Published in final edited form as:
AIDS Educ Prev. 2012 December ; 24(6): 549–563. doi:10.1521/aeap.2012.24.6.549.

HIV Risk, Substance Use, and Suicidal Behaviors among Asian American Lesbian and Bisexual Women

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Abstract

The authors examined the association between lesbian/bisexual identity and three risky health behaviors (HIV risk, substance use, and suicidal behaviors) in a sample of Asian American women. This cross-sectional study was designed to investigate the prevalence of HIV risk behaviors and mental health functioning among unmarried Chinese, Korean, and Vietnamese women ages 18 to 35 who are children of immigrants (N = 701), using computer-assisted survey interviews (CASI). Approximately one out of five Asian American women in the sample identified themselves as a lesbian and bisexual woman (18%). Overall, Asian American lesbian and bisexual women reported higher proportions of risky health behaviors than did their exclusively heterosexual counterparts. The odds of engaging in HIV risk behaviors, using substances, and experiencing suicidal ideation were two to three times higher for lesbian and bisexual women than for exclusively heterosexual women. These findings suggest that rigorous screening is necessary for identifying women in this lesbian/bisexual subgroup in order to provide them with better assessment and services.

The estimated percentages of lesbian and bisexual young women range from approximately 7% to 15% in the United States (Mosher, Chandra, & Jones, 2005; Russell & Joyner, 2001; Savin-Williams & Ream, 2007). The emergence of more studies on health risk behaviors in the gay, lesbian, and bisexual population indicates a rising scholarly concern about increasing rates of risk, particularly among women in this population (Bontempo & D'Augelli, 2002; Gruskin, Hart, Gordon, & Ackerson, 2001; Kaestle & Waller, 2011). In a study by Bontempo and D'Augelli (2002), lesbian and bisexual females reported significantly greater risks of suicidality, drinking, and marijuana use than did heterosexual females, while in another study, young lesbian and bisexual women reported higher weekly alcohol consumption and less abstinence from drinking compared with heterosexual women (Gruskin et al., 2001).

Furthermore, empirical evidence has demonstrated the need for increased concern about HIV risk behaviors among lesbian and bisexual women. In a recent study, bisexual females

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had significantly higher odds of contracting sexually transmitted diseases than females who were exclusively attracted to males (Kaestle & Waller, 2011). An earlier study indicated that bisexual women might not use protection with other women because they perceive no risk in female same-sex intercourse (Champion, Wilford, Shain, & Piper, 2005). Additionally, it is also common for lesbian and bisexual women to have had unprotected intercourse with men (Diamant, Schuster, McGuigan, & Lever, 1999; Diamond, 2000; Paz-Bailey et al., 2003). Even health practitioners may believe that lesbian and bisexual women do not need screening or sexual health education, which further exacerbates this population's sexual risk (Fishman & Anderson, 2003; Marrazzo et al., 1998). Collectively, previous research findings indicate that these health behaviors and attitudes pose a serious risk to the health of lesbian and bisexual women.

Asian Americans are the fastest growing population in the United States; however, we know little about risky health behaviors of the young gay, lesbian, and bisexual population within this race/ethnicity. This subgroup of Asian Americans may be especially vulnerable to adverse health consequences due to their dual minority status, in terms of race/ethnicity and sexual orientation (Wilson & Yoshikawa, 2004). Specifically, young gay, lesbian, and bisexual Asian Americans face various challenges with identity development, such as coming to terms with a sexual identity that is aberrant from the values and norms of both American culture and their ancestral culture (Markus & Kitayama, 1991). Asian cultures strongly value heterosexuality; thus, nonexclusive heterosexuality is seen as a threat to the family system and a rejection of typical male and female familial roles (Chung & Katayama, 1998). Outside of the family, friends and others view the parents of gay, lesbian, and bisexual adolescents as having failed in their responsibility to instill the value and importance of traditional gender roles in their children (Chan, 1989). As a result, Asian American gay, lesbian, and bisexual adolescents often face rejection in their family and cultural community. This can lead to identity confusion and social isolation, both of which have been comprehensively described in minority stress theory. Meyer's (1995) minority stress model is based on the premise that members of the gay, lesbian, and bisexual population, like members of other minority groups, are subjected to chronic stress related to their stigmatization.

