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The Associations Between Forced Sex and Severe Mental Health, Substance Use, and HIV Risk Behaviors Among Asian American Women

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Abstract

We examined the association between forced sex history and mental health, sexual health, and substance use among Asian American women ($n = 720$); 14.3% of our sample ($n = 103$) reported forced sex experiences. Multiple logistic regression analyses revealed that participants with forced sex histories were 2-8 times more likely to have higher rates of mental health problems, HIV risk behavior, and substance use. Qualitative analysis was used to supplement the quantitative results and give depth to our findings. Our results suggest that interventions for Asian American women who experienced forced sex should integrate mental health, substance use, and sexual health treatments.

Keywords

Asian American; Asian American women; forced sex; mental health; suicide; HIV risk behaviors; rape; depression

Introduction

Forced sex is a significant public health problem plaguing women in the United States. According to multiple national surveys, approximately 18% of all U.S. women have experienced forced sex at some point in their lives (Black et al., 2011; Tjaden & Thoennes, 1998), with the majority of first completed forced sex experiences occurring before a victim's 25th birthday (Black et al., 2011).

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Studies demonstrate that forced sex is associated with poor mental health, substance use, and HIV risk behaviors among White, Black, and Hispanic women. Among these three groups of women, a history of forced sex was found to be associated with high rates of depression (Regehr, Regehr, & Bradford, 1998; Ullman & Brecklin, 2002) and suicidality (Kilpatrick, Edmunds, & Seymour, 1992; Stepakoff, 1998). Women who reported a history of forced sex were more likely to use illicit drugs and alcohol (Gidycz, Orchowski, King, & Rich, 2008; Kalichman, Williams, Cherry, Belcher, & Nachimson, 1998; Nguyen, Kaysen, Dillworth, Brajcich, & Larimer, 2010). These women reporting forced sex also had a higher prevalence of HIV and sexually transmitted infections (STIs; Molitor, Ruiz, Klausner, & McFarland, 2000; Wyatt et al., 2002). Compared with women without a history of forced sex, women reporting forced sex also had higher rates of HIV risk behaviors, such as having a greater number of sexual partners (Molitor et al., 2000; Upchurch & Kusunoki, 2004; Wyatt et al., 2002), having an earlier sexual debut (Gidycz et al., 2008; Molitor et al., 2000; Upchurch & Kusunoki, 2004; Wyatt et al., 2002), and being less likely to use a condom (Gidycz et al., 2008; Lang et al., 2011). The effects of a history of forced sex remain long-lasting; individuals who experienced assault at a young age report increased risks associated with poor mental health (Hanson et al., 2001; Molnar, Buka, & Kessler, 2001), substance misuse (Brems & Namyniuk, 2002; Epstein, Saunders, Kilpatrick, & Resnick, 1998), and HIV risk behaviors (Zierler et al., 1991).

Despite substantive advances in our understanding of the associations between forced sex and psychological, behavioral, and sexual health outcomes for White, Black, and Hispanic women, these associations are not well understood for Asian American women. Most of the existing literature focuses on either the prevalence of sexual assault within the population or the perceptions (e.g., attitudes toward rape or forced sex) of forced sex among Asian American women, without accounting for a history of forced sex. In one of the few studies that focuses on the health outcomes of Asian American women who experienced sexual assault, Nguyen et al. (2010) found that Asian American female college students with no history of alcohol-related sexual assault had lower levels of both alcohol consumption and alcohol-related problems compared with White college students. In contrast, Asian American women who had a history of alcohol-related sexual assault had higher levels of both alcohol consumption and alcohol-related problems. These findings support the notion that sexually victimized Asian American women may experience higher levels of psychological distress or have fewer adaptive coping skills or sources of social support compared with sexually victimized White women.

Epidemiological studies have consistently shown that Asian American women have a lower prevalence of forced sex compared with White, Black, and Hispanic women. For instance, 7.0-8.0% of Asian American women have reported forced sex compared with 15.0-18.0% of Whites, 19.0-23.0% of Blacks, and 15.0-16.0% of Hispanic women (Kilpatrick, Resnick, Ruggiero, Conoscenti, & McCauley, 2007; Tjaden & Thoennes, 1998). This low prevalence may reflect Asian American women's reluctance to reveal their experience with forced sex. Examining a college sample with an Asian American majority (82%), Mills and Granoff (1992) found that only one out of three women who had experienced sexual assault correctly labeled their sexual assault experiences as *sexual assaults*. Previous research on Asian victims of sexual abuse or domestic violence supports the notion that disclosure may not be

avored among the population; these studies noted that Asian women frequently used tolerance, endurance, and silence as the most common coping mechanisms (M. Y. Lee & Law, 2001).

