Prevention Effective PrEP Use

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2019 PrEP Learning Network Regional Workshop

12 November 2019
Goals

• What does prevention-effective adherence mean?
• Why is prevention-effective adherence important?
• How does this idea shape our PrEP continuation expectations?
When taken, PrEP works

<table>
<thead>
<tr>
<th>Study</th>
<th>% adherence</th>
<th>Efficacy</th>
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<tbody>
<tr>
<td>iPrEx</td>
<td>51%</td>
<td>44%</td>
</tr>
<tr>
<td>Bangkok</td>
<td>67%</td>
<td>49%</td>
</tr>
<tr>
<td>Partners PrEP</td>
<td>81%</td>
<td>75%</td>
</tr>
<tr>
<td>TDF2</td>
<td>79%</td>
<td>62%</td>
</tr>
<tr>
<td>IPERGAY &amp; PROUD</td>
<td>~100%</td>
<td>86%</td>
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HIV protection effectiveness

Cause and effect = in studies with high adherence, high HIV protection was seen
When taken, PrEP works

Trials where only a minority where adherent did not / could not demonstrate HIV protection.

% adherence

HIV protection effectiveness

FEM-PrEP and VOICE
≤30% adherence /
No efficacy

≥30% adherence /
High efficacy
Risk is for a season

PrEP is not for life because people move in and out of seasons of risk

- Long term commitment is established in a relationship
- HIV infected partner achieves viral suppression
- When drug injecting practice or other high risk behaviour stops

People often move in and out of ‘seasons of risk’ and ‘risky situations’ for HIV infection

Source: Module 3: Counsellors.
Prevention Effective Adherence

- Adherence aligned to risk

Success is achieved when PrEP is used during all episodes of HIV exposure. Adherence to PrEP may be periodic and mapped to periods of risk.

(Haberer et al, AIDS 2015)
PrEP as a bridge to ART

• For couples initiating ART at enrollment, PrEP is offered through 6 months, then stopped:

  HIV+ partner
  HIV- partner
  PrEP
  PrEP prior to viral suppression in HIV+ partner
  Protection through sustained ART use

• For couples in which the infected partner delayed or declined ART, PrEP is continued until 6 months after ART initiation:

  HIV+ partner
  HIV- partner
  ART delayed
  PrEP
  PrEP prior to ART initiation and then prior to viral suppression in HIV+ partner
  Protection through sustained ART use

(Heffron et al, Gates Open Res, 2018)
Prevention-effective adherence

High adherence + At risk = Effective HIV prevention

High adherence + No risk = Unnecessary burden + health care system costs

Low adherence + At risk = Potential HIV acquisition
Early experience with PrEP (generic)

- PriYA (Mugwanya et al, IAS 2018)
- LVCT Health (Kyongo et al, IAS 2018)
Interpreting early experience with PrEP

- Common conclusion: PrEP use is low
- Maybe... but we need to know the context to know if PrEP use is appropriate
- What is our denominator?
  - It is not all people living in a region with HIV incidence >3%
  - We need to consider who needs it and who wants it in the context of all HIV prevention options
Prevention-effective adherence may explain low incidence despite “low” PrEP use

- HPTN 082 (Celum et al, IAS 2019):
  - Enrolled 400 women, all at high risk of acquiring HIV
  - At 3 months, only 25% had high adherence by DBS (>700 fmol/punch)
  - Only 4 seroconversions (1%) were observed
Prevention-effective adherence may explain low incidence despite “low” PrEP use

- Possible explanations
  - PrEP use may be aligned with risk at critical times
  - Participants in PrEP programs may change their risk
    - Fewer, lower risk partners
    - Use of other HIV prevention tools (e.g., condoms)
Evidence of people knowing their seasons of risk

Partners Demonstration Project
- Periodic, daily SMS surveys about adherence and sexual behavior
- Mean adherence was 92% on surveys with risk versus 84% on surveys without risk (p=0.001)

(Haberer et al, JAIDS 2017)
Challenges with prevention-effective adherence in practice

• Knowledge/perception of risk can be challenging
  • FEM-PrEP (Corneli et al, JAIDS 2014)
  • Adolescents in South Africa (MacIntyre et al, AIDS Behav 2004)
  • MSM in Canada (Wilton et al, JIAS 2017)

