Developing a culturally-appropriate HIV intervention in Puerto Rico: Managing stigma and building resilience

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Disclosure

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  – No relationships to disclose

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Objectives

1. Discuss the HIV epidemic in Puerto Rico (PR), particularly among men who have sex with men (MSM), and the need for culturally relevant interventions.


HIV/AIDS in Puerto Rico

• The lifetime risk for diagnosis of HIV infection among Hispanics/Latinos is estimated to be 1.92% (1 in 52) (over three times the rate for non-Hispanic/Latino whites).
  – For Hispanics/Latinos living in Puerto Rico, the estimated lifetime risk is 2.08% (1 in 48).

• HIV incidence rate in PR is twice that of the general US population (45 per 100,000) and almost double the overall US Hispanic/Latino population.
HIV/AIDS and MSM

• Globally, HIV continues to disproportionally affect MSM.
  – MSM are between 6-30 times more likely to be infected with HIV than members of the general population.

• The prevalence of HIV among MSM in PR is estimated to be 7.3%; this is 13 times higher than among men who only engage in sexual practices with women (non-MSM).

HIV, sexuality, and stigma

• Stigma is not simply an accidental artifact of mistaken fears of contagion, but may also be understood as reflecting a fundamental exercise of social power.

• HIV stigma results in prejudice and discrimination.

• MSM also face stigma associated with their sexual practices and sexual identities.
Stigma among HIV+ MSM in PR

- Framed as a social determinant of health, stigma - due to HIV status and sexual orientation/gender identity - is negatively impacting:
  - Interactions with health care providers
  - Access and retention in health care
  - Quality of life
  - Among others

Do we have what we need to halt the epidemic?

- There are limited interventions targeted to Hispanic/Latino MSM.
  - Most aimed to HIV-prevention.
- Limited interventions have been developed in Spanish.
- No evidence-based interventions addressing social determinants of health or stigma as their primary objective.
Lack of culturally-relevant interventions

- Successful interventions should take into consideration the social and physical environments of the people made vulnerable, rather than the environmental conditions as related to the survival of the infectious agent.

- Reducing health inequities requires a broad portfolio of policy, research, and interventions to decrease exposure, lessen vulnerability, and ultimately decrease infection.

Formative research

- Qualitative
  - In-depth life history interviews with HIV+ and HIV- MSM in PR

- Mixed-methods

- Quantitative
  - Stigma (HIV and Sexuality)
  - Sexual practices
  - Among others

- The Contacto Intervention

- ADAPT-ITT
Formative research findings

1. Life history interviews with HIV+ MSM
2. Semi-structured interviews with healthcare providers
3. Survey with HIV+ MSM

Intersection of HIV and gay stigma

Resilience

“I perceive it this way – the fact that I am gay has prepared me with a tough skin to deal with prejudice and discrimination. Eventually, having HIV is not so painful.”

- Gabriel, 28yo
What are their recommendations to HIV+ MSM?

“To avoid rough and violent sexual encounters […], avoid ejaculations in their mouths, and if they are having oral sex should be not too much…for not too long to avoid the exchange of fluids. They need a lot of counseling about safe sex. We should be aggressive with counseling; aggressive in a good way. […] They should do their best to have a primary sex partner. […] It’s not only about HIV, but to prevent other infections.

- Social worker, 45yo

<table>
<thead>
<tr>
<th>Quality of Life</th>
<th>Gay-related Stigma</th>
<th>Internalized Homophobia</th>
<th>Felt HIV Stigma</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>r</td>
<td>p-value</td>
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</tr>
<tr>
<td>Overall Function</td>
<td>-0.282</td>
<td>0.001</td>
<td>-0.274</td>
</tr>
<tr>
<td>Life Satisfaction</td>
<td>-0.340</td>
<td>&lt;0.001</td>
<td>-0.194</td>
</tr>
<tr>
<td>Health Worries</td>
<td>-0.101</td>
<td>0.257</td>
<td>-0.216</td>
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<tr>
<td>Financial Worries</td>
<td>-0.040</td>
<td>0.407</td>
<td>-0.137</td>
</tr>
<tr>
<td>Medication Worries</td>
<td>-0.293</td>
<td>0.002</td>
<td>-0.378</td>
</tr>
<tr>
<td>HIV Mastery</td>
<td>-0.185</td>
<td>0.036</td>
<td>-0.334</td>
</tr>
<tr>
<td>Disclosure Worries</td>
<td>-0.115</td>
<td>0.195</td>
<td>-0.294</td>
</tr>
<tr>
<td>Provider Trust</td>
<td>-0.081</td>
<td>0.366</td>
<td>-0.103</td>
</tr>
<tr>
<td>Sexual Function</td>
<td>-0.108</td>
<td>0.223</td>
<td>-0.032</td>
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<table>
<thead>
<tr>
<th>Stigma</th>
<th>Gay-related Stigma</th>
<th>Internalized Homophobia</th>
<th>Felt HIV Stigma</th>
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<td>1.000</td>
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Stigma is strongly associated with poor quality of life
Mixed-methods analysis: HIV status disclosure