The lack of disclosure may be related to cultural factors such as shame and stigma toward rape victims in the Asian American community. Previous research has shown that Asian American college students were more likely to endorse victim-blaming attitudes toward rape (J. Lee, Pomeroy, Yoo, & Rheinboldt, 2005; Mori, Bernat, Glenn, Selle, & Zarate, 1995). A study that compared attitudes about rape among White and Asian American students found that Asian American students, compared with their White counterparts, were more likely to believe that women should be held responsible for preventing rape and that victims precipitate rape (J. Lee et al., 2005). These attitudes among Asians may be a reflection of the deep impact Confucianism has had on some Asian cultures.

The social and ethnic values of Confucian philosophy may affect how Asian families respond to sexual activity, as discussions about sex are discouraged and emphasis is placed on female virginity until marriage (Gao et al., 2012; Kozu, 1999). As many Asian American parents preserve the traditional Confucian values of their country of origin (Koh, Shao, & Wang, 2009), these principles may in turn affect their children and make them less likely to report an incident of forced sex even though these women may have been born or may have grown up in the United States.

The influence of these community attitudes could also affect mental health outcomes for Asian American women. Studies have shown that victims in societies that emphasize personal culpability in rape are more likely to engage in self-blame (J. Lee et al., 2005), which in turn is associated with higher rates of depression (Janoff-Bulman, 1979). These findings imply that Asian American women with a history of forced sex may experience greater mental health problems than victims of other racial backgrounds.

Among subgroups of Asian Americans, young Asian American women who are children of immigrants show higher mental health risks than any other subgroup. For instance, U.S.-born Asian American women have a higher prevalence of suicidal ideation and suicide attempts than foreign-born Asian American women and men and U.S.-born Asian American men (Duldulao, Takeuchi, & Hong, 2009). In addition, in 2010, suicide was the second leading cause of death for Asian American women between the ages of 15-24 in the United States (Centers for Disease Control and Prevention, 2014). Significant risk factors for suicide include victimization, depression, and substance use (Berman, 2010; Borges, Walters, & Kessler, 2000; Kaminski & Fang, 2009). The combination of sociocultural factors unique to Asian Americans and the increased risk factors for this subgroup could mean that young Asian American women with a history of forced sex face more adverse health outcomes. Thus, the aim of our study is to explore the complex relationships between a history of forced sex and mental health, substance use, and HIV risk behaviors among Asian American women who are children of immigrants. These findings will provide researchers and practitioners in-depth information regarding the psychosocial needs of this understudied, high-risk group, and can be used to help design culturally sensitive interventions that meet the specific needs of this population.

Since 2011, there have been increased government initiatives to prevent sexual assault and protect victims of sexual assault on college campuses through the enforcement of Title IX (Anderson, 2014). Title IX of the Education Amendments of 1972 stipulates that no U.S. institutions of higher learning that receive Department of Education funding can engage in discriminatory practices on the basis of sex and that violations of Title IX are punishable with a termination of federal aid to offending educational institutions (U.S. Department of Education, Office for Civil Rights, 2012). One form of sexual discrimination that Title IX protects against is the fostering of environments that promote sexual harassment, sexual violence, and sexual assault, and thus colleges and universities must take special actions to prevent sexual misconduct on their campuses (Ali, 2011). This is important because Asian American women make up 6.6% of the total female population in colleges and universities (U.S. Department of Education, Office for Civil Rights, 2012), and the Asian American college population is projected to grow by 20% by 2021 (Hussar & Bailey, 2013). Therefore, investigating the intersection between poor mental health, substance use, HIV risk behavior, and forced sex among young Asian American women is a critical step in the prevention of sexual discrimination, harassment, and violence on college campuses and the protection of these young women.

As discussed, there is a lack of empirical research focused on mental health, substance use, and HIV risk behaviors among young Asian American women who have reported experiencing forced sex. Therefore, we undertook this study to (a) estimate the prevalence of forced sex in this population, and (b) determine the associations between forced sex, depression, suicidality, alcohol and drug use, and various HIV risk behaviors.

Method

Data used in this study were derived from the Asian American Women's Sexual Health Initiative Project (AWSHIP), a 5-year mixed-methods study funded by the National Institute of Mental Health (NIMH). The AWSHIP data used for this study examined the substance use patterns, and the mental and sexual health status of Chinese, Korean, and Vietnamese women who are children of immigrants living in the Greater Boston area. These ethnic groups were selected because their cultures of origin are significantly influenced by Confucianism, which places high value on strict moral and social conduct, supports sexual modesty, and discourages discussion of sexuality (Okazaki, 2002; Zhang & Beck, 1999). Furthermore, these groups make up three of the four most populous Asian ethnic groups in Massachusetts (U.S. Census Bureau, 2013).

