Sexual orientation and depression in Canada

Roger L. Scott, PhD, NP,¹ Gerri Lasiuk, PhD, RN,² Colleen M. Norris, PhD, FAHA^{3,4}

ABSTRACT

OBJECTIVES: Depression is a global concern and it is well known that certain segments of the population are at greater risk. Sexual minorities are recognized as being more likely to suffer from depression due to social stigma and prejudice. The aim of this study was to describe the relationship between sexual orientation and depression in the Canadian population.

METHODS: The study used the 2012 Canadian Community Health Survey – Mental Health data. The sample comprised 24,788 Canadians living in the ten provinces. Logistic regression analyses were used to examine the relationship of depression and sexual orientation.

RESULTS: After adjusting for known risk factors for depression, there was no difference in prevalence of past 12-month or lifetime major depressive episode between sexual minorities and heterosexuals. Bisexuals did have a near significant trend towards higher prevalence of both past 12-month and lifetime depression as a combined group, but there were not clear differences when stratified by sex.

CONCLUSION: This study supports important emerging trends in the relationship between sexual orientation and depression. Research on the mental health of sexual minority people must take into account differences between sexual minority groups and avoid aggregating mental health disorders into broad categories. These findings have implications for public health planning and clinical recommendations.

KEY WORDS: Homosexuality; bisexuality; depression; mental health; quantitative evaluation

La traduction du résumé se trouve à la fin de l'article.

Can J Public Health 2016;107(6):e545–e549
doi: 10.17269/CJPH.107.5506

Depression is a common mental health problem characterized by depressed mood and loss of interest or pleasure in usual activities; at its worst, it may also include thoughts of death and even suicide.¹ With 350 million people affected annually, depression is the third leading cause of disability-adjusted life years and an important public health concern.² The *World Mental Health Survey* estimates the 12-month prevalence of mood disorders, including depression, is between 1.1% and 9.7%, with the highest rates occurring in Western nations.³ In Canada, the 12-month prevalence of a major depressive episode (MDE) is estimated at 4.7% and lifetime MDE is 11.3% in the general population aged 15 and older.⁴

The risk for depression differs among subgroups of the population. Youth, Indigenous people and other racial minority groups, persons who use substances, and those who live with chronic illness have reportedly higher rates of depression.^{5–9} Sexual minorities (i.e., persons who identify as lesbian, gay or bisexual (LGB)) have also been reported to have higher risk for depression than heterosexuals.¹⁰ Minority stress theory suggests that members of minority groups suffer higher risk of mental health disorders as an effect of the unique chronic stressors they are exposed to through social stigma and discrimination.¹¹

The mental health of sexual minorities in Canada has not been the subject of much study. There is conflicting evidence in the literature, with some reports indicating higher risk for mood disorders among sexual minority women and men, and others lower risk in sexual minority men.^{12–14} Since depression is such a potentially disabling chronic disease, it is important to identify groups at greatest risk and particular risk factors. The purpose of

this study is to describe the relationship between sexual orientation and depression in Canada.

METHODS

Design

We conducted a secondary analysis of cross-sectional data from the Canadian Community Health Survey – Mental Health (CCHS-MH).

Ethical considerations

The University of Alberta Research Human Ethics Board determined that additional ethics approval was not required for this secondary analysis given the ethical oversight of the original Statistics Canada study. Participants in the original study provided informed consent prior to completing the CCHS-MH survey.

Sample

The CCHS-MH survey was carried out between January and December 2012 and collected data on health, social and

Author Affiliations

1. Adjunct Assistant Professor, Faculty of Nursing, University of Alberta, Edmonton, AB
2. Associate Professor, College of Nursing, University of Saskatchewan, Saskatoon, SK
3. Professor, Faculty of Nursing, University of Alberta, Edmonton, AB
4. Adjunct Professor, Faculty of Medicine and School of Public Health, University of Alberta, Edmonton, AB

Correspondence: Roger L. Scott, Faculty of Nursing, Level 3 ECHA, 11405-87 Avenue NW, Edmonton, AB T6G 1C9, Tel: 780-492-2551, E-mail: roger.scott@ualberta.ca

Acknowledgements: The authors acknowledge Statistics Canada Research Data Centre, University of Alberta, for their assistance with data access and vetting results for release.