• Most participants (88.6%) reported some kind of social support during the 3 months prior to the interview, mainly from friends (39.6%) and family (37.6%).
  – Those who did not receive any kind of social support obtained higher scores in the stigma scales (gay-related and felt HIV stigma).

• During the interviews, participants reported that HIV status disclosure has been a challenge with family, friends, partners, and healthcare providers.

Tailored to:
• Spanish-speaking HIV+ MSM in Puerto Rico
• Men somehow linked to HIV care
For HIV+ Spanish speaking MSM in PR

- Six-week, three-encounters intervention with a health educator
  - Two 1-hour working sessions
  - One 30-minutes booster session
- Based on motivational interviewing (MI)

Intervention design and recruitment
Intervention domains

1. Trust
2. Health, emphasizing sexual health
3. Sexual identity
4. Stigma
5. Linkages to care
6. Risk assessment
7. STI prevention
## Intervention outcomes

- **Short Term**
  - Less HIV stigma
  - Less gay stigma

- **Intermediate Term**
  - Disclosure of HIV status and sexual orientation to family, friends, and HCPs.
  - Engagement

- **Long Term**
  - Psychological/social indicators
  - Clinical indicators
    - > CD4
    - < VL

## Research and intervention design

<table>
<thead>
<tr>
<th>Data collection</th>
<th>Day 1</th>
<th>Day 14</th>
<th>Day 42</th>
<th>Day 90</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact assessment</td>
<td>Baseline</td>
<td>Day 14</td>
<td>Day 42</td>
<td>Day 90</td>
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<tr>
<td>Satisfaction survey</td>
<td>1-hour encounter</td>
<td>1-hour encounter</td>
<td>30-minutes booster</td>
<td></td>
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</tbody>
</table>

### Intervention

<table>
<thead>
<tr>
<th>Day 1</th>
<th>Day 14</th>
<th>Day 42</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 0</td>
<td>Week 2</td>
<td>Week 6</td>
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</tbody>
</table>

- **1-hour encounter**
  - Establish rapport
  - Explore issues
  - Prioritize and plan

- **1-hour encounter**
  - Continue to explore issues
  - Continue to plan

- **30-minutes booster**
  - Boost confidence
Intervention assessment

- **Feasibility**
  - Recourses and materials needed for the intervention

- **Acceptability**
  - Recruitment and retention rates
  - Satisfaction survey

- **Impact**
  - Survey interview with a pre-post-post design with no control group

Feasibility: Intervention materials
Feasibility: Educational materials

- Of eligible participants approached by the research team were recruited to the intervention: 53.7%
- Of those recruited have participated in at least one of the 4 research encounters: 93.7%
- Of those who start the intervention complete participation in the study: 94.1%
What are participants discussing during the intervention?

• **Different manifestations of stigma** based on HIV-status and sexual orientation, such as discrimination by family members and co-workers and its impact on adherence and care.

• **Fear to reveal HIV-status and sexual practices** to relatives, at work, and in healthcare settings was also reported.

• Most participants have shared the need to **make changes** related to disclosure of HIV-status and sexual orientation (to family, friends and employers), improve practices in seeking mental health services, and substance use.

**Participants**

<table>
<thead>
<tr>
<th>Demographics</th>
<th>HIV+ MSM (N=66)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>39.5 years (SD = 11.3; Range 21-63)</td>
</tr>
<tr>
<td>Year with HIV/AIDS</td>
<td>9.8 (SD = 7.8)</td>
</tr>
<tr>
<td>High school or less</td>
<td>25.7%</td>
</tr>
<tr>
<td>Unemployed</td>
<td>25.8%</td>
</tr>
<tr>
<td>No annual income</td>
<td>14.3%</td>
</tr>
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</table>
### Demographics Cont.

