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Hispanic Lesbians and Bisexual Women at Heightened Risk or Health Disparities

Hyun-Jun Kim, PhD and Karen I. Fredriksen-Goldsen, PhD

School of Social Work, University of Washington, Seattle

Abstract

Objectives—We investigated whether elevated risks of health disparities exist in Hispanic lesbians and bisexual women aged 18 years and older compared with non-Hispanic White lesbians and bisexual women and Hispanic heterosexual women.

Methods—We analyzed population-based data from the Washington State Behavioral Risk Factor Surveillance System (2003–2009) using adjusted logistic regressions.

Results—Hispanic lesbians and bisexual women, compared with Hispanic heterosexual women, were at elevated risk for disparities in smoking, asthma, and disability. Hispanic bisexual women also showed higher odds of arthritis, acute drinking, poor general health, and frequent mental distress compared with Hispanic heterosexual women. In addition, Hispanic bisexual women were more likely to report frequent mental distress than were non-Hispanic White bisexual women. Hispanic lesbians were more likely to report asthma than were non-Hispanic White lesbians.

Conclusions—The elevated risk of health disparities in Hispanic lesbians and bisexual women are primarily associated with sexual orientation. Yet, the elevated prevalence of mental distress for Hispanic bisexual women and asthma for Hispanic lesbians appears to result from the cumulative risk of doubly disadvantaged statuses. Efforts are needed to address unique health concerns of diverse lesbians and bisexual women.

Equity in health and health care is of critical societal importance given its ethical and social justice implications. Despite tremendous advancements in medicine and improved health for many Americans, historically disadvantaged and underserved communities continue to bear higher levels of illness, disability, and premature death. The National Institutes of Health affirms a commitment to reducing and eliminating health disparities affecting disadvantaged populations across the country.¹ In addition, Healthy People 2020 has specifically recognized racial/ethnic minorities and sexual minorities as primary targets of health disparity reduction.²

A growing body of literature endorses such federal initiatives' recognition of health disparities by race/ethnicity and sexual orientation. Health disparities among the Hispanic population, for example, have been well documented. Higher death rates from stroke,

Correspondence should be sent to Hyun-Jun Kim, PhD, 4101 15th Ave. NE, Box 354900, Seattle, WA 98105 (hyunjkim@u.washington.edu).

Contributors

H.-J. Kim originated the study, conducted data analyses, synthesized the conceptualization and analyses, and wrote the initial draft of the article. K. I. Fredriksen-Goldsen assisted with conceptualizing the study, interpreting the results of data analyses, and writing the article.

Human Participant Protection

The institutional review board of the University of Washington approved this study.

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chronic liver disease, diabetes, and HIV/AIDS have been observed among Hispanics compared with non-Hispanic Whites, and Hispanics are more likely to be obese and less likely to participate in regular physical activities.^{3,4} Furthermore, the Hispanic population is at increased risk for limited health care access.⁵⁻⁷ The likelihood of Hispanics not having health insurance is almost twice as high as that of the general population.⁸

The evidence of health disparities affecting sexual minority women is also growing. According to previous studies based on probability samples, sexual minority women, compared with heterosexual women, report experiencing higher levels of poor physical and general health,⁹⁻¹¹ mental distress,^{9,11-13} and higher prevalence rates of asthma^{10,11,13} and disability.^{10,11} In terms of health risk behaviors, lesbians and bisexual women are more likely to smoke^{9-11,13,14} and to consume higher quantities of alcohol.^{9,11,13,14} Sexual minority women are also at increased risk for poor health care access.^{10,14,15} Emerging research has also found within-group differences among sexual minority women; for example, lesbians, but not bisexual women, are more likely to be obese^{10,16} and have arthritis¹² than are heterosexual women, whereas bisexual women are more likely to report poor general health and mental distress than are lesbians.¹⁷

Yet, the evidence of health disparities by race/ethnicity and sexual orientation might not be generalized to sexual minorities of color,¹⁸ and knowledge regarding health among Hispanic sexual minorities is still limited. Without better understanding the potential interplay between these marginalized statuses, it remains difficult, if not impossible, to develop culturally sensitive health services that are responsive to the needs of the Hispanic sexual minority population.¹⁹

