

The Role of Help-Seeking in Preventing Suicide Attempts among Lesbians, Gay Men, and Bisexuals

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One possible approach to prevention of suicide attempts is to encourage help-seeking among individuals at risk. We assessed whether different forms of treatment were associated with lower odds of a suicide attempt in a diverse group of 388 lesbian, gay, and bisexual (LGB) adults aged 18–59, sampled from New York City venues. Of individuals who attempted suicide, 23% sought mental health or medical treatment and 14% sought religious or spiritual treatment prior to the suicide attempt. Black and Latino LGBs were underrepresented in mental health or medical treatment and Black LGBs were overrepresented in religious or spiritual treatment. Seeking mental health or medical treatment was not associated with lower odds of a suicide attempt; seeking religious or spiritual treatment was associated with higher odds of a suicide attempt. We discuss these results and posit hypotheses for further research of this understudied topic.

As a recent review of nearly three decades of research shows, the odds of attempting suicide is approximately 2 to 7 times higher for lesbians, gay men, and bisexuals (LGBs) than heterosexuals (Haas et al., 2011). Completed suicides have been less studied in part because of the small numbers of, or lack of data on, LGB individuals in probability studies and, in part, because of the difficulty of postmortem determinations of sexual orientation. Available research on completed suicides paints a more inconsistent picture than research on suicide

attempts; early studies concluded that gay men were not overrepresented in completed suicides (Rich, Fowler, Young, & Blenkush, 1986; Shaffer, Fisher, Hicks, Parides, & Gould, 1995), but more recent studies suggest that LGBs *are* overrepresented in completed suicides (Hatzenbuehler et al., 2014; Plöderl et al., 2013).

Little knowledge exists to help understand patterns of suicide behavior among subgroups of sexual minorities. Research suggests that there may be higher odds of suicide attempts among racial or ethnic minority LGBs than White LGBs (O'Donnell, Meyer, & Schwartz, 2011; Remafedi, 2002). Consistently, among urban racial or ethnic minority adolescents, sexual minorities have higher risk of suicide than heterosexuals (O'Donnell, O'Donnell, Wardlaw, & Stueve, 2004). A recent analysis of Youth Risk Behavior Survey data from various localities and states showed that the odds of suicide ideation and attempt were higher for American Native

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or Pacific Islander, Latino, and multiracial youth, and lower for Asian and Black youth, than White youth (Bostwick et al., in press).

Further, most of the research on suicide in LGB populations has focused on youth and adolescence. In a prospective study of youth across four waves of the AD HEALTH data, Russell and Toomey (2012) found that risk of suicide attempts among sexual minority males is largely limited to adolescence. But other studies suggest that LGB people continue to be at risk of suicide beyond early developmental periods as sexual orientation disparities in suicidality persist into young adulthood (Marshall et al., 2013). Suicide is a serious risk among the elderly and very elderly in the general population, but little research exists to shed light on this in both the general and LGB populations (Waern, Rubenowitz, & Wilhelmson, 2003).

Studies in the general (not specifically LGB) population show that a major risk factor for suicide attempts is a history of mental disorders, in particular mood and substance use disorders (Evans, Hawton, & Rodham, 2004; Galaif, Sussman, Newcomb, & Locke, 2007; Spirito & Esposito-Smythers, 2006). Substance use not meeting diagnostic criteria is also related to suicide completion (Spirito & Esposito-Smythers, 2006). Other suicide risk factors include family discord and childhood trauma and abuse (Flouri, 2005; Maniglio, 2011; Spirito & Esposito-Smythers, 2006) and peer conflict and bullying (Borowsky, Taliaferro, & McMorris, 2013; Espelage & Holt, 2013; Kowalski & Limber, 2013). These social or psychological factors may interact with genetic and other biological dispositions to suicide (Mann, 2003).