<table>
<thead>
<tr>
<th>Partnership status</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No partner</td>
<td>21</td>
<td>27.6</td>
</tr>
<tr>
<td><strong>Only one partner</strong></td>
<td>31</td>
<td>40.8</td>
</tr>
<tr>
<td>Regular and casual partners</td>
<td>10</td>
<td>13.2</td>
</tr>
<tr>
<td>Multiple casual partners</td>
<td>14</td>
<td>18.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sexual orientation</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heterosexual</td>
<td>2</td>
<td>2.6</td>
</tr>
<tr>
<td><strong>Homosexual/Gay</strong></td>
<td>69</td>
<td>89.6</td>
</tr>
<tr>
<td>Bisexual</td>
<td>6</td>
<td>7.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>History of incarceration</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>History of suicidal ideation</td>
<td>33</td>
<td>42.9</td>
</tr>
<tr>
<td>History of suicidal attempt</td>
<td>19</td>
<td>57.6</td>
</tr>
<tr>
<td>Suicidal attempt due to diagnosis</td>
<td>6</td>
<td>31.6</td>
</tr>
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</table>

### Suicidal behavior

<table>
<thead>
<tr>
<th>Psychosocial indicators</th>
<th>Baseline</th>
<th>Week 6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Depression symptomatology</td>
<td>15</td>
<td><strong>19.7</strong></td>
</tr>
<tr>
<td>Anxiety symptomatology</td>
<td>51</td>
<td><strong>66.2</strong></td>
</tr>
</tbody>
</table>
Efficacy: Preliminary findings

**Perceived gay stigma**

<table>
<thead>
<tr>
<th>HIV+ MSM (N=66)</th>
<th>Baseline</th>
<th>3rd Encounter</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived gay stigma</td>
<td>20.8</td>
<td>19.4</td>
<td>0.029</td>
</tr>
<tr>
<td>Hidden gay stigma</td>
<td>22.1</td>
<td>20.5</td>
<td>0.001</td>
</tr>
<tr>
<td>Internalized homonegativity</td>
<td>30.5</td>
<td>28.2</td>
<td>0.042</td>
</tr>
<tr>
<td>HIV felt stigma</td>
<td>36.2</td>
<td>33.7</td>
<td>0.001</td>
</tr>
<tr>
<td>Viral load</td>
<td>3,858</td>
<td>1,440</td>
<td>0.010</td>
</tr>
</tbody>
</table>

Statistically significant reductions

Efficacy: Preliminary findings cont.

**HIV disclosure**

<table>
<thead>
<tr>
<th>HIV+ MSM (N=66)</th>
<th>Baseline</th>
<th>3rd Encounter</th>
<th>p-value</th>
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</thead>
<tbody>
<tr>
<td>HIV disclosure</td>
<td>31.5</td>
<td>34.9</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Adherence</td>
<td>93%</td>
<td>96%</td>
<td>0.036</td>
</tr>
<tr>
<td>Quality of life* – Disclosure worries</td>
<td>63.0</td>
<td>70.0</td>
<td>0.009</td>
</tr>
</tbody>
</table>

The intervention is also proven to support disclosure of sexual orientation
**Satisfaction with the intervention**

**Participants have documented:**

- High levels of satisfaction (85-91%) with the intervention and the interventionist.
- 89% would recommend the intervention to others.

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**On their own words**

It’s a safe space; made me feel tense, but helped me to release some stress”.

- Robert

The intervention has provided me with the strength to look for professional help to deal with my health needs. [...] It has been a beautiful experience and important for me at this stage of my life.”

- Miguel
On their own words

“I feel more confident. More confident on issues related to HIV.”
- Samuel

“It would be great to have more encounters to follow-up [...]. I would like to be part of a group of peers to support each other.”
- Omar

Conclusions

- Preliminary analyses suggest the feasibility of implementing a culturally congruent intervention for stigma management among HIV+ MSM in PR.
  - Intervention is providing participants with the skills to identify challenges and plan for changes needed to overcome the negative impact of stigma when using health care services.
- Next steps: Assess the effectiveness of the intervention and its feasibility with other groups and in other formants (ie, group-level).
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- Our community collaborators
References


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