

Associations Between Alcohol Use and Intimate Partner Violence Among Men Who Have Sex with Men

Alissa Davis, PhD,¹ Farnaz Kaighobadi, PhD,^{1,2,*} Rob Stephenson, PhD,³
Christine Rael, PhD,¹ and Theodorus Sandfort, PhD¹

Abstract

Purpose: Intimate partner violence (IPV) research among men who have sex with men (MSM) has primarily focused on the prevalence of IPV victimization and perpetration. Although alcohol use is a known trigger of IPV in opposite sex relationships, less is known about alcohol use and IPV perpetration and victimization in same-sex couples. The aim of this study was to examine associations between alcohol use and different types of IPV victimization and perpetration among MSM.

Methods: MSM in New York City were recruited at gay-friendly venues and events to participate in an online survey assessing sociodemographics, alcohol use, and victimization/perpetration of IPV with both regular and casual sex partners. Logistic regression was used to examine associations between alcohol use and different types of IPV victimization and perpetration.

Results: Among 189 participants, 103 (54.5%) reported experiencing at least one incidence of IPV perpetrated by a regular partner and 92 (48.7%) reported having perpetrated IPV against a regular partner in the past 12 months. Higher levels of alcohol use were significantly associated with (1) physical/sexual and HIV-related IPV victimization by a regular partner, (2) physical/sexual, monitoring, and controlling IPV victimization by a casual partner, (3) physical/sexual, emotional, controlling, and HIV-related IPV perpetration against a regular partner, and (4) physical/sexual and emotional IPV perpetration against a casual partner.

Conclusions: The association of high levels of alcohol use with different types of IPV perpetration and IPV victimization suggests a need for targeted services that address the co-occurring issues of alcohol use and IPV.

Keywords: alcohol use, casual sex, intimate partner violence, MSM

Introduction

A GROWING BODY of research on intimate partner violence (IPV) indicates that men who have sex with men (MSM) have rates of IPV victimization that are comparable to those of heterosexual women.^{1–5} Despite similar prevalence levels, research on IPV among MSM still lags considerably behind IPV research among heterosexual couples and suffers from a number of limitations. A major limitation is that the majority of IPV research among MSM remains focused primarily on establishing the prevalence of IPV and does not examine how IPV relates to other factors, such as alcohol use.⁶ The dearth of research on alcohol use and IPV among MSM is particularly glaring in light of the fact

that MSM and other sexual minorities have both an elevated risk for alcohol abuse⁷ and high levels of IPV.^{1,2} Alcohol abuse and IPV are both serious public health concerns that result in a number of adverse sequelae. IPV can result in physical injury, sexually transmitted diseases, depression, anxiety, posttraumatic stress disorder (PTSD), and other negative outcomes.⁸ Alcohol abuse can result in liver disease, cancer, poor verbal fluency, and a decreased capacity for decision-making and inhibition.⁹

Among heterosexual couples, it has been shown that alcohol use is significantly associated with IPV, in particular as a trigger for the perpetration of IPV.^{10–13} However, in exploring associations with alcohol use, prior studies have not sufficiently differentiated among different types of IPV.¹³

¹Division of Gender, Sexuality, and Health, HIV Center for Clinical and Behavioral Studies, New York State Psychiatric Institute and Columbia University, New York, New York.

²Department of Social Sciences, Bronx Community College, City University of New York, New York, New York.

³Department of Health Behavior and Biological Sciences, School of Nursing and The Center for Sexuality and Health Disparities, University of Michigan, Ann Arbor, Michigan.

*Present affiliation: Department of Social Sciences, Bronx Community College, City University of New York, New York, New York.

Meta-analytic results demonstrate that alcohol use increases the risk for perpetration of physical IPV,¹³ but less is known about the link between alcohol use and psychological forms of IPV that do not involve physical violence, even though such forms of IPV may more strongly affect individual and family functioning than physical IPV.^{14–16} Examination of the relationship between alcohol use and different types of IPV is highly limited in the MSM literature.

