Perpetration of Intimate Partner Violence Among Men in Methadone Treatment Programs in New York City

Nabila El-Bassel, DSW, Louisa Gilbert, MS, Elwin Wu, PhD, Mingway Chang, MA, and Jorge Fontdevila, PhD

This study examined the prevalence of perpetration of intimate partner violence among 356 men recruited from methadone maintenance treatment programs. We used logistic regression with covariance adjustment to examine the associations between intimate partner violence and illicit drug use by the participants, their female partners, or both. We found a high prevalence of intimate partner violence among the men in our sample. Significant associations between intimate partner violence and illicit drug use varied by types of drugs and whether the female partner or both partners were using drugs. (Am J Public Health. 2007;97: 1230-1232. doi:10.2105/AJPH.2006. 090712)

Over the past 2 decades, accumulating research has found illicit drug use to be a key

risk factor for men perpetrating intimate partner violence against women. 1-7 Research also has found strong associations between women's use of different illicit substances and experiencing intimate partner violence. 8-10 Knowledge remains limited on how the relation between drug use and intimate partner violence varies according to whether the perpetrator, the victim, or both use illicit drugs. We addressed gaps in the knowledge base on the relation between illicit drug use by both partners in an intimate relationship and the perpetration of intimate partner violence.

METHODS

A random sample of 356 eligible men was recruited from methadone maintenance treatment programs in New York City. Eligible male participants had to meet the following requirements: be aged 18 years or older; have been enrolled in a methadone maintenance treatment program for at least 3 months; and during the past year, had a sexual relationship with a woman whom he described as his girlfriend, spouse, regular sexual partner, or mother of his children. ¹¹

Physical, sexual, and injurious intimate partner violence during the past 6 months and lifetime were assessed with the Revised Conflict Tactics Scale. 12 Sexual intimate partner violence pertains to coercive acts intended to engage a partner in unwanted sexual activity, that range from verbal insistence (e.g., "Insisted on having sex when my partner did not want to but did not use physical force") to physical force (e.g., used force [like hitting, holding down, or using a weapon] to make my partner have oral or anal sexual intercourse"). Injurious intimate partner violence refers to partner-inflicted violence that has caused physical injury. (An example question for minor injurious intimate partner violence is "My partner had a sprain, bruise, or small cut because of a fight with me," and an example for severe injurious intimate partner violence is "My partner passed out from being hit on the head in a fight with me.") Whereas injurious intimate violence refers to the consequences of partner-inflicted physical injury, physical intimate partner violence refers to the type of violent assault (e.g., slapping, pushing, kicking) perpetrated against the partner. Not

RESEARCH AND PRACTICE

all physical IPV necessarily results in injuries. We defined *any form of intimate partner violence* (combining minor and severe subscales) and *any form of severe intimate partner violence* as at least 1 incidence of sexual, physical, or injurious intimate partner violence.

We used the Drug Use and Risk Behavior Questionnaire to measure participants' use of crack or cocaine, heroin, and marijuana in the past 6 months. 13 We focused on these 3 illicit drugs because they were found to be associated with intimate partner violence in the literature. 4,10 Participants also reported whether their female partners used these drugs over the past 6 months. Polydrug use was defined as use of at least 2 of the 3 illicit drugs. Any illicit drug use was defined as use of any of the 3 drugs. For each type of illicit drug use, we constructed a "couples' illicit drug use" variable with 4 attributes: (1) neither the participant nor his female partner used the drug, (2) only the male participant used the drug, (3) only the female partner used the drug, or (4) both the participant and his female partner used the drug.

We collected data on sociodemographic characteristics (age, years of schooling, income, ethnicity, unemployment status, and incarceration status for participants and their female partners), relationship characteristics (type of relationship, length of relationship, participants' contribution to household expenses), and self-reports of heavy episodic drinking, defined for men as consuming 5 or more alcoholic drinks² and for women as consuming 4 or more alcoholic drinks¹⁴ within a 6-hour period.

To estimate the associations between the independent variables of couples' illicit drug use and the dependent variables of any form of intimate partner violence, we used logistic regression with the covariance adjustment (Table 1); covariance adjustment also included measures of heavy episodic drinking, because of the association between heavy episodic drinking and intimate partner violence. 15-17 Separate models were constructed for use of each drug by the female partner only, by the male partner only, and by both partners. The reference group for each of these models was no use of the drug by the participant and his partner. For a drug of interest, we included covariance adjustment for use of the other illicit drugs (e.g., heroin and marijuana when crack or cocaine was the drug of interest).

