

The Converging Epidemics of Mood-Altering-Drug Use, HIV, HCV, and Partner Violence:

A Conundrum for Methadone Maintenance Treatment

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Abstract

Background: Accumulating evidence suggests that partner violence may be associated with HIV risk behavior and drug use among women in methadone maintenance treatment programs (MMTPs), yet the mechanisms linking these overlapping problems remain unclear. The main purpose of this qualitative study is to explore in detail how drug-related activities and HIV risk behavior occur in the context of a recent episode of partner violence among women in MMTPs.

Methods: We conducted and analyzed in-depth interviews with 31 women who reported having experienced physical or sexual violence by an intimate partner during the past year. Guided by existing research, feminist theory and trauma theory, we constructed a set of questions which were designed to explore multiple ways in which drug-related activities or HIV risk behavior may be linked directly or indirectly to the recent event. To examine the extent and significance of the woman's and/or her partner's drug-related activities or sexual HIV risk issues occurring immediately before, during and/or after the most recent event, we adapted a series of techniques for thematic analysis of qualitative data.

Results: Of the 31 women who reported recent events: 83.8% (n=26) recalled recent events in which there was some drug-involvement; 40% (n=13) indicated that both she and her partner were involved in drug-related activities during the most recent event of partner abuse; 35% (n=11) reported that the partner was drug-involved; and only two women (6.4%) indicated that they alone had been drug-involved. One-fifth (19.3%, n=6) of the women indicated that they had used drugs immediately after the event because they were upset or in physical pain. One-fifth of the women (n=6) reported that they had coerced, unprotected sex during or after the most recent incident.

Conclusions: The multiple ways in which the use of mood-altering drugs are related to partner violence and the occurrence of coerced, unprotected sex underscore the need to design specific interventions for preventing drug relapse, and HIV and HCV infection among abused women in MMTPs. Treatment and policy implications of study findings are discussed.

Key Words: Domestic violence, methadone, HIV prevention, hepatitis C, drug use, sexual risk behavior.

Introduction

OVER THE LAST DECADE, emerging evidence has implicated partner violence as a risk factor for drug use and HIV risk behavior. Estimated lifetime rates of partner violence reported by drug-involved women range from 60–75% (1–3). These rates are two to three times higher than the 21–34% range found in national surveys of general populations of women (4). Accumulating evidence has also linked the epidemics of partner violence and sexually transmitted diseases (STDs), including human immunodeficiency

virus (HIV) (5–12). Recent research has also indicated that partner violence and STDs are associated among women in Methadone Maintenance Treatment Programs (MMTPs) (13, 14). The relationship between partner violence and hepatitis C (HCV) has yet to be researched. HCV is most commonly transmitted through multi-person use (“sharing”) of drug injection equipment by drug users (15), however, it may also be sexually transmitted if a person has genital sores or sexually transmitted diseases where a possibility of blood transfer exists.

Although the literature suggests that partner violence, HIV and drug use are converging epidemics, particularly among low-income, urban women, the mechanisms linking partner violence to drug use and risk behavior for HIV and HCV remain unclear. This lack of clarity has led researchers to recommend the need for fine-grained contextual data on the mediating role of drugs and HIV risk behavior in victimization experiences (6, 16–18). Understanding how

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partner violence contributes to drug relapse, and HCV and HIV infection, may provide further information to aid in the design of more contextually specific interventions in MMTPs.

Existing research on the relationship between drug use and partner violence indicates that the relationship is complex, varying by type and severity of drug use as well as by whether the perpetrator, the victim or both are drug-involved (19, 20). Over the last two decades, numerous studies have documented associations between alcohol use by males and violent behavior toward their intimate partners (19, 21, 22), and associations between male drug use, particularly crack/cocaine and marijuana use, and partner violence (23). Substantial research also suggests that a woman's alcohol use increases her risk of being abused by a partner (24–27). More recent findings suggest a relationship between a woman's drug use and abuse by a partner (3, 28–31).

Goldstein's tripartite model (32) linking drug use and violence lends further insight into this complex relationship, suggesting that psychopharmacological, economic compulsive, and systemic effects of drugs should be considered as factors contributing to violence. The more traditional psychopharmacological explanation posits that substance use acts to disinhibit violent behavior. More recent research has focused on how substance use induces cognitive disruption, which impairs the individual's ability to process social interactions (33). Other researchers, however, have argued that drug use is an instrument of domination and control used to excuse the exercise of violence against intimates (34, 35).