There is also a lack of research examining IPV issues among different types of intimate partnerships. Studies have found that the perpetration of IPV by casual dating partners is more prevalent than the perpetration of IPV by spousal partners among heterosexual women, but this has not been examined among MSM.¹⁷ It is unclear whether IPV occurs more frequently with regular partners or with casual partners among MSM. IPV theories are focused heavily on heterosexual relationships and neglect same-sex IPV and few distinguish between IPV in different types of partnerships.¹⁸ However, different types of IPV may be more prevalent among some types of intimate partners than others. For example, participants in long-term relationships with primary sexual partners may experience more types of violence that occur subtly over the long term and are designed to gain power in a relationship, such as controlling or monitoring violence. Participants experiencing IPV from casual sex partners, however, may be more likely to experience types of violence that occur quickly in the short term, such as physically or verbally violent outbursts. In addition, the association between alcohol use and IPV may manifest differently based on the type of intimate relationship in which the individuals are involved. For example, problematic alcohol use among regular partners may be associated more with types of IPV that occur frequently over the long term, such as verbal aggression. Problematic alcohol use with casual partners may be associated more with types of IPV that may occur one time, such as sexual assault. Increased knowledge and understanding of these different types of associations could better inform the development of IPV prevention and intervention services for MSM—a population for whom such services are often underdeveloped or lacking entirely.

In addition to a lack of research on health-related factors associated with IPV, a primary methodological limitation of existing IPV research among MSM is that studies too often rely upon measures of IPV designed for heterosexual couples. A systematic review on IPV and MSM found that researchers used 16 different definitions of IPV, all of which were derived from and validated with heterosexual women.⁶ None of these measures was developed with the consideration of gay and bisexual men's relationships, which are likely different from the relationships of heterosexual women. While IPV is experienced by individuals of all sexual orientations, research indicates that there may be some differences in the types of IPV experienced, particularly when comparing heterosexual women and MSM.¹⁹ To better understand IPV among MSM, research focused on this population needs to use IPV measures that are specifically designed for use among sexual minority men. This study addresses some of the gaps and limitations in the literature by (1) examining associations between alcohol use and different types of IPV among MSM, (2) gathering data on both the victimization and perpetration of different types of IPV with both regular and casual sex partners, and (3) using a scale designed specifically to measure IPV among MSM.

Methods

Recruitment and data collection

Participants in New York City were recruited from January to April 2013 to participate in a study that examined intimate relationships among MSM. A link to the survey was distributed through email messages, printed on paper flyers and postcards at gay-friendly venues, and posted on gay-oriented Web pages. Participants were also recruited from the New York City gay pride parade to complete the survey. Participants were screened for inclusion online before completing the survey. Eligible participants were men who had sex with another man in the past 12 months, were 18 years of age or older, and were current residents of New York City. Those who met eligibility criteria and consented to participate online were forwarded to the online survey. Data collection was completed using Qualtrics® (Qualtrics Company, Provo, Utah). Duplicate responses from one IP address were screened to exclude multiple responses from one person. There were a total of 31 duplicate IP addresses. Comparison of sociodemographic data revealed that all duplicates were different participants and, thus, no participants were excluded based on duplicate IP address. Survey completion took ~30 minutes. The survey contained items on demographics, IPV, relationship dynamics and satisfaction, sexual risk behaviors, sexual networks, alcohol use, and gender presentation. Upon completion of the survey, participants were mailed a money order for \$15 to reimburse them for their time. All protocols for the study were approved by the institutional review board at the New York State Psychiatric Institute.

Measures

Demographics. Participants self-reported their age, which New York City borough they lived in, race/ethnicity, education level (no high school diploma, high school diploma, 2- or 4-year college degree, graduate degree), and employment status (full time, part-time, unemployed).

IPV. IPV was measured using the IPV-GBM Scale,¹⁹ which was developed specifically to assess for IPV among gay and bisexual men. The IPV-GBM Scale measures victimization and perpetration of violence over the past 12 months using five subscales: physical and sexual, monitoring, controlling, HIV related, and emotional. Physical and sexual violence included the following behaviors: hitting, punching, slapping, pushing, throwing things, kicking, slamming against a wall, raping, and forcing to do something sexual. Monitoring violence included demanding access to email and cell phone, reading email and text messages without partner knowledge, and repeatedly posting on a partner's social network pages. Controlling violence included preventing a partner from seeing his family or friends or his partner's family or friends. HIV-related violence included lying about HIV status, not telling a partner he had HIV before having sex, and intentionally transmitting HIV. Emotional violence included accusing a partner of being a lousy lover, calling him fat, telling him to "act straight," and criticizing his clothes.