Meyer's theory connects literature that demonstrates higher odds of mental health and substance use problems among gay, lesbian and bisexual populations with well-established social science research that illustrates the link between stress or stressful life events and poor health outcomes (Avison & Turner, 1988; Dohrenwend, 2000). Therefore, discrimination, internalized homophobia, and social stigma can create a hostile and stressful social environment for Asian American lesbian and bisexual women and may contribute to mental health complications (Meyer, 1995, 2003). To cope with inner struggles and social isolation, Asian American lesbian and bisexual women may also turn to substance use (Hahm, Wong, Huang, Ozonoff, & Lee, 2008; Wright & Perry, 2006). Moreover, this sense of normlessness or anomie, resulting from a lack of an accepting social environment and feelings of exclusion from one's community, can lead to suicide (Durkheim, 1951). Asian American gay, lesbian, and bisexual adolescents are at risk for anomie because their sexual identity is viewed as deviant and is therefore rejected by their culture.

Previous research on risky health behaviors among Asians with nonexclusively heterosexual orientations has focused on men who have sex with men or transgendered women, with little attention to Asian American lesbian or bisexual women. Although Asian Americans have a long history in American society and represent the fastest growing minority group, Asian American women in the United States remain a relatively unknown and obscure population (U.S. Census Bureau, 2010). In particular, White ethnic myths about Asian women continue to persist, ranging from the erotic oriental beauty to the evil dragon lady to the obedient wife and mother, causing the complexities of Asian American women's lives to remain a mystery (Joe, 1996). Such myths may create exclusively heterosexual perceptions of Asian American women and numerous barriers in understanding the nuances of their everyday functioning and habits, including stress and coping, drug use, and sexual behavior.

Among the few available studies examining risky health behaviors among Asian American lesbian and bisexual women, we found that lesbian and bisexual women were at the highest risk for using illicit substances, compared to gay and bisexual men, exclusively heterosexual men, and exclusively heterosexual women (Hahm et al., 2008). However, we did not control for acculturative stress in the model, which has been an important predictor in determining risky health behaviors among immigrants (Lorenzo-Blanco, Unger, Ritt-Olson, Soto, & Baezconde-Garbanati, 2011; Miller, Yang, Farrell, & Lin, 2011). Controlling for acculturative stress may be particularly important when testing the role of having a nonexclusively heterosexual identity among young Asian Americans because these individuals, as children of immigrants, suffer from at least two sources of stress: acculturation and sexual orientation (Hahm & Adkins, 2009). Eliminating this potentially confounding factor would provide greater confidence in any results that reject the null hypothesis.

Our hypothesis is that (after controlling for ethnicity, age, level of education, birthplace, and acculturative stress) lesbian and bisexual women as a group will be independently associated with increased odds of HIV risk behaviors, substance use, and suicidal behaviors among our sample of young Asian American women. The analysis that follows describes the general characteristics, HIV risk behaviors, substance use, and suicidal behaviors of our sample and compares lesbian/bisexual participants with heterosexual participants to examine differences in each group's proportions of risks.

Method

Sample

This study was part of a larger cross-sectional study, the Asian Women's Sexual Health Initiative Project (AWSHIP), which was designed to examine the prevalence of HIV risk behaviors and mental health functioning among Chinese, Korean, and Vietnamese women who are children of immigrants. AWSHIP employed a convenience sampling strategy and collaborated with 8 universities and 20 community organizations to recruit female participants in Massachusetts and to serve as settings for conducting surveys. AWSHIP used bicultural and bilingual outreach workers to ensure cultural sensitivity for the participants. To be eligible for AWSHIP, respondents had to ft the following criteria: (a) single; (b) between 18 and 35 years old; (c) self-identified as Chinese, Vietnamese, Korean, or some

combination thereof; (d) a child of an immigrant; and (e) a current resident of the greater Boston area. Of the 804 women who were screened during the data collection period of 2010 to 2011, about 2% (n = 17) were ineligible and 10% (n = 83) never followed through. Women who selected “not sexually attracted to men or women” (n = 2) or “don't know” (n = 1) in response to the sexual orientation question on the survey were also excluded from analyses, leaving an analytic sample of 701 Asian American women.