• Risk scores may not function well (Giovenco et al, JIAS 2019)

• Discontinuation of PrEP was experienced as a loss of protection and a corresponding increase in risk of HIV acquisition in the Partners Demonstration Project (Gilbert et al, JAIDS 2019)
What we need to do to support prevention-effective adherence

• Support PrEP users in…
  • Determining when they need PrEP
  • Adhering during those periods

• Provide counseling that empowers PrEP users to make informed decisions

• Encourage retention in HIV prevention programs with ready access to PrEP when needed and wanted

This will be a lot easier when long-acting formulations are available!
What we need to do to support prevention-effective adherence

- Identify the appropriate denominator of PrEP users
- Contextualize PrEP adherence when considering program impact
- Recognize that non-persistence and cycling on/off PrEP is not necessarily failure
  - move away from ART mindset
Acknowledgements

• Jessica Haberer
  Harvard Medical School, Massachusetts General Hospital

• Jared Baeten
  University of Washington

• Nelly Mugo
  KEMRI, PHRD

• PrEP Users
Q&A
Supporting PrEP Effective Use and Continuation: SHAZ!
Hub implementation experience in Zimbabwe

Joseph Murungu
Pangaea Zimbabwe AIDS Trust (PZAT)
Shaping the Health of Adolescents in Zimbabwe (SHAZ!) HUB

- The HUB is a youth drop in centre in Chitungwiza, set-up in a public private partnership setting.
- Began as a research site in 2003 conducting HIV prevention and treatment studies among AGYW.
- Evolved into a youth drop in centre, that provides clinical (comprehensive SRH and HIV services) and non-clinical services to young people aged 16-24 years.
The SHAZ! HUB: Clinical services (Jan 18-Sep 19)

- Total # tracked during reporting period:
  - 2994 clients accessed services at the HUB, 60% males and 40% females

- Number tested for HIV:
  - 2500 HIV tests done, 60% males and 40% females

- Number tested for HIV:
  - 54 HIV positive clients identified, 25% males and 75% females

- STI cases attended:
  - 62 STI cases, 29% males and 71% females

- Minor ailments attended:
  - 868 minor ailments managed, 64% males and 36 females
Three Integrated Steps to Initiation of PrEP: AGYW (Jan - Jun 19)

- Pre-test
- Testing
- Post test services

HIV Testing services

Risk assessment
- Sexual activities and partners
  - History of STI
  - Condom use
  - Partner HIV status
  - History of PrEP use

PrEP readiness assessment
- Risk perception
  - Willingness to take PrEP
- Commitment and strategies for adherence
  - Strategy to enhance adherence
  - Pill storage
  - Disclosure

360 AGYW screened
268 at high risk

420 AGYW tested HIV negative

120 AGYW initiated on PrEP
INTENSIVE AND STRATEGICALLY TIMED FOLLOW UP of PrEP Clients

- Consent sought for follow up
- Peer led follow up of clients by Champions through SMS, WhatsApp, phone calls and home visits
- Non-clinical visits to the HUB used as opportunities for non-scheduled check-in
- Using the readiness assessment tool to identify and select youth who are not only at risk, but interested in and ready to take PrEP

**Overall Continuation:**

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<th>HRF</th>
<th>FSW</th>
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<tr>
<td>1 Month</td>
<td>100%</td>
<td>97%</td>
</tr>
<tr>
<td>3 Months</td>
<td>83%</td>
<td>70%</td>
</tr>
<tr>
<td>6 Months</td>
<td>83%</td>
<td>63%</td>
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Enabling Environment

• Using the readiness assessment tool to identify and select youth who are not only at risk, but interested in and ready to take PrEP

• Peer led regular follow ups and interactions by text, call and home visits

• Youth friendly and sensitive staff and environment
  • Confidentiality when accessing other services

• Supportive environments which enable the clients, staff and parents/guardians to work together to support continuation

• Regular dialogues
Conclusion

• Multiple strategies should be employed to improve uptake, effective use and continuation on PrEP among young people through peer led, youth friendly and sensitive platforms

• Young people should be engaged in the design, planning, implementation and improvement of services
Acknowledgements