Researchers note that these risk factors must be seen within a structural or sociocultural context with which these factors interact (Chu, Goldblum, Floyd, & Bongar, 2010; Mościcki, 2001). Thus, minority stress processes—related to prejudice and stigma against LGB people—are significant risks that could be related to sui-

cide ideation and attempts (Meyer, 2003; Meyer, Frost, & Nezhad, in press). For example, early openness about sexual orientation and being identified as LGB by parents increase risk of suicide attempts in LGB youth (D'Augelli et al., 2005). This may be because disclosure of LGB identity can lead to family rejection of the LGB person. In turn, family rejection is associated with increased risk of suicide attempts (Ryan, Huebner, Diaz, & Sanchez, 2009). In contrast, family acceptance is associated with greater self-esteem, social support, and better general health status and is protective against suicidal ideation and behaviors (Ryan, Russell, Huebner, Diaz, & Sanchez, 2010).

To address suicide risk, several types of suicide prevention programs have been developed for use in the general (non-LGB specific) population. Community-based prevention programs focus on environmental change or target the general public (e.g. hotlines, public awareness campaigns, regulation of lethal items such as firearms, and media standards to avoid sensationalizing suicide; Gould, Greenberg, Velting, & Shaffer, 2003). Although an effective proven preventive approach is elusive, early identification and intervention are often recommended. Thus, education of both the public and clinicians is important so that risks for suicide can be identified in time for an intervention to take effect (Mann et al., 2005). Specifically for youth, school-based prevention measures aim to increase identification of at-risk youth and connect them with resources, such as peer support, school-wide screening, gatekeeper training, and learning coping skills (Aseltine, James, Schilling, & Glanovsky, 2007; Gould et al., 2003; Mann et al., 2005; Wyman et al., 2008). Because depression is present in most suicides, clinical prevention programs of both youth and adults focus on mental health treatment for people at risk and, especially, follow-up care for people who have attempted suicide (Mann et al., 2005). Psychotherapy and psychopharmacology are both recommended strategies for suicide

prevention, but they have had mixed results (Bridge et al., 2007; Mann et al., 2005; Schmitz et al., 2012).

Studies have shown that significant proportions of individuals who attempt suicide do not seek or receive treatment before the attempt, but as many as 50% of suicide attempters do seek some kind of treatment (Cheung, Dewa, Cairney, Veldhuizen, & Schaffer, 2009; Luoma, Martin, & Pearson, 2002). In general, LGBs seek treatment at higher rates than heterosexuals (Grella, Cochran, Greenwell, & Mays, 2011). Nonetheless, high rates of service utilization among LGBs are accompanied by high rates of suicide attempts. One explanation for this discrepancy includes that LGBs receive unsatisfactory or unhelpful treatment (Israel, Gorcheva, Walther, Sulzner, & Cohen, 2008). Potential treatments for suicide attempters include religious and spiritual counseling (Colucci & Martin, 2008). Indeed, because of the importance of the Black Church in the lives of African Americans, some have called for better integration of religious or spiritual treatment in suicide prevention for African American youth (Goldston et al., 2008). But we do not know what impact religious or spiritual treatment may have on LGB suicide.

In this article, we assess the impact of treatment in preventing a suicide attempt among LGB individuals. First, to test whether treatment would help prevent at least some suicide attempts, we hypothesized that, after controlling for mental disorder symptoms before suicide attempts, LGB individuals who did *not* seek treatment will have a higher prevalence of suicide attempts than those who sought treatment. Second, to the extent that early treatment can prevent suicide behavior, examination of treatment utilization in LGB populations may also provide an explanation for the disparity between race or ethnic minority and White LGBs in suicide attempt prevalence. While LGBs use mental health services, many studies in the general (non-LGB) population have shown an unmet need for mental health treatment and underutiliza-

tion among ethnic minorities due to economic barriers and limited access to health care services. For example, Blacks are less likely than Whites to receive professional mental health treatment (González et al., 2010). Therefore, it is plausible that LGB individuals who are also racial or ethnic minorities are less likely than White LGBs to receive adequate mental health care. We tested whether racial or ethnic disparity in suicide attempt prevalence among LGBs is explained by disparities in treatment. We hypothesized that treatment mediates the relationship between race or ethnicity and suicide attempts. That is, the higher prevalence of suicide attempts among Black and Latino LGBs compared with White LGBs is explained by the lower utilization of treatment among Black and Latino LGBs after controlling for mental disorder symptoms prior to suicide attempt.

METHODS

The data analyzed in the current study were obtained as part of Project Stride, a large epidemiological study that investigated the relationships among stress, identity, and mental health in diverse LGB and heterosexual populations in New York City. Three hundred ninety-six LGB and 128 heterosexual individuals participated in Project Stride (detailed information about the study is available online at <http://www.columbia.edu/~im15/>).