Survey Procedure

Trained interviewers conducted a computer-assisted survey interview (CASI). CASI has been shown to successfully obtain answers to highly sensitive questions, including HIV risk and substance use behaviors (Brown & Vanable, 2009). To accommodate potential language barriers, consent forms and CASI surveys were offered in five different languages: English, traditional and simplified Chinese, Korean, and Vietnamese. A total of 12 translators and back translators (two translators and two back translators each for Chinese, Korean, and Vietnamese) completed the multilingual CASI. Respondents took approximately 45 to 60 minutes to complete the survey, and they received $20 as compensation. Boston University's Institutional Review Board approved all protocols and procedures.

Measures of Outcome Variables

Risky Sexual (HIV Risk) Behavior—*More than one sex partner* was coded *yes* if respondents reported having had more than one partner in the past 6 months and *no* if they reported one or no partners. *Ever having anal sex* was ascertained by asking if the participants had ever had anal sex, and their responses were dichotomized as *yes* versus *no. Sex while drinking or taking drugs* was coded *yes* if participants had ever had vaginal or anal sex while drinking or taking drugs (otherwise coded *no*). *Ever having potentially risky sexual partners* was measured by asking participants the following question: “As far as you know, have you ever had vaginal or anal sex with risky partners?” In this study, *risky partners* were referred to as anyone (a) who had worked as a prostitute, (b) who had ever been diagnosed with HIV or AIDS, (c) who had ever injected drugs, or (d) whose sexual history was not well known. If respondents reported having ever had vaginal or anal sex with risky partners, they were classified as having had a potentially risky sexual partner (coded *yes*; otherwise coded *no*).

Substance Use—*Hard-drug use* was ascertained by asking participants, “Have you ever used any type of illegal drug, such as LSD, PCP, Ecstasy, mushrooms, inhalants, ice, heroin, or prescription medicines not prescribed to you?” Participants' responses were dichotomized into two categories: *yes* and *no. Marijuana use* was coded *yes* if a participant had ever used marijuana (otherwise coded *no*). Binge drinking was measured by asking participants, “During the past 12 months, on how many days did you drink five or more drinks in a row?” Their responses were scored *yes* for one or more days of binge drinking and *no* for none.

Suicidal Behavior—*History of suicidal ideation* was measured by asking whether participants had ever seriously thought about committing suicide, and their responses were dichotomized as *yes* versus *no. History of suicide attempts* was coded *yes* if a participant had ever attempted to commit suicide and coded *no* if not.

Measure of Independent Variable

Lesbian or bisexual identity was assessed by asking participants, "How do you describe your sexual orientation?" In this study, participants were classified as being a *lesbian or bisexual woman* if they met any of the following four criteria: (1) mostly heterosexual ("I am mostly attracted to men, but somewhat attracted to women."); (2) bisexual ("I am equally attracted to men and women"); (3) mostly homosexual ("I am mostly attracted to women, but somewhat attracted to men"); and (4) homosexual or gay ("I am only attracted to women"). Responses were coded *yes (lesbian or bisexual)* if one or more conditions were met, and responses were coded *no (exclusively heterosexual)* for participants who reported being "100% heterosexual" or "straight." Participants who reported their sexual orientation as "not sexually attracted to men or women" or "don't know" were excluded from our analysis. This measure has been used in prior studies (Hahm et al., 2008; Martin-Storey & Crosnoe, 2012; Savin-Williams & Ream, 2007).

Measures of Control Variables

Ethnicity was measured as Korean, Chinese, Vietnamese, or a combination thereof (coded as *other*). *Age* at the time of the interview was divided into two groups: 18 to 27 years versus 28 to 35 years. *Education* was classified into three groups: (a) high school diploma or less, (b) some college or college degree, or (c) graduate school or higher. *Birthplace* was categorized as either born in Asia or born in the United States. *Acculturative stress* was measured by the acculturative distress subscale of the Cultural Adjustment Difficulties Checklist (CADC). The acculturative distress subscale consists of general stress items (including affective responses, behavioral responses, and psychosomatic symptoms), and the cultural stress items refer to interpersonal conflicts with White Americans, one's own cultural group, family members, general confusion, feeling alienated from both cultures, and feeling caught between two cultures. The internal consistency reliability for the full CADC scale and subscale was .92.

Statistical Analyses

Of the 701 Asian American women who completed the survey, chi-square tests were used to compare the prevalence of the behavioral outcomes of interest among exclusively heterosexual women with the prevalence of the same outcomes among lesbian/bisexual women (Table 2). Additionally, we ft a series of multiple logistic regression models to estimate the relative contribution of lesbian/bisexual identity to the three domains of risky health behaviors while controlling for ethnicity, age, level of education, birthplace, and acculturative stress (Table 3).