Economic compulsive violence occurs when the drug user engages in violent crimes to support costly drug use or when violence erupts as a result of conflict over procuring drugs (32). Economic compulsive violence may emerge in intimate relationships when drug users fail to supply their intimate partners with drugs, when they argue about spending money on drugs, or when they steal drugs or money from each other. Systemic violence refers to the patterns of social interactions within the system of drug distribution and use that are predisposed to violence (32). Systemic violence may erupt in intimate relationships in the form of disputes over splitting drugs.

Similarly, research on the relationship between partner violence and HIV indicates multiple, bi-directional linkages. Studies have found that compared to non-abused women, abused women are less likely to report using condoms (11, 13); they are more likely to report partner-related risk behaviors — e.g., having sex with an

injecting drug user (IDU), an HIV-infected partner, or a partner who has had sex with more than one partner (6, 13, 36) — and more likely to report having more than one partner themselves or exchanging sex for money (6, 13). Recent research conversely suggests that disclosure of positive HIV serostatus was associated with specific incidents of partner violence among a nationally representative probability sample of 2,864 HIV-infected women (12).

Qualitative research may further explain the multi-dimensional, bi-directional associations which have been found between partner violence, drug use, and HIV, and provide information so that intervention strategies can be made that are more effective in reducing drug relapse, and both HIV and HCV risk among abused women in drug treatment. The purpose of this study was to: (a) briefly describe background characteristics, current drug use, and sexual and physical partner violence as measured by the Revised Conflict Tactics Scale (37) and sexual and drug-related risk behavior; (b) elicit detailed information on different contexts in which drug-related activities and HIV risk behavior occurred immediately prior to, during or after a recent episode of partner violence among a sample of 31 abused women in MMTPs, using data from in-depth narrative interviews; (c) provide detailed recent event analysis using three case examples; and (d) discuss implications of study findings with respect to policy and practice at MMTPs.

Methods

Recruitment and Eligibility

Data were drawn from a National Institute on Drug Abuse (NIDA) funded study to examine the relationships between HIV-risk behavior, drug abuse and intimate-partner violence in women enrolled in MMTPs. This study had two phases: a qualitative phase, consisting of focus groups and in-depth interviews; and a longitudinal quantitative phase. Women were recruited from three MMTPs in New York City. Between May and December 1997, twenty-minute structured, face-to-face interviews were conducted with 251 women for screening purposes to determine whether they met eligibility criteria for the qualitative phase of the study.

To be eligible, women needed to report that they were between the ages of 18 and 55; had been on methadone for at least three months; had an intimate sexual partner in the past year; and had experienced physical or sexual abuse by

someone who they considered to be a boyfriend, spouse, father of their children or ex-spouse. Of these eligible women, 68 women participated in focus groups. A subsample of 38 women from the focus groups was selected randomly to participate in in-depth narrative interviews. Data for the present study were drawn from 31 women who had completed data on a recent event of partner violence.

Trained female research assistants conducted interviews in private rooms on-site at the methadone clinic. The interview lasted about two hours. During the first 15 minutes, we read a consent form to the participants which detailed the purpose of the study, confidentiality procedures and their rights as research participants, and then asked the participants to sign the form. The institutional review board of the participating methadone maintenance treatment program approved the protocol for this study. The last 15 minutes of the interview were reserved as a debriefing period. During this time, we assessed the needs and made referrals for women who exhibited signs of distress during the interview or who expressed a need for help. We presented the women with a handbook of services in their community (e.g., housing, domestic violence services, job training, counseling, and gynecological care) and encouraged them to call us if they needed further help with referrals. At the end of the interview, participants were paid \$20 as compensation.

Data Collection

In order to ensure that the interviewers did not overly influence or construct respondents' accounts of their experiences and beliefs, interviewers allowed the participants' responses to direct the flow of the interview — using active probes to keep the interview on target (38).

The interview protocol consisted of two parts. The first portion of the interview covered a range of topics designed to illuminate aspects of the personal biographies of the respondents and their intimate sexual partners, their histories of victimization, substance use and HIV-risk behavior, the history and nature of their intimate relationship, and the nature of their interpersonal relationships in general. We did not ask questions about HCV risk behavior apart from HIV risk behavior. In the second portion of the in-depth interview, each respondent was asked to reconstruct the interactions that occurred within her most recent event of partner abuse. After a respondent was given the opportunity to recount the event in her own words, the interviewer used a series of probes to

elicit details regarding key transitional moments of the interaction described. Several scholars have focused on violent event data in their research because of the analytic advantages that the approach affords (39–41). We chose this approach because it allows us to capture detailed descriptions of the contexts in which partner violence occurs. In addition, this event data helps us to understand the specific processes involved in violence, HIV risk and drug-related behaviors under study.