Participants and Procedure

In this article, we report on 388 LGB participants who were sampled between February 2004 and January 2005 from venues in New York City (8 of the 396 participants did not undergo a mental health evaluation and were excluded from this analysis). Sampling venues, chosen to represent a wide diversity of cultural, political, ethnic, and sexual communities, included business establishments (e.g., bookstores, cafes), social groups, and outdoor areas

(e.g., parks), as well as snowball referrals. Participants' recruitment occurred in two phases. In the first phase, 25 outreach workers visited a total of 274 venues in 32 different New York City zip codes. For each potential participant, recruiters completed a brief screening form to determine eligibility for participation in the study. In the second phase, eligible participants were contacted by research interviewers and invited to participate in a face-to-face interview. Consistently with major U.S. psychiatric epidemiological surveys, the study did not include older adults (e.g., Kessler et al., 2005). Participants were eligible if they were 18- to 59-year-old New York City residents for 2 years or more (to allow time for immersion in social networks in the city) who could communicate in English and self-identified as: (a) lesbian, gay, or bisexual or straight/heterosexual; (b) male or female and assigned the same sex at birth; and (c) White, Black, or Latino. Participants may have used other identity terms in referring to these social groups (e.g., *Queer*, *Hispanic*), but here they are recoded into these groups.

We used quota sampling to ensure approximately equivalent numbers of participants across sexual orientation, gender, race or ethnicity, and age group (18–30 and 31–59). The response rate was 60%, defined according to the American Association for Public Opinion Research (AAPOR, 2005; formula RR2) as the number of complete and partial interviews divided by the number of complete and partial interviews, refusals, and eligible noncontacts (individuals who screened eligible in phase 1 whom we could not contact for an interview). The cooperation rate was 79%, calculated in the same way as the response rate, but excluding noncontacts (AAPOR, 2005, formula COOP2). Response and cooperation rates did not vary greatly by sexual orientation, race or ethnicity, or gender (χ^2 s ≤ 0.78 , $ps \geq .38$).

Recruitment efforts were successful at reaching individuals residing in diverse New York City neighborhoods and avoiding the concentration in particular “gay

neighborhoods” that is often characteristic of community-based sampling of LGB populations. Participants resided in 128 different New York City zip codes; no more than 4% of the sample resided in any one zip code area.

By design, Whites, Blacks, and Latinos were about equally represented in the sample, as were men and women and age distributions within each race or ethnic group. Ages ranged from 18 to 58, with a mean of 32.6 (SD 9.3). Of the participants, 22% had a high school diploma or less, 30% had some college or an associate's degree, and 48% had a bachelor's degree or higher; 16% were unemployed; and 56% had a negative net-worth, meaning their debt exceeded their assets. Similar to the general population of New York City residents, Whites were more likely than Blacks and Latinos to have a bachelor's degree or higher and to be employed and less likely to have negative net-worth.

Measures

Mental Disorders and Suicide Attempts. The computer-assisted World Mental Health Survey version of the World Health Organization's Composite International Diagnostic Interview (WMH-CIDI, version 19, see Kessler et al., 2005) was used to evaluate respondents with respect to diagnoses of major depression disorders, anxiety disorders, and substance use disorders (according to the *Diagnostic and Statistical Manual of Mental Disorders, IV*) and to assess suicidal behaviors. Both suicide attempts and serious suicide attempts were used as outcomes based on respondents' response to the WHM-CIDI questions. A suicide attempt was considered a *serious* suicide attempt if the respondent reported that he or she had intended to kill himself or herself and “it was only luck” that prevented death. The interview also records the respondent's age at the time of mental health symptoms and suicide attempts.

Treatment Utilization. Treatment utilization history was also assessed using the

WMH-CIDI by asking whether and when respondents had sought help from professionals for problems with emotions, nerves, or use of drugs and alcohol. For the purpose of our analysis, we categorized the source of help into two groups: mental health and other medical professionals, and religious or spiritual advisors. WHM-CIDI questions about mental health symptoms, suicide attempts, and treatment utilization were asked in different modules of the interview and were not related to one another during the interview. Because respondents reported their age at the time of mental health symptoms, suicide attempts, and/or treatment utilization, we were able to time their occurrences and identify treatment utilization and mental disorders prior to the suicide attempt.

