

Suicide and Sexual Orientation

Nearing the End of Controversy?

OVER THE past 25 years, researchers have reported consistently high rates of suicidality among homosexual persons, particularly among adolescents and young adults.¹ Based on the data available at the time, the 1989 *Report of the Secretary's Task Force on Youth Suicide* concluded that "gay youth are 2 to 3 times more likely to attempt suicide than other young people. They may comprise up to 30% of completed youth suicides annually."²

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The report ignited a controversy that has persisted to the present day. In response to public and congressional inquiries, the American Association of Suicidology, Washington, DC, the Centers for Disease Control and Prevention, Atlanta, Ga, and the National Institute of Mental Health, Rockville, Md, convened a workshop in 1994 regarding rates of suicide among gay men and lesbians.³ Some of the meeting attendees concluded that "there is no population-based evidence that sexual orientation and suicidality are linked in some direct or indirect manner."⁴ However, in light of the research published soon thereafter, that judgment might have been premature and overstated.

To date, at least 10 peer-reviewed studies have found unusually high rates of attempted suicide, in the range of 20% to 42%, among young bisexual and homosexual research volunteers.^{1,5-13} Additionally, 6 other population-based and controlled studies published since 1997 have corroborated the findings from volunteers.¹⁴⁻¹⁹ All have found a clinically and statistically significant association between suicide attempts and homosexuality, strongest among males.

The 2 new articles in this issue of the ARCHIVES by Fergusson et al²⁰ and Herrell et al²¹ are the latest additions to the mounting evidence of a strong link between homosexuality and suicide. Herrell and coauthors analyzed data on suicidality and same-sex sexual behavior from a unique database of male, military veteran twin pairs. The study involved 48 monozygotic and 55 dizygotic twin pairs born between 1939 and 1957, who were discordant for sex with same-sex partners during adulthood.

An elegant co-twin control method was used to examine the relationship between same-sex sexual behavior and suicidality. Conditional logistic regression analysis for matched pairs was used to examine how demographic, military service, and psychiatric comorbidity variables affected the association between sexual orientation and suicidality. The investigators found that men with same-gender sexual partners were 6.5 (95% confidence interval, 1.5-28.8) times as likely as their co-twins to have attempted suicide, and the relatively high risk was not explained by mental health or substance abuse disorders.

At least 3 previous studies have found a significant association between reported suicide attempts and substance abuse or mental health symptoms in gay, lesbian, and bisexual (GLB) youth,^{9,12,13} and several others have noted that GLB youth were more likely than heterosexual youth to abuse substances or to suffer from mental health symptoms.¹⁶⁻¹⁸ However, the veteran's database study is 1 of only 2 studies¹⁹ to have shown that the association between suicidality and same-gender sexual orientation in men is independent of the confounding effects of substance abuse and mental health diagnoses.

The other study, by Fergusson et al,²⁰ examined the extent to which 28 GLB youth in a New Zealand birth cohort were at risk of suicidal behaviors

and psychiatric disorders. Different from the work of Herrell et al,²¹ this study treated mental health diagnoses as main outcomes rather than covariates of suicidality. The subjects were persons in the birth cohort who either self-identified as GLB (9 male; 11 female) or otherwise reported having had sex with same-sex partners (2 male; 6 female). The GLB youths were found to be at increased risk of a variety of psychiatric disorders, nicotine dependence, and suicidal ideation and attempts (odds ratio, 6.2 [95% confidence interval, 2.7-14.3]). The odds of a suicide attempt among homosexual persons from the 2 studies in this issue were quite similar and closely resemble figures from a population-based study of Minnesota students.¹⁵

The current articles have similar strengths pertaining to the unique samples and systematic assessment of psychiatric symptoms. The co-twins in the veteran database study serve as exceptionally well-matched controls for many of the hereditary and environmental factors that can influence suicidality. The Christchurch Health and Development Study is a 21-year longitudinal study of 1265 children born in Christchurch, New Zealand. The use of these rare databases averted some of the potential biases associated with prior convenience samples. Both of the current studies gathered data through face-to-face or telephone interviews, a methodological departure from, and possible improvement on, the more commonly used written surveys.

If not for mental health problems, what can explain the high prevalence of suicide attempts among young homosexual persons? The veteran database study could not directly compare the odds of suicidality among monozygotic and dizygotic twins because of insufficient numbers of sexually discordant pairs. However, there was no

association between suicidality and zygosity in the regression analyses, as might be expected if heritable mental illness or other biological conditions were at play.

Although the current studies were not specifically designed to identify comorbidities, 6 prior studies comparing homosexually oriented suicide attemptors with nonattemptors highlighted social risk factors such as gender nonconformity,¹ early awareness of homosexuality,^{1,6,9,12} gay-related stress,¹⁰ victimization by violence,¹² lack of social support,^{6,9,12} school dropout,¹⁰ family problems,⁶ suicide attempts by friends or relatives,¹⁰ and homelessness.¹⁰ Based on the results of the current studies, there appears to have been no decline in the risk of suicide for GLB individuals born from 1949 (the mean birth year of the veteran database sample) to 1977 (the birth year of the Christchurch Health and Development Study sample). As the authors of the twin study allude, whatever societal progress has been made in the interim might not have benefited adolescents struggling with the issue of sexual orientation.

In addition to their strengths, the current studies also share some common limitations. Like many prior studies, these studies could not examine sex differences. Women were not represented in the veteran database, and there were too few GLB subjects in the Christchurch Health and Development Study for statistical analysis of sex differences. Although adolescent women in the general population attempt suicide more often than adolescent men, young lesbian women and homosexual men have been found to have similarly high rates of attempted suicide.^{7,11,12} Two recently published studies of large, representative student populations in Minnesota¹⁵ and Massachusetts¹⁹ found suicide attempts to be associated with homosexuality in boys but not girls. Apparently, a homosexual orientation does not compound the already greater risk of suicide attempts for women compared with men.

Another prominent gap in all of the existing research is an examination of ethnic and racial differences. As illustrated by the current studies, the percentage of self-identifying

homosexual persons in the general population is so small that relatively huge samples are needed for meaningful subpopulation analyses. It is imperative that future large-scale population surveys include questions about sexual orientation and oversample minority groups to represent them appropriately.

Both of the current studies focus on special populations defined by military service or birth in Christchurch, limiting the generalizability of the findings to other places and types of persons. However, taken together with earlier studies, there can be little doubt about the conclusion that homosexual orientation is associated with suicidality, at least among young men. Whether the risk of suicide peaks during adolescence, as expected, or remains constant throughout the life cycle is still unknown. Moreover, the extent to which suicide attempts in homosexual persons result in actual deaths remains to be determined. Although 2 psychological autopsy studies¹⁵ have investigated the sexuality of suicide victims, sexual orientation is difficult to determine posthumously, and the prior studies' findings have been hard to interpret.

Certainly, there is much more to be learned about the circumstances and causes of attempted and completed suicide among homosexual people. Understanding the link between suicide and sexual orientation may provide important new clues to the general problem of youth suicide. As we continue to gather new information from studies such as the two in this issue, suicidologists and psychiatrists should recognize the serious risk of suicide facing some GLB people. The evidence is sufficiently compelling to warrant the education of mental health professionals as well as the development of preventive interventions for GLB youths. It is time to put the controversy aside and be about the business of saving lives.

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