Multilevel social influences on PrEP modality choice and adherence among a subset of persons enrolled in HPTN083, an international injectable PrEP trial

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Presented by Christina Psaros, Ph.D.

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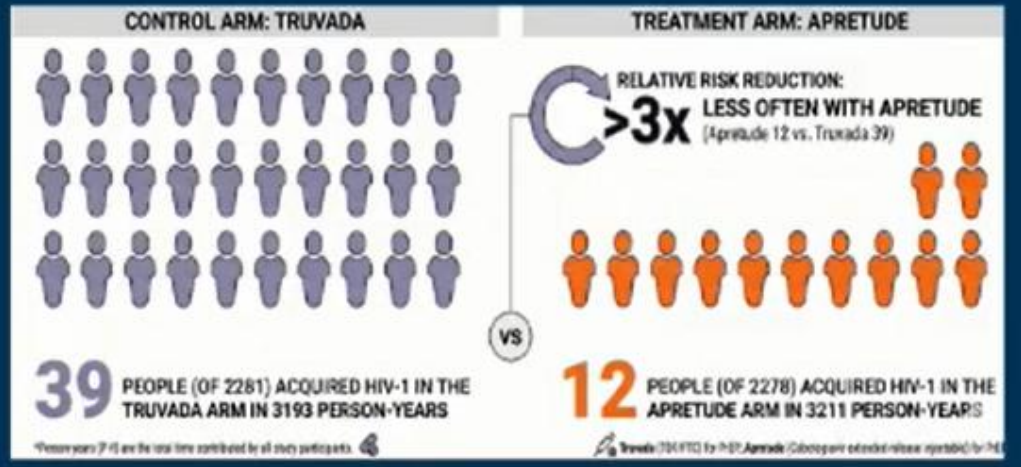
BACKGROUND

HPTN083, an international clinical trial, demonstrated the superiority of injectable PrEP CAB-LA over oral PrEP TDF/FTC.



Prior literature shows that social support and stigma influence PrEP uptake, modality choice, and adherence.

Existing research using quantitative approaches may not fully capture how stigma and social support dynamically interact across relationships and contexts to influence PrEP uptake and adherence behaviors.

Landovitz et al. N Engl J Med. 2021;385(7), Mehrotra et al. AIDS Behav. 2018;22(11), Babel et al. AIDS Behav. 2021;25(11), Golub. Curr HIV/AIDS Rep. 2018;15(2), John et al. Sci Rep. 2023;13.

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AIMS

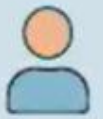
Interpersonal Level

Relationships and social networks

- **Family and partner support** (e.g., emotional and practical assistance)
- **Peer networks** (e.g., friends, community groups)
- **Disclosure and communication** (e.g., sharing health information with close others)

Institutional Level

Interpersonal Level



Intrapersonal Level

Intrapersonal Level

Individual factors that influence behavior

- **Self-efficacy** (e.g., confidence in managing one's own health)
- **Health beliefs** (e.g., perceived risk, attitudes toward treatment)
- **Personal motivation** (e.g., commitment to health goals)

Aim 1: Used **qualitative methods** to capture the dynamic, relational, and context-dependent processes through which social support and stigma shape PrEP engagement

Aim 2: Used the **socioecological model** to organize and explore how these factors operate at intrapersonal, interpersonal, and institutional levels across modalities

Institutional Level

Institutional factors and clinic culture

- **Clinic environment** (e.g., welcoming atmosphere, privacy, confidentiality)
- **Provider attitudes** (e.g., non-judgmental care, cultural competence)
- **Healthcare access** (e.g., availability of services, scheduling, wait times)

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Bronfenbrenner. In: Encyclopedia of Psychology. Oxford University Press; 2000. McLeroy et al. Health Educ Q. 1988;15(4).

METHODS

Post-unblinding semi-structured interview data with HPTN083 participants across 5 sites (N=150) during Jan 2021- May 2022.