Respondents Characteristics. Respondents also self-reported their sexual orientation, race or ethnicity, and other demographic characteristics. They also reported ages when they experienced coming out milestones (i.e., first same sex attraction, realization of one's LGB identity, age a family member found out about one's LGB identity, and the age the respondent told a family member that he or she is LGB).

Statistical Analysis

Prevalence and standard errors were computed to assess the frequency of suicidal behaviors, treatment utilization, as well as the type of treatment sought. Crude and adjusted odds ratios and 95% confidence intervals were computed from logistic regression using SAS version 9.2 (SAS Institute Inc., Cary, NC, USA).

To determine treatment prior to the suicide attempts, we calculated the age of the respondent at time of suicide attempt and any reported treatments prior to that age. For comparison with respondents who did not attempt suicide, we assessed treatment history among nonattempters by the same age as the respondents who did attempt suicide or serious suicide. Because age was measured in full years, age of treatment and age of suicide attempts could

have overlapped if both occurred at the same age. Because a suicide attempt itself may prompt mental health treatment, to avoid bias related to treatment *after* a suicide attempt, we assumed that if the age of treatment was identical to the age of attempt, then treatment utilization occurred after the attempt, and it was not considered as treatment prior to suicide attempt. Diagnosis with a mental disorder was positively associated with treatment utilization and suicidal behaviors. Therefore, we controlled in our analysis for the presence of these disorders prior to suicidal behaviors. Age of onset for symptoms associated with a disorder were used to determine age at time of the disorder, and it was compared with age at suicide attempt. Also to avoid bias related to treatment *after* a suicide attempt, for a few people with more than one suicide attempt, we considered the first suicide attempt only.

RESULTS

Of the LGB respondents, 17% reported a suicide attempt and 8% reported a serious suicide attempt over their lifetime (Table 1). Compared with White LGBs, more Black and Latino LGBs reported a suicide attempt (OR = 2.43, 95% CI = 1.16, 5.07; and OR = 2.93, 95% CI, 1.42, 6.04, respectively) and a serious suicide attempt (OR = 1.59, 95% CI = 0.55, 4.60; and OR = 3.22, 95% CI, 1.23, 8.44, respectively).

The mean age of first suicide attempt (including nonserious) was 17.4 years ($SD = 6.5$), with a range of ages 7 to 39 years. The mean time between report (i.e., age at the time of the interview) and suicide attempt was 15.4 years ($SD = 10$). Because we do not have an account of the reason for the suicide attempt, we examined whether suicide attempts coincided with coming out milestones. Coming out milestones are periods when LGB people are likely to encounter adjustment problems related to sexual identity. Figure 1 shows a

TABLE 1
Prevalence of Suicide Attempt and Treatment Prior to Suicide Attempt among New York City Lesbians, Gay Men, and Bisexuals (N = 388)

	Suicide Attempt		Serious Suicide Attempt		Treatment Prior to Suicide Attempt (n = 66)		Treatment Prior to Serious Suicide Attempt (n = 32)	
	% (SE)	% (SE)	N (%)	% (SE)	Mental Health or Medical Treatment % (SE)	Religious or Spiritual Treatment % (SE)	Mental Health or Medical Treatment % (SE)	Religious or Spiritual Treatment % (SE)
Total	17.0 (1.9)	8.2 (1.4)	388	22.7 (5.2)	13.6 (4.3)	15.6 (6.5)	12.5 (5.9)	
<i>Gender</i>								
Male	16.6 (1.0)	9.3 (2.1)	193 (50)	15.6 (6.5)	12.5 (5.9)	0.0 (0.0)	11.1 (7.6)	
Female	17.4 (1.0)	7.2 (1.9)	195 (50)	29.4 (7.9)	14.7 (6.2)	35.7 (13.3)	14.3 (9.7)	
<i>Race or ethnicity</i>								
White	9.1 (0.7)	4.5 (1.8)	132 (34)	58.3 (14.6)	8.3 (8.7)	33.3 (21.1)	0.0 (0.0)	
Black	19.5 (1.4)	7.0 (2.3)	128 (33)	12.0 (6.6)	24.0 (8.7)	11.1 (10.1)	22.2 (14.6)	
Latino	22.7 (1.6)	13.3 (3.0)	128 (33)	17.2 (7.1)	6.9 (4.8)	11.8 (8.1)	11.8 (8.1)	