Conflict of Interest: None to declare.

economic determinant factors, influences and processes that contribute to mental health. It sampled Canadians aged 15 years and older living in the ten provinces. Residents of the three territories, persons living on reserves and other Indigenous settlements, full-time members of the Canadian Armed Forces, and institutionalized persons were excluded. The excluded groups represented less than 3% of the target population.¹⁵ The CCHS-MH used a three-stage sampling design that sequentially and randomly selected geographical clusters, households, and then one respondent per household. The detailed design is reported elsewhere.¹⁶ Data were collected by computer-assisted personal interviewing; 25,113 valid interviews were completed.

Variables

Sexual orientation was assessed with a single question asking respondents if they consider themselves to be heterosexual (sexual relations with people of the opposite sex); homosexual, meaning lesbian or gay (sexual relations with people of your own sex); or bisexual (sexual relations with people of both sexes). Responses were categorized as heterosexual (straight), homosexual (gay men and lesbian), bisexual, don't know, and refused. Don't know and refused were recoded to a single "other" category for this analysis due to small numbers of respondents.

Depression was defined as an MDE, characterized as a period of at least two weeks of persistent depressed mood, loss of interest or pleasure in usual activities, accompanied by symptoms such as decreased energy, changes in sleep and appetite, impaired concentration, and feelings of guilt, hopelessness or suicidal thoughts. A modified version of the WHO Composite International Diagnostic Interview (CIDI) was used to assess the presence of 12-month or lifetime MDE.^{15,17}

Social Support was measured using an abbreviated Social Provisions Scale,¹⁸ which measured five main social domains – attachment, guidance, social integration, reliable alliance, and reassurance of worth. Scores of 10–40 are possible, with higher scores reflecting a higher level of perceived social support.

Negative Social Interactions in the preceding month were measured with four questions.¹⁹ These negative social interactions included too many demands from others; feeling that others are critical of the respondent or of things they had done; feeling that others were thoughtless or inconsiderate; and that others acted angry or upset with the respondent. Potential scores ranged from 0 to 12, with higher scores indicating more negative social interactions.

Socio-demographic variables included age, sex, income, education level, employment status, marital status and race. To reduce the number of categories with small numbers of respondents and comply with Statistics Canada guidelines, some of these variables were recoded. Marital status was reduced from six to three categories: partnered (married and common-law); separated, divorced, or widowed (SDW); and never married. Race was reduced from 13 categories to 2: white and other. Remaining categorical variables were education (less than secondary school, secondary graduate, other post-secondary, post-secondary graduate), employment (employed, unemployed), and sex (male or female).

Health Status was assessed by a screening question for self-perceived physical health on a five-point scale (poor, fair, good, very good, or excellent). Again, to reduce small numbers in the

categories they were recoded to binary categorical variables of "good, very good/excellent" and "poor/fair".

Statistical analysis

Sample weights provided by Statistics Canada were used to ensure the estimates were representative of the study population. Bootstrapping was performed as a variance estimation technique to account for the complex sample design. Statistics Canada guidelines for data analysis and release were followed.¹⁵ SAS version 9.4 software was used.

First, we compared demographic characteristics stratified by sexual orientation using chi-square tests for independence. Next we completed a series of three binomial logistic regression models to test for differences in the prevalence of past-year and lifetime MDE by sexual orientation and sex. We calculated unadjusted odds ratios (OR) and adjusted odds ratios (AOR) with three separate models. We adjusted one model for the socio-demographic variables associated with depression (age, education, income, marital status, employment status, race/ethnicity, and perceived physical health). Age was found to have a curvilinear relationship with depression, so a quadratic covariate was included. In the final model, we introduced social support and negative social interaction scores as covariates on the premise that these variables might differ between sexual orientation identities as a surrogate measure for minority stress effects. The "other" subgroup was treated as missing data in the adjusted models due to very small or zero cell counts that resulted in infinite confidence intervals in at least one category.