Results

Estimates of Demographic Characteristics among Asian American Women

Table 1 presents the number and percentage distributions of Asian American women by demographic characteristics. Approximately 1 out of 5 (18.4%) young Asian women identified themselves as lesbian or bisexual. Among the 701 participants, Chinese was the most predominant ethnic group in this study (51.5%), followed by Korean, Vietnamese, and

other (21.8%, 19.5%, and 7.2%, respectively). The majority of the women in the sample had some college or a college degree (72.9%), and more women were born in the United States than in Asia (64.6% and 35.4%, respectively).

Estimated Prevalence of HIV Risk, Substance Use, and Suicidal Behaviors among Asian American Women

Table 2 provides the estimated prevalence of risky health behaviors among Asian American women. In terms of risky sexual behaviors, approximately 1 out of 10 women reported having more than one sex partner in the past 6 months (12.3%), one fifth of the sample had ever experienced anal sex (20.1%), one third reported having ever had sex while drinking or taking drugs (33.8%), and 60.6% of participants reported ever having a potentially risky sexual partner. Among young Asian American women in this study, almost 10% reported ever having used hard drugs (9.7%). Nearly 40% of participants reported ever using marijuana and ever participating in binge drinking during the past 12 months. Approximately 1 out of 5 participants had ever seriously thought about committing suicide (17.9%), and over 7% of participants had ever actually attempted to commit suicide.

In addition, Table 2 shows the prevalence of sexual risk, substance use, and suicidal behaviors according to sexual identity. The results of chi-square tests showed that the proportions of risky health behaviors among lesbian and bisexual women were significantly higher than those of exclusively heterosexual Asian American women in all categories, except for binge drinking during the past 12 months. Among lesbian and bisexual women in this study, approximately one fifth (17.8%) reported having had more than one sex partner in the past 6 months and one third (35.7%) reported ever having had anal sex; however, only 11% of exclusively heterosexual women claimed having multiple sex partners ($p = .034$) and less than one-fifth (16.6%) of exclusively heterosexual women stated having had anal sex ($p = .000$). Furthermore, young Asian American lesbian and bisexual women had significantly higher percentages of hard drug use compared with those who were exclusively heterosexual women in this study (18.6% vs. 7.7%, respectively, $p = .000$). Notably, women in the lesbian and bisexual group were twice as likely to report having had suicidal ideation (31.0%) or suicidal attempts (13.2%) as the exclusively heterosexual group of women (lifetime suicidal ideation: 15.0%, $p = .000$; lifetime suicide attempt: 5.8%, $p = .003$).

Logistic Regression Results Examining Lesbian/Bisexual Identity and Other Control Variables as Predictors of Risky Health Behaviors among Asian American Women

Table 3 presents the results of the multiple logistic regression models for HIV risk, substance use, and suicidal behaviors, controlling for ethnicity, age, education, place of birth, and acculturative stress. Similar to the results of bivariate analyses shown in Table 2, these models indicate that identifying as lesbian or bisexual is significantly associated with increased odds of all risky health behaviors except suicidal attempts. Compared with exclusively heterosexual women, lesbian and bisexual women were more likely to have had more than one sex partner in the past 6 months and to have ever had anal sex, sex while drinking or taking drugs, and sex with a potentially risky partner (OR = 1.79, 2.93, 2.42, and 1.79, respectively), adjusting for demographic characteristics. Among young Asian American women, those who identified as lesbian or bisexual were two to three times as

likely to engage in substance use behaviors and about twice as likely to experience suicidal ideation as exclusively heterosexual women.

Asian women who had a college degree or were in college were more likely to have ever had anal sex, sex while drinking or taking drugs, and sex with a potentially risky partner, compared with women with less education, controlling for lesbian or bisexual identity, ethnicity, age, birthplace, and acculturative stress. Specifically, women in the high education group were about five or six times more likely to report engaging in these risky behaviors as women in the low education group. Additionally, having a mixed ("other") ethnicity was associated with increased odds of multiple sex partners, risky sexual partners, and marijuana use (OR = 2.37, 2.09, and 1.87, respectively), adjusting for other covariates.