timeline indicating the mean age and standard deviations of serious suicide attempts in the context of age of coming out milestones. It shows that, on average, the age of serious suicide attempts coincided with major coming out milestones. Although not a proof, this is consistent with the notion that sexual identity development was implicated in the lead up to the suicide attempt. We also examined whether this was true for outliers and found the same picture (not shown): People whose first suicide attempt was at an older age (after adolescence) also had later coming out milestones and their suicide attempts clustered around these coming out milestones.

Treatment utilization prior to suicide attempt and serious suicide attempt is also reported in Table 1. A significantly larger proportion of White LGB sought treatment from medical and mental health professionals than Black and Latino LGBs, but significantly more Blacks than White and Latino LGBs sought treatment from religious or spiritual advisors. These patterns were not changed when we controlled for presence of a mood or substance use disorder (data not shown).

Assessing the impact of mental health or medical and religious or spiritual treatment on suicide, we found no evidence for a protective effect of receiving mental health or medical treatment on suicide attempt. That is, contrary to our first hypothesis, respondents who sought mental health or medical treatment some time prior to their suicide attempt (or, among those who did not attempt suicide, prior to the age when suicide might have been attempted) were as likely as respondents who did not seek mental health treatment to have a suicide attempt or serious suicide attempt after this time (Table 2). Therefore, contrary to our second hypothesis, seeking treatment did not explain the race or ethnic disparity we observed in suicide attempts (not shown).

However, unexpectedly, we found that seeking counseling from a religious or spiritual advisor had a harmful impact—it was

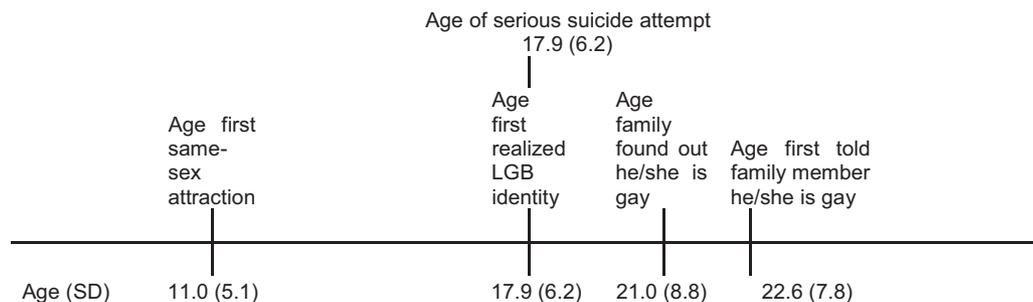


Figure 1. Mean age of serious suicide attempt and coming out milestones among lesbians, gay men, and bisexuals who attempted suicide ($n = 32$).

TABLE 2
Odds Ratio and 95% Confidence Interval for the Association of Any Treatment, Mental Health Treatment, and Religious or Spiritual Counseling on Suicide Attempt and Serious Suicide Attempt (N = 388)

<i>Suicide Attempt</i>	
Any treatment (vs. no treatment)	1.37 (0.78, 2.38)
<i>Treatment type (vs. no treatment)</i>	
Mental health or medical treatment	1.04 (0.55, 1.98)
Religious or spiritual counseling	2.86 (1.20, 6.85)
<i>Serious Suicide Attempt</i>	
Any treatment (vs. no treatment)	0.88 (0.39, 1.95)
<i>Treatment type (vs. no treatment)</i>	
Mental health or medical treatment	0.61 (0.22, 1.65)
Religious or spiritual counseling	1.95 (0.62, 6.13)

associated with higher odds of suicide attempt. Compared with individuals who did not seek help at all, those who sought help from a religious or spiritual advisor were *more* likely to later attempt suicide (OR = 2.86; 95% CI = 1.20, 6.85). This pattern was also found for serious suicide attempts (OR = 1.95; CI = 0.62, 6.13), but the confidence interval is wide and the results are not statistically significant at the set probability level of 0.05. As with the treatment from men-

tal health or medical professionals, adjustment for the presence of mood and/or substance use disorder prior to suicide attempt (or same age in nonattempters) did not change the results (data not shown).