RESULTS

There were 24,788 Canadians aged 15 and over in the sample, with small proportions of gay men (1.5%), lesbians (0.7%), bisexual men (0.6%) and bisexual women (1.1%). Slightly more men (1.8%) were categorized as other (don't know or refused) for sexual orientation compared to women (1.1%).

In sexual minority groups, men were more likely to identify as gay than bisexual, while the converse was true for women. Comparison of demographic characteristics is presented in Table 1. The sexual orientation groups differed on most variables. Bisexuals (62.3%), gay men and lesbians (56.0%), and other (48.8%) were more likely than heterosexuals to have never married. Heterosexuals (13%) and other (13.7%) were more likely to be separated, divorced or widowed than were sexual minorities. Gay men and lesbians (87.5%) were more likely to be post-secondary graduates than heterosexuals (77.9%), while bisexuals (68.8%) were less likely. White people accounted for the majority of people identifying as gay, lesbian or bisexual. There were small proportions of sexual minorities among the racial minorities group. About half of bisexuals were unemployed in the previous week and gay men and lesbians had the highest rate of employment. Bisexuals were more likely to report poor physical health (26.6%) and mental health (19.9%). Heterosexuals had the highest proportions of good physical and mental health. In this sample, heterosexuals were older than the sexual minority groups. The gay men and lesbians group had the highest mean household income.

The CCHS-MH prevalence for lifetime and 12-month MDE has been reported elsewhere and our findings did not differ.⁴ Sexual minority groups showed significant differences in prevalence of

Table 1. Socio-demographic characteristics of Canadians aged 15 and older: CCHS-MH (N = 28,314,716)

	Heterosexual % (n = 27,344,093)	Gay or lesbian % (n = 317,337)	Bisexual % (n = 238,292)	Other % (n = 414,994)
Sex				
Total	96.6 (96.2–97.0)	1.1 (0.9–1.3)	0.8 (0.7–1.0)	1.5 (1.1–1.8)
Male	96.0 (95.3–96.7)	1.5 (1.2–1.9)	0.6 (0.4–0.8)	1.8 (1.3–2.4)
Female	97.1 (96.7–97.5)	0.7 (0.5–0.9)	1.1 (0.8–1.3)	1.1 (0.8–1.4)
Marital status				
Married/partnered	61.0 (60.0–61.9)	38.2 (28.9–47.6)	28.9 (19.5–28.3)*	37.6 (26.7–48.3)
Separated, divorced, widowed	13.0 (12.4–13.7)	5.8 (3.0–8.7)*	8.8 (4.6–13.0)*	13.7 (8.1–19.2)*
Never married	26.0 (25.3–26.8)	56.0 (46.7–65.2)	62.3 (52.5–72.1)	48.8 (39.0–58.7)
Education				
Less than secondary	6.8 (6.3–7.2)	2.6 (1.1–4.2)*	†	7.9 (4.4–11.5)*
Secondary graduate	9.7 (9.1–10.3)	6.4 (3.2–9.5)*	10.3 (6.0–14.6)*	7.9 (4.3–11.4)*
Other post-secondary	4.0 (3.6–4.5)	2.4 (0.8–4.0)*	†	†
Post-secondary graduate	72.3 (71.3–73.3)	80.0 (74.0–86.0)	60.5 (50.3–70.7)	43.5 (32.9–54.1)
Not stated	7.2 (6.5–7.8)	8.6 (4.0–13.2)*	12.0 (5.0–19.0)*	39.0 (27.8–50.2)
Race/ethnicity				
White	97.0 (96.6–97.4)	1.3 (1.0–1.6)	0.8 (0.6–0.9)	0.9 (0.7–1.2)
Other	94.0 (91.5–96.5)	1.0 (0.5–1.6)*	2.7 (1.4–3.9)*	†
Labour status (employed in the past week)				
Unemployed	31.3 (30.4–32.2)	25.7 (18.1–33.3)	46.6 (37.1–56.1)	43.2 (32.6–53.8)
Employed	68.7 (67.8–69.6)	74.3 (66.7–82.9)	53.4 (43.9–62.9)	56.8 (46.2–67.4)
Self-perceived physical health				
Good to excellent	85.7 (85.0–86.5)	81.7 (75.4–87.9)	73.4 (64.7–82.1)	85.0 (79.4–90.6)
Poor or fair	14.3 (13.5–15.0)	18.3 (17.9–35.3)*	26.6 (17.9–35.3)*	15.0 (9.4–20.5)*
Self-perceived mental health				
Good to excellent	92.5 (91.9–93.0)	85.2 (79.1–91.4)	80.1 (72.0–88.2)	89.8 (85.8–93.8)
Poor or fair	7.5 (7.0–8.1)	14.8 (8.6–20.9)*	19.9 (11.8–28.0)*	10.2 (6.2–14.2)*
Age (mean)	45.9 (45.7–46.0)	38.0 (35.8–40.2)	30.7 (28.5–32.9)	45.7 (42.2–49.2)
Household income (mean × \$1,000)	80.6 (78.3–83.0)	90.3 (77.0–10.4)	64.2 (52.3–76.2)	52.9 (42.1–63.7)