Discussion

Our study provides a comprehensive picture of health risk behaviors (namely, HIV risk, substance abuse, and suicidal behaviors) among Asian American lesbian and bisexual women. We found that almost 20% of our sample identified themselves as lesbian or bisexual, which is substantially higher than the prevalence suggested in previous studies of Asian Americans (6%–10%) (Chae & Ayala, 2010; Hahm et al., 2008). Similar to findings from previous studies of the general population (Bell, Ompad, & Marshal, 2006; Wright & Perry, 2006), our findings suggest that lesbian/bisexual identity is associated with an elevated risk of HIV, substance use, and suicidal behaviors among Asian American women.

Risk of HIV among Asian American Lesbian and Bisexual Women

Our findings suggest that lesbian and bisexual Asian American women have a significantly higher risk for HIV than exclusively heterosexual Asian American women, as evidenced by higher rates of multiple sex partners, anal sex, sex while drinking or taking drugs, and sex with risky sexual partners. These results are consistent with the growing number of studies showing that lesbian/bisexual identity is a risk factor for engaging in HIV risk behaviors, including injection drug use, sexually transmitted diseases, and a history of multiple sexual partners (Goodenow, Szalacha, Robin, & Westheimer, 2008; Saewyc et al., 2006). Other studies have shown that lesbian and bisexual women are not free from risk for HIV through heterosexual intercourse: Most self-identified lesbian women (Cochran, Bybee, Gage, & Mays, 1996; Diamant et al., 1999; Einhorn & Polgar, 1994) and females who have female sexual partners (Fethers, Marks, Mindel, & Estcourt, 2000; Friedman et al., 2003) have had a history of heterosexual intercourse. These findings inform our understanding of the complex sexual history of lesbian and bisexual women and provide guidance for future clinical practice for this population.

Substance Use Behaviors among Asian American Lesbian and Bisexual Women

The findings about substance use in our study sample were consistent with previous findings. Specifically, the prevalence of marijuana use among Asian American women in our study (39.4%) was very similar to prevalence among White (38.2%) and Hispanic (39.9%) women in a study by McCabe et al. (2007). In addition, our finding that the odds of doing hard drugs, smoking marijuana, or binge drinking were approximately 1.5–3 times

higher for lesbian and bisexual women than for the exclusively heterosexual women is consistent with findings from several previous studies (Bell et al., 2006; Gruskin et al., 2001; Hahm et al., 2008; Koh & Ross, 2006; Tucker, Ellickson, Orlando, Martino, & Klein, 2005; Wright & Perry, 2006).

There are two possible explanations for this phenomenon. First, compared with exclusively heterosexual women, lesbian and bisexual women are less likely to adhere to traditional female gender roles. For instance, lesbian and bisexual women are less likely to refrain from using substances, even though these behaviors are contrary to cultural traditions for females (Diamond, 2000). Second, emotional support related to sexual orientation among Asian American/Pacific Islander lesbian and bisexual women is almost nonexistent due to cultural sanctions against and a lack of understanding of homosexuality/bisexuality. As a result, these women may seek out other sources of support, such as gay and lesbian communities (Hahm et al., 2008). In particular, lesbian and bisexual women may perceive gay and lesbian bars as a welcoming social scene and a secure environment (Flores, Mansergh, Marks, Guzman, & Colfax, 2009; Glaus, 1989); however, these environments pose a high risk for exposure to alcohol and drugs. Thus, Asian American lesbian and bisexual women who seek out supportive gay and lesbian communities might be at high risk for substance use. These findings raise new concerns about substance use among young Asian American lesbian and bisexual women and highlight the critical need for future public health preventive measures and interventions to focus on this issue.

