFER CONCEPTION COUNSELING TOOLKIT COMPONENTS

The Toolkit consists of (1) provider training, (2) a counseling guide for providers, and (3) safer conception methods brochures for men and women with HIV. The Toolkit materials can be found at <http://www.hiveonline.org/safer-conception-toolkit-for-hiv-affected-individuals-and-couples-and-healthcare-providers>. The Toolkit components were modeled after existing patient resources available in the United States (HIVE, 2015; Rutgers Francois-Xavier Bagnoud Center, 2015) and adapted and refined prior to the initiation of this study through an iterative process with key stakeholders (i.e., HIV-affected individuals and couples, local leaders, and health care providers) in the urban communities of Kisumu (Mmeje et al., 2016). The provider training is designed to be delivered in 4 hours: 2 hours of didactic lecture and 2 hours of facilitated interactive case studies and role-playing. In addition, the provider training includes a pre- and post-training questionnaire with binary (yes/no) and multiple-choice responses to measure change in confidence, knowledge, and attitudes among providers before and after receiving the training. The provider counseling guide is an illustrated, interactive booklet with suggested questions and responses to guide providers in counseling HIV-affected individuals and couples about safer conception options. Delivery of the counseling message is designed to take 30 minutes, and includes a pre- and post-counseling questionnaire with binary (yes/no) and multiple-choice responses to assess the change in knowledge among patients before and after the counseling session. The patient brochures contain images and text designed to encourage and educate HIV-affected individuals about their reproductive options and ways to minimize HIV transmission while planning their family. The brochures are available in Dholuo, Kiswahili, and English.

STUDY POPULATION AND RECRUITMENT

We enrolled HIV care and treatment providers, HIV-positive women, and heterosexual HIV-discordant couples into this study from eight HIV care and treatment facilities within the city of Kisumu. The selection of health care providers was conducted in consultation with the health facility leadership. Eligible providers included medical officers, clinical officers, nurses, and community health workers who were willing to participate in the study, over 18 years of age, currently providing care and treatment to HIV-affected patients and couples, and able to provide informed consent. HIV-discordant couples and HIV-positive women were recruited through health education sessions conducted by study staff, and flyers with a contact phone number posted in clinic waiting areas. Eligibility criteria for men and women included being over 18 years of age (women were restricted to age 18–40 years), in an HIV-affected relationship for at least three months, or HIV-positive by self-report, desiring children in the next five years, fluent in Kiswahili, Dholuo, or English, and able to provide informed consent. Providers, men and women who had participated in the earlier development of the Toolkit were not eligible. HIV-positive women and HIV-discordant couples were targeted, as these are the two groups that providers are most likely to encounter in this setting. Both female HIV-positive/male HIV-negative and female HIV-negative/male HIV-positive couples were included. While all participants were asked their HIV-status, we did not conduct HIV testing during the study to avoid unnecessary discomfort and anxiety. All study participants received reimbursement for travel costs, 500 Kenyan shillings (~\$5 U.S.).

STUDY DESIGN AND PROCEDURES

The study adopted a sequential mixed-methods design (Creswell & Clark, 2007), which involved a phase of pre-/post quantitative interviews conducted in the providers' and participants' language of choice before and after the Toolkit training (providers) and counseling sessions (patients). This was followed by a qualitative phase among providers, couples, and women who participated in the Toolkit training and counseling. We aimed to enroll a total of 10 HIV care and treatment providers, and 40 male and female participants (10 HIV-discordant couples, and 20 HIV-positive women).

The Toolkit provider training was implemented as one group training for all providers, and was led by a study investigator. In order to measure the impact of the Toolkit training, providers completed the structured interviewer-administered questionnaire before, immediately after, and 3 weeks following training to measure changes in (1) provider confidence to offer safer conception counseling, (2) provider knowledge of safer conception strategies, and (3) provider attitudes towards offering safer conception services for HIV-affected individuals and couples. The two administrations of the questionnaire following training were performed to measure durability of change over time. Three weeks following the provider training, each provider conducted three counseling sessions (one session with an HIV-discordant couple, and two sessions with HIV-positive women; Figure 1A). During the counseling session, providers followed the counseling guide, gave each participant a copy of the brochure, and counseling was conducted in the preferred language of the participants. A study staff member was present during the counseling sessions to directly observe the content and record the length of the session. In order to measure the impact of

the Toolkit counseling session on patient knowledge about safer conception strategies, patients completed the structured interviewer-administered questionnaire before, immediately after, and 3 weeks following the counseling session (Figure 1B). De-identified data from questionnaires were entered into an Excel database.