Survey participants were assessed for recent IPV (within the past 12 months) from a male partner. Only participants who had a regular partner currently or within the past year were asked IPV questions. A regular partner was defined as the primary male partner with whom the participant was

currently in an ongoing intimate relationship. Casual partner was defined as any other sexual partner. For each IPV item, participants were asked whether they had been a victim of IPV by their regular partner (i.e., “In the past 12 months, has a regular partner ever prevented you from seeing your family?”) or by a casual partner (i.e., “In the past 12 months, has a casual partner ever pushed you?”) and whether they had perpetrated IPV against their regular partner (i.e., “In the past 12 months, have you ever hit your regular partner?”) or a casual partner (i.e., “In the past 12 months, have you ever forced a casual partner to do something sexual?”).

Composite IPV scores were computed from all IPV variables based on the subscales established for the original IPV-GBM Scale: physical and sexual violence, monitoring violence, controlling violence, HIV-related violence, and emotional violence. To report and estimate prevalence for each of the IPV categories in the IPV-GBM, responses were dichotomized. Participants who reported being a victim of at least one of the behaviors in each subscale were coded as “1,” which corresponded to being a victim of that specific form of IPV. Participants who had not experienced at least one of the behaviors in each subscale were coded as “0,” which corresponded to not being a victim of that form of IPV. The same approach was used to code for perpetration of each form of IPV. Each participant had a dichotomized IPV score for each category of IPV and for each partner type [being a victim of (category of) IPV by a regular partner, being a victim of (category of) IPV by a casual partner, perpetrating (category of) IPV against a regular partner, and perpetrating (category of) IPV against a casual partner], resulting in a total of 20 IPV scores for each participant.

Cronbach’s alpha was calculated to determine the internal consistency of the IPV-GBM subscales among this sample. The physical and sexual violence subscale consisted of 10 items ($\alpha=0.848$), the monitoring violence subscale consisted of five items ($\alpha=0.700$), the controlling violence scale consisted of four items ($\alpha=0.527$), the emotional violence subscale had four items ($\alpha=0.533$), and the HIV-related violence subscale had three items ($\alpha=0.435$). Low Cronbach’s alpha scores for three of the subscales are likely a result of too few items for those subscales.

Alcohol Use. Alcohol use was measured using the Alcohol Use Disorders Identification Test (AUDIT).²⁰ The AUDIT has been used and evaluated extensively, and has been found to provide an accurate measure of alcohol risk across gender, age, and culture.^{21–23} The AUDIT consists of 10 questions about recent alcohol use, alcohol dependence symptoms, and alcohol-related problems. Each question has a possible score of 0–4. Responses to all 10 items were summed to create a composite AUDIT score for each participant. A higher score indicates higher levels of alcohol use. Cronbach’s alpha for the AUDIT scale among this sample was 0.817.

Statistical analysis

Descriptive statistics was used to characterize the sample. Univariate and multivariate logistic regression analyses were conducted and odds ratios computed to assess the strength of association between alcohol use and perpetration/victimization with respect to different forms of IPV with regular and casual sex partners. The independent variable was the AUDIT score and the dependent variables were the different

forms of IPV. A regression analysis was run for each category of IPV victimization and perpetration (IPV with a regular partner [$n=189$] and IPV with a casual partner [$n=155$]), for a total of 20 regression analyses. Demographic variables that were associated with the AUDIT score (race/ethnicity and age) and any measure of IPV (race/ethnicity, education, and age) were adjusted for in the multivariate analyses to control for confounding. The criterion level used to determine significance was $P\leq 0.05$. All analyses were conducted using SPSS version 23 (IBM Corporation, Armonk, NY).

Results

The sample included 226 participants recruited from five New York City boroughs. Of the 226 participants who completed the survey, 189 reported having a current regular partner or a regular partner in the past 12 months and were retained for analysis. Of these, only 155 reported having a casual partner. The mean age was 31.8 years, with participants ranging in age from 18 to 62 years (interquartile range, 25–37 years). Participants were from all five boroughs of New York City, with the largest proportion from Manhattan (40.2%). Nearly half of participants were (45%), with approximately a quarter who were black and a fifth who were Latino. The majority of participants had at least a 2-year college degree or higher (77.8%) and were employed at least part-time (72.5%). Twenty-eight (14.8%) reported that they were HIV positive. Table 1 provides information on the main demographic characteristics of the sample.