Our inquiry into these recent events of partner violence was influenced by existing research cited in the above sources, as well as by feminist theory and trauma theory. Feminist theory holds that an imbalance of power and control between women and men in intimate relationships may increase the risk of partner violence and unsafe behaviors that put women at risk for HIV (42–44). Feminist theory also claims gender discrepancies in power and control over procuring, sharing and using drugs. Drug-related activities and HIV risk behaviors take place within a wider context of culturally based gender role expectations and structural forces, such as poverty and racism (45). Gender power differentials are intensified even further for women in abusive relationships (11). Viewed within this theoretical framework, intimate violence in drug-related or HIV risk-related contexts occurs as an extension of the unequal distribution of power, social status, and labor between men and women (42, 46–48). Because drug-dependent women often engage in illicit activities including those that symbolize sexual availability, they are perceived as violating traditional gender role norms and are consequently regarded as “low status” women (20, 24, 48). Their low social status further enables intimate partners to exercise control and power in all aspects of the relationship, including determining when, where and how drug use and unprotected sex will occur, and initiating unprotected sex.

Alternatively, trauma-based theory and research suggest that when women become involved in drug-related activities, they are more likely to be exposed to partner violence and traumas of all kinds, thereby increasing their risk of post-traumatic stress and future substance abuse as a self-medicating response to the emotional and physical pain of the violent traumas. Accumulating evidence has linked substance abuse to post-traumatic, stress-related events of all kinds, including partner violence (16, 49–51). Trauma theory suggests that the numbing and desensitizing effects of traumatic experiences like partner violence may enhance the likelihood of women

engaging in a wide range of risky behaviors, including having unprotected sex with risky partners (52, 53). The consequences of not pursuing protection with a partner may loom small for a woman who has experienced multiple traumas.

Guided by existing research, feminist theory and trauma theory, we constructed a set of questions with respect to the recent event, which were designed to explore: (a) the extent to which drug-related activities (i.e., procuring, sharing and using drugs) of the woman and/or her partner occurred before, during or immediately after the violent event; (b) the participant's perception as to the significance of these drug-related activities in triggering or escalating the violent event; (c) the extent to which HIV risk issues (i.e., request for condom use, disclosure of STDs, refusal to use condoms, insistence on sharing needles) occurred immediately prior to the event and the participant's perception of how significant a role the issue played in triggering or escalating the violence; and (d) the extent to which the event itself involved HIV risk behavior (i.e., forced or unwanted, unprotected sex, injecting drug use). Feminist theory also guided our questions about situations in which the low social status of drug-involved women and negative stigma associated with their drug and alcohol use may have served as a pretext for their partners' emotional and physical abuse. Trauma theory informed our inquiry about situations in which women used drugs or alcohol to recover from the physical or emotional pain after an abusive episode. We differentiated patterns of violence by type of drug (i.e., heroin, crack/cocaine, and alcohol) and by whether the woman, her partner or both were involved in or abstaining from drug-related activities.

Study Limitations

Material presented here is meant to be suggestive. Sampling procedures and number of participants are insufficient to render data that may be generalizable. Further, several factors may have influenced the ability of women to recall and disclose specific details about the event. First, the time frame in which the experiences of abuse and drug use were recounted varied considerably, as some women discussed past relationships, some current long-term relationships, and some relationships that had started relatively recently. This variation in time frames may have differentially affected the ability of the women to recall. Second, several women reported that they had been high during the event, which may have further affected their recollection of the event. Finally,

some women may have been reluctant to disclose their drug use or HIV risk behaviors to interviewers, due to social desirability reasons or fear of jeopardizing their status in the MMTP. In order to lessen the bias that might be derived from the perception that research staff were "clinic insiders," we, as interviewers, were careful to establish that the study had no connection with the operation of the methadone clinic and that, as researchers, we followed strict confidentiality procedures.

Data Analysis

Each interview was audiotaped and transcribed verbatim. Interview data were coded using a modification of the methods developed by several researchers (54–56). The following steps were taken. First, all the interviews were summarized to develop an overview of the data. Second, based on these summaries, a list of the topical areas represented in the data was composed. Segments of the transcripts were coded under these topic headings using NuDist (Non-numerical Unstructured Data Indexing, Searching and Theorizing) software.