Immediately following the provider-patient counseling sessions, we conducted in-depth interviews (IDI) with each provider. Three weeks after the provider-patient counseling sessions, we conducted four focus group discussions (FGD) among the couples and women who received the counseling to elicit impressions of Toolkit materials and messages (Figure 1B). All HIV-discordant couples were invited to participate in FGDs. In order to evaluate whether responses differed during couples-based and single-sex FGDs, couples were divided into three FGDs: one with both members of the couple ($n = 5$ couples), one with the male partners only ($n = 5$ men), and one with female partners only ($n = 5$ women). Ten of the 20 HIV-positive women were invited to participate in one FGD, and were purposively selected based on the results of the pre/post questionnaires in order to have participants that ranged in terms of knowledge gained following the counseling session. All qualitative interviews were facilitated by members of the research team in the preferred language of the participants. A semi-structured guide, informed by the theory of planned behavior (Rimer & Glanz, 2005), prompted discussions on the acceptability, comprehensiveness, and feasibility of the content of the Toolkit and counseling sessions. To ensure the recordings of the interviews were of high quality, we used new audio recorders and microphones, conducted the discussions in a quiet room, and asked participants to speak clearly, and one at a time. All audio recordings were transcribed verbatim and translated into English by three professional transcriptionists who were familiar with the vernacular used by the interviewees. Transcriptionists were instructed on the purpose of the study, and study staff reviewed transcripts against the recordings to ensure their accuracy and consistency.

STATISTICAL CONSIDERATIONS

The sample size for evaluating change in confidence, knowledge, and attitudes following training and counseling was based on feasibility rather than specific power calculations. It was estimated that a sample of 10 providers would give us 80% power to identify large increases ($> 40\%$) in knowledge and confidence as statistically significant, while 40 men and women would allow us to identify moderate increases ($> 25\%$) in knowledge as statistically significant at the 0.05 level. The sample size of the qualitative interviews (10 IDIs with providers, and four FGDs with 30 men and women) was chosen to allow us to reach saturation (Dworkin, 2012).

Quantitative data from the responses given on questionnaires pre-/post-training and pre-/post-counseling were summarized with the proportion of participants that answered the question correctly. Possible responses to the quantitative questions were multiple choice and binary. We used the non-parametric, one-sided, exact McNemar test to evaluate the significance of observed changes in responses within person before and after the training (providers) and the counseling sessions (patients). The McNemar test is used when the same individuals are measured twice (e.g., before counseling and after counseling), and accounts

for clustering at the individual level (pre/post) and provider level. Quantitative data were analyzed using STATA v12.1 (StataCorp, College Station, TX).

Qualitative transcripts were imported into Dedoose v. 5.0.11 software for coding (SocioCultural Research Consultants, LLC, Los Angeles, CA). We performed an iterative qualitative analysis, using a grounded theory as a framework. Investigators used open and axial coding to generate a codebook that captured key themes and subthemes (Strauss & Corbin, 1998). Two investigators coded data using the code-book, and 50% of transcripts were double-coded for quality assurance. Investigators met frequently to compare codes, formulate new codes when necessary, and reach consensus. After all data were coded, the investigators used an inductive framework to analyze emerging themes (Boeije, 2002; Glaser & Strauss, 1967).

ETHICAL APPROVALS

Ethical approval was obtained from the Kenya Medical Research Institute and the University of California, San Francisco. All participants provided written informed consent.

RESULTS

We screened 116 participants to enroll a total of 10 HIV care and treatment providers and 40 male and female participants (10 HIV-discordant couples, and 20 HIV-positive women); 24 couples were screened to enroll 10 HIV-discordant couples, 58 women were screened to enroll 20 HIV-positive women, and all 10 providers screened were eligible; the response rate was 42% for discordant couples, 34% for HIV-positive women, and 100% for providers. Providers were both male and female, and included clinical officers ($n = 6$), nurses ($n = 2$), and community health workers ($n = 2$) with an average of 3.5 years of experience providing HIV care and treatment to patients (Table 1). Three-quarters of the men and women were HIV-positive, two-thirds (68%) had living children, and the majority (80%) reported a desire to have a child with their current partner in the next 12 months. No participants were lost to follow-up.

IMPACT ON PROVIDER CONFIDENCE, KNOWLEDGE, AND ATTITUDES

Feeling confident to provide safer conception counseling for their patients increased from 20% (2/10) of providers prior to training to 100% (10/10) of providers following training ($p < 0.01$) (Figure 2A). This increase in confidence was sustained 3 weeks after the training.