Study participants were required to meet all of the following criteria: (a) be a single (unmarried) woman; (b) be between ages 18-35; (c) self-identify as Chinese, Vietnamese, Korean, or a mix of these ethnicities; (d) have been born in a foreign country and immigrated to the United States and grew up in the United States as a child or adolescent (1.5 generation) or have been born in the United States (second generation); and (e) be a current resident of the Greater Boston area. We included both 1.5- and second-generation children of immigrants because studies have found that both groups have significant suicidal ideation, suicide attempts, and mental health disorders (Breslau & Chang, 2006; Hahm et al., 2013). AWSHIP data were collected from January 2010-August 2011, and of the 820

women screened, approximately 2% ($n = 17$) were ineligible for the study and about 10% ($n = 83$) did not complete appointments after initial contact. A total of 720 women completed surveys using Computer-Assisted Self-Interviewing (CASI). Trained research assistants provided laptop computers to each research participant and demonstrated how to use CASI, which has been shown to be effective in eliciting answers to highly sensitive questions, such as those involving substance use and HIV risk behaviors (Brown & Venable, 2009). The survey took 45-60 min to complete, and participants received US \$20 as compensation for their time. Boston University's Institutional Review Board (IRB) approved all protocols and procedures.

Although the analysis was primarily focused on the survey data, it was also informed by qualitative interviews. Thirty-eight of the 720 participants who completed CASI were interviewed one-on-one in a semistructured format by one of three Asian American women with mental health expertise. The interviews were conducted in English and lasted between 1-3 hr (averaging 1.5 hr). Informed consent was acquired and interviews were audio recorded, then transcribed verbatim by research assistants. A more detailed description of the sampling strategy and methods for our qualitative sample is available in Hahm, Gonyea, Chiao, and Koritsanszky (2014). For the current study, we identified nine women who, during the CASI, reported a history of forced sex, and we analyzed their interview transcripts.

Measures

Outcome Variables

Mental health status—Three variables were used to measure mental health status and were dichotomized: (a) Moderate to severe depression was examined by utilizing 20 questions from the Center for Epidemiologic Studies Depression (CESD) scale (Radloff, 1977). Study participants with CESD scores greater than or equal to 16 were considered to have moderate to severe depression. The CESD scale ranges from 0-60, and 16 is the common threshold for moderate or severe depression (Radloff, 1977). Thus, we dichotomized the score 1-15 as no or low depression and 16-60 as moderate to severe depression; (b) lifetime suicidal ideation was measured by asking whether participants had ever seriously thought about committing suicide; and (c) lifetime suicide attempt was coded “yes” if a participant had ever attempted to commit suicide.

Substance use—Three variables in this study (alcohol use to cope with problems, past year marijuana use, and past year illicit drug use) measured substance use patterns among those with a history of forced sex. These variables were also dichotomized. Alcohol use to cope with problems was measured by asking participants whether drinking alcohol to cope with difficulties was an accurate descriptor for them. Participants who answered that drinking alcohol to cope with difficulties was “an accurate description of you” or “a very accurate description of you” were coded “yes.” Past year marijuana use was ascertained by asking whether they had used marijuana in the past 12 months. Past year illicit drug use was determined by asking whether they had used marijuana, cocaine, crystal methamphetamine, or any other illegal drug in the past 12 months.

HIV risk behaviors—Ever having anal sex, ever having had one or more pregnancies in their lifetime, having more than one male sex partner in the past 6 months, and no condom use during most recent sexual intercourse were used to measure HIV risk behaviors. Each of these responses was dichotomized as “yes” versus “no.”

Ever having potentially risky sexual partners was measured by asking whether participants had ever had vaginal or anal sex with, to the best of their knowledge, partners who were considered risky. In our study, potentially risky partners were defined by four criteria: anyone who had worked as a prostitute, anyone who had HIV/AIDS, anyone who had injected drugs, and anyone whose sexual history was not well known. When participants agreed with one or more of the conditions, responses were coded “yes,” and otherwise were coded “no.”

Explanatory Variables

History of forced sex—Participants were considered to have a history of forced sex if they responded “yes” to ever having been forced or coerced into having vaginal intercourse or sexual contact, or ever having experienced parents or other adult caregivers touching them in a sexual way during childhood.