Note: Weighted sample sizes are reported. Proportion totals may not equal 100% due to rounding.

* Interpret result with caution due to high sampling variability (CV 16.5%–33.3%) associated with the variable.

† Result not published in accordance with Statistics Canada guidelines for sampling variability (CV >33.3) associated with the variable. Unweighted n = 25,113.

MDE. Bisexuals had the highest prevalence of 12-month MDE (22.4%, 95% CI 13.3–31.4), followed by gay men and lesbians (13.5%, 95% CI 7.3–19.7), other (4.6%, 95% CI 1.6–7.6) and heterosexuals (4.5%, 95% CI 4.1–4.9). A similar pattern existed for lifetime MDE, with bisexuals reporting the highest rates (30.8%, 95% CI 21.5–40.1), followed by gay men and lesbians (22%, 95% CI 15.1–28.8), heterosexuals (11.0%) and other (9.3%, 95% CI 4.4–14.3). The prevalence in the heterosexual groups was again very similar to the prevalence reported for the general Canadian population.⁴ The proportions reported for gay men and lesbians, bisexuals and “other” with past-year MDE had high co-efficients of variation (CV) and should be interpreted with caution. Likewise, the proportion reported for other with lifetime MDE had a high CV and should be interpreted with caution.

Unadjusted and adjusted OR for lifetime and past 12-month MDE based on sexual orientation and stratified by sex are displayed in Tables 2 and 3. The unadjusted odds ratios revealed higher prevalence for past 12-month depression for bisexuals (OR = 5.95, 95% CI 3.32–10.67), but not for gay men and lesbians. Stratification by sex showed that the prevalence for gay men and lesbians did not differ significantly from that for their heterosexual counterparts, but bisexual women (3.29, 95% CI 1.35–8.00) had higher prevalence compared to heterosexual groups. Differences in prevalence between LGB and heterosexuals were not significant in either of the two adjusted models. There was a near significant trend towards higher prevalence for past 12-month depression for bisexuals in model 2 (OR = 1.97, 95% CI 0.94–4.12) and model 3 (OR = 1.93, 95% CI 0.91–4.11).