Prior to the training, 10% (1/10) of providers were able to correctly identify the fertile period of the menstrual cycle. This increased significantly following the training to 70% (7/10; $p = 0.03$; Figure 2A). Prior to the training, approximately two-thirds of providers were aware of the use of pre-exposure prophylaxis, vaginal insemination, and semen washing as a method of safer conception. After the training 100% of providers (10/10) were able to correctly identify these methods as safer conception strategies. All providers were aware of the use of antiretroviral therapy to achieve viral suppression as a safer conception strategy for men or women infected with HIV.

Prior to training, nearly two-thirds (6/10) of providers reported that it is important to counsel HIV-discordant couples to avoid pregnancy compared to only 20% (2/10) following training ($p = 0.05$; Figure 2A).

These increases in provider confidence, knowledge, and positive attitudes were sustained 3 weeks after the training.

IMPACT ON PATIENT KNOWLEDGE

On average, following the counseling we saw a two-fold increase in the proportion of patients able to correctly identify the fertile period, and various safer conception strategies (Figure 2B). After the counseling session 74% of patients identified HIV treatment and viral suppression as an effective strategy for safer conception, compared with only 33% before counseling ($p = 0.02$). These increases in knowledge were similar between female and male patients, and among those who were counseled as individuals and couples. The increases in knowledge did not differ based on the type of provider who gave the counseling, and were sustained 3 weeks after the counseling visit.

FEASIBILITY OF PROVIDING THE COUNSELING

The provider training session took 4 hours to complete. The average length of an individual counseling session was 25 minutes (interquartile range [IQR] 20–30; range 15–32), and the average length of a couples-based counseling session was 29 minutes (IQR 26–35; range 14–43). In qualitative interviews, most providers reported that integrating the counseling session into their practice would be feasible, and the time required to deliver the counseling message would decrease as they mastered the material (representative quotes from qualitative interviews are included in Table 2). Both patients and providers acknowledged that some counseling sessions would naturally take longer than others depending on the level of background knowledge of the patients.

ACCEPTABILITY OF THE MATERIALS AND MESSAGES

All providers and patients indicated that the Toolkit components were culturally acceptable (Table 2). In addition, male and female patients reported that the brochures would help HIV-affected men and women to engage their partners and providers in a discussion about safer conception (Table 2).

COMPREHENSIVE AND UNDERSTANDABLE COUNSELING MESSAGES

The majority of providers and patients indicated that the Toolkit counseling messages were simple, understandable, and comprehensive (Table 2). A few providers suggested that some of the medical terminology in the patient brochures could be further simplified by creating lay terms for strategies such as pre-exposure prophylaxis and vaginal insemination. Overwhelmingly, providers and patients expressed that having a choice of safer conception strategies was preferable to limiting options (Table 2), and did not identify one safer conception strategy as being preferable to others. Some patients and providers suggested that additional brochures with detailed information on each of the safer conception strategies might be desirable.

HOPE FOR THE FUTURE

Some providers and patients indicated that counseling HIV-affected individuals and couples about their safer conception options gave them hope for their future (Table 2). Patients who had previously been told that conception was not an option because of their HIV status expressed feeling isolation and questioning whether they could remain with their partner. Some participants thought that efforts to enhance knowledge of safer conception strategies might also help to reduce HIV-related stigma in the community (Table 2).

Opinions expressed during qualitative interviews did not differ based on FGD composition, provider specialty, or the sex of the study participant.

DISCUSSION

Our study demonstrates that the Safer Conception Counseling Toolkit is an effective, feasible, and culturally acceptable tool for imparting knowledge and confidence to providers, changing provider attitudes, and increasing knowledge among patients in this high prevalence HIV setting. The Toolkit materials and messages are understandable, comprehensive, and give HIV-affected individuals and couples hope for their future. We saw a large and significant increase in provider confidence to offer safer conception counseling following the training. Moreover, we saw a large reduction in the number of providers with negative attitudes toward counseling HIV-discordant couples about safer methods of conception. After counseling, we also saw large and statistically significant increases in knowledge of safer conception strategies among patients.

The development of an effective and acceptable Safer Conception Counseling Toolkit that enhances provider knowledge and confidence is a critical first step to provision of safer conception services. Providers play an important role in determining access to and quality of reproductive health services (Harries et al., 2007; Matthews et al., 2012; Shelton, 2001), and enhancing provider knowledge has a positive impact on provider and patient practices, reproductive health, and patient outcomes (Davis, Thomson, Oxman, & Haynes, 1992; Forsetlund et al., 2009; García et al., 2012; Harrison et al., 2000; Holt et al., 2012; Stephenson, Beke, & Tshibangu, 2008). Improving provider confidence provides a crucial foundation for the successful acquisition and implementation of knowledge and skills (Lundberg, 2008).