• SHAZ HUB! Staff and clients
• Pangaea Zimbabwe AIDS Trust
• Ministry of Health and Child Care
• Gilead Sciences
• PSI Zimbabwe
Supporting effective PrEP use and continuation: the POWER study experience in South Africa

Elzette Rousseau
Desmond Tutu HIV Foundation
Study Population

HIV negative women
Ages 16-25 yrs
Sex in the last 3 months
Up to 3000 young women

Study Sites

Adolescent Friendly Clinic (Johannesburg)
Mobile Clinic (Cape Town)
Family Planning Clinic (Kisumu)
Ministry of Health Hospital (Kisumu)

South Africa
Kenya

Enroll
Accept PrEP
SOC, PrEP and adherence support
SOC and offer PrEP
Decline PrEP

Implementations Science study of PrEP delivery models to adolescent girls and young women assessing uptake and adherence to PrEP as a SOC option
POWER and Persistence

- Visit schedule
  - Enrollment
  - Month 1
  - Quarterly
  - Flexibility in schedule e.g. integrate with family planning schedule
- Counseling staff provide suggestions on ways to help young women remember to take their pills
- PrEP information shared

Persistence is defined as continuous PrEP use, per dispensing at months with an attended visit or having previously dispensed supply of at least 30 days of PrEP at months without attended visit. Persistence is calculated based on pharmacy records.
PrEP Decision Tool offering choice and education on prevention methods

Shared decision-making approach to counseling
Results: Participant Behavioural Data

[June 2017 – Sept 2019; N = 2077]

- **31%** Positive STI test (gonorrhea and/or chlamydia)
- **87%** Unable to consistently use condoms
- **65%** Do not know their partner’s HIV status
- **86%** Primary partner might have other partners
- **15%** More than 1 sex partner
- **74%** Sex partner provides financial support
- **4%** In known serodiscordant relationship
PrEP uptake, interruptions and restarts

Omollo V et al. IAS July 2019, Mexico City

**PrEP uptake**
- 91% of 1738 who enrolled

**PrEP interruptions**
- 94% of 1423 expected within 6 months

**Time to restart**
- 46% restarted within a month
- 20% of 1094 who should have visited

**Restarts**

**IMPORTANTLY** women sometimes did not view these periods as interruptions (e.g. intentional delays of PrEP initiation after the first prescription, attending follow-up visits late, or periods of PrEP non-use due to sexual abstinence).
Young women using contraception were more likely to initiate PrEP on the same day ($p=0.001$) 

PrEP initiation was significantly associated with contraception initiation on the same day ($p=0.003$)
Key considerations for PrEP delivery

- Location, convenience & confidentiality is essential
- Remove PrEP out of the narratives of ARV’s/illness and rather link it to general SRH/Contraception use/health: gain-frame messaging
- Adolescent friendly services
- Parents, partners, families and friends influence uptake and consistent use of PrEP
- High STI prevalence improves risk perception
- Establish peer support groups and bank on snowball effects

Want short waiting times: it should be a pickup just like I pick up condoms; and I can call you when I want to know more information

Want PrEP available everywhere: clinics, community centres, schools, dropped at my house

“One size does not fit all”
Tailored yet Flexible

Integrated Services

Convenience: Time, Location & Duration of PrEP delivery

Adolescent Friendly Services

Community Education + Adolescent Specific Messaging

Essential Components
PrEP delivery from mobile clinic, Cape Town

- Recruit 1000 HIV uninfected women ages 16-25
- Adolescent Friendly Services (fast and convenient)
- Anonymous biometric medical records
- Contraception services
Differentiated Models of PrEP Delivery

- Mobile Clinic
- POWER PrEP Adherence Club
- Local Government Clinic
- Courier PrEP delivery
The future: Gender-responsive PrEP delivery

- Acceptability, Accessibility, Options
- Trusting Provider-Community-Client Relationship
- Networks in the Community of Adolescent Girls and Young Women
- Non-fragmented and Integrated Services
- Enabling Self-Efficacy
Acknowledgements

- Linda-Gail Bekker
- Connie Celum
- Jared Baeten
- Tutu Teen Truck team
- POWER study team
- Future Fighter Youth CAB
- Young people & their families
- DTHF/DTHC Funders
Jhpiego PrEP Implementation Experience in Lesotho