DISCUSSION

Similar to D'Augelli, Hershberger, and Pilkington (2001), we found that LGB people who report a history of lifetime suicide attempts have attempted suicide during a period where coming out milestones had occurred; for example, around the age they first recognized their LGB sexual identity. We found that receiving mental health or medical treatment did not prevent suicide attempts. Although we posed the hypothesis that treatment will be helpful in preventing some suicide attempts, this finding is not completely surprising. As we indicated, data on success of treatment by mental health professionals in reducing suicide attempts have been mixed at best (Gould et al., 2003; Mann et al., 2005). More troubling is our finding that individuals who received religious or spiritual treatment had *higher* odds of later attempting suicide than those who did not seek treatment at all. It is notable that Black LGBs relied on treatment in religious or spiritual settings much more than White LGBs.

Although, in general, religion and spirituality are associated with lower rates of suicide attempts (Gould et al., 2003), little is

known about specific mechanisms that protect religious or spiritual people (Colucci & Martin, 2008). It is relevant in the discussion of treatment for LGB people to note that many religious groups have explicit antigay views (Hunsberger, 1996). Despite significant social changes that lead to improving attitudes toward sexual minorities, religiously affiliated people in the United States hold more antigay attitudes than those not affiliated with religion (Pew Research Center, 2013b). For example, 48% of Americans say there is a conflict between their religious beliefs and homosexuality. This number is greater among those who attend religious services weekly or more, with 66% saying homosexuality conflicts with their religious beliefs. Among religious groups, 74% of White evangelical Protestants, 62% of White Catholics, and 58% of Black Protestants say there is a conflict between homosexuality and their religious beliefs, while less than half of "White mainline Protestants" agree with that (Pew Research Center, 2013b). Consistently, most LGB people view most religious groups as unfriendly (Muslim religion, 84%; the Mormon Church, 83%; the Catholic Church, 79%; and evangelical churches, 73%), with almost half viewing Jewish (47%) and nonevangelical churches (44%) as unfriendly (Pew Research Center, 2013a).

Still, as these data also show, even among religions, there is large diversity of views. It is thus important to note the impact on LGB people of participation in affirming versus nonaffirming religious groups. Nonaffirming religious settings increase internalized homophobia among LGB parishioners compared with LGB people who do not attend religious services or who attend gay-affirming religious services (Barnes & Meyer, 2012). In turn, internalized homophobia is associated with greater risk of suicidal behavior both directly and through its association with depressive symptoms, substance use, and lower psychological well-being (Barnes & Meyer, 2012; King et al., 2008; Meyer, 1995; Newcomb & Mustanski, 2010). Thus, although religion

and spirituality can be helpful to LGB people, negative attitudes toward homosexuality in religious settings can lead to adverse health effects (Lease, Horne, & Noffsinger-Frazier, 2005).

Treatment that is experienced as non-affirming may explain our findings regarding both religious or spiritual and medical or mental health treatment. Studies in the general population have shown adverse effects of religion, for example, when individuals feel that they cannot live up to their religion's expectations (Colucci & Martin, 2008). Israel et al. (2008) found that mental health professionals who were affirming and knowledgeable about sexual orientation were cited as providing helpful therapeutic experiences. Conversely, therapists who focused inappropriately on sexual orientation or who suggested that sexual minority patients should change or hide their sexual identity were unhelpful and they may be damaging.

Strengths of our study include our inclusion of a racial or ethnic diverse sample, the careful timing of treatment seeking that occurred prior to the age of suicide attempt, and the consideration of the severity of the suicide attempt. There are several limitations that ought to be noted. One limitation to this study is the use of a nonprobability sample, which can reduce the external validity (generalizability) of the study. Thus, we cannot suggest that the population estimates (e.g., prevalence of suicide attempt) we derived are accurate. That our results are similar to findings in many samples of LGB population suggests that biases may not be too great. For example, our finding that the mean age at which participants first recognized their sexual minority identity (17.9 years of age) was similar to the age of 17.3, reported in a national representative sample of LGB people (Herek, Norton, Allen, & Sims, 2010), and our findings of high prevalence of suicide attempts are similar to findings from numerous studies, including studies that used probability sampling procedures and studies of both adults and youth (Haas et al., 2011; Hatzenbuehler et al., 2014; Marshal et al., 2013; Stone et al., 2014).

