Exploring correlations between contraceptive use and PrEP adherence to inform integrated service delivery among young women in Southern Africa: a secondary analysis from HPTN-082 (ConPrEP Study)

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Organization: MU-JHU Research Collaboration, Kampala Uganda
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HPTN Regional Meeting



- Adolescent Girls and Young Women (AGYW) (aged 15-24 years) in Sub-Saharan Africa (SSA) remain at substantial risk of HIV acquisition and unintended pregnancies
- 2. Integrated service delivery models serve as a platform to implement comprehensive, complementary HIV and SRH services for AGYW to scale-up PrEP
- 3. Targeting AGYW seeking PrEP services with contraceptives would provide the dual benefit of averting possible HIV and unintended pregnancies



63% new HIV cases globally (UNAIDS)

10 Million unintended pregnancies annually by 2019 (WHO)

Adolescent Girls and Young Women Statistics

Background/Study Rationale



- Adolescent mothers face higher risks of pregnancy and birthrelated complications, and their babies face increased adverse health outcomes
- Despite this, contraceptive uptake by AGYW remains low & inconsistent
- AGYW experience multiple sexual and reproductive health (SRH) issues, therefore making integration and comprehensive HIV and SRH services critical

Study Rationale/Purpose



- In 2015, WHO recommended PrEP for people at substantial risk of HIV acquisition
- The proven benefit is that if PrEP is taken adherently, the risk of HIV infection may be significantly reduced, thus making PrEP an important HIV prevention intervention for AGYW
- Integration of contraceptive services into HIV clinics has led to increased contraceptive use and reductions in unintended pregnancies



- 1. Aim 1: To establish the correlation between highly effective contraceptive method use (Pills, injectables, implants or IUDs) and PrEP adherence among young women in Southern Africa enrolled in the HPTN-082 study, over a 26-week follow up period.
- **1a)** To evaluate association between contraceptive use and PrEP discontinuation.
- Aim 2: To evaluate association between contraceptive switch and PrEP adherence.
- Aim 3: Exploratory aim: To describe associations between any contraceptive use at baseline and transactional sex, relationship dynamics (patterns of behaviour between two people that impact how they interact, communicate, and relate) e.g., gender-based violence, number of sexual partners, age difference with primary partner, presence of secondary sexual partners and condom use among women enrolled in the HPTN-082 study.



- Aim 1: The primary analysis will apply a random effects ordinal logistic regression accounting for repeated measurements over time to assess the association between contraceptive use at baseline and PrEP adherence, through month 6, since adherence to PrEP declined after month 6
- Aim 1a: The correlation between baseline contraceptive use and any motivation to discontinue PrEP rather than clinical hold will be evaluated using survival analysis (time to discontinuation for non-clinical reason)



- Aim 2: Exposure variables will be created for participants defining whether they were on the same, switched, discontinued, or never on contraceptives and grouped into four categories. A multinomial logistic regression analysis will be applied for associations between the exposure (a woman's decision to switch contraceptive method and how this influenced PrEP adherence.
- Aim 3: Multinomial logistic regression will be applied to test for association of contraceptive use and the exposures at baseline.

HPTN-082 Study Location

Southern Africa

Location 1: Zimbabwe Location 2: South Africa





Current Status







"We live in a completely interdependent world, which simply means we cannot escape each other. How we respond to AIDS depends, in part, on whether we understand this interdependence. It is not someone else's problem."

-Bill Clinton

Healthline

Timelines



HPTN Scholar awarded in Apr 2023. Attended the HPTN Annual Meeting for orientation, revision of project proposal and identification of statistical support	Jul-Sep 2023	summary table 2023. Visit to S	cleaning. Have es by November SDMC for shop in Seattle in		– Jul 24	Have manuscript published before end of program in Nov 2024
Analys Propos SRA(s) approv Progra	ing Statistical sis Plan and Project sal with mentors and). The Proposal was yed by Scholar im Leadership in Sep Analysis begun on 08	2023	ep 3-Feb)24	Draft Manus the HPTN A	e in July 2024, script. Attend nnual Meeting 24 to present	

Mentors



Scholar Dr. Phionah, Kibalama Investigator, MU-JHU Research Collaboration

Mentor Dr. Clemensia, Nakabiito Investigator/CRS Leader, MU-JHU Research Collaboration

Mentor Jennifer, Velloza Assistant Professor, University of California, San Francisco (UCSF)

> Michael, Burton Statistical Research Associate, Fred Hutch Cancer Centre

Mentor Brenda Gati, Mirembe Investigator/HPTN Lead, MU-JHU Research Collaboration







Thank you





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