Demographics—Age at the time of the interview was divided into two groups: 18-27 years old and 28-35 years old. We used Daniel Levinson's periods of adult development as the basis for these age categories (Levinson, 1986). We combined the periods of “Early Adult Transition,” ages 18-22, and “Entry Life Structure for Early Adulthood,” ages 22-28, to constitute our age category of 18-27 years. Our age category of 28-35 is based on the “Age 30 Transition,” which is from age 28-33. Collectively, these three periods of development are referred to as the “Novice Phase” of development (Levinson, 1986). Education was classified into three groups: (a) high school diploma or less, (b) some college or college degree, or (c) graduate school or professional school degree. We controlled for educational level because our previous study found that Asian American women with graduate or professional degrees were less likely to be virgins and were more likely to have engaged in anal sex (Hahm, Lee, Rough, & Strathdee, 2012). Birthplace was categorized as either born in Asia or born in the United States. Controlling for birthplace is important because a previous epidemiological study found that Asian American women who were born in the United States had the highest risk of suicidal ideation and suicide attempt, compared with foreign-born men and foreign-born women (Duldulao et al., 2009). Ethnicity was expressed as Chinese, Korean, Vietnamese, or Other (which indicates a mix of these ethnicities). It was important to control for ethnicity because Korean Americans, in comparison with Chinese Americans, have higher rates of alcohol use (Hendershot, Dillworth, Neighbors, & George, 2008; Iwamoto, Takamatsu, & Castellanos, 2012). Therefore, we adjusted for these variables in the models to determine the effect of the adjusted magnitude of having a history of forced sex on these health and behavior outcomes.

Quantitative Analysis

We ran logistic regression models of mental health outcomes, substance use, and HIV risk behavior patterns, adjusting for participants' age group, education level, birthplace, and

ethnicity. These regression analyses were performed to estimate the effect size of forced sex history on mental health outcomes, substance use, and HIV risk behavior outcomes. A threshold of .05 was used as the significance level to test the statistical hypotheses. In our exploratory analysis, we ensured that multicollinearity did not occur in the models by obtaining the variance inflation factors. The variance inflation factors of predictor variables were approximately 1, which provides sufficient evidence that there was no concern for multicollinearity.

Results

Quantitative Results

Table 1 describes the demographic characteristics of our sample. Among the 720 study participants, ethnic background of Chinese ($n = 372$, 51.7%) was the majority, followed by Korean ($n = 157$, 21.8%), Vietnamese ($n = 140$, 19.4%), and Other ($n = 51$, 7.1%). Most of women in the study ($n = 664$, 92.2%) were between 18-27 years old. A majority of the study sample attended some college or was college-educated ($n = 521$, 72.4%) and was born in the United States ($n = 465$, 64.6%). The prevalence of participants who had ever experienced forced sex was found to be 14.3% ($n = 103$).

Table 2 compares the demographic characteristics and outcome variables by history of forced sex using chi-square tests. Approximately 14% of women reported a prior history of forced sex. Bivariate analyses showed striking proportional differences in all mental health, substance use, and HIV risk behavior outcomes between women with a history of forced sex and those without a history of forced sex. In particular, 17.5% of women with a history of forced sex reported suicide attempts, whereas 5.4% of their counterparts without a history of forced sex reported suicide attempts. Among women with a forced sex history, about half had not used a condom during their most recent intercourse and 14% had ever been pregnant. By contrast, less than 30% of women with no history of forced sex had not used a condom during their most recent intercourse and 3.4% had ever been pregnant.

Table 3 describes the association between depression, suicidal ideation, and suicide attempts and a history of forced sex, using logistic regression. Controlling for age, education, place of birth, and ethnicity, a history of forced sex was found to be significantly associated with a moderate to severe level of depression (odds ratio [OR] = 2.3, 95% confidence interval [CI] = [1.5, 3.5]), suicidal ideation (OR = 2.9, 95% CI = [1.8, 4.7]), and suicide attempts (OR = 3.5, 95% CI = [1.8, 6.7]).

Table 4 displays the association between forced sex victimization and substance use. A history of forced sex was significantly associated with drinking alcohol to cope with problems (OR = 2.2, 95% CI = [1.3, 4.0]), using marijuana in the past 12 months (OR = 1.8, 95% CI = [1.1, 2.8]), and using illicit drugs in the past 12 months (OR = 2.4, 95% CI = [1.1, 5.1]).

Table 5 illustrates the association between forced sex experiences and HIV risk behaviors. Controlling for covariates, having a history of forced sex was associated with not using a condom during most recent sexual intercourse (OR = 2.4, CI = [1.5, 3.8]), having ever had

anal sex (OR = 3.4, CI = [2.2, 5.5]), and having ever gotten pregnant (OR = 3.7, CI = [1.7, 7.9]). Having a history of forced sex was not a significant predictor of having had more than one male sex partner in the past 6 months.