Codebook Development

1. Two coders drafted a prior codebook with categories derived from interview guide domains and data
2. Codebook iteratively refined through application to 10 randomly selected transcripts
3. Full team applied codebook to 3 additional transcripts to finalize content

Full Scale Coding

1. 150 transcripts were independently coded by the full team
2. 15% of transcripts double-coded to establish reliability
3. Discrepancies were flagged and resolved through consensus meetings

Data Analysis

1. Content analysis on data coded under social support and stigma domains
2. Identified determinants of modality choice and adherence related to social support and stigma
3. Determinants were compared between oral TDF/FTC and CAB-LA users using constant comparative method

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Hsieh & Shannon. Qual Health Res. 2005;15(9), Glaser & Strauss. Aldine Publishing; 1967.

Post-unblinding PrEP modality choice by site

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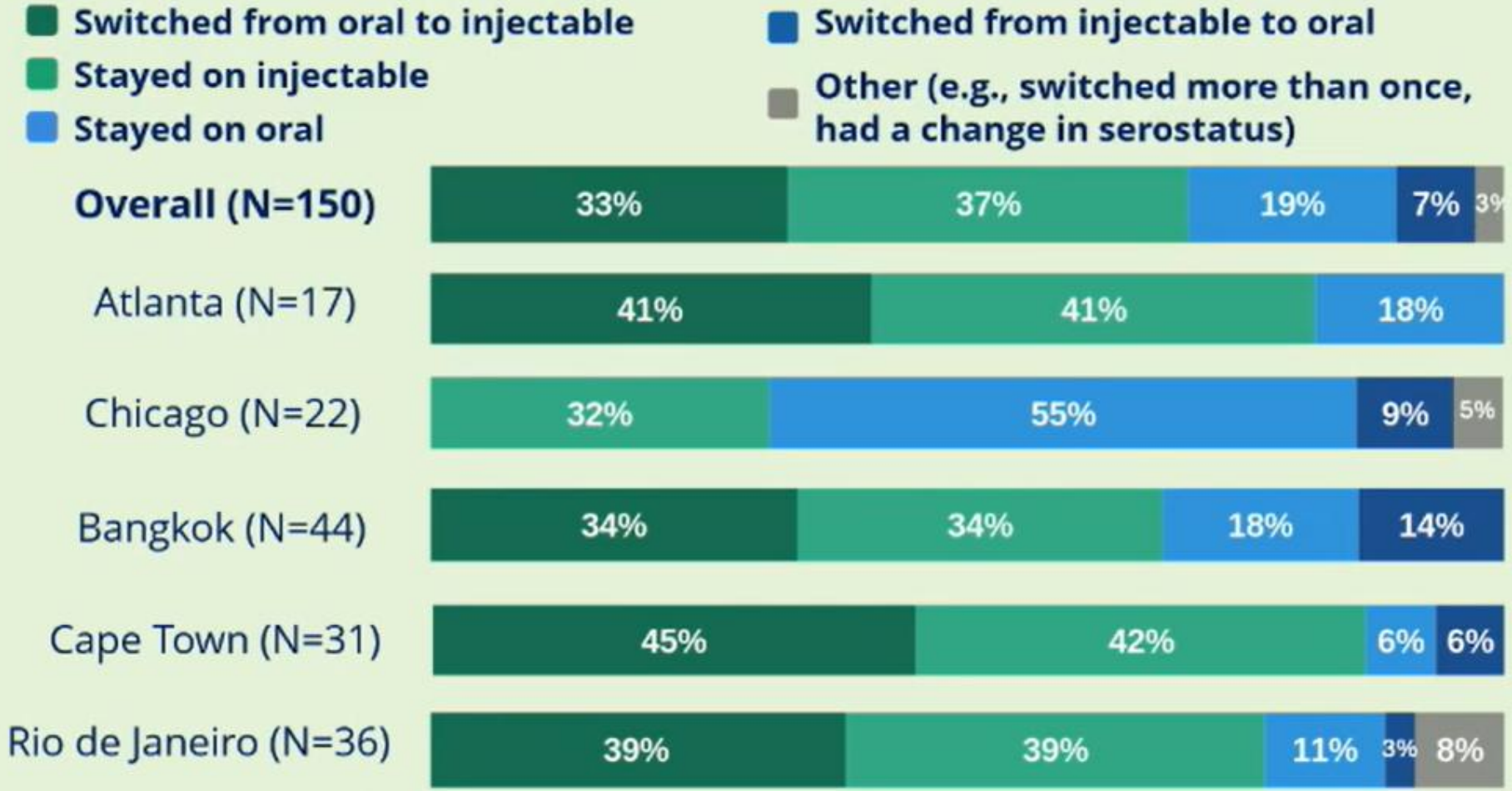

