

### Addictive Behaviors

journal homepage: www.elsevier.com/locate/addictbeh

# Sexual orientation disparities in prescription drug misuse among a nationally representative sample of adolescents: Prevalence and correlates

Dennis H. Li<sup>a,b,\*</sup>, Blair C. Turner<sup>a,b</sup>, Brian Mustanski<sup>a,b</sup>, Gregory L. Phillips II<sup>a,b</sup>

<sup>a</sup> Institute for Sexual and Gender Minority Health and Wellbeing, Northwestern University, 625 N. Michigan Avenue, Suite 1400, Chicago, IL 60611, United States <sup>b</sup> Department of Medical Social Sciences, Feinberg School of Medicine, Northwestern University, Chicago, IL 60611, United States

#### HIGHLIGHTS

- Sexual orientation disparities in prescription drug misuse are explored using the 2015 National Youth Risk Behavior Survey.
- Most female and male sexual minority adolescents are at elevated odds of ever misusing a prescription drug.
- Victimization experiences and poor mental health only partially account for these disparities.
- Findings for bisexual and racial/ethnic minority males are discrepant from previous studies, warranting further research.
- Interventions across socioecological levels are needed to reduce prescription drug misuse among sexual minority youth.

#### ARTICLE INFO

Keywords: Sexual minority Prescription drugs Gay Lesbian Bisexual Adolescent Victimization

#### ABSTRACT

*Objective:* Sexual minority adolescents (SMA) may be at disproportionate risk for misusing prescription psychotropic medications compared to their heterosexual peers. However, generalizable studies specific to this age group are lacking. The current study aimed to describe the prevalence of sexual orientation disparities in prescription drug misuse among a nationally representative sample of adolescents as well as to examine key correlates of misuse.

*Method:* Using data from the National Youth Risk Behavior Survey, we conducted stepwise multivariable weighted logistic regressions, sequentially controlling for demographics, experiences of victimization, mental health, and other illicit substance use.

*Results*: Adjusting for grade and race/ethnicity, female SMA and gay and unsure males had significantly elevated odds of ever misusing a prescription drug compared to heterosexual adolescents (*ORs* from 1.7–2.5). Most sexual orientation disparities among females remained significant with the addition of victimization and mental health covariates but attenuated completely after controlling for other illicit drug use. The effect for unsure males attenuated when victimization variables were included, but the effect for gay males remained significant through the final model. Controlling for other illicit drug use, mental health variables remained significant correlates for females whereas only forced sex was significant for males.

*Conclusion:* These results suggest experiences of victimization and mental health partially account for the disparities in prescription drug misuse between SMA and heterosexual adolescents, and their effects may differ by sex. A combination of structural, individual coping, and universal drug prevention approaches should be used to make the largest impact on reducing these disparities.

#### Introduction

Prescription psychotropic medications are the second most prevalent type of drug used illicitly among adolescents in the United States (Johnston, O'Malley, Miech, Bachman, & Schulenberg, 2016; Martins et al., 2017). The majority of high school youth perceive using prescription stimulants, pain relievers, tranquilizers, and sedatives without medical supervision as low risk (Miech, Johnston, O'Malley, Bachman, & Schulenberg, 2016). As such, over 18% of twelfth-grade students report ever having misused a prescription drug, and 13% report having misused in the past year (Miech et al., 2016). Like other substances, prescription drug misuse can have short- and long-term

CrossMark

E-mail address: dennis@northwestern.edu (D.H. Li).

http://dx.doi.org/10.1016/j.addbeh.2017.09.021

Received 4 May 2017; Received in revised form 14 September 2017; Accepted 26 September 2017 Available online 28 September 2017 0306-4603/ © 2017 Elsevier Ltd. All rights reserved.

<sup>\*</sup> Corresponding author at: Institute for Sexual and Gender Minority Health and Wellbeing, Northwestern University, 625 N. Michigan Avenue, Suite 1400, Chicago, IL 60611, United States.

negative social and health effects, including family and peer relationship problems, poor school performance, impaired brain functioning, increased risk for mental health and substance use disorders, and overdose death (Ali et al., 2015; McCabe, Veliz, Boyd, & Schulenberg, 2017; National Institute on Drug Abuse, 2016). Thus, early prevention, identification, and treatment of prescription drug misuse is of critical public health concern.

Limited evidence suggests emerging and young adults who identify as sexual minorities may be at increased risk of prescription drug misuse compared to those who identify as heterosexual (Corliss et al., 2010; McCabe, 2005; Rosario et al., 2014; Shadick, Dagirmanjian, Trub, & Dawson, 2016). Even less research has examined this relation among sexual minority adolescents (SMA, loosely defined here as those under 18 years), who may be less out and have less support for their sexual identity (Savin-Williams & Cohen, 2015) as well as different access to substances than older individuals (Johnston et al., 2016). In the only study of sexual orientation differences in prescription drug misuse that examined adolescents separately from emerging adults, Corliss et al. (2010) found that the elevated risk of misuse among sexual minorities was larger for gay, lesbian, and bisexual youth aged 12-17 than for those aged 18-23. In addition, whereas the estimates for emerging adults reflected other studies of sexual minority young adults that suggest the disparity is largely driven by bisexuals, questioning individuals, and females (McCabe, 2005; Rosario et al., 2014; Shadick et al., 2016), among the younger group, the risks for mostly heterosexual males and females were substantially attenuated relative to other SMA subgroups, and the adjusted effect for gay males remained significantly elevated. These age group discrepancies as well as the general lack of studies among younger individuals highlight a need for more targeted research examining prescription drug misuse specifically among SMA.

