PrEP uptake among pregnant and postpartum women: results from a large implementation program within maternal child health (MCH) clinics in Kenya

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PrEP Implementation for Young Women and Adolescents (PrIYA) Program
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No Conflict of interest to declare
HIV incidence is high among pregnant & postpartum women

- HIV incidence similar to other high risk groups
- Increased risk in pregnancy and postpartum
  - hormonal and physiological changes
  - external partnerships
- Women often unaware of partner HIV status and do not perceive risk

HIV risk per unprotected coital act increased in pregnancy & postpartum

Thomsom et al 2018
Women with acute HIV have higher MTCT
- higher viral load
- absent HIV immune responses
- no maternal or infant ARVs

~40% of infant HIV infections due to acute maternal HIV

Initiatives promoting primary HIV critical to protect HIV negative women & eMTCT

Dinh et al 2015; Johnson et al 2012; Drake et al 2014
WHO and Kenyan guidelines support PrEP in pregnancy and postpartum
Unanswered questions regarding PrEP in pregnancy & postpartum

• Will pregnant/breastfeeding women recognize risk for HIV?

• Which pregnant women should be offered or receive PrEP?

• Will women accept PrEP?
  – Who accepts PrEP?

• Will women adhere to PrEP?
  – Who adheres?
Implementation program delivering PrEP within MCH and FP clinics in Kisumu, Kenya

PrIYA is part of the DREAMS Innovation Challenge funded by PEPFAR & managed by JSI Research & Training Institute, Inc.
Distribution of 16 PrIYA sites across Kisumu County, Kenya

1. Ahero
2. Airport
3. Awasi
4. Chiga
5. Chulaimbo
6. KCH
7. Koru
8. Lumumba
9. Manywanda
10. Maseno
11. Migosi
12. Muhoroni
13. Nightingale
14. Nyalenda
15. Nyakach
16. Rabuor
• Evaluate PrEP acceptance and cofactors of uptake among pregnant and postpartum women offered PrEP within routine MCH
Methods

• HIV-uninfected women seeking routine ANC and PNC

• Screened for behavioral risk factors and willingness to consider PrEP

• System for PrEP delivery in MCH
  – co-delivery (one nurse)
  – coordinated (two nurses)
Methods (cont’d)

• Dispensed PrEP
  – same visit
  – within MCH clinics
  – willing to initiate and medically eligible

• Logistic regression models to determine cofactors of uptake

• Analyzed data from Nov 2017-May 2018
Results

Women assessed for behavioral risks & willingness to consider PrEP

\[ N = 9171 \]

Pregnant (52%)  Postpartum (48%)

Did Not Initiate PrEP

\[ N = 7178 \ (78\%) \]

Pregnant (54%)  Postpartum (46%)

Initiated PrEP

\[ N = 1993 \ (22\%) \]

Pregnant (45%)  Postpartum (55%)
### Characteristics of women offered PrEP (n=9171)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Median (IQR) or N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td>24 (21-28)</td>
</tr>
<tr>
<td>Age &lt;24 years</td>
<td>46%</td>
</tr>
<tr>
<td>Married</td>
<td>84%</td>
</tr>
<tr>
<td>Partner HIV status unknown</td>
<td>34%</td>
</tr>
<tr>
<td>Gestational age (weeks)*</td>
<td>26 (20-32)</td>
</tr>
<tr>
<td>First antenatal care visit*</td>
<td>45%</td>
</tr>
</tbody>
</table>

*Among pregnant clients*
PrEP uptake by characteristics (n=9171)

**Partner HIV status**
- HIV-positive: 79%
- Unknown: 37%
- HIV-negative: 12%

**Pregnancy status**
- Postpartum: 25%
- Pregnant: 19%

**Age**
- <24 years: 24%
- ≥24 years: 20%

**Marital status**
- Unmarried: 28%
- Married: 21%

(p<0.001)
## Correlates of PrEP initiation (n=9171)

<table>
<thead>
<tr>
<th>Factor</th>
<th>Crude Odds Ratio (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transactional sex(^1)</td>
<td>3.1 (1.4-6.8)*</td>
</tr>
<tr>
<td>Diagnosed with STI(^1)</td>
<td>3.0 (1.5-6.0)*</td>
</tr>
<tr>
<td>Forced to have sex(^1)</td>
<td>4.7 (2.4-9.3)**</td>
</tr>
<tr>
<td>Experienced IPV(^1)</td>
<td>3.2 (1.4-7.2)*</td>
</tr>
<tr>
<td>Partner HIV status unknown</td>
<td>3.7 (2.8-4.9)**</td>
</tr>
<tr>
<td>Age &lt;24 years</td>
<td>1.2 (1.1-1.4)*</td>
</tr>
<tr>
<td>Postpartum (vs pregnant)</td>
<td>1.5 (1.0-2.1)*</td>
</tr>
</tbody>
</table>

\(^1\) In the last 6 months

*p<0.05; **p<0.001
Reasons for not initiating PrEP among non-initiators with risk factors for HIV (n=2092)

- Need to consult my partner: 38%
- Low perceived HIV risk: 35%
- Pill burden: 13%
- Fear of IPV: 4%
- Fear of effects on unborn baby*: 2%
- Virally suppressed HIV-positive partner: 1%

*Among pregnant clients
Conclusions

• 1 in 5 pregnant & postpartum women accepted PrEP

• PrEP initiators were more likely to have HIV risk factors

• IPV or fear of effects on babies were infrequently reported as barriers

• One third had a partner of unknown HIV status
Implications

• Routine MCH clinics are an important platform for PrEP delivery

• Innovations are needed to increase knowledge of male partner HIV status
Ongoing analysis

- Adherence to PrEP
- Rates and reasons for discontinuing PrEP
Acknowledgments

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PrEP Uptake among Pregnant and Postpartum Women
Session Title: Making the Case: Ending Silos Once and for All with Evidence
Session Date: Sunday, 22 July 2018
Session Time: 9:50-10:45

Uptake of PrEP within clinics providing integrated family planning and PrEP services: Results from a large implementation program in Kenya
Session Code: TUAC03
Session Title: Diversities in delivery: PrEP from home to clinic
Session Date: Tuesday, 24 July 2018
Session Time: 16:30-18:00
Session Room: E105-108

PrEP uptake among pregnant and postpartum women: results from a large implementation program within maternal child health (MCH) clinics in Kenya
Session Code: WEAE04
Session Title: PrEP: Work in progress
Session Date: Wednesday, 25 July 2018
Session Time: 14:30-16:00
Session Room: Elicium 1