The possibility of cumulative risks resulting from multiple disadvantaged statuses affecting health among Hispanic sexual minorities has been raised in the literature. It has been suggested that Hispanic sexual minorities experience heightened risks of poor physical and mental health compared with non-Hispanic White sexual minorities and Hispanic heterosexuals. According to a comprehensive review on racial/ethnic disparities in health, racial discrimination and related stressors have an inverse relationship to physical and mental health and health care access.²⁰ Previous studies also have emphasized that health disparities among sexual minorities likely result from exposure to life stressors, including stigmatization, victimization, and discrimination.²¹⁻²³ The consequences of multiple stressors, such as racial/ethnic discrimination within sexual minority communities and antigay values within Hispanic communities, may lead to an increased risk of poor physical and mental health.^{18,24,25} Furthermore, Hispanic sexual minority women may experience additional stressors if they are perceived to violate conventional feminine norms in Hispanic communities.²⁶

A few studies have assessed health-related concerns among Hispanic sexual minority women. One study found that Hispanic sexual minority women had increased psychiatric morbidity risk compared with Hispanic heterosexual women.²⁷ Another study found that among sexual minority women, Hispanic women were more likely than were non-Hispanic White women to report depressive symptoms.²⁸ In terms of physical health status and behaviors, Hispanic lesbians and bisexual women have shown elevated risks and higher prevalences of obesity, smoking, and drinking than have Hispanic heterosexual women.²⁹

Yet, to identify the potentially cumulative impact of multiple disadvantaged statuses on health disparities, the prevalence of health indicators for Hispanic sexual minority women must be compared with Hispanic heterosexual women as well as non-Hispanic White lesbians and bisexual women within the same sample. Furthermore, because the patterns and extents of health disparities may be dissimilar between lesbians and bisexual women, the

cumulative effects should be tested separately among lesbians and bisexual women. Disaggregating groups of sexual minorities is an important stage in developing tailored interventions to respond to the unique health-related needs of these subgroups.¹⁷

The Washington State Behavioral Risk Factor Surveillance System (BRFSS) provides population-based data that allow us to examine indicators of health disparities. In this study, we compared the unadjusted and adjusted prevalence of health disparities including health status, health risk behaviors, health care access, and health outcomes by Hispanic lesbians (the reference group), non-Hispanic White lesbians, and Hispanic heterosexual women as well as by Hispanic bisexual women (the reference group), non-Hispanic White bisexual women, and Hispanic heterosexual women. We hypothesized that Hispanic lesbians and bisexual women would experience higher risks of health disparities than would non-Hispanic White lesbians and bisexual women as well as Hispanic heterosexual women.

METHODS

The BRFSS was designed to monitor health conditions and health behaviors annually among noninstitutionalized adults aged 18 years and older.³⁰ Beginning in 2003, the Washington State BRFSS included a measure of sexual orientation. Thus, data from 2003 to 2009 were aggregated to create a sufficient sample (n=6338) to test the study research questions. Weighted estimates demonstrated that among Hispanic women, 1.1% were lesbian, 1.6% were bisexual, and 97.3% were heterosexual.

Measures

Sexual orientation was measured by respondents selecting from the following categories: (1) heterosexual or straight; (2) homosexual, gay, or lesbian; (3) bisexual; or (4) other. In this study, we labeled women who selected homosexual, gay, or lesbian as lesbians, we labeled women who selected bisexual as bisexual women, and we omitted “other” from the analyses. In terms of race/ethnicity, we selected participants who identified as either non-Hispanic White or Hispanic for analysis and excluded the other racial/ethnic categories. We counted responses of “don’t know,” “not sure,” and “refused” as missing.

Health status indicators included disability, which we attributed to those who were experiencing limited activities because of physical, mental, or emotional problems or having any health problems that required them to use special equipment; we considered having a body mass index (defined as weight in kilograms divided by the square of height in meters) of ≥ 30 as being obese; and chronic conditions of asthma and arthritis were doctor-diagnosed conditions.