In addition to establishing the prevalence of prescription drug misuse among SMA, it is important to identify factors that contribute to heightened risk. School-based experiences of victimization are particularly salient to this population and may be one such factor (D'Augelli, 1998). SMA experience higher levels of both general peer victimization and homophobic teasing than heterosexual youth (Birkett, Espelage, & Koenig, 2009). In a national survey of 10,528 sexual and gender minority students, over 85% reported experiencing verbal harassment, largely based on sexual orientation, and 58% and 27% respectively reported feeling unsafe and being physically harassed in the past year because of their sexual orientation (Kosciw, Greytak, Giga, Villenas, & Danischewski, 2016). Per the minority stress model (Meyer, 2003), such stressors not only impact individuals acutely but can lead to and interact with internalizations of stigma and negative self-worth, which may subsequently foster risk behaviors and negative physical and mental health outcomes (Frost, Lehavot, & Meyer, 2015; Newcomb & Mustanski, 2010). SMA who experience victimization may turn to prescription drugs to cope, which has been suggested by some studies of emerging and young adults (Kecojevic, Corliss, & Lankenau, 2015; Rosario, Hunter, & Gwadz, 1997). Relatedly, having a positive school environment has been shown to be protective against alcohol and marijuana use, closing the disparity between gay and lesbian students and their heterosexual peers (Birkett et al., 2009). Heck et al. (2014) found that sexual and gender minority students attending high schools without a gay-straight alliance had greater odds of using several licit and illicit substances, including twice the odds of misusing attention-deficit/hyperactivity disorder and pain medications, than students attending schools with such an organization, but no other studies of peer victimization and prescription drug misuse in this age group have been identified.

SMA also experience higher levels of other types of victimization, namely forced sexual intercourse (McLaughlin, Hatzenbuehler, Xuan, & Conron, 2012). In a meta-analysis (Friedman et al., 2011), SMA were found to be 3.8 times more likely to have experienced sexual abuse than heterosexual youth. Early-life adverse events, including sexual abuse and sexual violence, have been linked to more tobacco, marijuana, and illicit drug use; greater odds of alcohol use; and higher levels of prescription opioid misuse among sexual minority emerging and young adults (Kecojevic, Wong, Corliss, & Lankenau, 2015; McLaughlin et al., 2012) as well as to earlier initiation and greater odds of prescription drug misuse among similarly aged youth in the general population (Kecojevic et al., 2012; A. Young, Grey, Boyd, & McCabe, 2011). Sexual abuse and sexual violence have also been linked to greater odds of depression and suicidality among sexual minority youth (McLaughlin et al., 2012). These findings in related populations suggest early-life sexual victimization may serve as another driver of prescription drug misuse disparities. However, no direct evidence has yet been reported for adolescents, and there has been limited exploration into differences by sexual orientation.

The current study aimed to estimate the prevalence of prescription drug misuse among a nationally representative sample of adolescents and to identify disparities in misuse between male and female SMA and heterosexual adolescents. We also sought to determine whether victimization experiences contribute to these disparities and to explore how they might do so through impacting mental health outcomes and other illicit substance use. We hypothesized that SMA would be at greater risk for misusing prescription drugs than heterosexual students and that victimization would account for much of the disparity between the groups.

#### 1. Methods

#### 1.1. Design and sample

We analyzed data from the 2015 National Youth Risk Behavior Survey (YRBS), a cross-sectional survey of priority health risk behaviors among public and private high school students in grades 9 through 12 conducted biennially by the Centers for Disease Control and Prevention (2016). National representativeness was achieved using a three-stage cluster sample design, with random selection of schools and classes probabilistically weighted by student enrollment in the target grades. All students in sampled classes were eligible to participate. School and student response rates were 69% and 86%, respectively; 15,624 usable questionnaires were obtained from 125 schools (Brener et al., 2013; Kann et al., 2016). Records were weighted based on student sex, grade, and race/ethnicity; school and student nonresponse; and oversampling of Hispanic and Black students. All current study activities were classified as non-human subjects research by the Institutional Review Board at Northwestern University.

#### 1.2. Measures

All variables in the YRBS are assessed via self-report. The YRBS codebook as well as a discussion of YRBS reliability and validity can be found elsewhere (Brener et al., 2013; Centers for Disease Control and Prevention, 2016).

#### 1.2.1. Sexual orientation

Self-identified sexual orientation was assessed with the question, "Which of the following best describes you?" Respondents could endorse identifying as heterosexual (straight), gay or lesbian, bisexual, or not sure.

#### 1.2.2. Demographics

Sex was coded as either female or male. Grade in school ranged between 9th and 12th grades. Two items for ethnicity and race were collapsed into a single variable with five categories: non-Hispanic White, non-Hispanic Black or African American, Hispanic/Latino, non-Hispanic multiracial, and non-Hispanic other. Download English Version:

## https://daneshyari.com/en/article/5037542

Download Persian Version:

https://daneshyari.com/article/5037542

Daneshyari.com