The prevalence of IPV is shown in Table 2. Overall, over half of participants (54.5%) reported being a victim of at least one form of IPV within the past 12 months by a regular partner (29.7% by a casual partner) and 48.7% perpetrated at least one form of IPV against a regular partner (21.3% against a casual partner) within this period. The most commonly reported forms of IPV were being a victim of emotional IPV by both regular and casual partners and perpetrating emotional IPV against both regular and casual partners. Rates of physical and sexual IPV were high. Over a fifth had been a victim of physical or sexual IPV by a regular partner within the past 12 months, and 16.9% had perpetrated physical or sexual IPV against a regular partner within the past 12 months. Specific prevalences of all forms of IPV victimization and perpetration with both regular and casual partners are shown in Table 2.

Table 3 summarizes the findings from the adjusted logistic regression analyses examining the association between alcohol use and different forms of IPV victimization and perpetration with both regular and casual sex partners. All associations that were significant in the univariate analysis remained significant in the multivariate analyses, except for the association between alcohol use and the perpetration of monitoring IPV against a casual partner. This association lost significance in the multivariate analysis; however, the effect size remained the same. In addition, the association between problematic alcohol use and being a victim of HIV-related violence by a regular partner was not significant in the univariate analysis, but became significant in the multivariate analysis. This is likely because HIV status was correlated with race/ethnicity, age, and education, which were controlled for in the multivariate analysis. Associations between alcohol use and physical and sexual IPV were the

TABLE 1. SOCIODEMOGRAPHIC CHARACTERISTICS OF MSM IN NEW YORK CITY, 2013 (N=189)

	Overall, mean (SD)
Age in years	31.8 (9.6)
AUDIT Score	5.3 (4.9)
	Overall, n (%)
New York City borough	
Bronx	26 (13.8)
Brooklyn	48 (25.4)
Manhattan	76 (40.2)
Queens	32 (16.9)
Staten Island	2 (1.1)
Race/ethnicity	
Black	49 (25.9)
Asian	6 (3.2)
Latino	39 (20.6)
White	85 (45)
Other	9 (4.8)
Education	
No high school diploma	5 (2.6)
High school diploma or GED	37 (19.6)
2-year college degree	26 (13.8)
4-year college degree	75 (39.7)
Graduate degree	46 (24.3)
Employed	
Full time	100 (52.9)
Part-time	37 (19.6)
No	51 (27.0)
HIV Status	
Positive	28 (14.8)
Negative	146 (77.2)
Don't know	4 (2.1)
Refuse to answer	2 (1.1)

Five participants were missing data about their borough, one was missing race/ethnicity data, one was missing employment data, and nine were missing HIV status data.

AUDIT, alcohol use disorders identification test; MSM, men who have sex with men.

strongest: higher levels of problematic alcohol consumption were significantly associated with a greater likelihood of being a victim of physical or sexual IPV by both regular and casual partners and perpetrating physical or sexual IPV against both regular and casual partners. The odds of perpetrating physical or sexual IPV increased by 13% (adjusted

odds ratio [AOR] 1.13, 95% CI: 1.04–1.22) against a regular partner and 23% against a casual partner (AOR 1.23, 95% CI: 1.08–1.40) with each one-unit increase in the AUDIT scale. Higher levels of problematic alcohol use were also associated with the perpetration of emotional, controlling, and HIV-related IPV against regular partners, the perpetration of emotional IPV against casual partners, being a victim of HIV-related IPV by a regular partner, and being a victim of monitoring and controlling IPV by a casual partner.

Discussion

Our study examined the associations between alcohol use and different types of IPV victimization and perpetration among MSM in New York City. Studies to date on IPV and MSM have focused primarily on prevalence, particularly of IPV victimization, or on links between IPV and sexual risk behaviors or HIV.⁶ Little research has focused on the association between IPV and problematic alcohol use. This study extends the existing literature by examining links between problematic alcohol use and different types of IPV victimization and perpetration among MSM.

