

Heterosexual HIV-negative partners in serodiscordant relationships views on HIV Pre-exposure Prophylaxis

A qualitative study

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Background

- PrEP (HIV Pre-exposure Prophylaxis) emerging as an effective medical strategy for HIV prevention with various RCT proving its efficacy
 - Daily oral PrEP with the fixed-dose combination of tenofovir disoproxil fumarate (TDF) 300 mg and emtricitabine (FTC) 200 mg has been shown to be safe and effective in reducing the risk of sexual HIV acquisition in adults; therefore ... PrEP is recommended as one prevention option for adult heterosexually active men and women who are at substantial risk of HIV acquisition. (US Public Health Services, 2014)
- Adherence as the main factor influencing risk reduction rates
- PrEP for heterosexual serodiscordant couples: for conception and or HIV prevention in general
- Limited literature with (heterosexual) serodiscordant couples

Study aim

- Examine the understandings and attitudes that HIV negative partners in heterosexual serodiscordant stable relationships have about PrEP

Methods

- Research design:** Semi-structured interviews with HIV-negative partners in a serodiscordant heterosexual relationship
- Inclusion criteria:**
 - 18 years or old
 - Have a HIV-negative status
 - Be in a serodiscordant heterosexual relationship for at least 12 months
 - Have a good understanding of verbal and written language
- Recruitment:**
 - Posters and leaflets at the Melbourne Sexual Health Centre
 - Clinicians opportunistically informing HIV-positive partners about study
- Analysis:** Interviews were transcribed verbatim and analysed thematically

Interview schedule

Table 1. Interview schedule topics

Interview schedule topics
Knowledge about HIV transmission risks with and without HIV-positive partner being on ART
Previous and current knowledge about PrEP
Clarification of questions regarding the PrEP fact sheet
Perceived advantages of PrEP use for general prevention and conception
Perceived concerns and barriers of PrEP use for general prevention and conception
Benefits and advantages of PrEP compared with alternative known methods to reduce risk of HIV sexual transmission
Perceived importance of discussing PrEP uptake with HIV-positive partner
Expected sexual behavior changes with use of PrEP

Results

Demographics

Table 1: Socio-demographic characteristics of participants

Characteristic	Men (n=6)	Women (n=7)
Age		
<40 years	2	4
>40 years	4	3
Mean period of years in current relationship	7 years	13 years
Participants whose partner was on ART	6	7
Participants with previous awareness of PrEP	1	2
Participants with no children	3	3
Participants trying to conceive at the moment	4	2
Participants who conceived a child through IVF	2	2
Participants who tried HBSI for conception	4	Not applicable

Abbreviations: IVF, In vitro fertilization; HBSI, home-based self insemination; ART, antiretroviral therapy; PrEP, preexposure prophylaxis

Main themes

- 1) **PrEP for conception**
 - Parental and child safety
 - A more “natural” way to conceive
- 2) **PrEP for HIV prevention in general**
 - Managing risks and benefits
 - Anticipated changes to sexual practices
- 3) **The role of the partner**

PrEP for conception

Parental and child safety

- Participants expressed an interest in PrEP for conception

“The main thing that I saw [with PrEP] was the ability to conceive, with a reduced risk of contraction of HIV, that was probably the main benefit... (the risk of) contracting HIV from my partner is low it's still there and while the medication are very effective this days, you know it's still something, I mean just the general health that you need to be cautious of, so yes, taking it would be an advantage, just give me more reassurance.” (Liam, age 50-55)

- Need to compare with other available methods

“Because the child is the most important thing in your life and you want safety for everything for the child. So if the medicine works 100%, and the child will be negative then it is ok. But otherwise I prefer IVF. Because IVF is completely safe on that point.” (Emily, aged 30-35)

PrEP for conception

A more “natural” way to conceive

- PrEP Perceived as a superior option to home-based self-insemination

“I have feelings for my partner and if I want these feelings to continue I want to feel personally, emotionally and sexually fulfilled, in the relationship, [PrEP] would be the best. Otherwise if I have to go to other type of treatment like taking the sperm from the male and putting in the female (HBSI), it seems outrageous at first... Well if they have a drug, then why not? If it's successful in 90% or 99% at least close to 100%, chances are that you would not catch [HIV] even with the medicine you're taking, than I don't think there is any other way we need to create a baby.” (Alexander, age 20-25)

“So we can have unprotected sex and not use the syringes. It seems a bit more natural that way”. (Andrew, age 25-30)

PrEP for HIV prevention in general

Managing risks and benefits

“I understand that how my partner's blood levels are at the moment that he is very healthy... but still it terrifies me...and the fact that he is on treatment doesn't change how I feel about catching it... No, no [I would not use PrEP], I am not a drug user and the condoms are a pain in the neck, but its ok, we can use them” (Karin, age 45-50)

“It's something that I have to do on a daily basis and if I skipped a day or whatever so, forgetting, I could also increase the risk again, and the fact that you still have to use condoms, for me there is no benefit, and plus the side effects that may cause, the nausea and all that sort of stuff, so I thought, why put myself through that ... No benefit for me.” (Marcela, age 45-50)

PrEP for HIV prevention in general

Managing risks and benefits

“Because we don't practice safe sex, hum, I consider [PrEP] would be advantageous ... I am sure it will probably make me feel a lot better. While having sex I don't think of it but you know, afterwards it always turns on me, should we have done that?” (Joe, age 40-45)

“It would mean a form of irritation because I am not used to taking medicine on a regular basis ... something that I take because is it going to help me from catching an infection, I feel like, like I am already infected, even when I am not.” (Alexander, age 20-25)

PrEP for HIV prevention in general

Anticipated changes in sexual practices

"[Using PrEP] wouldn't change my behaviour, I would still practice safe sex and I would still be paranoid". (Karin, age 45-50)

"No it won't change, well, it might actually, we don't always have intercourse and this would probably allow us to have intercourse a bit more often." (Joe, age 40-45)

"It would change in that we would be having unprotected sex... and obviously that would be a way that we would find it [the sex] more enjoyable". (Andrew, age 25-30)

"I reckon probably [sex] would change, it probably add a bit of sparkle I suppose". (Richard, age 40-45)

The role of the partner

"I would just put [PrEP] next to his [medication] and he would make sure. No, compliance it's not an issue". (Natalie, age 50-55)

"At the end of the day we are a partnership...if I was going to take a medication like that, she would be on the same path as me, we would want to make sure it's safe ... it's not going to affect us down the track". (Richard, age 40-45)

Discussion

- Willingness to take PrEP - complex interaction between risk perception, effectiveness, relationship stage – need to explore according to each individual/couple situation;
- PrEP vs HBSI – better alternative to HBSI considering population at risk, cost-effectiveness, unintended side effects?
- Participants viewed PrEP more favourably around conception than for prevention in general
- Expected changes in sexual practices – which might or might not translate in increased risk;
- Relationship importance for adherence - a factor to consider when identifying possible candidates for PrEP

Limitations and Implications

Limitations

- Hypothetical use of a drug
- Views of participants in stable and committed relationships, with good access to treatment for HIV-positive partner
- Small sample size

Implications

- Inform the future development of PrEP guidelines for heterosexual serodiscordant couples in Australia and other similar settings;
- Contribute to a wider understanding of the needs of HIV serodiscordant couples regarding sexual & reproductive health;
- Provide information for health services targeted at this population

Thank you

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