Acceptability of injectable cabotegravir versus daily oral TDF/FTC for PrEP: Lessons from HPTN 084

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METHODS

In January 2020, we initiated a prospective qualitative sub-study with a maximum of 140 women from 4 sites [Uganda, Mzawo, Johanesburg, South Africa; Kampala, Uganda; Harare, Zimbabwe]. Up to 3 in-depth interviews (24I), spanning the trial process, were conducted with each participant. Authors were trained to conduct interview using a standard protocol, which was piloted on study participants, by country.

Sample 10–16 continuing participants (CP) per site selected from randomly generated lists of participants by period of enrollment (2018, 2019 and 2020) for repeated IIs.

In addition, up to 10 special cases (SP) who became pregnant, experienced product holds or sero-converted were also invited to participate.

Analysis The research teams followed a four-step process to 1) read transcripts for emerging themes (e.g., Flexible TDF/FTC), product-related Acceptability, Adherence, Pregnancy, PrEP Use, and Clinical Trial Experiences; 2) develop a codebook and apply codes in NVivo to transcripts with intermittent inter-rater reliability checks; 3) develop memos identifying sub-themes and illustrative examples for main codes; and 4) summarize information in Excel matrices to explore differences across risk categories related to product acceptability and other themes.

FINDINGS

Sub-study participants’ risk contexts varied across sites, and their motivations to join HPTN 084 were multiple. Over a third of women reported being monogamous, either married, cohabitating or in committed relationships. Others described multiple, sequential, or concurrent partners – some relationships were more transactional, and about 1/3 described themselves as sex workers (Table 1). Across contexts, women wanted to gain access to HIV prevention products, either to concern about their own risk behaviors or because they suspected their partner’s behaviors. Women also sought access to free long-acting contraception, HIV testing or new treatments.

To varying degrees, participants’ perceptions of injectable and oral PrEP options, and their thoughts about PrEP access and use post-trial differed by risk category.

Injectable PrEP

By far, women liked the ease and convenience of a long-acting formulation. Injectable PrEP did not require daily remembering and fit better into women’s lifestyles, especially for women who traveled or had unpredictable work:

"I liked this study because when I read my material I was possessive and when I heard that there is a place where they give you a shot every 2 months, "I thought, won’t it be easier for me?" (Uganda, 22-year-old single participant, declared sex work)"

However, most women worried about pain, some described not being able to sit or stand up straight for several hours, or not being able to return to normal activity for a long time, and stopping their pill use. More confidence in the injection and whether it could protect was because it is long-acting.

Regarding risk category, women liked the injection’s privacy from husbands, boyfriends, sexual clients or just “nosy people”. Of note, few women in any category reported disclosing study participation to partners, but were more likely to have disclosed to other family members or friends. Disclosure was at times necessary when a household member found a woman’s study products.

The potential effectiveness of injectable PrEP was mentioned by some women, more often among women in higher risk categories.

The main disadvantage of injectable PrEP was pain. Almost all women described some level of pain, but descriptions varied widely. For some, the initial injection was painful, but they got used to it over time. Others attributed the level of pain to the skill of the clinician, while for some pain continued to be the chief concern.

Oral PrEP

About a third of participants found oral PrEP easy to take and mentioned few side effects. But, more than half worried about forgetting to take oral pills. Some referenced prior mishaps, including unintended pregnancies, when taking oral contraceptive pills. Pill attributes – size, taste and smell were disliked by some.

"If I take another pill, and it does not work, and I get HIV, who will be responsible for my kids? I don’t want to take a pill that I have never taken before, and I have to keep it in my mouth, and it will still work. (Mozambique, 23-year-old married monogamous partner)"

Additionally, most participants described encountering some problems with study pill adherence. For some, adherence was challenging early in the study as they figured out the best timing to take pills. Forgetting to take their pills was a real problem, and even when they took the right time, travel unrelated to work, or too heavy drinking was mentioned by women who acknowledged sex work or engaged in transactional sex.

"I should start taking my PrEP, but I am not able to follow it. I have a lot of work, and I have a baby. (Zimbabwe, 25-year-old single participant, transactional sex)"

BACKGROUND

HPTN 084, a multisite, double-blind, randomized Phase 3 trial, compared the safety and efficacy of injectable cabotegravir (CAB) administered 8-weekly to daily oral TDF/FTC for prevention of HIV-1 in uninfected African women. Initiated in November 2017, the study enrolled 4,720 sexually active women aged 18–45 who were randomized to receive one active (CAB or TDF/FTC) and one placebo product and participated in a 5-week oral run-in before moving into an injection phase. Like a similar trial in men who have sex with men and transgender persons (HPTN 083), the trial was stopped early for demonstrating the superiority of CAB over TDF/FTC in preventing HIV. Participants in both trials have been “unblinded” (i.e., informed about which active product they were using), and are currently being followed on the product of their choice (or no product). The anticipated timeline of these two trials has expected the need to consider introduction strategies for different populations.

We examine qualitative data from the initial phase of a four-country sub-study nested within HPTN 084 to better understand acceptability of these two PrEP methods and considerations for CAB access among African women at risk of HIV.

Table 1 provides an overview of sub-study participants, by country.

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PrEP Preferences

Most women preferred injections to daily pills, with strongest preferences appearing to be related to risk category.

"The injection is painful but I will choose it. MAY YOU TELL ME WHY? (Zimbabwe, 22-year-old single participant, declared sex work)"

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Take home message: Women’s desire for privacy and ease of use outweighed other injectable concerns, resulting in a strong preference for Injectable PrEP. Concerns about cost and accessibility will need to be addressed by implemented programs.

REFERENCES

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