Suicidal Behaviors among Asian American Lesbian and Bisexual Women

We found a strong link between lesbian/bisexual identity and suicidality among young Asian American women. Compared with the proportions among exclusively heterosexual counterparts in our sample, the proportion of lifetime suicidal ideation was double among lesbian and bisexual women (15.0% vs. 31.0%), and the proportion of lifetime suicidal attempts was 2.5 times greater (5.8% vs. 13.2%). This substantially higher level of suicidality among lesbian and bisexual women compared with exclusively heterosexual women may be explained by dual minority status and subsequently being more vulnerable to discrimination and negative mental health outcomes. Multiple stigmatized identities arising from self-perceived race/ethnicity, sexual orientation, and/or gender have been shown to act as compounding stressors in the lives of lesbian and bisexual women (Diaz, Bein, & Ayala, 2006; Lewis, Derlega, Griffin, & Krowinski, 2003; Wilson & Yoshikawa, 2004). As demonstrated in a recent representative study based on the National Latino and Asian American Survey (NLAAS), the higher prevalence of suicidality reported among Latina and Asian American lesbian and bisexual women as compared with their exclusively heterosexual counterparts is consistent with our findings (Cochran, Mays, Ortega, Alegria, & Takeuchi, 2007). However, the proportions of suicidal ideation and attempts among lesbian and bisexual women in the NLAAS study (13.6% and 8.5%, respectively) are dramatically lower than those reported in our study (31.0% and 13.2%, respectively). This difference in proportion of suicidal behaviors between our results and the results from the NLAAS study may stem from differences in study design. Specifically, our study only recruited women ages 18–35, who have been found to be the group with the second highest suicide rate compared with women of the same age in other racial groups in the United

States. However, the NLAAS study by Cochran and colleagues included both Latinas and Asian American women and a substantially wider age group (aged 18 and older). In order to estimate accurate suicidal rates among Asian American lesbian and bisexual women, this study should be replicated to include a wider age range.

Along with these findings, our analyses confirm that identifying as lesbian or bisexual is a risk factor for suicidal thoughts and suicide attempts among young Asian American women, and our study is the first to extend these findings to Asian American women. This trend suggests that health practitioners and caregivers should pay close attention to early signs of suicidality among Asian American lesbian and bisexual women and intervene early to prevent more serious suicidal behaviors from developing.

Limitations of the Study

There are some important limitations to this study. The measure used to determine sexual orientation is the first limitation. In the current study, lesbian and bisexual women were identified based on their sexual attraction. However, sexual orientation can be defined in various ways (Cochran, 2001), and a different study definition might have resulted in different findings to some extent. Deciding who belongs to which sexual group, on what basis, and for how long is fundamental to any practical paradigm for research on sexual orientation (Diamond, 2003; McConaghy, 1999; Savin-Williams & Ream, 2007). Without this information, identifying the nuances of lesbian and bisexual women's sexuality with confidence is limited. Therefore, to accurately identify lesbian and bisexual women in health research, there remains a need for a multidimensional standardized assessment of sexual orientation, including sexual attraction, behavior, and identity (Institute of Medicine, 2011). To this end, there may be differences of lesbian and bisexual identity among the women within this subgroup, which is the second limitation. For instance, some studies have indicated distinct patterns of risky health behaviors when comparing lesbian and bisexual populations (Burgard, Cochran, & Mays, 2005; Gruskin et. al, 2001). Results should therefore be interpreted with this in mind. Third, the definitions of various dimensions of HIV risk behaviors, substance use, and suicidal behaviors were based on self-reported answers to survey questions, which pose additional challenges. However, such surveys are generally considered valid when confidentiality is protected, and previous research has demonstrated good reliability and validity for the CASI (Brown & Vanable, 2009). Fourth, 86% of our samples were in college or had graduate degrees. AWSHIP data were collected in the Greater Boston Area, which has one of the highest densities of academic institutions in the United States (Boston Redevelopment Authority, 2010). Thus, because our sample is skewed toward a higher education group, this limitation should be taken into account when interpreting the results of the study, because specific cultural and other norms of this geographic area may have influenced the participants' responses.

Conclusion

Our study findings illuminate potential avenues for research and intervention strategies. We must continue monitoring the health issues of Asian American lesbian and bisexual women as part of population-based surveys of health behaviors. Improving the accuracy and

effectiveness of these measures will only serve to enhance our surveillance, augment our understanding of their health needs, and more effectively guide health promotion efforts for this vulnerable population. Therefore, researchers should consider how representative samples with multidimensional measures of sexuality could add depth to our understanding of nonexclusively heterosexual orientations and health. Furthermore, future studies should focus on articulating and testing longitudinal and mediated pathways of risk among Asian American lesbian and bisexual women to identify key mechanisms for prevention and intervention programs to target.

Given the significance of our study results, sexual orientation might serve as a useful clinical indicator for health practitioners working with young Asian women. Moreover, such identification could help to promote a safe and confidential environment for lesbian and bisexual women to discuss their orientation and to adequately assess HIV risk, substance use, and suicidality in order to provide the best possible care. Sex education courses that cover issues relevant to lesbian and bisexual women and other possible modes of intervention should be explored to reduce health inequities and improve individual understanding of health risks.

