The Promise of the Dual Prevention Pill

Sanyukta Mathur, DrPH MHS
Population Council

Can Fantasies Become Realities? The Quest for Multi-purpose Prevention Products
AIDS Foundation
13 October 2021
The Population Council conducts biomedical, social science, and public health research. We deliver solutions that lead to more effective policies, programs, and technologies that improve lives around the world.
Women want multi-purpose technologies (MPTs)

- Women worldwide face dual risks of unintended pregnancy and HIV
- Risk of unintended pregnancy often outweighs concerns about HIV
- 83% of women prefer HIV/STI prevention products with contraception vs. HIV/STI prevention alone

Dual prevention pill (DPP)

• **Delivery system**: oral pill
• **APIs**: Combines 2 approved drugs (Oral contraceptive and HIV PrEP)
• Create a single product that combines a 28-day oral contraceptive regimen with oral PrEP
5.4 million HIV-negative COC users in 15 sub-Saharan African countries

- HIV-negative COC users, AGYW 15–24 years old: 1.27 million
- HIV-negative COC users, 25–49 years old: 4.13 million
Potentially a 2- to 10-fold increase in PrEP usage

Estimated DPP users compared to current PrEP users

- Current PrEP users (women and men)
- Estimated DPP users

Low range conversion estimate: 113,000
Mid-range conversion estimate: 513,000
High range conversion estimate: 1,252,000

Low range conversion estimate: 250,000

Considerations for the DPP and new biomedical technologies

While nearly all AGYW were eligible for PrEP, more need access to it.

Engaged in HIV prev programming | PrEP eligible | PrEP consultations
--- | --- | ---
Adolescent girls | 154 | 139 | 34
Young women | 289 | 272 | 112

Study site: Kenya

Health care provider perspectives & access to PrEP

Factors associated with providers’ willingness to prescribe PrEP (n=316)

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<tr>
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<th>Adj. IRR¹ (95% CI)</th>
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<tbody>
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<td>Negative attitudes toward AGYW sexuality</td>
<td>0.81 (0.66–0.99)*</td>
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<tr>
<td>Behavioral disinhibition scale</td>
<td>0.89 (0.79–0.99)*</td>
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¹Adjusted for provider demographics, prior PrEP knowledge, other facility factors (e.g., stockouts)
*p<0.05

Some of us are very critical and judgmental. We just judge someone, ‘Ooh you came again? Last time you had gonorrhea, did you do it again?’

—Service provider, age 32, TZ

Study site: Tanzania

Partnership dynamics & influence on PrEP use

Our relationship will be affected if he is not informed...if he understands me properly, he can decide to accompany me and begin to take PrEP as well. But if I don’t tell him and he finds them on his own, that is where the problem steps in.

—Young woman, Tanzania

...he [partner] came across those drugs, and he got out of control...when he found the drugs he became disturbed, furious, threw them, asked me whether a I am a commercial sex worker, whether am infected, if I had infected him. I told him the drugs are not for HIV, fearing to explain further, ...He beat me to tell him the truth.... He beat me and we seriously fought....

—Young woman, PrEP user (8mo), Uganda


DPP Acceptability Studies (2019-2023)

Qualitative formative research to explore acceptability of DPP to increase PrEP uptake.

Among CURRENT COC USERS, compare preference, adherence, and acceptability of a single DPP capsule to two separate tablets (COC and PrEP).

Focus groups with end-users (COC and non-COC users)

In-depth interviews with different cadre of family planning and HIV health care providers

Randomized, crossover clinical trials

- Zimbabwe: 30 AGYW (16-24 yrs)
- South Africa: 96 women (16-40 yrs)

Choice period (South Africa)

In-depth interviews with women who withdraw early plus sub-set of completers
Perceived benefits of the DPP

• Empower women to access HIV and pregnancy prevention they can control themselves
  • Prevent school dropout in young women due to unplanned pregnancies
  • Protect against stealthing (removal of condom during sex without consent)
  • Provide protection during spontaneous sexual activity (condom access limited)
  • Offer protection in the event of rape
• Reduce frequency of clinic visits for women currently using both PrEP and COCs
• Lessen the burden of taking two separate pills
• Positively impact contraception and PrEP uptake

Source: n = 14 FGDs with age 16–40 from South Africa and Zimbabwe
Source: n = 29 health care providers from South Africa and Zimbabwe
## Potential challenges for DPP

<table>
<thead>
<tr>
<th>Product</th>
<th>Service delivery</th>
<th>Social</th>
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| • Side effects (double the side effects?)
• Daily dosing
• Duration of use | • Provider attitudes
• Waiting period/testing requirements
• Provision outside the facility
• Counseling tools to encourage informed choice
• Counseling for effective use
• Cost/ability to afford DPP | • Partner approval
• Family and community leaders unsupportive of PrEP and/or COC use
• Myths and misconceptions around COCs
• HIV-related stigma
• Sociocultural norms and taboos regarding adolescent sexual behavior |

*Source: n = 14 FGDs with age 16–40 from South Africa and Zimbabwe*
*Source: n = 29 health care providers from South Africa and Zimbabwe*
Summary

• DPP potentially the fastest MPT to market
• May overcome uptake and adherence barriers of oral PrEP
• Potential to expand contraceptive choice
• Key to assess integration and implementation challenges early in the product development lifecycle
Acknowledgements

Study Participants

Population Council, DREAMS Implementation Science Research Team, USA, Kenya and Tanzania: Sanyukta Mathur, Jerry Okal, Nanlesta Pilgrim, Nrupa Jani, Craig J. Heck, James Matheka, Lou Apicella, Julie Pulerwitz

Kenya: Collaboration with DREAMS implementing partners (PATH/Aphia Plus) & local USAID and PEPFAR DREAMS teams

Tanzania: Local implementing partner—CSK (Catherine Kahabuka), Neema Makyao (NACP, Tanzania) & collaboration with NACP/MOH and local USAID and PEPFAR DREAMS teams

Funding support for the DREAMS studies from the Bill & Melinda Gates Foundation

Population Council, DPP Acceptability study team: Barbara Friedland, Sanyukta Mathur, Tracy McClair, Lorna Begg, Marlena Plagianos, Rebecca Brodsky, Bruce Variano, Loreley Villamide-Herrera, Susanna Grecky, Dan Loven, Thierry Bonnaire, Brady Zieman, Lisa Haddad

Wits RHI, Johannesburg, South Africa: Thesla Palanee Phillips, Krishnaveni Reddy, Lebogang Maila, Onthatile Mabo, Lydia Mampuru, Siyanda Tenza, & Wits RHI Staff


Funding support for the DPP studies from

This presentation is made possible by the generous support of the American people through the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR) and U.S. Agency for International Development (USAID). The contents are the responsibility of the authors and do not necessarily reflect the views of PEPFAR, USAID, or the U.S. Government.

Research reported in this publication was also supported by the National Institute of Mental Health of the National Institutes of Health under Award Number R34MH119982. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.