Relationship Status

Age

Bar = mean; line = ±1SD; scale 0-40 yrs

Choice for CAB-LA was shaped primarily by intrapersonal & interpersonal stigma

INTRAPERSONAL: INTERNALIZED HIV- AND SEXUALITY-RELATED STIGMA

Oral TDF/FTC was more visible and often misperceived as HIV treatment

*"I was worried about taking the pills sometimes. Others might think, do I have AIDS because I take a **medicine for AIDS**."*

Thailand, remained on injectable

*"People don't understand there is PrEP, so when they see you with it, they think that maybe you are taking the ARV ones, and it's something that is kind of embarrassing because you know that when people know that you are taking the ARVs, **they start to discriminate**."*

South Africa, remained on injectable

CAB-LA offered more discretion

*"The injection is **completely discrete**. You get here, no one knows what you do"*

Brazil, remained on injectable

"More discreet. You don't have pill bottles laying around your home and things of that nature. So that would be a plus for me."

Atlanta, from oral to injectable

Daily pills risk simultaneously outing both PrEP use and sexual orientation

*"If you take pills daily and you are still gay, with that **stigma** and with that **phobia**, people will say 'Oh, maybe this one is **HIV positive and gay**'... then you get the injection once, then you are done, no one will see."*

South Africa, remained on injectable

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stream-up.eu - To exit full screen, press Esc

Choice ped primarily by intrapersonal & interpersonal stigma

INTERPERSONAL: ANTICIPATED AND ENACTED STIGMA FROM OTHERS RELATED TO PREP USE

Oral TDF/FTC created more disclosure demands, prompting questions participants felt pressured to answer

*"Sometimes, at work, my friends asked what drug I was taking for. Were you sick? They saw me taking drug every day at the beginning. I **did not want to answer**. They doubted about it every day, at the beginning. The injection is given only one time, it would be convenient."*

Thailand, remained on injectable

*"My father even argued very badly with me about pills, but it was **pure ignorance**, because he is older and so on. But I felt a little uncomfortable talking about it with people, something that is not well-known yet, you know? I **had to explain several times** what it is and what it does and where it comes from to a lot of people."*

Brazil, from oral to injectable

Selective concealment of oral TDF/FTC to avoid being labeled as HIV positive or promiscuous

*"My partner does not know that I take PrEP pills because I did not tell him what the pills are for. If he knows... he **may think that I have AIDS and leave me."***

Thailand, remained on injectable

*"I spoke with the person I was seeing by that time and I told him that I am now taking PrEP, he even **blocked me** for some time 'Oh, you wanna sleep around"*

South Africa, from oral to injectable

*"One of my friends he participated the study and friends labeled him as he was flirting and practicing high risk sexual behaviors because he needed PrEP. When I saw this I was **afraid** to be labeled as **high risk sexual practices**."*

Thailand, from oral to injectable

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Adherence to selected PrEP modality was influenced primarily by the availability of interpersonal & institutional social support