Given the fact that Asian American lesbian and bisexual women are at greater risk for suicidality, more efforts are needed to develop suicide prevention and intervention programs that target young Asian American women in this subgroup. The available evidence suggests that efforts that include a peer component (Anderson, 1998; Garofalo et al., 1998) and that focus on coping with stress and stigma (Hunter, 1999; McDaniel, Purcell, D., & D'Augelli, 2001) would be effective components of interventions for young Asian American lesbian and bisexual women who may be at risk for suicide.

In summary, our results show that Asian American lesbian and bisexual women are significantly more likely than their exclusively heterosexual counterparts to report risky health behaviors, and this disparity is strong and pervasive. The risky behavior dynamic observed among all Asian American women may just be a precursory indicator of other underexamined health behaviors. Considering this population's dual minority status and concomitant health risk behaviors, it is important that scholars, clinicians, researchers, and policy makers pay special attention to Asian American lesbian and bisexual women.

Acknowledgments

Support for this research was provided to Hyeouk Chris Hahm by Mentored Research Scientist Development Grant (K01) and the National Institute of Mental Health (Primary Investigator: H.C.H., 1K01MH086366-01A1).

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Table 1

Estimates of Demographic Characteristics of Young Asian American Women (*N* = 701)

	Lesbian or Bisexual		Exclusively Heterosexual		Total	
	n	**%**	***n***	**%**	***n***	**%**
Lesbian/Bisexual Identity						
Yes					129	18.4
No					572	81.6
Ethnicity						
Chinese	79	61.2	282	49.3	361	51.5
Korean	14	10.9	139	24.3	153	21.8
Vietnamese	24	18.6	13	19.8	137	19.5
Mixed/other	12	9.3	38	6.6	50	7.2
Age						
Young	116	89.9	540	94.4	656	93.6
Old	13	10.1	32	5.6	45	6.4
Education						
High school or less	24	18.6	82	14.3	106	15.1
College	88	68.2	423	74.0	511	72.9
Graduate or more	17	13.2	67	11.7	84	12.0
Birthplace						
Foreign born	46	35.7	202	35.3	248	35.4
U.S. born	83	64.3	370	64.7	453	64.6
	Mean	*SE*	Mean	*SE*	Mean	*SD*
Acculturative stress	96.2	1.9	90.1	0.9	91.2	21.2

Note. *SE* = standard error, *SD* = standard deviation.

Table 2

Estimated Prevalence of HIV Risk, Substance Use, and Suicidal Behaviors Among Young Asian American Women (*N* = 701)

	Lesbian or Bisexual		Exclusively Heterosexual		Total		Model *p* value
	n	%	*n*	%	*n*	%	
HIV risk behaviors							
More than one sex partner in the past 6 months							.034*
Yes	23	17.8	63	11.0	86	12.3	
No	106	82.2	507	89.0	613	87.7	
Ever having anal sex							.000***
Yes	46	35.7	95	16.6	141	20.1	
No	83	64.3	476	83.4	559	79.9	
Ever having sex while drinking or taking drug							.000***
Yes	64	49.6	173	30.4	237	33.9	
No	65	50.4	397	69.6	462	66.1	
Ever having potentially risky sexual partners							.010*
Yes	91	70.5	333	58.3	424	60.6	
No	38	29.5	238	41.7	276	39.4	
Substance use							
Hard drug use							.000***
Yes	24	18.6	44	7.7	68	9.7	
No	105	81.4	526	92.3	631	90.3	
Marijuana use							.001**
Yes	68	52.7	207	36.4	275	39.4	
No	61	47.3	362	63.6	423	60.6	
Binge drinking during the past 12 months							.075
Yes	60	46.9	219	38.4	279	39.9	
No	68	53.1	352	61.6	420	60.1	
Suicidality							
Lifetime suicidal ideation							.000***
Yes	40	31.0	85	15.0	125	17.9	

	Lesbian or Bisexual		Exclusively Heterosexual		Total		Model *p* value
	n	**%**	***n***	**%**	***n***	**%**	
No	89	69.0	483	85.0	572	82.1	
Lifetime suicide attempt							.003**
Yes	17	13.2	33	5.8	50	7.2	
No	112	86.8	537	94.2	649	92.8	

* $p < .05$.