Qualitative Results

The quantitative results were enriched by the analysis of qualitative interviews. Data analysis followed Braun and Clark's (2006) stages of thematic analysis. Initially, two authors independently reviewed the interview transcripts to familiarize themselves with the qualitative data. Then, they had a joint meeting with the first author to discuss the data and begin developing the initial codes. Independently, one author applied the initial codes to the data, expanded upon the codes, and categorized them into potential themes. Together, the authors discussed the potential themes and began developing a thematic map. Throughout the iterative, inductive coding process, the researchers continued to review and revise the themes until they were mutually agreed upon. The quotes presented below are representative of the participants' overall experiences.

Sense of Inadequacy, Depression, and Suicidality

Participants experiencing depression overwhelmingly reported feeling inadequate due to relational concerns with their parents and/or significant others. Participants sought acceptance and approval from their parents; however, they perceived that their parents viewed them as “inadequate” or “not good enough.” Participants internalized the feeling of not measuring up to their parents' expectations, as illustrated by the words of this participant, “I have a lot of worth issues. That's partially from depression, partially because of things that I was told growing up.” Similarly, another participant explained,

I felt like nothing I can ever do will be good enough for my mother... I tried really hard to please my parents—to have them be proud of me ... so I would feel kind of down whenever I had a huge blowout with my mom.

Participants also discussed relational concerns as a factor contributing to suicidal ideation and suicide attempts. Examples included fights with parents and/or significant others, and/or breakups with significant others, as demonstrated through the words of this participant who reported breaking up with her boyfriend and attempting suicide:

I decided that I wanted to kill myself because I just ... I saw no hope... Yeah, it was just like dark. It was kind of like being in this small little cave hole ... number one, you didn't want to find a way out and number two, even if you thought about finding a way out, there was no possibility.

Self-Medication Through Substance Use and Risky Sexual Behaviors

Participants described self-medicating these feelings by using substances. All sample participants reported experimenting with alcohol and/or other drugs at some point in their lives. Participants reported using drugs such as marijuana, ecstasy, cocaine, and crystal methamphetamine. Some experimented in high school and/or college. Others reported current alcohol or marijuana use at the time of the interview. Participants discussed substance use as a self-medicating mechanism to cope with depressive feelings and/or help

them relax. One participant discussed her marijuana use in this way: “Last year, like I was staying at home and depressed, I used it (marijuana) like almost every day.”

Participants reported using substances when engaging in sexual activities because it relaxed them and made them feel less lonely, sad, or anxious. One participant discussed her marijuana and cocaine use as follows: “That's sort of how I had fun.” Participants reported engaging in sex to cope with loneliness. Through sex, they sought physical and emotional intimacy from their sexual partners. Some engaged in sex with someone they already knew or with whom they had a previous relationship, whereas others engaged in sex with strangers. One participant explained,

I guess I get really lonely sometimes ... and sometimes it's nice to have sex there or ... Because like what sex entails is like when you're done usually ... kind of like with someone for a while and that's nice.

Similarly, another participant said, “Sometimes I feel like ... oh I don't have a guy, but I wanna have sex, those type of things? ... That will be sort of like loneliness.”

Participants had varying degrees of knowledge regarding sexual risk behavior and condom use. Participants generally used condoms when they engaged in sex with people they did not know very well; however, they did not consistently use condoms with people with whom they had a preexisting friendship and/or committed relationship. More than half of the sample had not had an HIV test and did not know their HIV status. However, they perceived themselves to be at low risk. Only a few participants routinely asked their partners whether they had an HIV and/or STI test prior to engaging in unprotected sex, as underscored by this participant's comments:

Because I would—I would spend a lot of time with a person before I would ... sleep with them. And I think in that time I would get to know them, and I would also ask about their histories and you know, decide whether or not it's trustworthy.

Discussion

Approximately 14% of our sample reported a history of forced sex. This rate is lower than that for Black (22%) and White (18.8%) women, but is similar to the rate for Hispanic women (14.6%; Black et al., 2011). Multiple studies on the prevalence of forced sex in Asian American women show that the consistently lower prevalence rate may be due to underreporting as a result of shame and stigma (Futa, Hsu, & Hansen, 2001; Hall, Windover, & Maramba, 1998; J. Lee et al., 2005). In a study of 186 Asian American women regarding perceptions of sexual violence, M. Y. Lee and Law (2001) found that “feeling shameful” was the most dominant reason (40.6%) preventing Asian American women from seeking outside help if they experienced sexual victimization (p. 16).

A sense of shame and stigma related to sexual victimization also discourages Asian family members from seeking professional help for the victims. Rao, DiClemente, and Ponton (1992) found that Asian American parents of sexually victimized children provided the least support and had minimal involvement in helping victims seek evaluation and treatment with appropriate services when compared with White, Black, and Hispanic parents. Future

studies should expand upon these interactions and determine the rate of help-seeking behaviors of Asian American women who experience forced sex; for example, studies should examine the extent to which help is sought through the justice system and/or mental health or medical professionals.

