Development of an HIV Risk Reduction Intervention for Older Seropositive African American Men

2012 SUMR Symposium
Mentor: Christopher Lance Coleman, PhD, MS, MPH, FAAN
Spencer B. Stubbs
Candidate for Bachelors of Science in Nursing
Candidate for Bachelors of Arts in Sociology (concentration in Health & Medicine)
University of Pennsylvania, Class of 2013
Agenda

- Background
- Overall Aim & Hypothesis
- Research Methods & Study Findings
- Conclusion
- Q&A Session
Epidemiology of HIV in the Geriatric Population

- HIV is now a chronic disease

- HIV in those who are fifty years and older comprise 27% of all HIV cases in the United States

- Of the 56,000 new cases of HIV infection, 45% were African Americans (MSM → Injection Drug Users → Heterosexual)

- African Americans are less likely than their white counterparts to know their HIV status

- “triple jeopardy” effect seen in older HIV+ population
Epidemiology of HIV in the Geriatric Population (cont.)

- Adults 50 years and older are more likely to...
  - Not use condoms during sexual encounters
  - Have more comorbid conditions known to complicate their HIV treatments
  - Be less knowledgeable about HIV
  - Develop AIDS more rapidly
  - Experience greater marginalization compared with younger populations
More specifically, older African American MSM are more likely to…

- Engage in unprotected receptive anal and vaginal intercourse
- Report a history of marriage to women
- Disclose being secretive about same sex behavior
- Engage in bisexual relationships
- Report not being “out” to their families
- More likely to meet sexual partners through online services and public parks than gay bars
Consistent Condom Use

- Studies (Millett, et. al) have shown that African American MSM engage in more high-risk sexual behavior, including a failure to practice consistent condom use than did African American heterosexual men.

- One study (Crawford, et. al) found that 20% of their sample of HIV-positive MSM 50 years of age and older did not use condoms with male partners and 72% reported engaging in unprotected vaginal sex.
  - 37% reported being secretive about sexual behavior and having multiple sex partners.
Theoretical Framework

- Intervention
  - Behavioral Beliefs
  - Normative beliefs
  - Control Beliefs
- Attitude
- Subjective Norms
- Self-Efficacy
- Intention
- Condom Use
Aim/Objective & Hypothesis

- To tailor an intervention to teach safe sex strategies that can be incorporated into the social context of the daily lives of older HIV positive American American MSM

- HIV Risk Reduction = ↑ condom adherence
Methods: Brief Overview of Research Design

- Design: Randomized control trial

- Sample: 60 seropositive African American men fifty years and older with a mean age of 52 years

- Settings: Center for Health Equities Research (CHER)

- Study: conducted in 4 phases: Phase I → Phase IV
Phase I: Focus groups

Phase II: Pilot test on small subset of the sample

Phase III: Modification

Phase IV: Implementation
Phase I

- Series of focus groups conducted by the study team and staff at ASOs and CBOs to gain insight about a proposed intervention, recruitment, and retention strategies and data collection instruments

- Flyers and discrete sampling used to get this select group

- Focus groups included: 8 seropositive AA MSM (mean age ~55) and 8 members from ASOs and CBOs

- Focus group participants were seen as consultants for the study

- Intervention for review included 8 modules: risk assessment, facts about HIV, facts about sexually transmitted diseases (STDs), attitudes and vulnerability, learning to be safe, unsafe sex triggers, condom negotiation and refusal skills, taking care of your health
What the team learned from Phase I...

- Strong desire from the focus group to cover the following issues...
  - homophobia,
  - Social alienation
  - Ageism
  - Stigma and marginalization
  - Navigating sexual venues
  - Social networking
  - HIV disclosure
  - Increasing awareness of personal risk for HIV and STI
  - Risk assessment activities used to role-play condom negotiation skills when in public areas
  - Acquiring resistant viral strains
  - Comorbidities
  - Viral load
  - Drug and alcohol use
  - Risks associated with rimming during anal/oral sex
Modified Intervention (four 2-hour sessions)

- Homophobia
- Alienation
- Marginalization
- Ageism
- Navigating through sexual venues safely in the face of alienation and isolation
- Managing physical and psychosocial comorbid conditions that potentially trigger unsafe sex
- Disclosing HIV status
- Medication side effects
- Viral load
- Safe sex skills
Consistent with the Literature...