Health risk behaviors included current smoking, defined as having smoked at least 100 cigarettes and currently smoking every day or some days; acute drinking, defined as having ≥ 4 drinks on at least 1 occasion during the past month; and lack of exercise, defined as not having performed any physical activities or exercise except regular job duties during the past month.

We measured health care access in 3 ways. First, the respondents were asked whether they had any health insurance coverage, including health insurance, prepaid plans such as health maintenance organizations, and government plans such as Medicare. Second, financial barriers to health services were measured by asking whether respondents had experienced any financial barrier to seeing a doctor in the past 12 months. Last, usual source of primary care was measured by asking respondents whether they had a personal doctor or health care provider.

Health outcomes included respondents' general health, frequent mental distress, and frequent poor physical health. We dichotomized the self-rating of general health into 2 categories (excellent, very good, or good vs fair or poor). Respondents were asked how many days their mental and physical health was not good in the past 30 days, and each variable was dichotomized with the cut-off of 14 or more days as consistently used in other health research studies.^{17,31–35}

We measured sociodemographic characteristics in terms of age, education (high school graduate vs some college vs 4 years of college), income (below vs above 200% poverty level guided by the federal poverty guidelines),^{36–42} employment (employed vs unemployed), relationship status (married or partnered vs other), and household size.

Statistical Analyses

We used Stata version 11.0 (StataCorp LP, College Station, TX) for data cleaning and analyses. All the analyses applied the weights provided by the Washington State BRFSS to account for probability of selection and to adjust differential participation by age, gender, and race/ethnicity.

First, we examined unadjusted prevalence of sociodemographic characteristics and health-related indicators for Hispanic lesbians, non-Hispanic White lesbians, and Hispanic heterosexual women. By utilizing weighted estimates with 95% confidence intervals (CIs), we compared Hispanic lesbians with non-Hispanic White lesbians and Hispanic heterosexual women. We also tested multiple adjusted logistic regression models to examine differences in each health indicator between the 3 groups while controlling for age, education, and income. We treated Hispanic lesbians as the reference group in each model.

Second, we applied the same analytic processes in comparisons between Hispanic bisexual women, non-Hispanic White bisexual women, and Hispanic heterosexual women. We tested for multicollinearity and detected no problems with the variables tested in these analyses.

RESULTS

Table 1 illustrates the sociodemographic characteristics of Hispanic and non-Hispanic White sexual minority women and Hispanic heterosexual women. We compared the characteristics of Hispanic lesbians and bisexual women with non-Hispanic White lesbians and bisexual women and Hispanic heterosexual women based on 95% CIs of weighted estimates. The sociodemographic characteristics of Hispanic lesbians were similar to those of non-Hispanic White lesbians but significantly different from those of Hispanic heterosexual women except for age and unemployment rate. Hispanic lesbians were better educated, had higher household incomes, were less likely to be married or partnered, and had a smaller household size than did Hispanic heterosexual women. Hispanic bisexual women were younger than were non-Hispanic White bisexual women, but the other sociodemographic characteristics were similar for both groups. Hispanic bisexual women were younger, were less likely to be married or partnered, and reported lower household size than did Hispanic heterosexual women. The levels of educational achievement, income, and unemployment for Hispanic bisexual women were not statistically different from those of Hispanic heterosexual women.

Health Disparities of Hispanic Lesbians

We compared the weighted prevalence estimates of health conditions, health behaviors, health care access, and health outcomes for Hispanic lesbians with those for non-Hispanic White lesbians and Hispanic heterosexual women using 95% CIs. The results of adjusted analyses are illustrated in Table 2. About 42% of Hispanic lesbians reported that they had a disability. Non-Hispanic White lesbians showed a similar prevalence of disability, but

Hispanic heterosexual women were significantly less likely to be disabled, even after accounting for age, education, and income (adjusted odds ratio [AOR]= 0.20; 95% CI=0.07, 0.56). Nearly half of Hispanic lesbians also reported having lifetime asthma, and both non-Hispanic White lesbians (AOR=0.28; 95% CI=0.11, 0.73) and Hispanic heterosexual women (AOR=0.24; 95% CI=0.09, 0.63) had significantly lower odds of having lifetime asthma, even after accounting for age, education, and income. The prevalence rates of obesity and arthritis for Hispanic lesbians were similar to those for both non-Hispanic White lesbians and Hispanic heterosexual women.