** $p < .01$.

*** $p < .001$.

Table 3

Logistic Regression Results Examining Lesbian and Bisexual Identity and Other Control Variables as Predictors of Risky Health Behaviors

	Risky sexual (HIV risk) behaviors				Substance use			Suicidality	
	More than one sex partner in the past 6 months (*n* = 673) OR (95% CI)	Ever having anal sex (*n* = 674) OR (95% CI)	Ever having sex while drinking or taking drug (*n* = 673) OR (95% CI)	Ever having potentially risky sexual partners (*n* = 674) OR (95% CI)	Hard drug use (*n* = 673) OR (95% CI)	Marijuana use (*n* = 672) OR (95% CI)	Binge drinking during the past 12 months (*n* = 674) OR (95% CI)	Lifetime suicidal ideation (*n* = 672) OR (95% CI)	Lifetime suicide attempt (*n* = 673) OR (95% CI)
Lesbian or Bisexual	1.79* (1.03–3.10)	2.93*** (1.85– 4.62)	2.42*** (1.59– 3.68)	1.79* (1.14–2.82)	2.97*** (1.67– 5.31)	2.18*** (1.44– 3.30)	1.54* (1.02–2.32)	2.07* (1.27–3.37)	1.84 (0.89–3.81)
Korean (Chinese -reference)	1.05 (0.57–1.92)	0.98 (0.58–1.65)	1.24 (0.81–1.90)	0.66* (0.44–0.99)	1.83 (0.94–3.54)	1.64* (1.09–2.46)	1.36 (0.92–2.03)	1.03 (0.60–1.78)	1.06 (0.46–2.46)
Vietnamese	0.75 (0.38–1.50)	1.16 (0.69–1.95)	1.11 (0.72–1.73)	2.10* (1.33–3.31)	1.31 (0.65–2.69)	1.33 (0.87–2.04)	0.67 (0.43–1.03)	1.17 (0.68–2.00)	1.77 (0.82–3.79)
Mixed/other	2.37* (1.12–5.0)	1.96 (0.98–3.95)	1.50 (0.79–2.86)	2.09* (1.04–4.22)	1.40 (0.53–3.67)	1.87* (1.01–3.49)	1.29 (0.70–2.37)	0.63 (0.25–1.54)	0.21 (0.03–1.81)
Age - old age (young - reference)	1.31 (0.52–3.33)	1.70 (0.80–3.61)	1.15 (0.57–2.35)	2. 73* (1.07–6.94)	3.16** (1.33–7.50)	2.62** (1.27–5.40)	0.74 (0.37–1.51)	1.14 (0.46–2.82)	1.17 (0.24–5.79)
Mid-education (low - reference)	2.16 (0.95–4.94)	4.28*** (1.89– 9.69)	2.51** (1.45–.434)	3.12*** (1.96– 4.96)	1.12 (0.50–2.52)	1.38 (0.86–2.20)	1.70* (1.06–2.72)	0.67 (0.39–1.18)	0.33** (0.16–0.68)
High-education	2.35 (0.83–6.67)	4.67** (1.77– 12.33)	4.82*** (2.35– 9.87)	5.95*** (2.87– 12.30)	1.80 (0.65–4.99)	0.94 (0.48–1.85)	2.38* (1.23–4.61)	1.10 (0.50–2.45)	0.34 (0.10–1.18)
U.S. born	1.32 (0.79–2.21)	1.09 (0.72–1.66)	1.51* (1.06–2.16)	1.19 (0.84–1.67)	1.71 (0.94–3.11)	1.83** (1.29–2.58)	1.31 (0.93–1.82)	1.57 (0.99–2.48)	0.82 (0.43–1.59)
Acculturative stress	1.01 (1.00–1.02)	1.01 (0.99–1.01)	1.01 (1.00–1.01)	1.01 (0.99–1.00)	1.00 (0.99–1.02)	1.01 (1.00–1.01)	1.01 (1.00–1.01)	1.03*** (1.02– 1.04)	1.05*** (1.04–1.07)
Model *p* value	0.023*	0.000***	0.000***	0.000***	0.000***	0.000***	0.002***	0.000***	0.000***

Note: CI = confidence interval; OR = odds ratio.

* $p < .05$.

** $p < .01$.

*** $p < .001$.