Published in final edited form as:

AIDS Care. 2016 December ; 28(12): 1586–1589. doi:10.1080/09540121.2016.1191610.

“I never thought that it would happen ...” Experiences of HIV seroconverters among HIV discordant partnerships in a prospective HIV prevention study in Kenya

Kenneth Ngunjiri^{1,2}, Sophie Vusha³, Nelly Mugo^{2,4}, Mira Emmanuel-Fabula², Mariah Ngutu³, Connie Celum^{2,5,6}, Jared Baeten^{2,5,6}, and Renee Heffron^{2,3}

¹School of Public Health, Jomo Kenyatta University of Agriculture and Technology, Kenya

²Department of Global Health, University of Washington, Seattle, USA

³Partners in Health Research and Development, Nairobi, Kenya

⁴Center for Clinical Research, Kenya Medical Research Institute, Nairobi, Kenya

⁵Department of Epidemiology, University of Washington, Seattle, USA

⁶Department of Medicine, University of Washington, Seattle, USA

Abstract

In spite of access to behavioral and biomedical HIV prevention strategies, HIV transmission occurs. For HIV serodiscordant couples, prevention programs can be tailored to address individual and couples' needs to preserve their relationship while minimizing HIV risk. Programs for serodiscordant couples may benefit from learning from experiences of couples who transmit HIV. We conducted 20 individual in-depth interviews with 10 initially HIV serodiscordant couples who transmitted HIV during prospective follow-up at a peri-urban research site in Thika, Kenya. Data were analyzed inductively to identify situations that led to prevention failure and coping mechanisms. Inconsistent condom use driven by low HIV risk perception and alcohol use often preceded seroconversion while persistent blame frequently hindered couples' communication soon after seroconversion. In this emerging era of antiretroviral-based HIV prevention, couples' counseling can capitalize on opportunities to foster a supportive environment to discuss initiation and adherence to time-limited pre-exposure prophylaxis and lifelong antiretroviral therapy, in addition to strategies to reduce alcohol use, diffuse blame, and use condoms.

Keywords

HIV; couples; seroconversion; prevention; Kenya

INTRODUCTION

More than two million persons are infected with HIV each year, the majority in Africa (UNAIDS, 2013). HIV serodiscordance is common in Kenya with an estimated 260,000 of married or cohabiting couples being in a serodiscordant relationship (KAIS., 2012).

Understanding the experience of HIV seroconversion, through behaviors before and after and corresponding emotions, such as blame or shame and feelings of fatality and despair (Rispel et al., 2012), may provide insight into novel approaches to support people at risk of HIV and improve targeted prevention delivery. In the context of a prospective HIV prevention trial among HIV serodiscordant couples, we conducted qualitative interviews with recent HIV seroconverters and their chronically HIV infected partners to gain a better understanding of the gaps that led to failure to use condoms consistently and their experience becoming a couple where both members are HIV infected.

METHODS

Study population

This study was nested within the Partners PrEP Study, a randomized clinical trial of daily oral pre-exposure prophylaxis (PrEP) to prevent HIV acquisition by HIV uninfected members of heterosexual HIV serodiscordant couples (Mujugira et al., 2011). The Partners PrEP Study enrolled 4758 HIV serodiscordant couples in 9 sites in Kenya and Uganda including Thika site which enrolled 496 couples (Baeten et al., 2012). During routine study visits for the clinical trial, all participants received HIV risk reduction counseling and free condoms and HIV uninfected partners were tested for HIV and received refills of study medication (active PrEP or placebo) and adherence counseling.

Data collection

Data were collected between April 2011 and February 2012. Interviews were conducted in Kiswahili or English, according to the participant's preference. Individuals within a couple were interviewed separately using a semi-structured interview guide. Interviews were audio recorded, transcribed and Kiswahili interviews translated into English.

Analysis

An iterative process led to the generation of emergent themes, thematic categories, and a codebook. SV coded all transcripts and MEF independently coded a subset of transcripts to ensure inter-coder reliability using Atlas.ti version 6. KN, SV, MEF, and RH discussed any discrepancies, until mutual agreement was reached.