TABLE 1—Logistic Regression of Perpetrating Intimate Partner Violence in the Past 6 Months on Couples' Illicit Drug Use in the Past 6 Months From Sample of Men (N = 356) From Methadone Maintenance Treatment Programs: New York City, 2000–2001

| Couples' Illicit Drug Use | No. | Any Form of Intimate Partner Violence, ^a Adjusted OR ^b (95% CIs) | Any Form of Severe Intimate Partne Violence, ^c Adjusted OR ^b (95% CI) | |
|-------------------------------|-----|---|--|--|
| Crack or cocaine | | | | |
| Neither partner used | 201 | NA | NA | |
| Only male participant used | 77 | 1.2 (0.7, 2.2) | 0.4 (0.1, 2.0) | |
| Only female partner used | 25 | 3.3 (1.2, 8.7)** | 5.8 (1.4, 24.0)** | |
| Both used | 53 | 1.9 (0.9, 4.0)* | 2.5 (0.7, 8.4) | |
| Heroin | | | | |
| Neither partner used | 165 | NA | NA | |
| Only male participant used | 129 | 1.4 (0.8, 2.4) | 1.7 (0.5, 5.4) | |
| Only female partner used | 9 | 1.1 (0.2, 5.1) | 6.7 (0.8, 56.3)* | |
| Both used | 53 | 1.4 (0.7, 3.1) | 6.8 (1.9, 24.6)*** | |
| Marijuana | | | | |
| Neither partner used | 193 | NA | NA | |
| Only male participant used | 85 | 0.8 (0.5, 1.5) | 0.8 (0.3, 2.4) | |
| Only female partner used | 29 | 1.2 (0.5, 2.9) | 0.8 (0.1, 5.0) | |
| Both used | 49 | 1.4 (0.7, 2.8) | 0.8 (0.2, 3.2) | |
| Polydrug use ^d | | | | |
| Neither partner used | 199 | NA | NA | |
| Only male participant used | 97 | 1.3 (0.8, 2.3) | 1.0 (0.3, 3.1) | |
| Only female partner used | 18 | 2.4 (0.8, 7.0) | 5.2 (1.0, 26.9)** | |
| Both used | 42 | 1.9 (0.9, 4.3) | 10.0 (2.6, 39.1)*** | |
| Any illicit drug ^e | | | | |
| Neither partner used | 70 | NA | NA | |
| Only male participant used | 141 | 1.2 (0.6, 2.3) | 1.0 (0.2, 4.8) | |
| Only female partner used | 26 | 1.3 (0.5, 3.5) | , | |
| Both used | 119 | 2.1 (1.0, 4.3)** | 3.7 (0.8, 16.6)* | |

Note. OR = odds ratio; CI = confidence interval; NA = not applicable.

RESULTS

Of the 356 participants, 45% were Latino, 38% were African American, 11% were Caucasian, 2% were Native American, and 4% were mixed race. Their mean age was 43.6 years (SD=8.5). The percentages of male participants who used illicit drugs in the past 6 months were as follows: crack or cocaine,

37%; heroin, 51%; marijuana, 38%; and any illicit drug, 73%. For the female partner, the percentages were as follows: crack or cocaine, 22%; heroin, 17%; marijuana, 22%; and any illicit drug, 41%.

Table 2 shows the prevalence of men who perpetrated intimate partner violence by type and severity. Results indicated that 58% of the sample reported perpetrating any form of

^aAny form of intimate partner violence encompasses both minor and severe incidents of any type of intimate partner violence (physical, sexual, or injurious). Physical intimate partner violence refers to the type of violent assault (e.g., slapping, pushing, kicking) perpetrated against the partner, whereas injurious intimate violence refers to the consequences of partner-inflicted physical injury (e.g., need for medical attention, bone or tissue damage, felt pain).

^bThe adjusted covariates were participant's age, years of schooling, income, ethnicity, unemployment status, incarceration status, duration on methadone, and methadone dose; female partner's age, years of schooling, ethnicity, unemployment status, and incarceration status; type of relationship, whether living together, length of relationship, participant's contribution to household income; and participant's other drug use, partner's other drug use, participant's heavy episodic drinking, and partner's heavy episodic drinking.

