Ending the HIV Epidemic among Diverse Populations of Women

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Overview

- Challenges regarding PrEP uptake
  - Community-level
  - Psychosocial

- Who are we missing?
- Future research needs
PrEP Uptake Among Women of Color

**Individual-Level**
- Low self-perceived risk
- Potential side effects
- Not wanting to take a daily pill
- Other life priorities
- Relationship dynamics (Gender inequality)

**Systems-Level**
- PrEP availability
- Limited health care access
- Transportation
- Cost (Perceived)
- Gender Inequality

**Community-Level**
- Medical Mistrust
- Research Mistrust
- HIV-related Mistrust
- Stigma
- Gender Inequality

<table>
<thead>
<tr>
<th>Authors (Year)</th>
<th>Population</th>
<th>PrEP Awareness (%)</th>
<th>PrEP Willingness (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rutledge R et al (2018)</td>
<td>125 women in CJS* 59% White/22% Black Connecticut</td>
<td>25%</td>
<td>90%</td>
</tr>
<tr>
<td>Patel AS et al (2019)</td>
<td>225 women - - 72 PrEP eligible 83% Black/16.9% non-Black Southern US</td>
<td>11%</td>
<td>77%</td>
</tr>
<tr>
<td>Carley T et al (2019)</td>
<td>144 women 62% Black/31% White GYN clinic in Louisiana</td>
<td>44%</td>
<td>38%</td>
</tr>
</tbody>
</table>

*Criminal Justice System
Medical Mistrust

“Social inequality drives mistrust; Mistrust drives disparities”

Types of Medical Mistrust:

- Health care provider-level
- Clinic-level
- System-level: mistrust in the health care system or the government
- Research-related
- **HIV-Related Mistrust**: holding certain beliefs regarding HIV (“conspiracy beliefs”)

- Highest among Black and Latinx individuals

- Associated with lower ART adherence, **decreased PrEP willingness**, higher HIV testing


Intimate Partner Violence (IPV)
Gender Inequality & HIV

- Gender inequality is associated with IPV
- Women of color are more likely to experience IPV
- IPV increases risk of HIV acquisition
- Women who have experienced IPV may be more willing, but IPV is a barrier to PrEP use
- PrEP guidelines?

Complex Drivers of PrEP Utilization among Women of Color

- Racism and Social Inequality
- Mistrust
- Self-perceived Risk
- ?
- Health Literacy
- Health Care Access
- Gender Inequality
Nationally: Immigrants Diagnosed with HIV by Region, 2010-2014
17.2% of Total (36,324): 26.7% Female

- Europe: 4.4%
- Africa: 17.8%
- South America: 8.7%
- Caribbean: 21.2%
- Asia: 10.4%
- Central America & Mexico: 35.9%

Massachusetts: Women Diagnosed with HIV Infection Within the Years 2015-2017, by Race/Ethnicity and Place of Birth
36% of the Total

- White NH: 81%
- Black NH: 26%
- Hispanic/Latino: 45%

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 01/01/19

Kerani R et al. CROI 2017. Abstract #851
Metropolitan Statistical Areas with the Largest Number of non-US Born Individuals Living with HIV 2010-2014

New York City
Miami-Dade County
Houston
Dallas
Oakland
San Diego
Washington DC
San Francisco
Los Angeles
Fort Lauderdale
Silver Springs, MD
Orlando
West Palm Beach

Africa
Caribbean
Asia
South America
Latin America

Kerani R et al. CROI 2017. Abstract #851
# National Data: HIV Among Black Individuals in the US

## US versus Non-US Born

<table>
<thead>
<tr>
<th></th>
<th>US Born</th>
<th>Non-US Born</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender (new diagnoses)</td>
<td>&gt;Male</td>
<td>&gt;Female</td>
</tr>
<tr>
<td>Risk Category (Men)</td>
<td>Majority MSM</td>
<td>Majority Heterosexual</td>
</tr>
<tr>
<td>Highest Annual Rate (2008-2014)</td>
<td>MSM</td>
<td>African Women</td>
</tr>
<tr>
<td>Diagnoses Trend</td>
<td>Largest decline among women</td>
<td>Smallest decline among women</td>
</tr>
<tr>
<td>Late Diagnoses*</td>
<td>26%</td>
<td>37%</td>
</tr>
</tbody>
</table>