Communication between providers and patients, and within a couple is necessary for safer conception practices to be successfully adopted. Patients and providers in this study reported that the Toolkit facilitates provider-patient communication, and may improve communication between HIV-affected women and men who desire children. The Toolkit can be used to counsel men, women, and couples, making it highly versatile. Engagement of male partners is particularly important in this setting where men have strong fertility desires and influence over reproductive decision-making (Crankshaw et al., 2012). Moreover, the participation of men in antenatal care is associated with better health seeking behavior (Kwambai et al., 2013) and better reproductive health outcomes (Aluisio et al., 2011; Mullany, Becker, & Hindin, 2007).

In this study, providers and participants expressed a preference for being offered a choice of safer conception services, and did not identify one safer conception strategy as preferable to other strategies. The choice and availability of safer conception strategies will differ given financial resources, and the social and cultural context (Chadwick et al., 2011; Schwartz et al., 2014). For example, lower-technology options including vaginal insemination timed to the ovulatory period may be more feasible in low-resource settings, while semen washing may be inaccessible to many patients because of its current lack of availability in the public sector and/or relatively higher out-of-pocket costs. Nevertheless, it is important to work towards offering couples a choice of strategies. From contraceptive studies we know that increased choice is associated with increased uptake and with better health outcomes (such as lower pregnancy rates and fewer sexually transmitted infections), and that those given a choice exercise it and continue to use their chosen contraceptives to a greater degree than those denied a choice (Gray, Smit, Manzini, & Beksinska, 2006).

All providers indicated that it is feasible to integrate the individualized counseling messages into their existing clinical practice. In addition, we previously reported that the majority of HIV-affected individuals and couples in this study indicated that they would prefer delivery of safer conception counseling in individualized sessions (Mmeje et al., 2016), which allows them to ask questions they would not ask if there are many people. However, it is possible that group-level counseling may be more feasible than individual or couple-level counseling in some settings. The feasibility, acceptability, and effectiveness of group-level counseling should be explored in future studies.

Strengths of this study include the evaluation of actual (rather than hypothetical) training and counseling sessions, the inclusion of providers, HIV-affected men, women, and couples who desire children, and measurement of the durability of the impact of the Toolkit over a 3-week period. We did not see deterioration in knowledge or confidence over the 3-week period; however, studies with longer follow-up time will be necessary to evaluate longer-term durability and inform whether ongoing refresher sessions may be useful in order to improve outcomes. The use of both qualitative and quantitative methods allowed us to gather a broader and deeper understanding of the Toolkit. We measured outcomes in participants both before and after receiving the training or the counseling, and therefore participants served as their own controls. However, we did not have an unexposed control group. Additional limitations of this study include a relatively small sample and recruitment of participants from only one geographic region of Kenya, which potentially limits the generalizability of the results. Our results require validation with a larger sample of providers and patients, from varied settings (e.g., rural, urban, HIV prevalence).

While the argument for offering safer conception counseling and services has been accepted by many, the actual roll-out of safer conception will be a challenge for numerous reasons, including provider time constraints, limited resources, knowledge gaps, costs, and HIV-related stigma (Steiner, Dariotis, Anderson, & Finocchiaro-Kessler, 2013; Thurman et al., 2015). This Toolkit may help to address some of these potential challenges by improving confidence, knowledge, and attitudes among providers and patients through relatively short provider training and patient counseling sessions, and with simple, easily adaptable materials. Further research on the implementation of the Toolkit should be done to

incorporate various task-shifting scenarios, different provider and patient populations, longer-term follow-up, individual versus group-level counseling, and the effect of refresher training or counseling sessions. Moreover, rigorous implementation research is needed to evaluate the effect of offering safer conception counseling and services on the uptake of and adherence to these services, preferences for various safer conception services, as well as their impact on clinical outcomes (e.g., HIV and pregnancy), and their costs and cost-effectiveness. The use of this Toolkit may facilitate the successful roll-out of safer conception services, which in turn may help to eliminate sexual transmission of HIV and accelerate efforts to curb the AIDS epidemic.

CONCLUSION

The Toolkit is an effective, feasible, and culturally acceptable tool. The Toolkit can enhance education of HIV care providers and safer conception counseling of HIV-affected individuals and couples.

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FIGURE 1.
Diagram of study visits and procedures for providers (A) and patients (B).

FIGURE 2.