^cDefined as any incident of any type of intimate partner violence (sexual, physical, or injurious) that was rated severe. CTS2 items for each subscale (injurious, physical or sexual IPV) fall into minor and severe categories. Acts of violence (regardless of type—injurious, physical or sexual) are classified as minor or severe acts of violence. Table 2 contains examples of minor and severe levels of violence.

^dPolydrug use was defined as use of at least 2 of the 3 illicit drugs asked about (i.e., crack or cocaine, heroin, and marijuana).

^eAny illicit drug use was defined as use of any of the 3 drugs asked about (i.e., crack or cocaine, heroin, and marijuana).

*P< .10; **P< .05; ***P< .01.

RESEARCH AND PRACTICE

TABLE 2—Prevalence Among Sample of Men (N = 356) From Methadone Maintenance Treatment Programs Who Have Perpetrated Intimate Partner Violence in Their Lifetime and in the Past 6 Months, by Type and Severity: New York City, 2000–2001

| Type of Intimate | Lifetime | | Past 6 Months | |
|-------------------------------|----------|----|---------------|----|
| Partner Violence | No. | % | No. | % |
| Any form ^a | 208 | 58 | 137 | 38 |
| Any form, severe ^b | 62 | 17 | 28 | 8 |
| Physical ^c | 173 | 49 | 95 | 27 |
| Physical, severe | 57 | 16 | 25 | 7 |
| Sexual ^d | 113 | 32 | 74 | 21 |
| Sexual, severe | 15 | 4 | 7 | 2 |
| Injurious ^e | 68 | 19 | 36 | 10 |
| Injurious, severe | 17 | 5 | 11 | 3 |

^aIntimate partner violence was defined as any incident of minor or severe type of intimate partner violence (physical, sexual, or injurious). ^bSevere intimate partner violence was defined as any incident of severe type of intimate partner violence (physical, sexual, or injurious). ^cAn example question for minor physical intimate partner violence was "I threw something at my partner that could hurt"; for severe physical intimate partner violence, "I used a knife or gun on my partner." dAn example question for minor sexual intimate partner violence was "I made my partner have sexual intercourse without a condom"; for severe sexual intimate partner violence, "I used force (such as hitting, holding down, or using a weapon) to make my partner have oral or anal sexual intercourse." eAn example question for minor injurious intimate partner violence was "My partner had a sprain, bruise, or small cut because of a fight with me"; for severe injurious intimate partner violence, "My partner passed out from being hit on the head in a fight with me."

intimate partner violence against their current partner in their lifetime and 38% in the past 6 months.

Table 1 presents the association between illicit drug use by participants and their female partners and perpetration of intimate partner violence. Crack or cocaine use by the female partner was significantly associated with perpetration of any intimate partner violence and any severe intimate partner violence. Heroin use by both partners was significantly associated with perpetration of any severe intimate partner violence. Polydrug use by the female partner and by both partners was significantly associated with perpetration of any severe intimate partner violence. Any illicit drug use by both partners also was significantly associated with perpetration of any intimate partner violence.

DISCUSSION

The high rates of perpetrating different types of recent intimate partner violence reported in this random sample of men attending methadone maintenance treatment programs underscore the need to address the co-occurring public health threat of intimate partner violence and drug abuse. Multiple associations were found between the use of different drugs by the female intimate partner or both partners and perpetration of intimate partner violence. Although the data on female partners' illicit drug use were collected from the male participants, findings suggested that drug treatment programs should assess how patterns of couples' drug use and female intimate partner drug use may be creating relationship problems that lead to intimate partner violence. By identifying and addressing the service needs of drug-using female partners and couples at risk for intimate partner violence, drug treatment programs may reduce couples' drug use and help stem the epidemic of intimate partner violence and its deleterious effects on this population.

About the Authors

Nabila El-Bassel, Louisa Gilbert, Elwin Wu, and Mingway Chang are with the Social Intervention Group, Columbia University School of Social Work, New York, NY. Jorge Fontdevila is with the Center for AIDS Prevention Studies, University of California, San Francisco.

Requests for reprints should be sent to Nabila El-Bassel, DSW, Social Intervention Group, Columbia University School of Social Work, 1255 Amsterdam Ave, New York, NY 10027 (e-mail: ne5@columbia.edu).

