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Research paper

Sexual orientation and treatment-seeking for depression in a multilingual worldwide sample

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ABSTRACT

Background: Prior research has found higher rates of mental health problems among sexual minority individuals. We examine treatment-seeking for depression, as well as its relationship with sexual orientation, in a large, multilingual, international sample.

Method: Participants in an automated, quintilingual internet-based depression screening tool were screened for depression, and completed several background measures, including sexual orientation (with an option to decline to state) and past and current depression treatment seeking.

Results: 3695 participants screened positive for current or past depression and responded to the sexual orientation question. Those who declined to state their sexual orientation were far less likely to seek any treatment than individuals endorsing any orientation; they were especially unlikely to seek psychotherapy. Individuals identifying as bisexual sought both psychotherapy and alternative treatments at a higher rate than other groups. An interaction was observed between sexual orientation and gender, such that lesbian women were especially likely to have used psychotherapy. Other variables that emerged as significant predictors of treatment-seeking for depression included age and participant's language.

Limitations: Limitations include possible misinterpretation of translated terms due to regional differences, and possible limits to generalizability due to this study being conducted on the internet.

Conclusions: Our results suggest that individuals who decline to state their sexual orientation may be more likely to forgo effective treatments for depression. Further studies of depression service utilization should focus on developing treatment modalities that could better engage sexual minority individuals, especially those who are reluctant to disclose their orientation.

1. Introduction

Despite the existence of effective treatments for depression, the most common and well-studied of which include psychotherapy and antidepressant medications (Weissman et al., 1979; Hollon et al., 2005; Bauer et al., 2007), the majority of the estimated 350 million individuals experiencing depression worldwide (http://www.who.int/mediacentre/factsheets/fs369/en/) are untreated or undertreated. An estimated 50% of those suffering from depression in the United States, and 75% worldwide, are undertreated (Kessler et al., 2003). Even if treatments are available, depressed individuals, on average, defer seeking treatment for up to 10 years (Mark et al., 2007). Reasons for this alarming rate of undertreatment range from logistic (e.g., lack of trained providers, or lack of means) to the reluctance to pursue care when opportunities are present, possibly due to the stigma associated with mental illness and its treatment (Barney et al., 2006).

Sexual minority individuals (that is, those who do not explicitly endorse a heterosexual orientation) are at an increased risk for mental health difficulties, including major depressive episodes and suicidality (Chakraborty et al., 2011; Institute of Medicine (US) Committee on Lesbian, Gay, Bisexual, and Transgender Health Issues and Research Gaps and Opportunities, 2011; McNair et al., 2005). The higher rates of mental health disorders among sexual minority individuals can be explained by minority stress theory (Meyer, 1995, 2003) which posits that sexual minority individuals experience higher rates of social prejudice, discrimination, and

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internalized stigma related to their sexual orientation, and that these factors in turn are related to poorer mental health outcomes. Accordingly, sexual minority individuals seek mental health treatment at greater rates than heterosexual counterparts both in adolescence (Lucassen et al., 2011; Williams and Chapman, 2011) and adulthood (Cochran et al., 2003; Grella et al., 2009), even if the specific mental health issue is not formally defined (Grella et al., 2009).

Given the pervasive stigma faced by sexual minorities (Herek, 2009), which is perhaps compounded by the stigma of having mental health concerns, it is likely that sexual minority individuals with depression have mental health needs that remain unmet. Indeed, research among selected sexual minority communities has shown that fears of stigma and bias interfere with help seeking among sexual minority individuals (e.g., veterans of the military, Simpson et al., 2013; rural communities, Willging et al., 2006). Stigma appears to present barriers to treatment across the lifespan. Among adolescents, sexual minority youth experience higher levels of anxiety, depression, and suicidality and a greater unmet mental health need (Williams and Chapman, 2011). Among older sexual minority populations, only 33% of those who utilized Veteran Administration Healthcare services reported open communication of their sexual orientation, with 25% indicating that they avoided treatment due to anticipated stigma (Simpson et al., 2013).