We did not find any differences in the prevalence rates of current smoking and lack of exercise between Hispanic lesbians and non-Hispanic White lesbians. On the other hand, Hispanic lesbians reported higher prevalence rate of smoking and lower rate of lack of exercise than did Hispanic heterosexual women. When controlling for age, education, and income, only the difference in smoking remained significant (AOR=0.38; 95% CI=0.16, 0.93). The prevalence rate of acute drinking for Hispanic lesbians was not different from those for non-Hispanic White lesbians and Hispanic heterosexual women.

The prevalence rates of health insurance coverage and usual source of primary care were similar between Hispanic lesbians and non-Hispanic White lesbians. The prevalence rates of these health care access indicators for Hispanic lesbians were higher than those for Hispanic heterosexual women, but when age, education, and income were accounted for, the differences did not remain significant. The prevalence rate of financial barriers to health care for Hispanic lesbians was similar to those for non-Hispanic White lesbians and Hispanic heterosexual women. The prevalence rates of poor general health, mental distress, and poor physical health for Hispanic lesbians were also similar to those for non-Hispanic White lesbians and Hispanic heterosexual women.

Health Disparities of Hispanic Bisexual Women

Table 3 demonstrates the weighted prevalence estimates of health conditions, health behaviors, health care access, and health outcomes and the results of adjusted logistic regression analyses for Hispanic bisexual women, non-Hispanic White bisexual women, and Hispanic heterosexual women. Hispanic heterosexual women were at lower risk for disability (AOR=0.33; 95% CI=0.15, 0.72), lifetime asthma (AOR=0.40; 95% CI=0.20, 0.82), and arthritis (AOR = 0.25; 95% CI=0.08, 0.76) than were Hispanic bisexual women even after accounting for age, education, and income whereas Hispanic and non-Hispanic White bisexual women had similar prevalence rates in these 3 health conditions. The prevalence rate of obesity for Hispanic bisexual women was similar to those for non-Hispanic White bisexual women and Hispanic heterosexual women.

Although the prevalence rates of smoking and acute drinking for Hispanic bisexual women were similar to those for non-Hispanic White bisexual women, Hispanic heterosexual women were significantly less likely to smoke (AOR= 0.12; 95% CI=0.06, 0.25) or to engage in acute drinking (AOR=0.18; 95% CI=0.08, 0.38) than were Hispanic bisexual women, even when controlling for age, education, and income. The prevalence rate of lack of exercise for Hispanic bisexual women was not significantly different from those for non-Hispanic White bisexual women and Hispanic heterosexual women.

Hispanic bisexual women had levels of health care access similar to non-Hispanic White bisexual women and Hispanic heterosexual women. Hispanic and non-Hispanic White bisexual women showed a similar level of health insurance coverage. The prevalence of health insurance coverage for Hispanic bisexual women was higher than that for Hispanic heterosexual women, but when we accounted for age, education, and income, the difference was not statistically significant. The prevalence rates of financial barriers to health care and

usual source of primary care for Hispanic bisexual women were also similar to those for non-Hispanic White bisexual women and Hispanic heterosexual women.

Hispanic bisexual women show disparities in general health and mental distress. The prevalence of poor general health for Hispanic bisexual women was similar to those for non-Hispanic White bisexual women and Hispanic heterosexual women, but when we adjusted the comparison for age, education, and income, Hispanic heterosexual women were less likely to have poor general health than were Hispanic bisexual women (AOR=0.39; 95% CI=0.19, 0.84). In terms of frequent mental distress, both non-Hispanic White bisexual women (AOR=0.45; 95% CI=0.22, 0.92) and Hispanic heterosexual women (AOR=0.14; 95% CI=0.07, 0.28) had significantly lower odds than did Hispanic bisexual women even when adjusting for sociodemographic characteristics. The prevalence rate of frequent poor physical health for Hispanic bisexual women was similar to those for non-Hispanic White bisexual women and Hispanic heterosexual women.