Ethics

All participants provided written informed consent. Prior to the study, ethical approval was obtained from the Kenyatta National Hospital Ethical Review Committee and the University of Washington Institutional Review Board.

RESULTS

Participant Characteristics

Ten men (7 seroconverters and 3 HIV infected partners) and ten women (3 seroconverters and 7 HIV infected partners) were interviewed. The median age was 33 years for women (range: 29–42) and 30 years for men (range: 28–52). HIV seroconversion occurred at a median of 10 months (range: 4–23) after enrollment into the Partners PrEP Study, and 15 months (range: 3–27) prior to the interview. Of the 10 initially-HIV uninfected participants interviewed in this qualitative study, 3 had been randomly assigned to active PrEP and 9 seroconversions were linked to the primary HIV-infected partner. The major emergent themes can broadly be described as situations leading to inconsistent condom use and coping with seroconversion.

Situations leading to inconsistent condom use

Unfavorable attitudes towards condom use—Condom use by many of the couples was hampered by the belief that condoms were “*not meant for married people*”, and their users are generally “*untrustworthy*” people with multiple or casual partners. Most of the men who seroconverted reported using condoms inconsistently or not at all, since they perceived condoms to be new to their relationship and had started using them only upon learning their HIV serodiscordant status. Some men reported that condoms disrupted sexual pleasure for them or their female partners, leading to their reluctance to use them, and interfered with their plans for natural conception (Table).

Low risk perception—Many participants had reportedly felt their actual HIV risk was low due to continuous HIV negative test results for the uninfected partner and this low level of risk perception was also a deterrent to consistent condom use. A majority of seroconverters reported they were surprised to become HIV infected, such as one participant who said, “*I never knew that it (seroconversion) would happen.*”

Alcohol use—Alcohol use influenced consistent condom use. Some HIV infected women described increased alcohol use by their partners following discovery of their serodiscordant status, and this was corroborated by most of the male seroconverters. Both men and women also articulated experiences of not using condoms when men were using alcohol excessively.

Coping with HIV seroconversion

Blame and regret—After seroconversion, emotional reactions were common, such as blame. Most of the female seroconverters blamed their male partners for their seroconversion due to their failure to consistently use condoms. Additionally, many initially HIV uninfected partners blamed themselves for the failure to use condoms consistently and one woman said, “*I feel I got into a hole that I was aware of;*” because she had known her HIV risk and yet did not use condoms. Even among the seroconverters who talked about using condoms, there was an expression of regret from them about failure to use condoms consistently. Moreover, feelings of blame often persisted long after seroconversion, resulting in strained relationships. Some participants would constantly remind their partners that they caused their seroconversion.

Increased alcohol use—Participants described initiating or increasing their alcohol use as a way of coping with seroconversion. Some of them had mentioned receiving their seroconversion results well but their partners would disagree. In the interviews, alcohol use was primarily reported among male participants.

Positive coping strategies—After initially negative reactions, some couples reported seeking counseling support, which assisted them to maintain their relationship and eventually adjust to their new concordant positive status. Additional positive reactions following seroconversion included improved adherence to ART and improved partner support. Some of the male participants mentioned becoming more responsible and actively taking care of their families after they seroconverted (i.e., “*working harder now*”).

DISCUSSION

In this population of initially HIV serodiscordant couples who were in a prospective HIV prevention study with monthly clinic visits, and thus were well-informed about HIV risk and condom use, the couples who transmitted HIV cited a variety of circumstances leading to their low condom use. Low risk perception was often related to repetitious experiences of testing HIV negative in spite of low condom use, and sexual preferences contributed to inconsistent or non-use of condoms (Ngure et al., 2012; Bunnell et al., 2005). Couples-based HIV counseling provides an opportunity to engage couples in discussions about the ongoing risk of HIV transmission, and encourage initiation and adherence to PrEP and ART, especially for couples facing challenges with condoms (Ware et al., 2012, Ngure et al., 2016).