Research on the relationship between sexual orientation and unmet mental health needs has been limited in a number of ways. One important limitation is geographic, with the majority of research having been conducted in North America (Cochran et al., 2003; Grella et al., 2009), a few countries in Europe such as the United Kingdom (e.g., King et al., 2003) and Holland (e.g., Kuyper, 2011), or in Australia (e.g., Lucassen et al., 2011). Another limitation is that such research typically does not include individuals who are unwilling to disclose their sexual orientation. Such unwillingness is not necessarily an indication of sexual minority status; however, individuals unwilling to disclose their sexual orientation represent a group that may have unique challenges and needs (Schrimshaw et al., 2013).

Studies carried out on the internet allow investigators to avoid the aforementioned limitations. Internet-based studies are not limited geographically; any individual in any geographic location with internet access can participate. Further, online studies can be designed for privacy and anonymity and do not rely on face-to-face interaction with a researcher, which can reduce response bias due to social stigma. Indeed, research shows that, when responding to questions on topics as sensitive as suicide, individuals are more likely to be open with a computer rather than a clinician (Erdman et al., 1987; Levine et al., 1989). Internet-based studies generally do not incur additional cost from including more people; such studies can therefore easily include individuals who may be excluded from other research paradigms due to cost or logistical challenges, such as individuals who do not disclose their sexual orientation.

The purpose of our investigation was to understand the relationship between sexual orientation and treatment-seeking for depression among individuals who had screened positive for depression. Given the unique opportunities afforded by internet-based investigations, our research was carried out worldwide and in five languages, and included those who had declined to state their sexual orientation.

2. Methods

2.1. Participants and recruitment

Recruitment took place between February 11, 2013 and June 27, 2014. Participants were primarily recruited using worldwide Google AdWords campaigns (Gross et al., 2014). Eligible participants were at least 18 years of age, and able to read one of the five languages of our study (English, Spanish, Russian, Chinese, or Arabic); no other recruitment criteria were used. Participants who indicated that their responses were not accurate or who had obviously haphazard or deceptive responses (e.g., more years of education than years of age) were excluded from analyses. For this report, given our question of interest, we limited our analyses to individuals who: 1. screened positive for either current or past major depressive episodes (i.e., endorsed having either depressed mood or anhedonia, endorsed the presence of five of nine symptoms of depression, and indicated that their symptoms were interfering with their life; 845 participants failed to meet these criteria and were excluded; there were no differences in the proportion of participants with past/current MDEs across sexual orientation groups, Pearson chi-square(3)=2.86, p=0.41); and, 2. either identified as heterosexual, gay/lesbian, bisexual, or explicitly declined to state their sexual orientation. Thus, the final sample consisted of 3695 participants from 133 countries and territories, of whom 826 were English speakers, 802 were Spanish speakers, 751 were Russian speakers, 492 were Chinese speakers, and 824 were Arabic speakers. Demographic information about participants is offered in Table 1.

Table 1
Demographic information by participants' sexual orientation.

	Heterosexual n=3121 % or M (SD)	Gay/Lesbian n=105 % or M (SD)	Bisexual n=198 % or M (SD)	Prefer not to answer n=271 % or M (SD)	*p-value*
Sex[a]					0.0001
Male (n=1435)	37.7%	56.2%	26.3%	54.6%	
Female (n=2260)	62.3%	43.8%	73.7%	45.4%	
Age	29.85 (10.7)	28.29(10.4)	25.98(8.68)	26.34(8.91)	0.0001
Education	14.62(3.66)	14.46(3.53)	14.48(3.46)	14.24(4.03)	0.113
Language[b]					0.0001
English (n=826)	84.7%	2.9%	5.8%	6.5%	
Spanish (n=802)	91.0%	2.9%	4.1%	2.0%	
Russian (n=751)	86.4%	1.7%	7.5%	4.4%	
Chinese (n=492)	87.2%	3.0%	6.9%	2.8%	
Arabic (n=824)	74.4%	3.6%	3.3%	18.7%	

[a] The percentages reported here are for sex within each sexual orientation.
[b] The percentages reported here are for sexual orientation within each language.