DISCUSSION

To our knowledge, this is one of the first studies to use a population-based sample to assess health disparities among Hispanic lesbians and bisexual women by comparing them to both non-Hispanic White sexual minority women and Hispanic heterosexual women. Both Hispanic lesbians and bisexual women had increased risks of smoking, lifetime asthma, and disability compared with Hispanic heterosexual women. In addition, Hispanic bisexual women showed higher odds of reporting arthritis, acute drinking, frequent mental distress, and poor general health than did Hispanic heterosexual women. In the examination of health disparities by race/ethnicity, we observed that the prevalence rates of most health indicators for Hispanic lesbians and bisexual women were similar to those of non-Hispanic White lesbians and bisexual women. Yet, there was evidence of racial/ethnic health disparities among lesbians and bisexual women in 2 specific areas: Hispanic bisexual women were more likely to report frequent mental distress than were non-Hispanic White bisexual women, and Hispanic lesbians were more likely to report lifetime asthma than were non-Hispanic White lesbians.

Our findings suggest that the hypothesized cumulative risks on health of Hispanic sexual minority women are supported in 2 important areas. First, Hispanic lesbians reported a significantly higher likelihood of having ever had asthma than did both Hispanic heterosexual women and non-Hispanic White lesbians. High lifetime asthma rates among lesbians have been observed in previous studies (18%–25%).^{10,11} Our data demonstrate a comparable lifetime asthma rate among lesbians (20%) that is much higher than the national average asthma rate among women (9%).⁴³ Surprisingly, Hispanic lesbians reported a high prevalence of lifetime asthma (46%) that was significantly greater than that of both Hispanic heterosexual women and non-Hispanic White lesbians even when controlling for age, income, and education. It is known that obesity, smoking, and mental distress may be related to high asthma rates among sexual minority women,⁴⁴ and obesity has been found to be one of the major risk factors of asthma regardless of smoking status.^{45,46} Although further investigation is warranted, the high prevalence of obesity, smoking, and mental distress in Hispanic lesbians seems to explain, in part, cumulative risks of lifetime asthma among Hispanic lesbians. To date, no existing studies have examined the prevalence of lifetime asthma specifically in Hispanic lesbians. Future population-based studies need to examine lifetime asthma prevalence among Hispanic lesbians and identify factors that increase their risk.

Second, among Hispanic bisexual women, cumulative risk related to multiple marginalized statuses appears to lead to greater mental distress. Although previous studies have suggested

that Hispanic sexual minority women have cumulative elevated psychiatric morbidity risk,^{27,28} these studies did not detect distinctive disparity patterns between lesbians and bisexual women. This is the first study, to our knowledge, to reveal that Hispanic bisexual women are more likely to experience frequent mental distress than are both non-Hispanic White bisexual women and Hispanic heterosexual women.

One important predictor of mental health is the extent of social support among sexual minorities. Social support obtained through relationships and group connectedness can ease the negative impact of prejudice and discrimination⁴⁷ and provide opportunities for building better coping capacities to prevent mental distress.⁴⁸ Bisexual women report stigmatization and exclusion within gay and lesbian communities,⁴⁹ and as a result they may distance themselves from these communities.⁵⁰ Thus, Hispanic bisexual women likely have relatively less social support available to them than do lesbians.⁴⁹ One study revealed that Hispanic lesbians are often able to construct a safe environment where they can share their unique challenges and conflicts of being both a racial/ethnic minority and a sexual minority,⁵¹ but Hispanic bisexual women may have fewer such opportunities because of a lack of social support. More research is needed to test whether patterns of social support received and the degree of internalized stigma among Hispanic bisexual women are different than those among Hispanic lesbians and non-Hispanic White sexual minority women and to what extent such risk and protective factors explain cumulative risk affecting mental health among Hispanic bisexual women.

