The DRAM, Vol. 9(6) – State pride? A look at the possible relationship between same-sex marriage policy and mental health

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Later this month the US Supreme Court is expected to issue rulings on two high-profile cases related to same-sex marriage. Earlier this spring three states—Delaware, Minnesota, and Rhode Island—legalized same-sex marriage, bringing the total to twelve, while in the past decade 31 states have adopted constitutional amendments banning legal recognition of same-sex unions. In light of these various legal actions, this week's DRAM reviews a study that investigated the relationship between living in states that banned same-sex marriage and the mental health of lesbian, gay, and bisexual populations, including the prevalence of alcohol use disorders (Hatzenbuehler, McLaughlin, Keyes, & Hasin, 2010).

Methods

- Researchers used data from the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC, 2006), a longitudinal, nationally representative study.
    - The study included data from 2 waves: 2001-2002 and 2004-2005.
    - Participants self-identified as heterosexual, gay or lesbian, bisexual, or not sure.
- NESARC used the Alcohol Use Disorder and Associated Disabilities Interview Schedule (AUDADIS-IV; Grant et al. 2003) to assess past-year DSM criteria for mood, anxiety, alcohol, and substance use disorders, as well as other disorders not reported here.
- For this study, researchers grouped NESARC participants according to sexual orientation and whether they lived in states that banned same-sex marriage between 2004 and 2005, which coincided with NESARC wave 2 data collection. Sample size varied among the four resulting groups:
    - LGB respondents in states with bans: n = 135

- LGB respondents in states without bans: n = 442
- Heterosexual respondents in states with bans: n = 9,963
- Heterosexual respondents in states without bans: n = 24,113

Results

- The Figure shows percentages of lesbian, gay, and bisexual respondents endorsing mood, anxiety, alcohol, or drug use disorders, compared to heterosexual respondents, and the percent change and adjusted odds ratios from wave 1 to wave 2.
- Among lesbian, gay, and bisexual respondents living in states that banned same-sex marriage between wave 1 and wave 2, the prevalence of alcohol use disorders increased by 41.9%.
    - Among lesbian, gay, and bisexual respondents living in states without such bans, the prevalence of alcohol use disorders increased by a smaller, non-significant, margin (28.9%).
    - Rates of alcohol use disorders increased by smaller but significant margins among heterosexuals living in states with (18.0%) and without (15.7%) same-sex marriage amendments.
    - Rates of drug use disorders increased significantly among both LGB (88.6%) and heterosexual (31.8%) residents of the states *without* amendments, but not among residents of states *with* amendments.
- Mood disorder rates increased significantly among LGB respondents in states with constitutional amendments (36.6%) and declined among LGB respondents in states without amendments (-23.6%). Rates were unchanged among heterosexual respondents.
- Anxiety disorder rates increased significantly among *heterosexual* respondents in both categories but not among LGB respondents.

		Constitutional Amendment banning Same-sex marriage				**No Constitutional Amendment banning Same-sex marriage**			
		Wave 1 %	**Wave 2 %**	**% Change**	**AOR**	**Wave 1 %**	**Wave 2 %**	**% Change**	**AOR**

LGB	**Alcohol disorder**	21.7	30.8	41.9	1.80*	16.4	21.2	28.9	1.41
	Drug disorder	11.0	12.9	17.3	1.25	6.0	11.4	88.6	2.11*
	Any mood disorder	22.7	31.0	36.6	1.67*	22.5	17.2	-23.6	0.69
	Any anxiety disorder	14.4	18.0	25.1	1.34	13.2	15.9	21.0	1.27
Hetero sexual	**Alcohol disorder**	8.6	10.2	18.0	1.22*	7.9	9.2	15.7	1.19*
	Drug disorder	2.1	2.1	0	1	1.8	2.3	31.8	1.34*
	Any mood disorder	10.9	11.2	2.8	1.03	7.9	8.2	3.7	1.06
	Any anxiety disorder	6.4	7.4	15.0	1.17*	5.8	6.7	15.4	1.17*

Figure. Percent change in prevalence of disorders from wave 1 to wave 2 among respondents by State Constitutional Amendment status. Asterisks indicate statistically significant changes ($p<.05$). Adjusted odds ratio demonstrates the odds of having a disorder at wave 2 as compared to wave 1. Odds ratio adjusted for age, gender, race/ethnicity, income, educational attainment, marital status, and region. Click image to enlarge.

Limitations

- On its own, the correlation between same-sex marriage bans and increases in mental health disorders among LGB respondents does not establish causality. More evidence is needed before we can conclude that living in states that enact discriminatory policies *causes* mental health problems among LGB individuals.
- Some of the conclusions of this study were based on comparing the statistical significance of odds ratios within the different groups.

However, the significance of odds ratios is determined partly by sample sizes. The same size increase in prevalence rates might be significant among heterosexuals but not among LGB respondents due to much larger sample size among heterosexuals.

- Because of social stigma, especially in states with bans on same-sex marriage, some LGB individuals might not have felt comfortable reporting their sexual orientation and instead identified as heterosexual. The authors discuss how this might have inflated the increase in mental health disorders among heterosexuals in these states.

Discussion

The gay marriage debate has been one of the most nationally polarizing issues in recent memory. Underlying all the controversy are the possible mental health consequences of same-sex marriage amendments. The results of this study suggest that institutional discrimination, in the form of
same-sex marriage bans, might contribute to mental health disorders among lesbian, gay, and bisexual individuals. Considering alcohol use disorders, mood disorders, and anxiety disorders, the group that experienced the greatest increase in prevalence was LGB respondents living in states that banned same-sex marriage. The authors suggest that living in communities that are hostile to same-sex marriage might create a "cascade" of negative psychological consequences; more in-depth research is needed to confirm this explanation. On the other hand, this explanation does not account for the sharp increase in drug use disorders among LGB respondents in states without same-sex marriage bans. As US laws continue to change in the coming days, there will be more opportunity to study how public policy shapes private life.

-Emily Shoov

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