IPV rates among this sample of MSM were comparable to IPV prevalence found among MSM in other studies^{1–5} and among women.^{24–26} More than half of participants reported being a victim of any type of IPV by a regular partner and almost half reported perpetrating IPV against a regular partner. Nearly a third of participants reported being a victim of any type of IPV by a casual partner, and about a fifth reported perpetrating IPV against a casual partner. The perpetration and victimization of all types of IPV were more prevalent with regular partners than casual partners. Psychological forms of IPV that do not involve physical violence, namely emotional and monitoring IPV, were reported more frequently than physical and sexual IPV among regular partners, but only emotional IPV was reported more frequently than physical and sexual IPV among casual partners. Still, over a fifth of the participants reported being a victim of physical or sexual IPV by a regular partner and ~16% of participants reported perpetrating physical or sexual IPV against a regular partner. Approximately 15% of participants reported being a victim of physical or sexual IPV by a casual partner and only 7% reported perpetrating physical or sexual IPV against a casual partner. These results indicate that IPV is also common among MSM couples, both with regular partners and casual partners. Although IPV is commonly thought of as a problem of heterosexual women, health professionals

TABLE 2. TWELVE-MONTH PREVALENCE OF IPV WITH REGULAR PARTNERS AND CASUAL PARTNERS, 2013

Type of IPV	Victim of IPV, n (%)		Perpetrator of IPV, n (%)	
	Regular partner N=189, n (%)	Casual partner N=155, n (%)	Regular partner N=189, n (%)	Casual partner N=155, n (%)
Any IPV	103 (54.5)	46 (29.7)	92 (48.7)	33 (21.3)
Physical/sexual	41 (21.7)	23 (14.8)	32 (16.9)	11 (7.1)
Emotional	73 (38.6)	25 (16.1)	53 (28.0)	18 (11.6)
Monitoring	56 (29.6)	11 (7.1)	48 (25.4)	10 (6.5)
Controlling	38 (20.1)	11 (7.1)	13 (6.9)	4 (2.6)
HIV related	11 (5.8)	10 (6.5)	9 (4.8)	6 (3.9)

IPV, intimate partner violence.

TABLE 3. ADJUSTED LOGISTIC REGRESSION BETWEEN ALCOHOL USE AND DIFFERENT FORMS OF IPV AMONG MSM

	<i>Victim of IPV</i>		<i>Perpetrator of IPV</i>	
	<i>Regular partner</i> N = 189 AOR [95% CI]	<i>Casual partner</i> N = 155 AOR [95% CI]	<i>Regular partner</i> N = 189 AOR [95% CI]	<i>Casual partner</i> N = 155 AOR [95% CI]
Physical/sexual	1.11 [1.03–1.20]**	1.27 [1.13–1.43]**	1.13 [1.04–1.22]**	1.23 [1.08–1.40]**
Emotional	1.06 [.99–1.13]	1.05 [.96–1.15]	1.09 [1.01–1.17]*	1.14 [1.04–1.25]**
Monitoring	1.05 [.98–1.12]	1.22 [1.06–1.39]**	1.05 [.98–1.12]	1.12 [1.00–1.25]
Controlling	1.07 [.99–1.16]	1.14 [1.01–1.29]*	1.18 [1.07–1.31]**	1.18 [.99–1.40]
HIV related	1.16 [1.01–1.33]*	1.08 [.95–1.22]	1.23 [1.07–1.42]**	1.17 [.95–1.44]

Adjusted for age, race/ethnicity, and education.

* $P \leq 0.05$; ** $P \leq 0.01$.

AOR, adjusted odds ratio.

should also screen for IPV among MSM. Additional health services that address the adverse physical and psychological consequences of IPV among MSM may also be needed.

These findings also demonstrated that higher levels of problematic alcohol use were significantly associated with the perpetration of most types of IPV against regular partners. Although there is a substantial body of literature among heterosexual couples, indicating a link between higher consumption of alcohol and perpetration of physical or sexual violence,¹³ much less research has been conducted on this topic among MSM, and little research has been conducted in relation to psychological types of IPV that do not involve physical violence. It should be noted that, because the IPV-GBM scale combines physical and sexual violence in a single subscale, rather than dividing the two (as is done in most studies on IPV among heterosexual couples), our results cannot be directly compared to IPV rates among heterosexual couples.

