Discrimination and Mental Health among Sexual Minority Adults in the United States: Implications for Intervention

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Sexual Minority Status

- Sexual minority = Umbrella term to describe anyone whose sexual identity, orientation, or practices differ from the majority

- Sexual minority status made up of intersection of
  - Attraction (same-sex, opposite sex, both sexes)
  - Behavior (same-sex, opposite sex, both sexes)
  - Identity (lesbian, gay, bisexual)

- Sexual and gender minorities (SGM) is larger group – includes gender minorities (e.g. transgender)
Why study sexual minority health?

- Increased recognition of the significant vulnerability associated with being a sexual minority (SM)
  - Poorer outcomes across diverse health issues
    - Obesity
    - Heart disease
    - STDs
    - Drug abuse
    - Suicide
Seminal Publications/Events related to Sexual Minority Health

- 2011: TOM Report
- 2015: NIH Strategic Plan
- 2016: Public Health Service Act
- 2015: NIH SGM Research Office
Sexual-orientation-related health disparities are a serious public health concern.

Stigma-related experiences are key drivers of SM-related health disparities, morbidity, and mortality...

...thus, it is necessary to understand how these experiences vary across the lifespan to address the resultant disparities.
Mental Health Disparities

- Sexual minorities (SM) are disproportionately vulnerable to a variety of health outcomes – including mental health outcomes
  - SM adults have elevated odds of depression and anxiety compared to heterosexual adults
- Poor mental health among SM adults has been linked to stress and discrimination
- Little known about how the relationship between discrimination and mental health may vary by age
  - Periods of increased vulnerability and resilience?
Method: Sample

National Epidemiological Survey of Alcohol and Related Conditions III (NESARC III 2012-2013; N = 36,309)\(^1\)

Analytic sample: Adults age 18 to 65 who reported same-sex attraction, same-sex sexual partners, or LGB identity (n = 2,993)

- 64% White, 13% Black, 15% Hispanic/Latino
- 61% female
- Median age = 37
Method: Measures

Recoded into **three types** of discrimination:

- Healthcare discrimination
- General discrimination
- Victimization

Coded: Yes = 1, No = 0
Method: Analyses

Time-varying effect modeling (TVEM)

TVEM is a flexible, semi-parametric model that estimates prevalences and associations as a flexible function of time.
Sample TVEM Figure

- Figures used to interpret “coefficient functions”
Time-varying effect modeling (TVEM): Direct extension of regression

- Regression coefficients express associations between variables

- Traditional regression predicting outcome $Y$

\[ Y = \beta_0 + \beta_1 x + e \]

- TVEM allows coefficients to be dynamic

\[ Y = \beta_0(t) + \beta_1(t) x + e \]
DISCRIMINATION
Results: Discrimination and Age

Overall Sample:
13% general discrimination
12% victimization
7% healthcare discrimination
Results: General Discrimination by Age and...

Sex

LGB Status
Results: Victimization by Age and...

Sex

LGB Status
Results: Health Care Discrimination by Age and...

Sex

LGB Status
MENTAL HEALTH
Weighted association between SM Status and Past Year Generalized Anxiety Disorder

OR: 2.02 (1.78, 2.30)
AOR: 1.92 (1.69, 2.19)
Weighted association between SM Status and Past Year Major Depressive Episode

OR: 2.09 (1.91, 2.30)

AOR: 2.00 (1.81, 2.19)
Weighted Association between sexual minority status and recent suicidal behavior
DISCRIMINATION & MENTAL HEALTH
Measures

- **Predictors:**
  - Discrimination in past year (collapsed 3 types) (mental health)
  - Discrimination lifetime

- **Health Outcomes:**
  - Major depressive episode (DSM-V) in past year
  - Generalized anxiety disorder (DSM-V) in past year
  - Suicide attempt (past 5 years)
<table>
<thead>
<tr>
<th>Outcome:</th>
<th>Adjusted Odds Ratio</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>1.66</td>
<td>(1.25, 2.21)</td>
</tr>
<tr>
<td>Depression</td>
<td>1.56</td>
<td>(1.26, 1.93)</td>
</tr>
<tr>
<td>Suicidal Behavior</td>
<td>2.71</td>
<td>(1.79, 4.09)</td>
</tr>
</tbody>
</table>
Discrimination & Anxiety

[Graph showing odds ratio of pydisc over a range of values.]
Discrimination & Depression

[Graph showing the odds ratio of depression over different age ranges, with a trend indicating a peak around middle age.]

- Discrimination can lead to increased risk of depression.
- The graph illustrates a peak in the odds ratio of depression in the middle age range.
Discrimination & Suicidal Behavior

![Graph showing odds ratio over age]

- Odds Ratio
- Age (years)
Summary of Findings

- Past-year discrimination varied by age, sex, and sexual identity
  - Young adult and midlife males > females to experience discrimination and victimization
  - Midlife males > females to report health care discrimination
  - LGB identified adults > than non-LGB sexual minorities to experience all types of discrimination across ages

- 18 to mid-thirties: steep declines in victimization relative to general discrimination and a rise in healthcare discrimination
Summary of Findings

- Mental Health Outcomes
  - Disparities related to sexual minority status are very strong in young adulthood, but diminish by mid to late 50s, but remain significant across adulthood

- Relationship between Discrimination and Mental Health
  - Association between discrimination and mental health outcomes statistically significant in early adulthood and again in mid-life
  - Odds of anxiety and depression are nearly 4 times higher among 18-year old SM adults who reported discrimination in past year
Discussion

- Experiences (or at least perceptions) of discrimination change across the lifespan
- Effect of discrimination on health also varies across lifespan and health outcome
- Differences are important for explicating its role in SM health
  - ...for subgroups of SGMs
- TVEM / developmental approaches have the potential to identify critical age periods for targeted policies, programs, and prevention strategies that combat sexual-orientation-related health disparities
Potential Implications

• SM have elevated odds of every mental health outcome examined at (at least!) some period of adulthood

• May inform prevention and intervention strategies – periods of increased vulnerability and increased resilience

• Future research
  ○ Heterogeneity within SM population
  ○ Etiology of disparities
Implications for Intervention

- Reducing discrimination will likely require broad cultural and societal approaches
  - A multitude of systems that shape health and wellbeing across the life course,
    - Families
    - Communities
    - Schools
    - Workplaces
    - Healthcare
    - city, state, and national policy.
- SM adults living in states with enumerated protections report lower levels of internalized homophobia and substance use
- Youth in LGB-supportive climates are less likely to engage in suicidal behavior
- LGB-affirming policies and programs at work and school are associated with less discrimination, and subsequently better health
Thank you!

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