Despite the important findings of the cumulative risks of lifetime asthma among Hispanic lesbians and mental distress among Hispanic bisexual women, we did not observe cumulative risks in most other health indicators. Nevertheless, an elevated risk of health disparities by sexual orientation exists within Hispanic women communities. These findings support the increasing evidence that sexual orientation is a social indicator of health disparities among women.^{9-14,16,44,52,53}

We observed 2 unexpected findings, however. Previous studies consistently report that lesbians in general have a higher likelihood of obesity than do heterosexual women.^{10,16} However, we did not observe this trend with Hispanic women. Obesity is a known risk factor among Hispanic women.³ In fact, we observed a high prevalence of obesity among both Hispanic lesbians and Hispanic heterosexual women in our data. Hispanic women, regardless of their sexual orientation, seem to be at elevated risk for obesity. Another important indicator of health disparities experienced by sexual minority women in general is lack of health insurance coverage.^{5,6,14,15} We observed, however, that among Hispanic women, the unadjusted prevalence rates of health insurance coverage for lesbians and bisexuals were much higher than was the rate for heterosexuals. This finding may reflect the fact that a high percentage of Hispanics in the United States are lacking health insurance coverage and that the sociodemographic status of Hispanics accounts for a significant part of the disparity.⁸ The higher sociodemographic status of Hispanic sexual minority women likely accounts for the difference in the rate of health insurance coverage. In fact, once we controlled for age, education, and income, the difference did not remain significant.

This study is an important first step in examining patterns of cumulative risks of health disparities among Hispanic lesbians and bisexual women. The results of this study, however, should be considered in the context of several important limitations. The operationalization and defined categories of sexual orientation as measured in the BRFSS may be culturally constrained and may not be relevant in Hispanic culture.⁵⁴ For example, it may be that those who respond affirmatively to a sexual minority identification in the BRFSS are less marginalized from non-Hispanic White sexual minorities and more conditioned to the dominant discourse regarding sexual orientation.

Second, although one of the strengths of this study was the analysis of multiyear population-based data, the small number of Hispanic lesbians and bisexual women and the sample size discrepancies between comparison groups may have reduced the power of the logistic regression analyses. Combining lesbians and bisexual women would increase the sample size of the group, but it would overlook unique health-related needs of lesbians and bisexual women. In the future, oversampling in a population-based study to increase the number of Hispanic lesbians and bisexual women would likely help to increase sample size to examine in depth the cumulative impact of multiple marginalized statuses and health disparities among Hispanic lesbians and bisexual women.

Despite these potential limitations, this population-based study sheds important new light on the unique health risks of Hispanic lesbians and bisexual women. Most importantly, this study provides insights into the differences that exist in the cumulative risk of health disparities between Hispanic lesbians and Hispanic bisexual women. The findings reveal important areas in need of further research to develop culturally appropriate and sensitive health services designed to meet the needs of Hispanic sexual minority women. In turn, such research will help to achieve the goals of Healthy People 2020 for health disparity reduction among sexual and racial/ethnic minorities.

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TABLE 1
 Background Characteristics by Self-Reported Sexual Orientation and Race/Ethnicity Among Women: Washington State BRFSS, 2003–2009

| Characteristic | Lesbians | | Bisexual Women | | |
|----------------------------------|----------------------|------------------------------|----------------------|------------------------------|--|
| | Hispanic (n = 41) | Non-Hispanic White (n = 936) | Hispanic (n = 60) | Non-Hispanic White (n = 795) | Heterosexual Hispanic Women (n = 4506) |
| Age, y, mean (95% CI) | 36.87 (30.82, 42.92) | 43.37 (42.15, 44.58) | 28.28 (25.08, 31.49) | 33.60 (32.35, 34.86) | 34.69 (34.19, 35.19) |
| Education, % (95% CI) | | | | | |
| high school | 19.82 (9.56, 36.63) | 16.20 (13.22, 19.70) | 53.08 (35.29, 70.13) | 31.60 (26.98, 36.62) | 66.98 (65.03, 68.88) |
| Some college | 41.28 (21.96, 63.71) | 31.40 (27.36, 35.73) | 21.85 (10.50, 39.97) | 33.85 (29.05, 39.00) | 20.12 (18.51, 21.83) |
| 4 y of college | 38.90 (22.27, 58.58) | 52.40 (48.04, 56.72) | 25.07 (13.59, 41.58) | 34.55 (30.30, 39.06) | 12.90 (11.64, 14.28) |
| < 200% poverty level, % (95% CI) | 38.23 (19.00, 62.02) | 28.86 (24.84, 33.25) | 57.44 (41.01, 72.38) | 43.31 (38.37, 48.39) | 70.72 (68.70, 72.66) |
| Unemployed, % (95% CI) | 13.72 (5.14, 31.81) | 6.41 (4.69, 8.70) | 5.11 (1.59, 15.22) | 7.64 (5.51, 10.51) | 10.34 (9.15, 11.66) |
| Married or partnered, % (95% CI) | 47.60 (28.29, 67.67) | 52.82 (48.50, 57.10) | 47.32 (30.22, 65.07) | 45.71 (40.83, 50.68) | 70.88 (68.91, 72.77) |
| Household size, mean (95% CI) | 2.94 (2.48, 3.40) | 2.42 (2.29, 2.54) | 3.19 (2.80, 3.58) | 3.00 (2.86, 3.15) | 4.12 (4.03, 4.20) |