- Insecurities w/ Age..
  - “we need to be around men our age when talking about risky sexual behaviors”
  - “I’m not comfortable talking about having HIV or unprotected sex with younger guys in the room”
  - “Many of us have lost so many friends, so the sessions should provide an opportunity for us to talk about losses, and give us an opportunity to make new friends.”

- Showed Inconsistent Nature  Condom Use...
  - “Some of our friends figure, at their age, what does it matter?”
  - “Why should we give up what little pleasure we have left?”
  - “We are already infected so we cannot get infected again”
Phase II

- Study questionnaire pilot tested with 8 HIV+ AA MSM (eligibility: age, seropositive status, having sex of any kind with a man in the previous 3 months, being born male)
- Reordering of sections (for ex: having childhood sexual experiences placed before interpersonal conflict)
- Use of common vernacular particularly when it comes to assertive/submissive roles during intercourse
- Suggested to use the audio computer-assisted self interview (ACASI) because of the length of survey
Phase III

- Combined feedback from both phase I and phase II in order to tailor the intervention

- Sessions modified to include:
  - Stigma
  - Alienation and marginalization
  - Side effect of drug therapy and the comorbidities associated with aging and HIV (such as diabetes, heart disease, mental changes, HIV symptoms, arthritis, etc)
  - Include visual aid when teaching safe sex practices and intimacy (“cheeking video”)
  - Made to be more interactive in general
  - Include SWAT negotiation in order to increase condom negotiation skills (say no to unsafe behavior, be prepared to say why you want to be safe, provide alternative safe behaviors, and talk it out with your partner.)
Phase IV – The “Actual” Intervention

- The modified intervention was pilot tested with 60 HIV+ AA MSM 50 years of age and older

- Men were randomized to either an HIV risk condition or a health condition

- Health condition = focused on content related to risks for heart disease, hypertension, stroke, diabetes, and certain cancers...which all also happen to be causes of morbidity and mortality amongst african americans

- HIV risk condition = focused on content related to sexual health practice
Results: Flow of Study Participants

Assessed for Eligibility ($n = 82$); Enrolled and Randomized ($n = 60$); Not meeting Inclusion Criteria ($n = 22$)

- HIV Risk Condition ($n = 30$); Received allocated intervention ($n = 30$)
  - Lost to follow-up ($n = 0$)
  - Analyzed ($n = 30$)

- Allocation
  - Follow-up
  - Analysis

- Health Condition ($n = 30$); received allocated health condition ($n = 30$)
  - Lost to follow-up ($n = 0$)
  - Analyzed ($n = 30$)
## Results: Comparison of Baseline Characteristics by Study Group