One of the main assumptions of the theory of reasoned action is that an individual's decision to engage in a particular behavior (e.g. condom use) is based on the consequences the individual expects as a result of the behavior (Gillmore et al., 2002). In our study, couples reported that consistent condom use interfered with sexual intimacy and fertility plans, and many were concerned about the impact of condoms on relationship stability and sexual satisfaction. This situation often led to inconsistent condom use. Couples participating in clinical studies of antiretrovirals for HIV prevention have stated that PrEP and ART offer solutions to the discordance dilemma, providing an opportunity to preserve their relationship and substantially reduce HIV transmission risk without necessitating condom use (Ware et al., 2012).

Alcohol use was reported as a factor leading to inconsistent condom use prior to HIV seroconversion and was a commonly-cited coping mechanism after seroconversion. For HIV serodiscordant couples, screening for excessive alcohol use by either partner is an important intervention prior to and after seroconversion as well as providing interventions for those struggling with alcohol. Antiretroviral-based prevention has the potential to fill a prevention gap for couples who are unable to consistently use condoms due to alcohol use.

Seroconversion of the initially HIV uninfected partner in a serodiscordant relationship often is associated with blame and regret. Therefore, counseling can be enhanced as a place for discussion about coping with HIV serodiscordance and acknowledging and normalizing

feelings of denial and blame in cases when a long term HIV uninfected partner seroconverts. Many participants reported a healthier experience after the initial negative post-seroconversion reactions, including improved adherence to ART by the HIV infected partner and finding immediate emotional support from the partner, mainly as a result of the counseling support they had received.

Our study provided opportunity to interview both members of each couple, resulting in complimentary insights into their strategies for negotiating HIV prevention and coping after seroconversion. Future studies among HIV seroconverters could take a longitudinal approach to explore the progression of reactions and coping strategies after HIV seroconversion as well as incorporate interviews with couples that do not seroconvert to compare their experiences and gain insight into their potential success using prevention strategies.

Our study has shown that consistent condom use even among counseled couples at risk of HIV transmission is not always possible and strategies that focus primarily on condom use leave ample opportunity for HIV transmission to occur. As antiretroviral-based prevention is scaled up, couples-based counseling is an important setting for discussion about initiation and adherence to ART (and PrEP when available) which can provide additional protection for couples unable or unwilling to use condoms.

Acknowledgments

We thank the study participants and the Partners PrEP Study staff at the Thika, Kenya site for all their contributions to this work. Funding for this study was provided by the National Institute of Health (R21NR012663 and K99HD076679) and the Bill and Melinda Gates Foundation (grant OPP 47674).

REFERENCES

- Baeten JM, Donnell D, Ndase P, et al. Antiretroviral prophylaxis for HIV prevention in heterosexual men and women. *The New England journal of medicine*. 2012; 367(5):399–410. [PubMed: 22784037]
- Bunnell RE, Nassozi J, Marum E, et al. Living with discordance: knowledge, challenges, and prevention strategies of HIV-serodiscordant couples in Uganda. *AIDS care*. 2005; 17(8):999–1012. [PubMed: 16176896]
- Gillmore MR, Archibald ME, Morrison DM, Wilsdon A, Wells EA, Hoppe MJ, Murowchick E. Teen sexual behavior: Applicability of the theory of reasoned action. *Journal of Marriage and Family*. 2002; 64(4):885–897.
- Mujugira A, Baeten JM, Donnell D, et al. Characteristics of HIV-1 serodiscordant couples enrolled in a clinical trial of antiretroviral pre-exposure prophylaxis for HIV-1 prevention. *PloS one*. 2011; 6(10):e25828. (2011). [PubMed: 21998703]
- National AIDS and STI Control Programme (NASCOP). Kenya: Kenya AIDS Indicator Survey; 2012. Final Report Nairobi, NASCOP. June 2014
- Ngure K, Mugo N, Celum C, Baeten JM, Morris M, Olungah O, Shell-Duncan B. A qualitative study of barriers to consistent condom use among HIV-1 serodiscordant couples in Kenya. *AIDS care*. 2012; 24(4):509–516. [PubMed: 22085306]
- Ngure K, Heffron R, Curran K, et al. I knew I would be safer. Experiences of Kenyan HIV serodiscordant couples soon after PrEP initiation. *AIDS Patient Care and STDs*. 2016 Feb; 30(2): 78–83. PMID:26836236. [PubMed: 26836236]