Our study demonstrated that young Asian American women who reported forced sex had a higher prevalence of HIV risk behaviors compared with women without a forced sex history. In terms of HIV risk behaviors, the vast majority of participants who had a history of forced sex (85.4%) reported engaging in risky sexual behaviors, including sex with partners whose sexual history was not known, who injected drugs, who were prostitutes, or who had HIV/AIDS. Our multivariate analyses also show that those who reported forced sex were 2.4 times more likely to report not using a condom during their most recent sexual encounter, 3.7 times more likely to have ever been pregnant, and 3.4 times more likely to have engaged in anal sex compared with women who did not report a history of forced sex. Even after controlling for age, education, birthplace, and ethnicity, these associations remained statistically significant.

Our qualitative findings enhance our quantitative results by providing an emerging understanding of the experiences and perceptions of Asian American women reporting a history of forced sex. One possible mechanism explaining the higher involvement in HIV risk behaviors among these women is that they perceived themselves to be at low risk for STIs and HIV, though the majority had never been tested, nor did they ask their sexual partner whether or not he had been tested. These results imply that Asian American women who have experienced forced sex may have difficulties negotiating condom use. Shame and stigma related to their history of sexual victimization may discourage these women from initiating discussions related to HIV risk and to advocate for their sexual health and well-being.

Similar to their rate of HIV risk behaviors, women who had a history of forced sex had a substantially higher prevalence of depression, suicidal ideation, and suicide attempts compared with women without a history of forced sex. For instance, 17.5% of women who had a history of forced sex attempted suicide, whereas 5.4% of women without a history of forced sex attempted suicide. These women reported feeling inadequate in their relationships with parents and significant others, with some reporting relational issues as a contributing factor to depression, suicidal ideation, and suicide attempts. This further demonstrates the need to provide comprehensive suicide prevention and intervention services that incorporate participation from multiple sources, including family members, peers, and significant others.

In terms of substance use, women with a forced sex history were approximately 2 times more likely to drink alcohol, use marijuana, or use illicit drugs to cope with mental health problems. Our qualitative analysis found that women used alcohol and drugs as mechanisms to self-medicate for depressive and suicidal thoughts. This finding raises important questions regarding mental health utilization among Asian American women. A study by Chu, Hsieh, and Tokars (2011) found that compared with Latinos and White, Asian American women were less likely to perceive a need for help or seek professional help for depression, suicidal ideation, or suicide attempts. More empirical research is needed that is focused on

perceptions of mental health and help-seeking behaviors among Asian American women with a history of forced sex.

Limitations

Several limitations in our study should be noted. First, as our study is cross-sectional and retrospective in nature, we cannot determine the directionality between forced sex and various mental health, sexual health, and substance use problems. A longitudinal study will provide more confidence in predicting whether forced sex leads to later development of psychopathology among young Asian American women. Second, the forced sex experiences were self-reported. Due to shame and stigma surrounding health and mental health issues in the Asian American community, participants may have underreported the occurrence of forced sex or answered questions in a way they deemed to be socially desirable. Third, we were unable to validate the time of first occurrence, frequency, or severity of the forced sex experience. Fourth, our definition of history of forced sex included both child sexual abuse and forced sex in their lifetime, regardless of the time line. The results from the analyses show that there is little difference between including child sexual abuse cases in the forced sex experience group and excluding child sexual abuse cases from the forced sex experience group. Fifth, the qualitative sample is small and cannot be generalized to all Asian American women. Future studies are needed to validate the two themes that emerged from the qualitative data—"sense of inadequacy, depression, and suicidality" and "self-medication through substance use and risky sexual behaviors." Finally, our data were unable to explore how racism and/or social oppression may play into the complex relationships between being a woman of color, power, racism, and negotiation during sex. Very little empirical evidence was available to support a possible correlation between racism and sexual victimization among Asian American women. Future studies should address these important linkages for Asian American women.

Conclusion

Our study offers insights into the health status of Asian American women who were sexually victimized, highlighting the importance of early identification of forced sex victims among this population. It emphasizes the need for comprehensive interventions focused on the three health domains of mental health, substance use, and sexual health, rather than interventions that target only one. In addition, it underscores the need for education and awareness campaigns targeting multiple audiences, including the Asian American community as a whole, the family as a whole, and individual members.

Given the increased political attention under Title IX to prevent and protect victims of sexual harassment, sexual assault, and sexual violence, and the projected increase in the number of Asian American college students, more active and rigorous investigation in this area is essential. As highlighted in our quantitative and qualitative findings, research should focus on establishing the prevalence of forced sex, the perceptions of Asian American women about mental health services, and patterns of help seeking among Asian American women who are sexually victimized.