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Entire Sample (n = 60)</th>
<th>HIV risk reduction intervention (n = 30)</th>
<th>Health Control (n = 30)</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age, years</td>
<td>51 (50-72)</td>
<td>51.5 (50-59)</td>
<td>51 (50-72)</td>
<td>ns</td>
</tr>
<tr>
<td>Employed</td>
<td>6 (10.3)</td>
<td>3 (10.0)</td>
<td>3 (10.0)</td>
<td>ns</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School or less</td>
<td>28 (47.5)</td>
<td>15 (50.0)</td>
<td>13 (44.8)</td>
<td>ns</td>
</tr>
<tr>
<td>Some College</td>
<td>31 (52.5)</td>
<td>15 (50.0)</td>
<td>16 (55.2)</td>
<td></td>
</tr>
<tr>
<td>Current living situation</td>
<td></td>
<td></td>
<td></td>
<td>ns</td>
</tr>
<tr>
<td>alone</td>
<td>25 (45.5)</td>
<td>14 (48.3)</td>
<td>11 (42.3)</td>
<td></td>
</tr>
<tr>
<td>w/ others</td>
<td>30 (54.5)</td>
<td>15 (51.7)</td>
<td>15 (57.7)</td>
<td></td>
</tr>
<tr>
<td>Relationship Status</td>
<td></td>
<td></td>
<td></td>
<td>ns</td>
</tr>
<tr>
<td>Single/ divorced/ widowed</td>
<td>46 (82.1)</td>
<td>22 (78.6)</td>
<td>24 (85.7)</td>
<td></td>
</tr>
<tr>
<td>Married/ living/ together</td>
<td>10 (17.9)</td>
<td>6 (21.4)</td>
<td>4 (14.3)</td>
<td></td>
</tr>
<tr>
<td>Sexual Orientation</td>
<td></td>
<td></td>
<td></td>
<td>ns</td>
</tr>
<tr>
<td>homosex.</td>
<td>43 (71.7)</td>
<td>21 (70.0)</td>
<td>22 (73.3)</td>
<td></td>
</tr>
<tr>
<td>bisex.</td>
<td>12 (20.0)</td>
<td>8 (26.7)</td>
<td>4 (13.3)</td>
<td></td>
</tr>
<tr>
<td>heterosex</td>
<td>5 (8.3)</td>
<td>1 (3.3)</td>
<td>4 (13.3)</td>
<td></td>
</tr>
</tbody>
</table>
Results (cont.)

Percentage of Participant Attending Data Collection Sessions by Group and Time

<table>
<thead>
<tr>
<th>Group</th>
<th>Baseline</th>
<th>Three Months</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV risk reduction condition</td>
<td>n = 30</td>
<td>100% (n = 30)</td>
</tr>
<tr>
<td>Health Condition</td>
<td>n = 30</td>
<td>100% (n = 30)</td>
</tr>
</tbody>
</table>

Percentage Reporting Consistent Condom Use in the Past Three Months by Group and Time

<table>
<thead>
<tr>
<th>Group</th>
<th>Baseline</th>
<th>Three Months</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV risk reduction condition</td>
<td>n = 40.9</td>
<td>71.4</td>
</tr>
<tr>
<td>Health Condition</td>
<td>n = 42.1</td>
<td>55.0</td>
</tr>
</tbody>
</table>
Study Findings

- The groups did not differ significantly at baseline on demographic characteristics

- Every participant attended sessions 1 and 2, 98% attended session 3, and 100% attended session 4

- Although the unadjusted analyses did not reach statistical significance, men in the HIV risk condition were twice as likely to use condoms consistently [OR = 2.04; 95% CI = 0.48-8.77; p=0.336]

- 50% of participants reported inconsistent condom use (15 men in the HIV risk condition and 15 in the health condition). Among these men, those in the HIV risk condition were 5 times more likely to start using condoms consistently compared to those in the health condition [OR = 5.18; 95% CI=0.97-27.78; P=0.054]

- Participants in the health condition were 43% more likely to have had multiple sex partners

- 50% of the participants reported having multiple partners (15/15)

- Men in the health condition were 2.5 times more likely to report having multiple sex partners at the 3-month follow-up compared with the risk reduction intervention [OR=2.45, 95% CI=0.46-13.16; P=0.296]
What I learned this summer...

- How to write an R01 grant application
- Statistics and multivariate/bivariate analyses
- Critical Race Theory, Gender Queer Theory, Literature Review
- Patience is a virtue!
- Communication and Multitasking (researchers balance a lot)
- PhD is definitely the goal!
Special Thanks to Joanne Levy, Lissy Madden, and the LDI Staff!
Questions?

- Spencer Barrington Stubbs
- Cell: 908-315-6242
- Email: stubbss@nursing.upenn.edu