Our results indicated that higher levels of problematic alcohol use were associated with the perpetration and victimization of both physical/sexual and psychological forms of IPV in male–male intimate relationships for both regular and casual partners. These findings are of note as physical and sexual IPV can result in severe physical injuries and are associated with poor relationship quality.²⁷ However, psychological IPV has also been found to be a strong predictor of relationship problems and has negative impacts on individual and family functioning.^{14–16} Psychological IPV can result in depression, anxiety, PTSD, dissociative disorders, and suicidality.²⁸ Contrary to our hypothesis, higher levels of alcohol use were associated with being a victim of monitoring and controlling violence with casual partners, but not with regular partners. Although the reasons for these differences are unclear, it may be that MSM involved in casual dating relationships break them off when their partner engages in monitoring or controlling behaviors and, thus, these relationships do not develop into regular partnerships. In regard to perpetration of psychological forms of IPV, higher levels of problematic alcohol use were associated with the perpetration of emotional, controlling, and HIV-related violence with regular partners, but only with the perpetration of emotional IPV with casual partners. Although these results are not conclusive, they indicate that differences in IPV perpetration may indeed differ between different types of intimate partnerships and, thus, IPV interventions may need to be tailored based on the type of relationship. Further research needs to be conducted to examine dif-

ferences in IPV perpetration and victimization between regular and casual partnerships.

The temporal relationship of alcohol use and IPV among this sample is unclear. It is possible that alcohol use leads to the perpetration of IPV, or it is possible that men who perpetrate violence are risk takers who engage in higher levels of alcohol consumption.¹³ It is also possible that men who perpetrate violence use alcohol to cope with how they feel after enacting violent behavior or to cope with what led them to perpetrate violent behavior in the first place. Although these results cannot establish a causal relationship between problematic alcohol use and IPV, they do indicate strong associations between alcohol use and several types of IPV.

Furthermore, our findings indicated that higher levels of alcohol use were significantly associated with being a victim of physical or sexual IPV by both regular and casual partners, and by monitoring and controlling IPV by a casual partner. The association between alcohol use and being a victim of IPV is consistent with findings among women.²⁹ The temporal direction of the association between alcohol use and being a victim of IPV is not established.²⁹ It is unclear whether being a victim of IPV leads to increased alcohol consumption or whether consuming higher levels of alcohol leads to being a victim of IPV. Individuals who are victims of IPV may suffer from depression or PTSD and may engage in higher levels of alcohol consumption to cope with their mental health problems.³⁰ Alternatively, individuals who consume higher levels of alcohol may place themselves in situations where they are vulnerable to IPV.²⁹ Nonetheless, regardless of the direction of causality, these findings suggest that interventions aimed at reducing IPV among MSM should also address alcohol use.

Particular strengths of this study include its use of an IPV scale specifically developed for MSM, the assessment of both IPV victimization and perpetration, and low levels of missing data.

However, our study also has a few limitations. First, our findings are limited by the fact that this was a cross-sectional study and, thus, causal relationships between alcohol use and IPV could not be established. Second, because we used a venue-based recruitment strategy, our results may not be generalizable to all MSM. Furthermore, questions about IPV were asked only in relation to the past 12 months, not over the life course; therefore, estimates of IPV victimization and perpetration in this study may be conservative. Next, only participants who had a regular partner were asked

IPV questions, so we were not able to examine IPV with casual partners among those who did not have a regular partner in the past year. Furthermore, the definition of casual partner was broad, so individuals may have interpreted this term differently. Different types of casual partnerships may result in different patterns of IPV or have different factors that are associated with IPV. Future research should use a more nuanced approach to examining IPV from casual partners (e.g., consider the length of the casual relationship, consider whether or not the casual relationship is monogamous, etc.). In addition, it should be noted that because the majority of participants in our study were HIV-negative, the perpetration of HIV-related violence items did not apply to much of our sample. Future research should examine HIV-related IPV (perpetration and victimization) in samples with more HIV-positive MSM to obtain a more accurate estimate of the prevalence of these problems. Also, the alphas were low for several of the IPV-GBM subscales, which should be considered when interpreting these findings. Finally, the use of regression analysis for multiple outcome measures has the potential to result in a Type I error. However, commonly used methods to adjust for *P*-values, particularly when working with small sample sizes, can result in Type II errors, which are also undesirable.³¹ Thus, results should be interpreted conservatively.

