PrEP delivery in public health settings: Successes and barriers

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On behalf of the Senegal PrEP Team
One of the Demonstration Studies Sponsored by the Gates Foundation

- Kenya
- India
- South Africa
- Nigeria
- Benin
- Senegal
- Mozambique
Background

• National HIV prevalence <1%
  – FSW (30%)
  – MSM (19%)

• There is a need to move beyond the existing types of interventions;
  – Interventions such as community-level and structural HIV prevention types of programs were recently added

• Now adding biomedical intervention to help lower the HIV incidence and prevalence among FSWs
Context

• PrEP implementation in real-world clinical settings for future scale up plans
  – Implemented in 4 Ministry of Health (MoH)-run clinics in Dakar, Senegal

• Sex work is legal and regulated in Senegal
  – FSWs can register with the system for monthly HIV/STIs visits in MoH-run clinics

• The demonstration project enrolled both registered and also unregistered sex workers
Intervention & Measures

Visits: Baseline, 7 days, 1, 3, 6, 9, and 12 months

Medication: Daily PrEP (Truvada) – dispensed day 0, month 1, and every 3 months thereafter

Measures:
- Socio-demographics
- Medical History
- Physical Exam
- Laboratory Test:
  - Urine βHCG; Urine dipstick; HIV-1 ELISA; HBsAG and HBsAG+; Serum Chemistry, LFT; CBC; STI screening; vaginal swab for Y chromosome PCR; Medication levels
- Behavioral Assessments:
  - Social support; Self-reported adherence; Sexual Activity and condom use; Risk perceptions; Alcohol, and drug use assessment
Key Findings - Enrollment and Uptake
Key Findings - Retention

Before adjustment

88 subjects out of 267 discontinued
One year Retention : 67.0%

After adjustment

68 subjects out of 267 discontinued
One year Retention : 74.5%

Adjustment: Reasons of discontinuation such as death, pregnancy, moved out of the area, had a car accident were not counted as events
Predictors of Retention

- Older age among FSW was found to be a significant predictor of higher PrEP retention ($P = 0.0012$)

- Age Categorized:
  - 18-24 year age group: 1
  - 25-34 year age group: (OR = 2.53, 95%CI = 1.22-4.99),
  - 35-44 year age group: (OR = 3.24, 95%CI = 1.57-6.23), and
  - 45+ year age group: (OR = 3.85, 95%CI = 2.13-10.27)

- No significant differences in retention by site, education, registration as sex worker status, condom use or HIV risk perception.
Reasons for non-adherence

• Most participants did not take meds when did not feel at risk

• 3 top reasons of non-adherence
  – Simply Forgot (20%)
  – Too busy with other things (18%)
  – Run out of study pills (14%)
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<tr>
<th>Barriers</th>
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<tr>
<td>Fear of stigma</td>
<td>Personal/Motivational Interviewing</td>
<td>Stigmatization</td>
<td>Personal/Motivational Interviewing</td>
<td>Lack of coordination between different sectors within health centers</td>
<td>Trainings of health staff</td>
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<td>Medication (Daily intake, size, color)</td>
<td>Group Counseling sessions</td>
<td>(at the family &amp; community level)</td>
<td>Group Counseling sessions (sharing positive stories, experiences and tricks)</td>
<td>Work load</td>
<td>Capacity building and planning evaluation (Lab QMS, Pharmacy SOP, SOP for coordination of activities between different sectors.)</td>
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<td>Blood test at each visit (quarterly)</td>
<td>Free treatment of diagnosed STIs</td>
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<td>Lack of Research Experience</td>
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<td>Mobility</td>
<td>Provision of condoms</td>
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<td>Mobility of site staff</td>
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<td>Younger age</td>
<td>Younger peer-educators</td>
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<td>Site and laboratory capacity and logistics (freezers, reagents, sample kits)</td>
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Lessons Learned

• Successful enrollment and retention of FSWs in PrEP when offered in Ministry of Health (MoH)-run clinics

• Challenges
  – Sex Worker Population very Mobile
  – Despite continuous recommendation of daily PrEP use,
    • medication mostly taken when feeling of being at risk
  – Human resource and structural issues at facilities
  – Challenge of enrolling younger participants
  – Personal, social and structural stigma

• Personal and group counseling sessions to support enrollment, retention, and adherence
Experience in other public health settings

• In South Africa:
  – Retention rate was pretty low, but women who really wanted to take PrEP came and stayed
  – Mobile services may help with the next stage of reach.

• In Swaziland:
  – 59% clients were retained at 1-month after PrEP initiation.
  – very high self-perceived risk of HIV infection, middle age, and having a partner known to be living with HIV were significantly significant predictors of retention at 1-month
What we would do differently

• Earlier in the process (top 3):
  – Have a higher number of younger peer-educators

  – Match the number of participants attending site visits to staff workload:
    • Better coordination between peer-educators and site staff

  – Better coordination between different sectors within health centers
What to Do Next...

• National dissemination meeting with Ministry of Health and key in-country stakeholders
• Include recommendations into next in-country National strategic plan
• Ministry of Health (MoH)-run clinics can be used possibly used to expand PrEP’s access nationwide
  – not only for FSWs, but also for
  – other high-risk groups such as Men having Sex with Men (MSM), serodiscordant couples, or IV drug users
• Use of an event-driven versus mandatory daily PrEP
• Secure funding for scale-up effort
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Thank you!!