Unadjusted OR for lifetime prevalence of MDE was also higher in the combined bisexual group (OR = 2.27, 95% CI 1.29–3.99)

Table 2. Unadjusted and adjusted odds ratio for past 12-month major depressive episode in Canadians aged 15 and older: CCHS-MH (N = 11,862)

	All OR (95% CI)	Men OR (95% CI)	Women OR (95% CI)
By sexual orientation (reference is heterosexual)			
Model 1			
Gay or lesbian	2.09 (0.96–4.55)	1.58 (0.70–3.54)	3.24 (0.79–13.25)
Bisexual	3.73 (1.81–7.72)	4.03 (0.64–25.48)	3.29 (1.35–8.00)
Model 2			
Gay or lesbian	1.58 (0.62–4.00)	1.10 (0.49–2.57)	2.46 (0.44–13.86)
Bisexual	1.97 (0.94–4.12)	2.67 (0.31–23.3)	1.83 (0.82–4.07)
Model 3			
Gay or lesbian	1.57 (0.61–4.05)	1.04 (0.45–2.42)	2.46 (0.44–13.95)
Bisexual	1.93 (0.91–4.11)	1.91 (0.14–25.50)	1.84 (0.82–4.14)

Note: OR = odds ratio; AOR = adjusted odds ratio; CI = confidence interval. Model 1 = OR for depression by sexual orientation. Model 2 = AOR for depression by sexual orientation adjusted for age, education, income, marital status, employment status, race/ethnicity, and perceived physical health. Model 3 = AOR for depression by sexual orientation adjusted for model 2 variables, social support scale score, and negative social interactions scale score. Bold = statistically significant, Italics = near statistically significant.

and the bisexual men group (OR = 3.08, 95% CI 1.12–8.49). As was the case for past 12-month MDE, the prevalence for lifetime MDE did not significantly differ between the sexual minority groups and the heterosexual groups in the adjusted models, but there was again a near significant trend towards higher prevalence for bisexuals in both model 2 (OR = 1.75, 95% CI 1.003–3.05) and model 3 (OR = 1.73, 95% CI 0.99–3.03).

In the adjusted models, most covariates were significantly associated with depression. Income and education were inversely associated with depression. Not being married, being unemployed,

Table 3. Unadjusted and adjusted odds ratio for past lifetime major depressive episode in Canadians aged 15 and older: CCHS-MH (N = 11,862)

	All OR (95% CI)	Men OR (95% CI)	Women OR (95% CI)
By sexual orientation (reference is heterosexual)			
Model 1			
Gay or lesbian	1.59 (0.96–2.65)	1.39 (0.74–2.59)	2.32 (1.04–5.19)
Bisexual	2.27 (1.29–3.99)	3.08 (1.12–8.49)	1.79 (0.87–3.70)
Model 2			
Gay or lesbian	1.38 (0.81–2.36)	1.17 (0.64–9.74)	1.98 (0.77–5.08)
Bisexual	<i>1.75 (1.00–3.05)</i>	2.81 (0.81–9.74)	1.43 (0.75–2.75)
Model 3			
Gay or lesbian	1.38 (0.81–2.34)	1.16 (0.64–2.12)	1.99 (0.77–5.11)
Bisexual	<i>1.73 (0.99–3.03)</i>	2.74 (0.79–9.53)	1.42 (0.74–2.75)

Note: OR = odds ratio; AOR = adjusted odds ratio; CI = confidence interval. Model 1 = OR for depression by sexual orientation. Model 2 = AOR for depression by sexual orientation adjusted for age, education, income, marital status, employment status, race/ethnicity, and perceived physical health. Model 3 = AOR for depression by sexual orientation adjusted for model 2 variables, social support scale score, and negative social interactions scale score. Bold = statistically significant, Italics = near statistically significant.

and poor perceived physical health were all linked with higher odds ratios for depression. Social support scores were generally not significant in the models and negative social interaction scale scores were associated with only a slightly higher prevalence for depression.

DISCUSSION

This study adds to the existing evidence that the majority of persons who identify as LGB do not suffer from depression. More importantly, this study supports emerging findings that sexual orientation is associated with depression, but that important subgroup differences exist among gay men, lesbians and bisexuals. This study also underscores the importance of examining mental health disorders more discretely than using broad groupings of mood and anxiety and/or other disorders.

