Increasing Pre-exposure Prophylaxis use Intentions among Young Sexual Minority Men

Thomas H.F. Whitfield, MA & H. Jonathon Rendina, PhD

Presented at Adherence 2019
Miami, FL, June 19, 2019
Disclosures

- We have no conflicts of interest to disclose
Background

- In 2017, young sexual minority men (SMM; ages 13-24) made up 93% of all new HIV infection among men in their age group.
- Pre-exposure Prophylaxis (PrEP) is effective in the prevention of HIV acquisition and was approved for ALL individuals at risk in May, 2018.
- PrEP use remains uncommon and understudied for YSMM and
Developmental context

- Adult models of PrEP uptake have relied heavily on understanding cognitive factors (e.g., perceived benefits, perceived risk, concerns about side effects)
  - Social factors, such as stigma and norms, have also been shown to be influential

- Developmental models suggest that social factors are particularly relevant for adolescents and emerging adults
  - The impact of social factors may decline as cognitive development reaches its peak in mid-20’s
Research questions

- How are PrEP stigma and perceived benefits of PrEP use associated with intentions to being a PrEP regimen among YSMM?
  - Higher PrEP stigma will be associated with lower PrEP intentions
  - Higher perceived benefits of PrEP will be associated with higher PrEP intentions

- Does age moderate these associations?
  - The influence of stigma will decrease with age
  - The influence of perceived benefits will increase with age
Principal Investigator: H. Jonathon Rendina, PhD, MPH
Co-I & Research Scientist: Ali Talan, DrPH
Lab Manager: Ore Shalhav, MPH
Assistant Lab Manager: Nico Tavella, MPH
Project Manager: Brian Salfas, MA
Data Analyst: Scott Jones
Data Manager: Nicola Forbes
Data Systems Manager: Juan Castiblanco
Recruitment Director: Ruben Jimenez
Deputy Clinical Director: Cynthia Cabral, PhD
Clinical Coordinators: Paula Bertone, MA, LMHC, Ricardo Despradel
Collaborators & Consultants: Brian Mustanski, PhD, Carlos Rodriguez-Diaz, PhD, MPHE, Eli Rosenberg, PhD, Mark Pandori, PhD

NIH LITE Initiative funded by NIAID, NICHD, and NIMH: UG3-AI133674
Participants & Recruitment

- GBM recruited in the U.S., D.C., and Puerto Rico

Eligibility
- Live in U.S. including D.C. and Puerto Rico
- 16 years or older
- Identifies as male (including transgender men)
- Non-heterosexual identity
- Internet access and mailing address
- Self-reported HIV-negative/unknown status and recent HIV testing for adults 18+ (note: no prior HIV testing required for participants 16-17 y.o.)
- Willing to complete at-home HIV and STI (rectal GC/CT) testing
- Reports risk for HIV using modified CDC criteria for PrEP use
  - Non-adherent PrEP users included based on missed doses and subjective reporting
- Reports using any sexual networking app to find sex partners
# Analytic Sample ($N = 2,003$)

<table>
<thead>
<tr>
<th>Category</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>13-17, 18-24</td>
</tr>
<tr>
<td>Race</td>
<td>Black/AA, White, Asian, Multi, Other, AI AN</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>Yes, No</td>
</tr>
<tr>
<td>Sexual Orientation</td>
<td>Gay, Bisexual</td>
</tr>
<tr>
<td>Relationship Status</td>
<td>Single, In a Relationship</td>
</tr>
<tr>
<td>Region</td>
<td>NE, MW, S, N, W</td>
</tr>
<tr>
<td>Insurance</td>
<td>None, Own, Parent</td>
</tr>
</tbody>
</table>

![Chart showing distribution of demographic categories.](chart.png)
Measures

Demographics – Race, Ethnicity, Sexual Orientation, Income, Education, Relationship Status, Region, Insurance

Age – Entered into the model as a continuous variable

PrEP Stigma - 11 questions on a 5-point Likert scale, where higher scores indicated more PrEP-related stigma.

Benefits of PrEP Use – 12 questions on a 5-point Likert scale, where higher scores indicated more perceived benefits of PrEP use.

PrEP Stigma

β = -0.05*
S.E. = 0.02
AOR = 0.93

Age

β = 0.05*
S.E. = 0.02
AOR = 1.07

β = -0.06*
S.E. = 0.02
AOR = 0.81

β = 0.28***
S.E. = 0.02
AOR = 2.15

PrEP Intentions

Benefits of PrEP Use
Types of benefits that mattered most

1. Taking PrEP seems like the **responsible** thing to do (0.29)
2. Taking PrEP seems like the “**normal**” thing for an HIV-negative guy to do (0.28)
3. Taking PrEP would make me feel like I’m **doing my part** to control the HIV epidemic (0.25)
4. Taking PrEP would make me **feel more in control** of my sexual life (0.24)
Summary of findings

- Lower PrEP stigma and higher perceived benefits of PrEP were associated with higher PrEP intentions among YSMM.
- Contrary to hypotheses, the negative impact of PrEP stigma strengthened with age.
  - Consistent with hypotheses, the positive impact of perceived benefits increased with age.
Limitations

- Enrollment requirements limited the number and type of YSMM involved
- Data are cross-sectional and rely on self-reported intentions
Discussion

- Messaging for youth should focus on benefits while promoting normative, positive social messages about PrEP use.
- Our messages should be a foot in the door, not replace the provider’s role – leave HIV out and save the routine testing and other requirements for the clinic visit.
- To enhance their developmental appropriateness, messages could:
  - Focus on short-term rather than long-term benefits.
  - Highlight identity and social salience rather than risk.
  - Emphasize positives like being worry-free.
Examples to play with

Teeth brushed? Hair good? Phone charged? PrEPped for the day👍

Teen dating is hard enough, learn more about how to take the worry out of sex😊😍

Take it when it’s easy so you’re ready when it’s hard😉
Acknowledgements & Funding

- The entire team of staff, interns, volunteers, and recruiters as well as our collaborators
- The Alameda County Public Health Laboratory and Dr. Mark Pandori
- National Institutes of Health (NIAID, NICHD, NIMH, NIDA)
  - Examining Modifiable Psychosocial Predictors of HIV Seroconversion in a Large Nationwide Cohort of High Risk Men (UG3-AI133674; PI: Rendina)
  - Understanding Barriers to Biomedical HIV Prevention among Young Men at Risk (F-31-MH116874, PI: Whitfield)
- Our participants who volunteered their time
Thank you!