Change in knowledge, confidence, and attitudes towards safer conception strategies before and after training providers (A), and before and after counseling patients (B). PrEP = pre-exposure prophylaxis; ART = antiretroviral therapy; STI = sexually transmitted infection. * $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$.

TABLE 1**Characteristics of Providers and Patients**

	<i>N (%) or Median (range)</i>
PROVIDERS (N = 10)	
Age in years	30 (27–42)
Sex	
Male	3 (30)
Female	7 (70)
Professional training:	
Clinical officer	6 (60)
Nurse	2 (20)
Community health worker	2 (20)
Health discipline:	
HIV Care and Treatment	10 (100)
Family planning	3 (30)
Years providing HIV care	3.5 (1–6)
Have experience providing HIV care to couples	9 (90)
PATIENTS (N = 40)	
Age in years	29 (20–46)
Sex	
Male	10 (25)
Female	30 (75)
Number of living children	2 (0–6)
Desire to have a child in next 12 months	32 (80)
How affected by HIV	
Participant is HIV positive	30 (75)
Partner is HIV positive	15 (38)
Child is HIV positive	4 (10)
Engagement in care	
Participant receiving HIV care	29 (73)
Participant receiving antiretroviral therapy	27 (68)

TABLE 2

Representative Quotes From IDIs With Providers, and FGDs With HIV-Affected Men, Women, and Couples

Feasibility

"After mastering what is in the guide, this thing should take a maximum of 10 minutes.... and then you do it." — Clinical officer, woman, 27 years old

"It also depends because there are those who are slow learners and not exposed and those who are exposed and have some knowledge so it will mean that the doctor will take much time with those that are not exposed to make them understand." — HIV+ woman, 27 years old

Cultural acceptability

"From what I have experienced today, they'll accept the counseling very positively." — Nurse, woman, 42 years old

"Everything in the brochure is good and can help us. I have not seen anything bad that should be removed." — HIV+ woman, 28 years old

Facilitate patient's ability to engage provider and partner

"To me I think everyone is affected (by HIV) and it's nowadays like malaria and if someone gets hold of the brochure especially those who know their HIV status and have problems disclosing, it will help them get more information and will encourage them to visit (their provider) for more information and this will help them together with their partner." —HIV+ woman, 23 years old

"From the brochure, I felt that there is an element of support that partners give to each other. They are encouraged to be open and discuss issues relating to transmission and prevention." —HIV+ woman, 28 years old

"Another thing, when you are with your partner and maybe you (are) a discordant couple you could go with that booklet at home you can be free to ask questions "I don't understand this part" and you as well you can ask her "I don't get this part, please help me understand". —HIV+ man, 31 years old

Comprehensive, understandable counseling messages

"The counseling messages are simplified...in fact, I think everything is contained here about the tests which are supposed to be done before the couples get pregnant ... you are able to understand ... the methods which can be used to prevent the negative partner from getting infected...the calendar method, it is well explained. And you are able to show the client there and then what to do and how to perform the calendar method. Everything is okay." — Nurse, woman, 42 years old

"In regard to the messages, they were clear enough to understand" — HIV+ man, 40 years old

Preferences for a choice of strategies

"What I liked most about the brochure is that a client is getting different types of messages from the brochure and is able to choose from the brochure whatever he or she can be able to carry out according to her understanding, according to her economic status and according to her environment." — Nurse, woman, 42 years old

"This brochure has encouraged me because there are other methods that can be used that I never knew. The methods that can prevent your partner from acquiring HIV virus like sperm washing which sounds good to me." —HIV–woman, 29 years old

Hope for the future

"I was tested HIV positive and my partner was negative so we thought that I would never give birth and I had not given birth, so when I came for the counseling, I got information that I can still give birth and we were so happy." —HIV+ woman, 23 years old

"It will encourage her because it will be one way of giving her hope on how the two of us can live." —HIV- man, 40 years old

"When I realized that my partner was HIV positive, I was so angry and I felt like I shouldn't stay in that marriage, so when I came for the counseling, I learnt a lot of things because initially I thought that I should not give birth anymore ... because I thought I would give birth to HIV positive baby. So when I received the counseling that we can still get an HIV negative baby and shared with him, he was also happy about it, about the strategies like timed unprotected intercourse." —HIV– woman, 26 years old

Reduce HIV-related stigma

"For me I always believed that HIV positive person should be left alone and should not be associated with because the person is responsible for acquiring the virus but after this counseling and education, I learnt that it's important to be close to that person and encourage him to get medication." —HIV+ woman, 27 years old

"It will empower them. The stigma with the issue of "Am not able to get a child simply because I am HIV positive" will be a gone case." — Community health worker, woman, 28 years old