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Table 1Demographic Characteristics of Asian American Women ($n = 720$).

Characteristics	<i>n</i>	Prevalence (%)
Dependent variables		
Demographic characteristics		
Age (years)		
18-27	664	92.2
28-35	47	6.5
Education		
High school diploma or less	111	15.4
Some college or college degree	521	72.4
Graduate/professional school or graduate degree	88	12.2
Birthplace		
Born in Asia (1.5 generation)	254	35.3
Born in the United States (second generation)	465	64.6
Ethnicity		
Chinese	372	51.7
Korean	157	21.8
Vietnamese	140	19.4
Other	51	7.1
History of forced sex		
No prior history of forced sex	615	85.4
Prior history of forced sex	103	14.3
Outcome variables		
Mental health		
Depression	232	32.2
Suicidal ideation	126	17.5
Suicide attempt	51	7.1
Substance use		
Drink alcohol to cope with problems	81	11.3
Used marijuana in the past 12 months	188	26.1
Used illicit drugs in the past 12 months	41	5.7
HIV risk behavior		
No condom used during most recent sexual intercourse	213	29.6
More than one male sex partner in the past 6 months	87	12.1
Anal sex	144	20.0
Had risky sexual partners	431	59.9
Ever pregnant	35	4.9

Table 2Demographic Characteristics of Asian American Women by Forced Sex ($n = 720$).

Characteristics	No prior history of forced sex ($n = 615$)		Prior history of forced sex ($n = 103$)		<i>p</i> value
	<i>n</i>	%	<i>n</i>	%	
Dependent variables					
Demographic characteristics					
Age (years)					
18-27	575	93.5	88	85.4	.0049**
28-35	33	5.4	13	12.6	
Education					
High school diploma or less	101	16.4	10	9.7	.0168*
Some college or college degree	448	72.8	73	70.9	
Graduate/professional school or graduate degree	66	10.7	20	19.4	
Birthplace					
Born in Asia (1.5 generation)	212	34.5	41	39.8	.2943
Born in the United States (second generation)	403	65.5	62	60.2	
Ethnicity					
Chinese	329	53.5	42	40.8	.0282*
Korean	129	21.0	27	26.2	
Vietnamese	119	19.3	21	20.4	
Other	38	6.2	13	12.6	
Outcome variables					
Mental health					
Depression	184	29.9	48	46.6	.0009***
Suicidal ideation	93	15.1	33	32.0	<.0001*†*
Suicide attempt	33	5.4	18	17.5	<.0001***
Substance use					
Drink alcohol to cope with problems	60	9.8	21	20.4	.0016**
Used marijuana in the past 12 months	151	24.6	37	35.9	.0151*

Characteristics	No prior history of forced sex (<i>n</i> = 615)		Prior history of forced sex (<i>n</i> = 103)		<i>p</i> value
	<i>n</i>	%	<i>n</i>	%	
Used illicit drugs in the past 12 months	30	4.9	11	10.7	.0173 *
HIV risk behavior					
No condom used during most recent sexual intercourse	162	26.3	51	49.5	<.0001 ***
More than one male sex partner in the past 6 months	68	11.1	19	18.4	.034 *
Anal sex	101	16.4	43	41.7	<.0001 ***
Had risky sexual partners	343	55.8	88	85.4	<.0001 ***
Ever pregnant	21	3.4	14	13.6	<.0001 ***

* *p* < .05.

** *p* < .01.

*** *p* < .001.

Table 3

Multivariate Analysis of History of Forced Sex and Mental Health Status Variables.

Demographic variables	Depression		Suicidal Ideation		Suicide attempt	
	OR	95% CI	OR	95% CI	OR	95% CI
Age (years)						
18-27 (<i>R</i>)	1.0		1.0		1.0	
28-35	0.8	[0.4, 1.6]	0.9	[0.4, 2.2]	1.5	[0.5, 5.0]
Education						
High school diploma or less (<i>R</i>)	1.0		1.0		1.0	
In college or graduate from a college	0.9	[0.6, 1.5]	0.7	[0.4, 1.1]	0.7	[0.3, 1.6]
Graduate school or professional school	0.9	[0.5, 1.8]	0.9	[0.4, 2.0]	0.5	[0.1, 1.6]
Birthplace						
Born in Asia (<i>R</i>)	1.0		1.0		1.0	
Born in the United States	1.2	[0.8, 1.7]	1.6	[1.0, 2.4] [*]	1.5	[0.8, 2.9]
Ethnicity						
Chinese (<i>R</i>)	1.0		1.0		1.0	
Korean	1.0	[0.7, 1.5]	1.0	[0.6, 1.7]	1.5	[0.7, 3.3]
Vietnamese	1.2	[0.8, 1.9]	1.2	[0.7, 1.9]	1.9	[0.9, 4.0]
Other	0.5	[0.3, 1.1]	0.6	[0.2, 1.3]	1.9	[0.7, 5.3]
History of forced sex						
No prior history of forced sex (<i>R</i>)	1.0		1.0		1.0	
Prior history of forced sex	2.3	[1.5, 3.5] ^{**}	2.9	[1.8, 4.7] ^{***}	3.5	[1.8, 6.7] ^{***}

Note. OR = odds ratio; CI = confidence interval; R = Reference group.