Conclusion

The findings of this study have important implications for IPV prevention and intervention programs. In the United States, IPV programs remain focused primarily on providing services to heterosexual women, and there are few interventions targeting MSM.³² Given the severe adverse physical and psychological consequences that result from IPV, services for MSM who experience IPV are needed greatly. In addition, existing IPV services for MSM rarely focus on co-occurring health problems, such as problematic alcohol consumption. Targeted interventions specific for MSM are necessary and should include content related to moderating alcohol consumption. Additional research is needed to understand the contribution of alcohol use to various types of IPV. Further research is also needed to understand the pathways linking alcohol use and IPV victimization among MSM to improve the design of effective interventions. The development of supportive services for MSM that address both IPV and problematic alcohol consumption may be crucial in reducing the burden of IPV among this population.

Acknowledgments

We especially appreciate the support from Kevin Singh and Olivier Anene who supported the conduct of this study. Funding: This study was supported by the HIV Center for Clinical and Behavioral Studies through a Center grant supported by the National Institute of Mental Health (NIMH; Grant P30-MH43520, Principal Investigator: Robert H. Remien, PhD). Dr. Davis, Dr. Kaighobadi, and Dr. Rael received support by an NIMH training grant (T32-MH19139, Behavioral Sciences Research in HIV Infection; Principal Investigator: Theo Sandfort, PhD).

Author Disclosure Statement

No competing financial interests exist.

References

1. Herek GM, Sims C: *Sexual Orientation and Violent Victimization: Hate Crimes and Intimate Partner Violence Among Gay and Bisexual Males in the United States*. New York, NY: Oxford University Press, 2007.
2. Stephenson R, Khosropour C, Sullivan P: Reporting of intimate partner violence among men who have sex with men in an online survey. *West J Emerg Med* 2010;11:242–246.
3. Stephenson R, Rentsch C, Salazar LF, Sullivan PS: Dyadic characteristics and intimate partner violence among men who have sex with men. *West J Emerg Med* 2011;12: 324–332.
4. Tjaden P, Thoennes N, Allison CJ: Comparing violence over the life span in samples of same-sex and opposite-sex cohabitants. *Violence Vict* 1999;14:413–425.
5. Waldner-Haugrud LK, Gratch LV, Magruder B: Victimization and perpetration rates of violence in gay and lesbian relationships: Gender issues explored. *Violence Vict* 1997;12: 173–184.
6. Finneran C, Stephenson R: Intimate partner violence among men who have sex with men: A systematic review. *Trauma Violence Abuse* 2013;14:168–185.
7. Balsam KF, Molina Y, Lehavot K: Alcohol and drug use in Lesbian, Gay, Bisexual, and Transgender (LGBT) youth and young adults. In: Miller P (ed.). *Principles of Addiction: Comprehensive Addictive Behaviors and Disorders*. 1. San Diego, CA: Academic Press, 2013.
8. Campbell JC: Health consequences of intimate partner violence. *Lancet* 2002;359:1331–1336.
9. Fernandez-Serrano MJ, Perez-Garcia M, Rio-Valle J, Verdejo-Garcia A: Neuropsychological consequences of alcohol and drug abuse on different components of executive functions. *J Psychopharmacol* 2010;24:1317–1332.
10. Caetano R, McGrath C, Ramisetty-Mikler S, Field CA: Drinking, alcohol problems and the five-year recurrence and incidence of male to female and female to male partner violence. *Alcohol Clin Exp Res* 2005;29:98–106.
11. McCarroll JE, Fan Z, Bell NS: Alcohol use in nonmutual and mutual domestic violence in the US Army: 1998–2004. *Violence Vict* 2009;24:364–379.
12. Rothman EF, McNaughton Reyes L, Johnson RM, LaValley M: Does the alcohol make them do it? Dating violence perpetration and drinking among youth. *Epidemiol Rev* 2012; 34:103–119.
13. Foran HM, O'Leary KD: Alcohol and intimate partner violence: A meta-analytic review. *Clin Psychol Rev* 2008;28: 1222–1234.
14. Clarke SB, Koenen KC, Taft CT, et al.: Intimate partner psychological aggression and child behavior problems. *J Trauma Stress* 2007;20:97–101.
15. Taft CT, O'Farrell TJ, Torres SE, et al.: Examining the correlates of psychological aggression among a community sample of couples. *J Fam Psychol* 2006;20:581–588.
16. Woodin EM, Caldeira V, Sotskova A, et al.: Harmful alcohol use as a predictor of intimate partner violence during the transition to parenthood: Interdependent and interactive effects. *Addict Behav* 2014;39:1890–1897.
17. Sinha M: Family Violence in Canada: A Statistical Profile, 2011. Statistics Canada, 2013. Available at www.statcan.gc.ca/pub/85-002-x/2013001/article/11805-eng.pdf Accessed September 28, 2016.
18. Bell KM, Naugle AE: Intimate partner violence theoretical considerations: Moving towards a contextual framework. *Clin Psychol Rev* 2008;28:1096–1107.