There is supporting evidence for the novel finding of reduced prevalence of depression in gay men compared to heterosexual men and no difference in prevalence between heterosexual and bisexual men reported in a US population sample and in another recent Canadian study.^{14,20} The findings reported in the Canadian study were based on a small convenience sample recruited in one location, and thus the lower prevalence of depression found may not be generalizable to the population.¹⁴ Although lower prevalence for gay men was not repeated here, there was no significant difference found in MDE prevalence for sexual minority men compared to heterosexual men. With only self-identity as a measure of sexual orientation, it is not possible to determine the effect of discordance between sexual identity and sexual activity or attraction in this study to compare to findings, previously reported in Scott et al.²⁰ and the California Quality of Life study (CQoL),²¹ that heterosexually identified men with same-sex partners account for higher prevalence of depression.

Lesbian and bisexual women do not appear to be at greatest risk for 12-month or lifetime MDE. This finding differs from the higher prevalence for mood and anxiety disorders (3.6, 95% CI 2.51–5.16) for bisexual women reported in CCHS Cycle 2.1,¹⁰ but is similar to the CCHS 2.1 finding that reported no significant difference for mood and anxiety disorders for lesbians. The difference may well be the result of grouping disorders together in the earlier study,

however, it is important to note that higher depression prevalence for bisexual women was also found in both the CQoL and National Epidemiologic Survey on Alcohol and Related Conditions (NESARC) Wave 2.^{21,22} The near significant trend towards higher prevalence of depression in the combined bisexual group in the current study may be reflective of the differences for bisexual women found in the previous reports.

The role of social support and social interactions may partly explain the lack of difference in MDE prevalence between LGB and heterosexual people and the very modest differences between models 2 and 3. As suggested in previous work, social attitudes have been changing towards sexual minorities in recent decades, resulting in less social stigma or discrimination.²⁰ Increased acceptance of sexual minority status in Canadian society through initiatives such as legalization of same-sex marriage, legal protection from discrimination based on sexual orientation, and mainstream acceptance of openly gay or lesbian celebrities and politicians are possible explanations for the small differences in the models found here. LGB people may also protect themselves from internalizing negative stigma of sexual orientation through a sense of belonging to the LGB community or through discovering acceptance among family, friends, and the wider community.

Limitations

This study has some limitations. The data are cross-sectional, so no causal link between sexual orientation and depression can be inferred. Nevertheless, there is a body of evidence in the literature describing the mental health of sexual minorities and new trends appear to be emerging. The WHO-CIDI is a self-report tool and is administered by lay-interviewers. Although the WHO-CIDI has been validated and used in several studies, self-report may over- or underestimate the true prevalence of MDE compared to the gold standard of a clinical interview and diagnosis. The single domain measure of sexual orientation in the CCHS-MH is a major limitation. Measurement of sexual orientation is complex and straddles domains of identity, attraction, and sexual behaviour. Multiple measures of sexual orientation would have enabled identification of sexual minority people based on those other two domains. True prevalence of sexual minority people may be underestimated by non-disclosure to the identity question or by failing to identify people who do not self-identify as a sexual minority, but have same-sex attraction or sexual activity. Prior research indicates that multiple measures of sexual orientation suggest a higher population prevalence of sexual minorities.^{20,21} The lack of a category for transgender people in the CCHS-MH sample leaves those people invisible to study. The large sample size and response rate for the CCHS-MH is an important strength for this study. It enabled analysis of depression distinct from other mental health disorders as well as analysis of gay men, lesbians, and bisexual men and women separately. Despite the large sample size, the OR for some sexual minority groups lack precision as shown by the large confidence intervals. This is likely a reflection of the smaller unweighted cell counts in these subgroups, the bisexual subgroups in particular.

CONCLUSION

Previous research on the mental health of sexual minorities may have over-estimated the risk of depression for gay men and lesbians

overall by grouping men and women together, and more importantly, by grouping bisexuals with gay men and lesbians. Grouping mental health disorders together may also confound findings of higher risk for poorer mental health in sexual minorities. There is a need for research using multiple measures of the domain of sexual orientation (i.e., sexual identity, behaviour, and attraction) to develop a fuller picture of the mental health of sexual minorities in all large-scale population studies that include socio-demographic measures. Similarly, population studies should include categories to identify gender minority people. Oversampling of sexual and gender minority groups may be necessary in study designs to ensure adequate representation for analysis and interpretation. Future research should continue to focus on differences in mental health disparities between sexual minority men and women as well as between different sexual and gender minority groups to identify who is at greatest risk for mental health disorders and to allow public health policy and clinical recommendations to have the greatest possible impact on the mental health of Canadians.