Note. BRFSS = Behavioral Risk Factor Surveillance System; CI = confidence interval. Estimates were weighted.

Comparisons of Health-Related Indicators Between Hispanic Lesbians, Non-Hispanic White Lesbians, and Hispanic Heterosexual Women: Washington State BRFSS, 2003–2009

TABLE 2

| Indicator | Hispanic Lesbians (Ref) | | Non-Hispanic White Lesbians | | Hispanic Heterosexual Women | |
|-------------------------------|-------------------------|------|-----------------------------|--------|-----------------------------|---------|
| | % (95% CI) | AOR | % (95% CI) | AOR | % (95% CI) | AOR |
| Health conditions | | | | | | |
| Disability | 41.91 (22.66, 63.99) | 1.00 | 33.38 (29.50, 37.49) | 0.51 | 12.02 (10.80, 13.34) | 0.20 ** |
| Obesity | 40.37 (23.42, 59.98) | 1.00 | 32.05 (28.09, 36.28) | 0.70 | 27.67 (25.72, 29.71) | 0.54 |
| Asthma | 45.60 (26.04, 66.61) | 1.00 | 18.74 (15.79, 22.08) | 0.28 * | 12.02 (10.76, 13.41) | 0.24 ** |
| Arthritis ^a | 29.36 (11.57, 56.91) | 1.00 | 34.87 (29.85, 40.25) | 0.73 | 12.44 (11.08, 13.95) | 0.42 |
| Health behaviors | | | | | | |
| Smoking | 22.03 (10.98, 39.31) | 1.00 | 26.24 (22.53, 30.32) | 1.56 | 9.17 (8.03, 10.46) | 0.38 * |
| Acute drinking | 8.15 (2.65, 22.43) | 1.00 | 14.23 (11.16, 17.97) | 2.28 | 7.52 (6.29, 8.97) | 1.20 |
| Lack of exercise | 12.66 (5.40, 26.91) | 1.00 | 16.32 (13.48, 19.63) | 1.28 | 32.68 (30.77, 34.66) | 1.52 |
| Health care access | | | | | | |
| Health insurance | 85.84 (69.76, 94.10) | 1.00 | 87.06 (83.90, 89.68) | 0.64 | 58.87 (56.77, 60.93) | 0.47 |
| Financial barrier | 20.81 (10.41, 37.28) | 1.00 | 20.55 (16.93, 24.71) | 1.14 | 27.95 (26.10, 29.88) | 0.78 |
| Usual source of primary care | 86.59 (70.94, 94.47) | 1.00 | 80.74 (76.56, 84.32) | 0.51 | 63.62 (61.52, 65.67) | 0.61 |
| Health outcomes | | | | | | |
| Poor general health | 15.05 (6.24, 32.04) | 1.00 | 13.57 (10.98, 16.67) | 0.69 | 22.22 (20.61, 23.93) | 0.78 |
| Frequent mental distress | 19.10 (8.76, 36.73) | 1.00 | 17.12 (14.01, 20.76) | 0.85 | 10.85 (9.61, 12.23) | 0.51 |
| Frequent poor physical health | 6.06 (1.93, 17.48) | 1.00 | 13.57 (10.99, 16.63) | 2.03 | 10.68 (9.55, 11.93) | 1.67 |

Note. AOR = adjusted odds ratio; BRFSS = Behavioral Risk Factor Surveillance System; CI = confidence interval. Adjusted logistic regression analyses controlled for age, income, and education and included a dummy variable indicating the 3 stratified groups with coding Hispanic lesbians as the reference group; estimates were weighted.