This brief was accepted August 21, 2006.

Contributors

N. El-Bassel and L. Gilbert conceptualized and implemented the study. N. El-Bassel conceptualized the data analysis plan, wrote the brief, and supervised the process of data analysis. L. Gilbert participated in the conceptualization of the data analysis and revision of the brief. E. Wu participated in the data analysis and revision of the brief. M. Chang conducted the data analysis. J. Fontdevila participated in the conceptualization of the study and reviewed the brief.

Acknowledgments

This study was supported by the National Institute on Drug Abuse (grant DA012335).

We acknowledge the contributions of the staff of the Methadone Maintenance Treatment Program at the Beth Israel Medical Center, New York, for their help in conducting this study.

Human Participant Protection

The protocol was reviewed and approved by the institutional review boards of Columbia University and the

Methadone Maintenance Treatment Program at the Beth Israel Medical Center, New York.

References

- Abbott J, Johnson R, Koziol-McLain J, Lowenstein SR. Domestic violence against women: incidence and prevalence in an emergency department population. *JAMA*. 1995;273:1763–1767.
- 2. Miller BA, Downs WR. The impact of family violence on the use of alcohol by women. *Alcohol Health Res World.* 1993;17:137–143.
- 3. Chermack S, Fuller B, Blow F. Predictors of expressed partner and non-partner violence among patients in substance abuse treatment. *Drug Alcohol Depend.* 2000;58:43–54.
- 4. Chermack ST, Walton MA, Fuller BE, Blow FC. Correlates of expressed and received violence across relationship types among men and women substance abusers. *Psychol Addict Behav.* 2001;15:140–151.
- 5. Hotaling GT, Sugarman DB. An analysis of risk markers in husband to wife violence: the current state of knowledge. *Violence Vict.* 1986;1:101–124.
- 6. Leonard KE, Bromet EJ, Parkinson DK, Day NL, Ryan CM. Patterns of alcohol use and physically aggressive behavior in men. *J Stud Alcohol*. 1985;46:279–282.
- 7. El-Bassel N, Fontdevila J, Gilbert L, Voisin D, Richman BL, Pitchell P. HIV risks of men in methadone maintenance treatment programs who abuse their intimate partners: a forgotten issue. *J Subst Abuse*. 2001;13:29–43.
- 8. Brewer DD, Fleming CB, Haggerty KP, Catalano RF. Drug use predictors of partner violence in opiate-dependent women. *Violence Vict.* 1998;13:107–115.
- 9. Kilpatrick DG, Acierno R, Resnick HS, Saunders BE, Best CL. A 2-year longitudinal analysis of the relationships between violent assault and substance use in women. *J Consult Clin Psychol.* 1997;65:834–847.
- 10. El-Bassel N, Gilbert L, Wu E, Go H, Hill J. Relationship between drug abuse and intimate partner violence: a longitudinal study among women receiving methadone. *Am J Public Health*. 2005;95:465–470.
- 11. El-Bassel N, Gilbert L, Golder S, et al. Deconstructing the relationship between intimate partner violence and sexual HIV risk among drug-involved men and their female partners. *AIDS Behav.* 2004;8:429–439.
- 12. Straus M, Hamby S, Boney-McCoy S, et al. The Revised Conflict Tactics Scales (CTS2): development and preliminary psychometric data. *J Fam Issues*. 1996; 17:283–316
- 13. El-Bassel N, Gilbert L, Schilling RF, et al. Drug abuse and partner violence among women in methadone treatment. *J Fam Violence*. 2000;15:209–225.
- 14. Matano RA, Koopman C, Wanat SF, Whitsell SD, Borggrefe A, Westrup D. Assessment of binge drinking of alcohol in highly educated employees. *Addict Behav.* 2003;28:1299–1310.
- 15. Kantor G, Straus M. Substance abuse as a precipitant of wife abuse victimizations. *Am J Drug Alcohol Abuse*. 1989;15:173–189.
- 16. McKenry PC, Julian TW, Gavazzi SM. Toward a biopsychosocial model of domestic violence. *J Marriage Fam.* 1995;57:307–320.
- 17. Stith SM, Smith DB, Penn CE, et al. Intimate partner physical abuse, perpetration and victimization risk factors: a meta-analytic review. *Aggress Violent Behav.* 2004;10:65–98.