INTERPERSONAL: SOCIAL SUPPORT FROM FAMILY AND FRIENDS FACILITATED ADHERENCE

Reminders and accountability checks from trusted persons

"When I met my friend, I just asked if he had taken the pill for the day in a playful way"

Thailand, from injectable to oral

Positive reactions after disclosure to family and friends created supportive social environments

*"Yes, my mother because I explained to her how this works... she was **encouraging** me and tell me to keep going coming as long as it kept me safe"*

South Africa, from oral to injectable

*"Because I told them once that I was participating, right? And a friend next to me said like 'wow, I participate in it too.' And I was like 'wow, so cool.' Then the others already asked 'what is it?' Then we had to explain everything to them. Every little detail **to avoid prejudice**, to avoid everything."*

Brazil, from oral to injectable

FOR CAB-LA USERS SPECIFICALLY

Coordinated and accompanied visits

"My boyfriend... will choose to not come to his visit on that date and come the following day with me"

South Africa, from oral to injectable

Altruism and social connectedness with other LGBTQ+ individuals

*"Knowing other people like me also enrolled makes the study a very interesting **support network**. We schedule, 'let's go there that date, let's go together."*

Brazil, from oral to injectable

*"I don't give a damn who says what because I wanted a cure to **help other people**. When I was growing up, my mom was diagnosed with HIV... That thing entered my mind, it was stressing me, my mom she's gonna die... that's why I'm into preventing and stuff because I don't want other people to get HIV. I really need a cure; we really need a cure for HIV."*

South Africa, from oral to injectable

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Adherence to selected PrEP modality was influenced primarily by the availability of interpersonal & institutional social support

INSTITUTIONAL: CLINIC-LEVEL SUPPORT FACILITATED ADHERENCE TO CHOSEN MODALITY

Clinic reminders delivered personally by clinic staff

*"I think one of the facilitators here helped me, because he always told me about how important it is to keep coming here. **He knows me personally**, so he would remind me about how important it was to keep coming."*

South Africa, stay on injectable

Flexible scheduling as an expression of staff respect for participants' lives

*"The **flexibility**, **just them not pressuring you**... it was very 'Okay. We wanna work around your schedule. When are you able to make these visits?"*

Atlanta, from oral to injectable

Transportation assistance as an institutional commitment to engagement

*"The **reimbursement** was very important because otherwise I would not be here, actually. I would not come to many appointments, to be honest. Because I could not come, especially because I live far away"*

Brazil, from oral to injectable

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Clinical Implications

Leveraging Social Support

FOR BOTH MODALITIES

- Encourage disclosure to trusted individuals where safe to do so
- Train adherence counselors to provide relational and informational support
- Promote buddy and support systems
- For patients who lack social support, offer clinic-initiated alternatives
- Cultivate LGBTQ+-affirming clinic environments with staff representation
- Frame counseling around the sense of purpose and community connection that some patients derive from PrEP use

Reducing Stigma

FOR BOTH MODALITIES

- Integrate questions assessing disclosure willingness, household safety, and community stigma into modality counseling
- Connect patients experiencing stigma to peer support or community resources
- Affirm patients' autonomy in choosing the modality that best fits their needs

FOR ORAL TDF/FTC

- Address PrEP misconceptions
- Encourage and support voluntary disclosure of PrEP use to trusted individuals when patients judge it safe and appropriate
- Support patients who cannot safely disclose through dose reminders, refills tracking, and regular check-ins

FOR CAB-LA

- Emphasize the discretion advantage in outreach to individuals experiencing stigma

Limitations

- Research study participants may have higher motivation and healthcare engagement compared to the general population.
- Socially-driven determinants may be unique to the specific geographical and cultural contexts of study sites; differences across sites were not examined.
- Findings subject to coder subjectivity and positionalities despite rigorous consensus coding processes.
- Potential recall bias across the multi-year study period influencing participant narratives.

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Thank you!

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