* *AIDS classification ≤ 3 months after HIV diagnosis*  

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### Annual HIV Diagnosis Rates, 2014 per 100,000 Population

<table>
<thead>
<tr>
<th>Population</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>African-born women</td>
<td>100.5</td>
</tr>
<tr>
<td>US-born Black men</td>
<td>72.8</td>
</tr>
<tr>
<td>African-born men</td>
<td>51.3</td>
</tr>
<tr>
<td>Caribbean-born men</td>
<td>40.6</td>
</tr>
<tr>
<td>Caribbean-born women</td>
<td>31.8</td>
</tr>
<tr>
<td>US-born Black women</td>
<td>19.1</td>
</tr>
</tbody>
</table>
Non-US Born Individuals and HIV

- **Immigration is a social determinant of health**
  - Language discordance, lack of familiarity with the health care system, poverty, and fear
  - The Ryan White HIV/AIDS Program covers any HIV-infected individual in need, regardless of immigration status

- **Women**
  - High rates of HIV-stigma, low rates of HIV knowledge
  - Gender inequality, IPV
  - Once in care: mental health (depression/PTSD), status non-disclosure, isolation, quality of life concerns

PrEP Use among non-US born Women

- **Are non-US born individuals at risk here in the US?**
  - Constructed a national HIV transmission network for all individuals diagnosed in the US from 2001-2013 (genetically similar viruses)
  - **38%** of transmission partners of female non-US born individuals were born in the US
  - **Conclusion**: A significant proportion of newly reported HIV infections among non-US born women occurred after immigrating to the United States.

Little data about PrEP barriers and uptake among at risk non-US born women

Valverde EE et al. JAIDS. 2017
**Tulumbe!** or “Let’s Engage”: Academic-Community-Department of Public Health Partnership

**MISSION:** To build a sustainable partnership that considers the contributions of patients, community members, and researchers to reduce the impact of HIV among African immigrants

Listed as the primary strategy to address HIV among non-US born individuals in the MA State Comprehensive Plan 2017-2021

**Funding Source:** Patient Centered Outcomes Research (PCORI) funded, 5136253-014
HIV Cluster Investigation among Injection Drug Users

Total new HIV infection: 129
Percent female: 43%
Risk factor: 90% IDU (potentially also sexual risk)
Race/ethnic: 85% white non-Hispanic females
Mean age: 35 years old
HCV infection: 90% current or past

Women Who Use Drugs (WWUD)

- More than 12 million women reported illicit drug use in the past month and have increased HIV risk
  - *PrEP works for women who inject drugs*: Bangkok Tenofovir Study
    - 482 women
    - 50% reduction in HIV incidence; 79% reduction among women (high adherence)

- But are they willing to use it?
  - 755 WWUD
  - 21% aware of PrEP
  - 60% willing to use PrEP

Choopanya K et al. Lancet. 2013
Zhang C et al. AIDS Behav. 2019
Women Living with HIV

- Perspective of my patients
- Community-level and psychosocial issues
- Aging with HIV
  - Non-AIDS morbidity
  - Intersectional stigma and discrimination
  - Resilience

Psaros C et al. 2015; Sangaramoorthy T et al. 2017; Durvasula R et al. 2014
Ongoing and Future Research Needs

- Women must be more equitably included in the HIV prevention research agenda
  - Demonstration projects to determine promising and innovative models of PrEP uptake (and adherence) among women
  - Qualitative research to understand women’s HIV prevention preferences
  - Explore PrEP use and perception of risk among non-US born women, particularly those from sub-Saharan Africa and the Caribbean
  - Development of trauma-informed HIV prevention interventions

- PrEP guidelines that incorporate female-specific indications

Ojikutu BO et al. 2019; Chapman CL et al. 2018; Sales JM et al. 2016
Thank You!

- Presidential Advisory Committee on HIV/AIDS (PACHA) for organizing this session
- Community of women who have contributed to the data presented
- Community-based collaborators
  - Chioma Nnaji MPH MEd (African for Improved Access/Multicultural AIDS Coalition)
  - Tulumbe! team
- Mentors
  - Kenneth Mayer MD
  - Laura Bogart PhD
  - Valerie Stone MD MPH