^{*} $p < .05$.

^{**} $p < .01$.

^{***} $p < .001$.

Table 4

Multivariate Analysis of History of Forced Sex and Substance Use Variables.

Demographic variables	Drank alcohol to cope with problems		Used marijuana in the past 12 months		Used marijuana in the past 12 months	
	OR	95% CI	OR	95% CI	OR	95% CI
Age (years)						
18-27 (<i>R</i>)	1.0		1.0		1.0	
28-35	2.2	[0.8, 5.6]	1.1	[0.5, 2.4]	1.9	[0.5, 7.3]
Education						
High school diploma or less (<i>R</i>)	1.0		1.0		1.0	
Some college or college degree	1.0	[0.5, 1.9]	1.1	[0.7, 1.8]	1.0	[0.4, 2.5]
Graduate school or professional school	0.3	[0.1, 1.0]	0.7	[0.3, 1.4]	0.3	[0.0, 1.5]
Birthplace						
Born in Asia (<i>R</i>)	1.0		1.0		1.0	
Born in the United States	1.5	[0.9, 2.6]	2.1	[1.4, 3.0]***	1.5	[0.7, 3.1]
Ethnicity						
Chinese (<i>R</i>)	1.0		1.0		1.0	
Korean	1.3	[0.7, 2.4]	1.6	[1.0, 2.4]*	2.0	[0.9, 4.4]
Vietnamese	0.9	[0.5, 1.8]	1.1	[0.7, 1.8]	1.5	[0.6, 3.6]
Other	1.7	[0.8, 3.9]	1.8	[0.9, 3.3]	2.3	[0.8, 6.9]
History of forced sex						
No prior history of forced sex (<i>R</i>)	1.0		1.0		1.0	
Prior history of forced sex	2.2	[1.3, 4.0]**	1.8	[1.1, 2.8]*	2.4	[1.1, 5.1]*

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

* $p < .05$.

** $p < .01$.

*** $p < .001$.

Table 5

Multivariate Analysis of History of Forced Sex and HIV Risk Behaviors.

Demographic variables	No condom used during most recent sexual intercourse		More than one male sex partner in the past 6 months		Anal sex		Ever pregnant	
	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI
Age (years)								
18-27 (R)	1.0		1.0		1.0		1.0	
28-35	2.3	[1.2,4.4] *	1.2	[0.5, 2.9]	1.6	[0.8, 3.3]	3.4	[1.2,9.9] *
Education								
High school diploma or less (R)	1.0		1.0		1.0		1.0	
Some college or college degree	1.8	[1.1,3.1] *	2.1	[0.9, 4.8]	4.0	[1.8,8.9] **	0.6	[0.2, 1.5]
Graduate school or professional school	2.6	[1.3,5.1] **	2.1	[0.7, 5.9]	4.7	[1.8, 12.1] **	0.9	[0.2, 3.0]
Birthplace								
Born in Asia (R)	1.0		1.0		1.0		1.0	
Born in the United States	1.0	[0.7, 1.5]	1.3	[0.8, 2.2]	1.2	[0.8, 1.9]	1.0	[0.5,2.1]
Ethnicity								
Chinese (R)	1.0		1.0		1.0		1.0	
Korean	0.8	[0.5, 1.2]	1.0	[0.6, 1.8]	0.8	[0.5, 1.3]	0.9	[0.3, 2.4]
Vietnamese	1.4	[0.9, 2.2]	0.7	[0.4, 1.4]	1.0	[0.6, 1.7]	1.6	[0.7, 3.9]
Other	1.6	[0.9, 3.0]	2.1	[1.0,4.5] *	1.6	[0.8, 3.2]	1.6	[0.5, 5.4]
History of forced sex								
No prior history of forced sex (R)	1.0		1.0		1.0		1.0	
Prior history of forced sex	2.4	[1.5,3.8] ***	1.7	[1.0,3.1]	3.4	[2.2, 5.5] ***	3.7	[1.7,7.9] ***

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

* $p < .05$.** $p < .01$.*** $p < .001$.