Supporting effective use and continuation

Tafadzwa Chakare
MBChB, M.Phil

Johns Hopkins University Affiliate
Community PrEP - Overview

- Lesotho has 2.2 million population, adult HIV prevalence of 25% and incidence of 1.5
- Jhpiego responsible for community based PrEP primarily targeted at AGYW, FSW and MSM
- Over 12 000 new clients enrolled between January 2018 and September 2019
Scale-up Characterized by Early Attrition

Multiple Parallel Interventions

- Weekly continuation tracking
- Generation Aspire
- Observed start
- Premobilization
- 7 Day phone call
- Community PrEP Groups
- Destigmatized packaging
- Engagement of village health workers
PrEP Continuation Innovations and Improvements

**Generation Aspire**
Empower AGYW during their first month on PrEP to share experiences with peers.

**RESULT**
63% of participants continued PrEP beyond 1 month.

**Community PrEP Groups**
Groups send a representative to collect refills each month.

**RESULT**
100% continuation* after 12 months.
*based on 1 group of 10 clients

**Pre-Mobilization**
Start discussions with communities in advance of services being offered.

**RESULT**
79% returned for 1 month refill, compared to continuation rates of 27-46% in the district at the time.

**Observed Start**
Clients take their first dose of PrEP with the nurse to eliminate the fear of swallowing the pill.

**RESULT**
50% of clients returned for refill after 30 days, compared to continuation rates of 33-41% in the district at the time.

**7-Day Phone Call**
Clients receive a phone call from a provider within 7 days of starting PrEP.

**RESULT**
60% of clients returned for refill after 30 days, compared to continuation rates of 33-41% in the district at the time.

**CROSS-CUTTING SOLUTIONS**
- Calling or WhatsApp messaging with clients scheduled for refills the week prior to appointments to remind them to come for their refill.
- Providing clients with pill cases shaped like lip balm at their 30-day refill to allow for easy carrying of a 7-day supply in their bag.
Community PrEP 30 Day Continuation Trend

1 Month Continuation Rate (%)

Client Cohort

Active continuation monitoring started 25 Feb 2019
Thank You
PrEP user support groups and leveraging PLWHA: the Kenya experience

OPTIONS PrEP Learning workshop
Blantyre, Malawi
November 12, 2019

Njambi Njuguna
Senior Technical Advisor, clinical services
Background

• LINKAGES Kenya ran from March 2016
  – Reached 58,759 FSW and 12,306 MSM in FY19
  – Package of services includes PrEP
  – Partnered with Jilinde in 6 out of 16 counties of operation

• Key challenge is continuation
  – Low rates in both populations
  – Discussions with beneficiaries on reasons revealed several issues, including forgetting to take PrEP, low risk perception, fear of stigma/actual stigma, myths and misconceptions
Support groups

• 2 types:
  – PrEP support groups with HIV negative individuals
  – Mixed support groups with HIV negative and positive individuals

• Purpose is to maintain/support continuation through peer-led efforts

• Meetings scheduled to run once a month; segregated by KP typology

• Target is new PrEP users, drop-outs from month 1
PrEP user support groups

• Approx. 20 per group – newly initiated with a few PrEP champions
• Day of meeting determined by organizations e.g. some coincided with PrEP refill days, some coincided with PrEP theme days
• Key discussion points: benefits of PrEP, myths and misconceptions, challenges to continuation and how to address them
Mixed support groups

- Approx. 20 per group: mix of HIV- and HIV+
- HIV+ clients willing to self-disclose
- Focus is for newly initiated, early discontinuations
- Adherence challenges addressed pre-emptively (newly initiated) and benefits of PrEP (vs ART) plus tips for continued adherence
- Strategy most successful among MSM
Lessons learnt

• Support groups work, but composition is critical
  – Mixed groups require disclosure
  – Mixed groups may not work for all populations and settings

• Support groups are not ‘forever’
  – Only one or two sessions needed (PrEP only for a season)

• Support groups are not for everyone
  – Clients who come for their refills on time may not need support groups
EXPERIENCE SHARING & GROUP DISCUSSION