REFERENCES

1. American Psychiatric Association (APA). *Diagnostic and Statistical Manual of Mental Disorders*, 5th ed. Washington, DC: American Psychiatric Press Inc., 2013; 991 p.
2. World Health Organization. 2014. *Mental Health: A State of Well-Being*. Available at: http://www.who.int/features/factfiles/mental_health/en/ (Accessed December 12, 2015).
3. Kessler RC, Aguilar-Gaxiola S, Alonso S, Chatterji S, Lee S, Ormel J, et al. The global burden of mental disorders: An update from the WHO World Mental Health (WMH) surveys. *Epidemiol Psychiatr Soc* 2009;18(1):22–33.
4. Pearson C, Janz T, Ali J. *Mental Health and Substance Use Disorders in Canada*. Ottawa, ON: Statistics Canada, 2013.
5. De Marco RR. The epidemiology of major depression: Implications of occurrence, recurrence and stress in a Canadian community sample. *Can J Psychiatry* 2000;45:67–74. PMID: 10696492.
6. Evans D, Charney DS, Golden RN, Gorman JM, Krishnan KR, Nemeroff CB, et al. Mood disorders in the medically ill: Scientific review and recommendations. *Biol Psych* 2005;58(3):178–89. PMID: 16084838. doi: 10.1016/j.biopsych.2005.05.001.
7. Kessler RC. Epidemiology of women and depression. *J Affect Disord* 2003;74: 5–13. doi: 10.1016/S0165-0327(02)00426-3.
8. Kirmayer LJ, Gill K, Fletcher C, Ternar Y, Boothroyd L, Quesney C, et al. *Emerging Trends in Research on Mental Health among Canadian Aboriginal Peoples. A Report Prepared for the Royal Commission on Aboriginal Peoples*. Report No. 2. Montreal, QC: Culture & Mental Health Research Unit, Jewish General Hospital, 1994; 115 p. Available at: <http://www.mcgill.ca/files/tcpsych/Report2.pdf> (Accessed February 1, 2014).
9. Government of Canada. *The Human Face of Mental Health and Mental Illness in Canada*. Catalogue No.: HP5-19/2006E. Ottawa, ON: Minister of Public Works and Government Services, 2006; 188 p. Available at: http://www.phac-aspc.gc.ca/publicat/human-humain06/pdf/human_face_e.pdf (Accessed February 1, 2014).
10. King M, Semlyen J, Tai SS, Killaspy H, Osborn D, Popelyuk D, et al. A systematic review of mental disorder, suicide, and deliberate self harm in lesbian, gay and bisexual people. *BMC Psychiatry* 2008;8:70.
11. Meyer IH. Prejudice and discrimination as social stressors. In: Meyer IH, Northridge ME (Eds.), *The Health of Sexual Minorities: Public Health Perspectives on Lesbian, Gay, Bisexual, and Transgender Populations*. New York, NY: Springer, 2007; 242–67.
12. Steel LS, Ross LE, Dobinson C, Veldhuizen S, Tinmouth JM. Women's sexual orientation and health: Results from a Canadian population-based survey. *Women & Health* 2009;49(5):353–67. PMID: 19851942. doi: 10.1080/03630240903238685.
13. Brennan DJ, Ross LE, Dobinson C, Veldhuizen S, Steele LS. Men's sexual orientation and health in Canada. *Can J Public Health* 2010;101(3):255–58. PMID: 20737821.
14. Juster RP, Smith NG, Ouellet E, Sindi S, Lupien SJ. Sexual orientation and disclosure in relation to psychiatric symptoms, diurnal cortisol, and allostatic load. *Psychosom Med* 2013;75(2):103–16. PMID: 23362500. doi: 10.1097/PSY.0b013e3182826881.
15. Canadian Community Health Survey (CCHS) – Mental Health. *User Guide Microdata Files*. Ottawa, ON: Statistics Canada, 2013; 300 p.
16. Canadian Community Health Survey (CCHS) – Mental Health. *Derived Variable Specifications*. Ottawa, ON: Statistics Canada, 2013; 164 p.
17. Kessler RC, Abelson J, Demler O, Escobar JI, Gibbon M, Guyer ME, et al. Clinical calibration of DSM-IV diagnoses in the World Mental Health (WMH) version of the World Health Organization (WHO) Composite International Diagnostic Interview (WMH-CIDI). *Int J Methods Psychiatr Res* 2004;13(2):122–39.
18. Cutrona CE, Russell DW. The provisions of social support and adaptation to stress. In: Jones WH, Perlman D (Eds.), *Advances in Personal Relationships*, Vol. 1. Greenwich, CT: JAI Press, 1987; 37–67.
19. Krause N. Negative interaction and satisfaction with social support among older adults. *J Gerontol B Psychol Sci Soc Sci* 1995;50(2):P59–73. PMID: 7757834. doi: 10.1093/geronb/50B.2.P59.
20. Scott RL, Lasiuk G, Norris C. The relationship between sexual orientation and depression in a national population sample. *J Clin Nurs* 2016;25(23-24):3522–32. PMID: 27126162. doi: 10.1111/jocn.13286.
21. Cochran SD, Mays VM. Burden of psychiatric morbidity among lesbian, gay, and bisexual individuals in the California Quality of Life Survey. *J Abnorm Psychol* 2009;118:647–58. PMID: 19685960. doi: 10.1037/a0016501.
22. Bostwick WB, Boyd CJ, Hughes TL, McCabe SE. Dimensions of sexual orientation and the prevalence of mood and anxiety disorders in the United States. *Am J Public Health* 2010;100:468–75. PMID: 19696380. doi: 10.2105/AJPH.2008.15942.