19. Stephenson R, Finneran C: The IPV-GBM scale: A new scale to measure intimate partner violence among gay and bisexual men. *PLoS One* 2013;8:e62592.
20. Babor T, de la Fuente J, Saunders J, Grant M: AUDIT: The Alcohol Use Disorders Identification Test. Guidelines for use in primary health care. Geneva: World Health Organization, 2001. Available at http://apps.who.int/iris/bitstream/10665/67205/1/WHO_MSD_MSB_01.6a.pdf Accessed September 28, 2016.
21. Saunders JB, Aasland OG, Babor TF, et al.: Development of the Alcohol Use Disorders Identification Test (AUDIT): WHO collaborative project on early detection of persons with harmful alcohol consumption. *Addiction* 1993;88:791–804.
22. Saunders JB, Aasland OG, Amundsen A, Grant M: Alcohol consumption and related problems among primary health care patients: WHO collaborative project on early detection of persons with harmful alcohol consumption—I. *Addiction* 1993;88:349–362.
23. Allen JP, Litten RZ, Fertig JB, Babor T: A review of research on the Alcohol Use Disorders Identification Test (AUDIT). *Alcohol Clin Exp Res* 1997;21:613–619.
24. Devries KM, Mak JY, Garcia-Moreno C, et al.: Global health. The global prevalence of intimate partner violence against women. *Science* 2013;340:1527–1528.
25. Thompson RS, Bonomi AE, Anderson M, et al.: Intimate partner violence: Prevalence, types, and chronicity in adult women. *Am J Prev Med* 2006;30:447–457.
26. Garcia-Moreno C, Jansen HA, Ellsberg M, et al.: Prevalence of intimate partner violence: Findings from the WHO multi-country study on women's health and domestic violence. *Lancet* 2006;368:1260–1269.
27. Shortt JW, Capaldi DM, Kim HK, Laurent HK: The effects of intimate partner violence on relationship satisfaction over time for young at-risk couples: The moderating role of observed negative and positive affect. *Partner Abuse* 2010;1:131–152.
28. Centers for Disease Control and Prevention: Intimate Partner Violence: Consequences. 2015. Available at www.cdc.gov/violenceprevention/intimatepartnerviolence/consequences.html Accessed September 28, 2016.
29. Devries KM, Child JC, Bacchus LJ, et al.: Intimate partner violence victimization and alcohol consumption in women: A systematic review and meta-analysis. *Addiction* 2014;109:379–391.
30. Wingood GM, DiClemente RJ, Raj A: Adverse consequences of intimate partner abuse among women in non-urban domestic violence shelters. *Am J Prev Med* 2000;19:270–275.
31. Feise RJ: Do multiple outcome measures require p-value adjustment? *BMC Med Res Methodol* 2002;2:8.
32. U.S. Department of Health and Human Services: HRSA Care Action: Intimate Partner Violence. Rockville, MD, 2009. Available at <http://hab.hrsa.gov/newspublications/careactionnewsletter/sept2009.pdf> Accessed September 28, 2016.

Address correspondence to:

Alissa Davis, PhD

Division of Gender, Sexuality, and Health

HIV Center for Clinical and Behavioral Studies

New York State Psychiatric Institute

and Columbia University

1051 Riverside Drive, Unit 15

New York, NY 10032

E-mail: ad3324@cumc.columbia.edu