However, it is important to note that our study, which assesses the role of treatment in preventing suicide attempts, has less to do with generating population estimates (external validity) and more to do with suggesting causal relationships (internal validity). Nonprobability sampling is not in and of itself a limitation to assessing such causal hypotheses (Shadish, Cook, & Campbell, 2002). Limitations to causal inferences must be examined also. These include that our retrospective study does not provide sufficient information to assess some of the specific mechanisms that may cause spiritual and religious treatment to increase risk of suicide attempt. Moreover, although we have rich data on the participants at the time of the survey, we have limited retrospective information that we could time to the period prior to the suicide attempt. Thus, we were able to time treatment history and the presence of mental disorders prior to the suicide attempt but not other factors at that time. For example, while we know that a participant attended spiritual or religious counseling, we do not know the participant's religion and religiosity at that time. Similarly, we speculate that the religious (hence, we suppose, antigay) content of the treatment may have to do with its negative of impact on suicide attempts, but we have no way to assess the content or quality of the treatment received by LGB participants who sought it.

Another limitation is potential confounding by religiosity. It may be that regardless of the treatment, it is religiosity that is associated with suicide attempts. For example, religious LGB may be more likely than nonreligious LGB people to internalized homophobia and, in turn, attempt suicide. Because, presumably, religious people are more likely to seek spiritual or religious treatment than nonreligious or even less religious people, it is impossible to know whether it was the treatment, as we discuss here, or the religiosity, which was associated with the suicide attempt.

Perhaps most importantly, conclusions from our results are limited because our findings refer to treatment that occurred many years ago. Thus, our findings may not reflect current conditions, when social attitudes toward LGB people have improved significantly. It is possible that today's youth who seek treatment find help that prevents suicide attempts. While this needs to be studied, at least in terms of the prevalence of suicide attempt, we do not yet see marked improvements. Studies of suicide attempts occurring as recently as 2001–2009 show that sexual minority youth continue to be at high risk of suicide ideation, plans, attempts, and medically serious attempts compared with heterosexuals (Stone et al., 2014).

In part because of some of these limitations, implications for intervention cannot be made easily. Of course, interventions aimed at the general population affect LGB youth as well, but it remains to be assessed whether such programs are as successful for LGB youth as they are for other youth (to the extent that they are successful at all). Even if general prevention programs identify LGB youth at risk of suicide attempt and refer them for treatment, many LGB youth may not have access to LGB-competent care. For example, less than one-third of college counseling centers offer individual counseling for LGB students and most psychiatrists who work in middle and high schools said that they require more training to be able to work with LGBT students (Kilanowski-Press, 2009; Wright & McKinley, 2011).

We know of only one large-scale lesbian, gay, bisexual, and transgender (LGBT)-specific suicide prevention program—the Trevor Project, which provides a telephone and Web-based helpline—but we know of no assessment of its efficacy (Suicide Prevention Resource Center, 2008). A very promising approach is the *Family Acceptance Project*, which aims to improve the health and well-being of LGBT youth by helping “ethnically, socially and religiously

diverse families to support their LGBT children” (<http://familyproject.sfsu.edu>; see also Ryan et al., 2010), but its efficacy has not yet been tested either.

Our study provides insight into seemingly paradoxical research findings in the LGB health literature that has shown that LGBs report higher utilization of mental health treatment than heterosexuals, but also have a higher prevalence of suicide attempts. We showed that LGB people had similar risk of suicide whether or not they received mental health or medical treatment, and worse, if they received religious

or spiritual treatment, their risk of suicide attempt was higher than that of LGBs not seeking help at all.

With the consistent evidence about sexual orientation disparities in suicide behavior, it is surprising that very little research assesses interventions to prevent suicide in LGB youth and/or adults specifically. We hope that our study encourages others to assess the impact of treatment on LGB youth and adults and provide some answer as to whether—and if so, what—treatment is effective in preventing suicide attempts in LGB individuals.

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