Received: February 8, 2016

Accepted: August 15, 2016

RÉSUMÉ

OBJECTIFS : La dépression est un problème mondial, et l'on sait que certains segments de la population y sont plus vulnérables. Les minorités sexuelles sont reconnues comme étant plus susceptibles de souffrir de dépression en raison de la stigmatisation sociale et des préjugés à leur endroit. Notre étude visait à décrire le lien entre l'orientation sexuelle et la dépression dans la population canadienne.

MÉTHODE : L'étude a fait appel aux données sur la santé mentale de l'Enquête sur la santé dans les collectivités canadiennes de 2012. L'échantillon comprenait 24 788 Canadiens vivant dans les 10 provinces. Des analyses de régression logistique ont servi à examiner la relation entre la dépression et l'orientation sexuelle.

RÉSULTATS : Après avoir tenu compte des facteurs de risque connus de la dépression, il n'y avait aucune différence dans la prévalence des accès dépressifs majeurs au cours des 12 mois antérieurs ou au cours de la vie entre les minorités sexuelles et la population hétérosexuelle. Les personnes bisexuelles, en tant que groupe combiné, présentaient bien une tendance quasi significative de prévalence accrue de dépression au cours des 12 mois antérieurs et au cours de la vie, mais il n'y avait pas de différence claire lorsque les données étaient stratifiées selon le sexe.

CONCLUSION : Notre étude appuie d'importantes tendances émergentes en ce qui a trait au lien entre l'orientation sexuelle et la dépression. La recherche sur la santé mentale des minorités sexuelles doit tenir compte des différences entre les minorités sexuelles et éviter de regrouper les troubles de santé mentale en grandes catégories. Ces constatations ont des conséquences pour la planification en santé publique et pour les recommandations cliniques.

MOTS CLÉS : homosexualité; bisexualité; dépression; santé mentale; évaluation quantitative