^a Arthritis was measured only in 2003, 2005, 2007, and 2009.

* $P < .05$;

** $P < .01$;

*** $P < .001$.

TABLE 3

Comparisons of Health-Related Indicators Between Hispanic Bisexual Women, Non-Hispanic White Bisexual Women, and Hispanic Heterosexual Women: Washington State BRFSS, 2003–2009

| Indicator | Hispanic Bisexual Women (Ref) | | Non-Hispanic White Bisexual Women | | Hispanic Heterosexual Women | |
|-------------------------------|-------------------------------|------|-----------------------------------|-------|-----------------------------|---------|
| | % (95% CI) | AOR | % (95% CI) | AOR | % (95% CI) | AOR |
| Health conditions | | | | | | |
| Disability | 28.71 (15.72, 46.51) | 1.00 | 37.39 (32.79, 42.23) | 1.52 | 12.02 (10.80, 13.34) | 0.33** |
| Obesity | 18.93 (9.23, 34.92) | 1.00 | 27.20 (23.26, 31.52) | 1.57 | 27.67 (25.72, 29.71) | 1.25 |
| Asthma | 27.90 (15.43, 45.08) | 1.00 | 29.03 (24.71, 33.76) | 0.97 | 12.02 (10.76, 13.41) | 0.40* |
| Arthritis ^a | 36.74 (16.85, 62.47) | 1.00 | 22.09 (17.80, 27.08) | 0.50 | 12.44 (11.08, 13.95) | 0.25* |
| Health behaviors | | | | | | |
| Smoking | 35.08 (20.76, 52.70) | 1.00 | 33.77 (29.08, 38.79) | 0.68 | 9.17 (8.03, 10.46) | 0.12* |
| Acute drinking | 29.61 (16.75, 46.79) | 1.00 | 24.24 (19.52, 29.68) | 0.51 | 7.52 (6.29, 8.97) | 0.18*** |
| Lack of exercise | 16.97 (8.59, 30.77) | 1.00 | 15.38 (12.17, 19.24) | 1.14 | 32.68 (30.77, 34.66) | 1.57 |
| Health care access | | | | | | |
| Health insurance | 82.52 (68.36, 91.16) | 1.00 | 78.78 (74.18, 82.74) | 0.77 | 58.87 (56.77, 60.93) | 0.50 |
| Financial barrier | 31.88 (18.38, 49.30) | 1.00 | 26.48 (22.33, 31.10) | 0.94 | 27.95 (26.10, 29.88) | 0.67 |
| Usual source of primary care | 69.08 (46.82, 85.01) | 1.00 | 72.99 (67.89, 77.55) | 0.65 | 63.62 (61.52, 65.67) | 0.65 |
| Health outcomes | | | | | | |
| Poor general health | 23.67 (12.97, 39.24) | 1.00 | 17.95 (14.51, 22.00) | 0.56 | 22.22 (20.61, 23.93) | 0.39* |
| Frequent mental distress | 36.75 (22.08, 54.36) | 1.00 | 27.56 (23.23, 32.35) | 0.45* | 10.85 (9.61, 12.23) | 0.14*** |
| Frequent poor physical health | 11.19 (4.36, 25.85) | 1.00 | 15.90 (12.59, 19.89) | 1.15 | 10.68 (9.55, 11.93) | 0.61 |

Note. AOR = adjusted odds ratio; BRFSS = Behavioral Risk Factor Surveillance System; CI = confidence interval. Adjusted logistic regression analyses controlled for age, income, and education and included a dummy variable indicating the 3 stratified groups with coding Hispanic bisexual women as the reference group; estimates were weighted.

^a Arthritis was measured only in 2003, 2005, 2007, and 2009.

* $P < .05$;

** $P < .01$;

*** $P < .001$.