- Rispel LC, Cloete A, Metcalf CA, Moody K, Caswell G. 'It [HIV] is part of the relationship': exploring communication among HIV-serodiscordant couples in South Africa and Tanzania. *Cult Health Sex.* 2012; 14(3):257–268. [PubMed: 22077668]
- UNAIDS. Global report: UNAIDS report on the global AIDS epidemic 2013. Geneva, Switzerland: Joint United Nations Programme on HIV/AIDS (UNAIDS); 2013.
- Ware NC, Wyatt MA, Haberer JE, et al. What's love got to do with it? Explaining adherence to oral antiretroviral pre-exposure prophylaxis for HIV-serodiscordant couples. *Journal of acquired immune deficiency syndromes.* 2012; 59(5):463–468. [PubMed: 22267018]

Table 1

Situations leading to inconsistent condom use

Theme	Quotes
Unfavorable attitudes towards condom use	<p><i>"My wife says she is not satisfied [when using condoms]. When you look at it you feel she will start moving out of marriage and when you think about it you feel you wouldn't like such things. So now you decide."</i> (30-year-old man, HIV seroconverter)</p> <p><i>"It affects the relationship because if you were not used to using it, then now you have gotten into using it, now the way we were enjoying...one side is cut".</i> (40-year-old man, HIV seroconverter)</p> <p><i>"I used to feel sad because I thought if I die I would leave him with the children, when he used to refuse to use [condom] I used to get angry."</i> (33-year-old woman, initially HIV infected)</p> <p><i>"I asked those questions here when I was negative, I was asking which method can I use so that she can get pregnant and I am not infected, ...I was told one can go for artificial insemination ... but I didn't like it because things can change at the laboratory and someone else's sperms are taken (laughs)." (37-year-old male, HIV seroconverter)</i></p>
Low risk perception	<p><i>"Earlier on before I knew my partner's status, we were not using anything and I hadn't gotten this misfortune".</i> (33-year-old woman, HIV seroconverter)</p> <p><i>"I didn't expect it to be positive because I had stayed almost a year and it was negative, so even that time I was expecting it to be negative".</i> (37-year-old man, HIV seroconverter)</p>
Alcohol use	<p><i>"And also there is a time you can go somewhere and if it is someone who drinks you can go there and you also forget".</i> (40-year-old man, HIV seroconverter)</p> <p><i>"I used to take alcohol...you see when you are drunk you wouldn't know. You will be back to senses after you have done it".</i> (30-year-old man, HIV seroconverter)</p> <p><i>"We used the condoms but at times when he was drunk he was not using".</i> (33-year-old woman, initially HIV infected)</p>
Coping with seroconversion	
Blame and regret	<p><i>"I feel like the mistake could be on my side. There is a time we did have sex without 'Trust' [a condom brand] for a month. So in my thoughts I feel I am the one who brought this problem to myself."</i> (33-year-old woman, HIV seroconverter)</p> <p><i>"I blamed myself. I stayed and thought almost 3 days and said if I had followed the doctor's advice and use the condom I wouldn't have been like this. I reached a point and said 'it is okay; it has already happened'".</i> (30-year-old man, HIV seroconverter)</p> <p><i>"Sometimes I feel if we talk so much together it will reach a point that I will remind her that 'you brought this thing to me.' So sometimes I am not happy and because of that I feel it is better I go away."</i> (52-year-old man, HIV seroconverter)</p>
Increased alcohol use	<p><i>"Let me say, I am not happy at all and when I knew I have it [HIV], I was lost to alcohol... I have to go to alcohol and I take it so that I can get sleep. But the problem is still there tomorrow, so sometimes I am like a mad man, I think so much."</i> (52-year-old man, HIV seroconverter)</p>
Positive coping strategies	<p><i>"He has supported me well; he goes for work. When he gets money, he brings, we eat, and the children are well fed. There is no noise in the home; I feel he is taking good care of me."</i> (42-year-old woman, HIV seroconverter)</p> <p><i>"Earlier on I had even rented a house in town, I was living there, but now I am living at my home. I felt if by bad luck if I die there or this one dies (wife) how will the children go on, that is when I took a step and took my wife at home."</i> (28-year-old man, HIV seroconverter)</p>