Perceived Discrimination and Physical Health Outcomes among HIV-Positive Black and Latino Men who have Sex with Men

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\textsuperscript{4}RAND Corporation
Racial/Ethnic Disparities in HIV-related Outcomes

- African Americans and Latinos living with HIV show:
  - Greater delay of medical care after diagnosis
  - Lower levels of antiretroviral treatment (ART) adherence
  - Shorter survival times and greater death rates

Sources: CDC, 2011; Giordano et al., 2003; Hall et al., 2006; Knowlton et al., 2001; Stone, 2004; Gebo et al., 2005; Shapiro et al., 1999; Losina et al., 2009; Sabin et al., 2004; Mugavero et al., 2007; Bogart et al., 2010; Simoni, 2010
Discrimination and Disparities

- Discrimination may be one reason for disparities
  - Institutional, historical, and experienced mistreatment
- Perceived discrimination is associated with poor physical and mental health, and health behaviors

Pascoe & Smart Richman, 2009
PROJECTS MEDLIFE & VIDA
Research Goals

- To examine the association of perceived discrimination with health-related outcomes among Black and Latino men living with HIV
  - HIV-positive Black and Latino men who have sex with men (MSM) are discriminated against due to multiple stigmatized characteristics
    - HIV-serostatus
    - Race/ethnicity
    - Sexual orientation

Sources: Bogart et al., 2010a; Bogart et al., 2010b
Methods: Participants

- 181 Black MSM recruited from three AIDS service organizations and one clinic in Los Angeles
- 167 Latino MSM recruited and surveyed by staff at a Latino AIDS service organization in Los Angeles County
- All participants were on ART
- Studies conducted as community partnerships
Methods: Procedure

- Assessed with audio computer-assisted interviews
  - Choice of English or Spanish for Latino clients
- $30 incentive
Measures: Multiple Discrimination Scale

- Sum of experiences in past year with 10 different types of discrimination due to HIV-serostatus, race/ethnicity, and sexual orientation separately
  - e.g., “In the past year, were you physically assaulted or beaten up because someone thought that you were gay?” (yes/no)

- Very good internal consistency
  - Black MSM: HIV-serostatus ($\alpha = .85$); Race/ethnicity ($\alpha = .83$); Sexual orientation ($\alpha = .86$)
  - Latino MSM: HIV-serostatus ($\alpha = .88$); Race/ethnicity ($\alpha = .86$); Sexual orientation ($\alpha = .86$)
Measures: Physical Health

- CD4 Count: <200 (indicative of AIDS) or ≥200
- HIV Viral Load: detectable vs. undetectable
- AIDS Symptoms (14-item sum): e.g., fever, fatigue
- Medication Side Effect Severity:
  - How much have side effects from your medications interfered with your day-to-day activities?
    1 = No interference to 5 = A lot of interference
- Emergency Department Use, Last 6 Months (yes/no)
Statistical Analysis

- Multivariate regression models predicting physical health with all three discrimination types
  - Tests of 3 discrimination types as a set (Wald $\chi^2$ or F)
  - All possible discrimination interactions tested (nonsignif.)
  - Socio-demographic covariates
- Linear regression for continuous outcomes
  - AIDS symptoms, medication side effect severity
- Logistic regression for dichotomous outcomes
  - Viral load, CD4 count, emergency department use
Perceived Discrimination in Past Year (%)
## Multivariate Results: Blacks

<table>
<thead>
<tr>
<th>Discrimination</th>
<th>Side Effects b (SE)</th>
<th>AIDS Sx b (SE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race</td>
<td>0.1 (0.1)</td>
<td>0.3 (0.2)</td>
</tr>
<tr>
<td>HIV</td>
<td>0.0 (0.1)</td>
<td>0.1 (0.2)</td>
</tr>
<tr>
<td>Gay</td>
<td>-0.1 (0.1)</td>
<td>0.0 (0.2)</td>
</tr>
<tr>
<td>Discrim. Set (F)</td>
<td>1.2</td>
<td>4.1**</td>
</tr>
</tbody>
</table>

** p < .01
## Multivariate Results: Latinos

<table>
<thead>
<tr>
<th>Discrimination</th>
<th>Side Effects b (SE)</th>
<th>AIDS Sx b (SE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race</td>
<td>0.0 (0.1)</td>
<td>0.2 (0.1)</td>
</tr>
<tr>
<td>HIV</td>
<td>0.2 (0.1)*</td>
<td>0.2 (0.2)</td>
</tr>
<tr>
<td>Gay</td>
<td>-0.1 (0.1)</td>
<td>-0.1 (0.2)</td>
</tr>
<tr>
<td>Discrim. Set (F)</td>
<td>4.7**</td>
<td>3.4*</td>
</tr>
</tbody>
</table>

* p < .05; ** p < .01
## Multivariate Results: Blacks

<table>
<thead>
<tr>
<th>Discrim.</th>
<th>CD4 Cell Count ≥200 OR (95% CI)</th>
<th>Undetect. Viral Load OR (95% CI)</th>
<th>Emergency Dept. Use OR (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race</td>
<td>0.7* (0.5-0.9)</td>
<td>0.8* (0.6-1.0)</td>
<td>1.3 (1.0-1.7)*</td>
</tr>
<tr>
<td>HIV</td>
<td>1.0 (0.7-1.5)</td>
<td>1.1 (0.8-1.4)</td>
<td>0.9 (0.7-1.2)</td>
</tr>
<tr>
<td>Gay</td>
<td>1.5 (1.0-2.2)*</td>
<td>1.1 (0.9-1.4)</td>
<td>1.0 (0.8-1.3)</td>
</tr>
<tr>
<td>Discrim. Set (F)</td>
<td>6.9*</td>
<td>5.9</td>
<td>7.7*</td>
</tr>
</tbody>
</table>

OR=Odds Ratio; CI=Confidence Interval  
+ p < .10; * p < .05
# Multivariate Results: Latinos

<table>
<thead>
<tr>
<th>Discrim. Set (F)</th>
<th>CD4 Cell Count ≥200 OR (95% CI)</th>
<th>Undetect. Viral Load OR (95% CI)</th>
<th>Emergency Dept. Use OR (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race</td>
<td>1.0 (0.6-1.6)</td>
<td>1.0 (0.8-1.3)</td>
<td>0.9 (0.7-1.2)</td>
</tr>
<tr>
<td>HIV</td>
<td>0.5 (0.2-1.1)^+</td>
<td>1.0 (0.7-1.4)</td>
<td>1.1 (0.8-1.7)</td>
</tr>
<tr>
<td>Gay</td>
<td>1.8 (0.6-4.9)</td>
<td>1.1 (0.7-1.5)</td>
<td>1.1 (0.8-1.6)</td>
</tr>
<tr>
<td>Discrim. Set</td>
<td>5.8</td>
<td>0.3</td>
<td>3.5</td>
</tr>
</tbody>
</table>

OR=Odds Ratio; CI=Confidence Interval

+ p < .10
Discussion

- Perceived discrimination was related to physical health and operated differently by race/ethnicity
  - Racism paramount for Blacks
  - Three discrimination types as a set predictive for Latinos
- Intersectionality of race, HIV-status, and sexual orientation may have distinct meanings by ethnicity
- Interventions to reduce HIV stigma need to take into account intersectionality and other types of stigma
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  - Bienestar Human Services
  - SPECTRUM
  - OASIS
  - Minority AIDS Project