Potential implications of HIV-risk perception, HIV testing, and PrEP knowledge for PrEP service delivery in Central Uganda

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Disclosures

• I have no real or apparent conflicts of interest to report
Background

- Uganda is committed to improved HIV prevention.
- In December 2016, Uganda drafted and endorsed the national PrEP guidelines for use of tenofovir-based PrEP.
- PrEP roll-out in Uganda started in August 2017 at selected sites in a funded and phased approach.
Background

Scale-up of PrEP is targeting most at risk populations and priority populations:

1. Serodiscordant couples
2. Men who have sex with men
3. Female sex workers
4. Fisher folk
5. People who inject drugs
6. Transgender
7. Adolescent girls and young women
8. Long distance truck drivers
9. Prisoners
10. Migrant workers (road construction / tea plantations, etc)

There is, however, limited data to guide identification and engagement of these potential PrEP users in the region.
Methods

• This was a cross-sectional study using a semi-structured questionnaire.
• We targeted participants from 3 geographic regions:
  – Urban
  – Peri-urban
  – Rural
We recruited PrEP naïve individuals from the 4 MARP/PP groups who self-identified as HIV-negative

1. Serodiscordant couples

2. Men who have sex with men

3. Female sex workers

4. Fisher folk

Recruitment of participants was done from HIV Testing Service centers, safe spaces and by using snowballing.
Interview questions

- Data was collected using a one-time interview administered questionnaire:
  - HIV risk perception
    - Self assessment of HIV risk
    - Knowledge of factors that put individual at risk (multiple partners, STIs, no condom use)
  - Knowledge of PrEP
    - What PrEP is
    - Difference between PrEP and PEP
  - HIV testing
    - History of testing
    - Frequency of testing
    - Willingness to do test in next one year and how often
Analysis

• We used descriptive statistics to understand characteristics and perceptions of potential PrEP users
• We used multivariable logistic regression analysis to understand how these factors may influence PrEP uptake
• We used HIV testing as a proxy for accessing HIV prevention services
Participant characteristics

• 390 individuals were approached and 250 accepted enrollment:
  – Men who have sex with men: 74 (30%)
  – Fisher folk: 67 (27%)
  – Female sex workers: 56 (22%)
  – Serodiscordant couples: 53 (21%)

• Average age was 29 years (SD 10.5)

• Region of origin:
  – Rural: 91 (36%)
  – Urban: 83 (33%)
  – Peri-urban: 76 (31%)
Perceptions and behaviors

• HIV testing frequency
  – Previously tested for HIV: 247 (99%)
  – Reported testing several times a year: 188 (76%)

• Perception of risk in next year
  – High: 81 (32%)
  – Moderate: 51 (21%)
  – Low: 72 (29%)
  – None: 21 (8%)
  – Don’t know: 25 (10)

• Preference for PrEP delivery
  – Location of service delivery (district hospital): 87 (35%)
### Multivariable Regression model for predicting HIV Testing

**Low Vs High**

<table>
<thead>
<tr>
<th>Predictor</th>
<th>aOR (95% CI)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perception of risk in next year</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Low</strong></td>
<td>Ref</td>
<td></td>
</tr>
<tr>
<td><strong>High</strong></td>
<td>0.8 (0.4, 1.7)</td>
<td>0.52</td>
</tr>
<tr>
<td>Number of sexual partners in past 30 days</td>
<td>1.01 (1.0, 1.03)</td>
<td>0.04</td>
</tr>
<tr>
<td>Location of service delivery</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Rural</strong></td>
<td>Ref</td>
<td></td>
</tr>
<tr>
<td><strong>Peri-urban/urban</strong></td>
<td>0.4 (0.2, 0.9)</td>
<td>0.027</td>
</tr>
<tr>
<td>Lack of knowledge of partner status</td>
<td>0.3 (0.1, 0.8)</td>
<td>0.016</td>
</tr>
<tr>
<td>PrEP reminder by spouse/family</td>
<td>0.4 (0.2, 1.1)</td>
<td>0.07</td>
</tr>
<tr>
<td>Preference of PrEP delivery at district hospital</td>
<td>3.5 (1.2, 10.2)</td>
<td>0.025</td>
</tr>
<tr>
<td>Preference of PrEP delivery at facility close to residence</td>
<td>0.4 (0.2, 0.9)</td>
<td>0.024</td>
</tr>
</tbody>
</table>
Conclusions

- Knowledge of PrEP among HIV-negative MARPs/PPs in central Uganda is limited

- Self-perceived HIV risk alone is not related to HIV testing frequency

- Counseling geared toward number of sexual partners and partner HIV status may be helpful in identifying individuals for whom PrEP may be a good option

- Given variable testing by region and proximity to home, outreach efforts should consider the geographic location of potential PrEP users
Next steps

• Data collection from potential PrEP users (PPUs) and health care workers (HCWs) is going post PrEP basics training.

• Collection of qualitative data from PPUs and HCWs is ongoing (ongoing)

• Systematic Review for PrEP research and service delivery (ongoing)
Acknowledgements

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THANK YOU

QUESTIONS?

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