Then, in order to examine the extent and significance of the woman's and/or her partner's drug-related activities or HIV risk issues occurring immediately before, during and/or after the most recent event of violence, we adapted a series of techniques developed by Boyatzis (56) for thematic analysis of qualitative data. According to Boyatzis, "thematic analysis enables scholars, observers, or practitioners to use a wide variety of types of information in a systematic manner that increases their accuracy or sensitivity in understanding and interpreting observations about people, events [and] situations." We compared themes that we had identified from a close reading of cases within each subsample. Themes consist of generalized statements by respondents about experiences, behavior, beliefs, attitudes, values, or sentiments (55, 56). Lists of emerging themes were also compared across subsamples at intervals during the analysis. Finally, the themes generated from each subsample were compared for all the cases. In addition to this event analysis among the 31 participants, we selected three case studies which are representative of some of the general themes that emerged from the data regarding how drug-related activities and HIV risk behavior evolve and play out in tandem with partner violence. In these case studies, names have been substituted and any personal identifying information has been removed to protect the confidentiality of the participants.

Results

Socio-demographic Background

As shown in Table 1, the majority of participants were Latina (51.6%) and African-American (29.0%). The average age of the participants was 37. Fewer than one-third (29.0 %) were married or had common-law relationships, but three-quarters of the women (74.0%) had children under the age of 18. Only two women (6.5%) were currently employed. More than three-quarters (77.4%) of the women reported that they hadn't had enough money to buy food in the past year and one-quarter (25.8%) indicated that they had been homeless in the past year.

Partner Violence

The vast majority of the sample (87.0%) reported experiencing a minor physical assault from an intimate partner in the past year, based on the Revised Conflict Tactics Scale, and more than half (58.0%) indicated that they had experienced a severe physical assault in the past year (Table 2). Almost two-thirds (64.5%) reported experiencing a minor sexual coercion from an intimate partner in the past year and 12.9% indicated severe sexual coercion. One-third (32.3%) reported experiencing severe physical injury from an intimate partner in the past year.

Drug Use and HIV and HCV Risk

Almost one-third (29.0%) had used heroin in the past 90 days and 41.9% had used crack/cocaine (Table 3). More than one-third

TABLE 1
Background Characteristics of Participants (n=31)

Age — in years	37.8 ± 6.15	
Ethnicity	(n)	(%)
African-American	9	29.0
Latina	16	51.6
White	5	16.1
Other	1	3.2
Marital Status		
Single	22	70.9
Married or common-law	9	29.1
Have children under age of 18	23	74.2
Less than high school education	16	51.6
Currently employed	2	6.5
Homeless in the past year	8	25.8
Not enough money to buy food in past year	24	77.4

TABLE 2
Prevalence of Partner Violence in the Past Year as Measured by Revised Conflicts Tactics Scale (n=31)

Revised Conflict Tactics Subscale	n	%
Minor physical assault	27	87.0
Severe physical assault	18	58.0
Minor Sexual Coercion	20	64.5
Severe Sexual Coercion	4	12.9
Minor Injury	14	35.1
Severe Injury	10	32.3

TABLE 3
Drug Use and HIV Risk Characteristics of Participants (n=31)

Characteristic	n	%
Heroin use in the past 90 days	9	29.0
Crack/cocaine use in the past 90 days	13	41.9
Alcohol use one or more times a week in the past 90 days	11	35.4
Injecting drugs in the past year	6	19.4
Partner has a substance abuse problem	19	61.2
Had sex in the past 90 days	23	74.1
Never used condoms during sex in the past 90 days	14	60.0
Exchanged sex for money/drugs in the past 90 days	6	19.4
Had sex with >1 partner in the past 90 days	6	19.4
Had sex with an HIV+ partner in the past 90 days	5	16.1

(35.4%) reported drinking alcohol one or more times per week. One-fifth (19.4%) indicated that they had injected drugs in the past year. Nearly two-thirds (61.2%) reported that their partner had a substance abuse problem. Three-quarters (74.1%) reported having had sex in the past 90 days. Sixty percent (60%) had never used a con-

dom with their main intimate partner. One-fifth (19.4%) indicated that they had exchanged sex for money or drugs during the past 90 days. Another one-fifth (19.4%) indicated that they had had sex with more than one partner in the past 90 days, and 16.1% reported having had sex with an HIV-positive partner.

Recent Event Analysis

Table 4 shows the frequency of different drug-related activities occurring immediately before, during or immediately after recent events of partner violence. Of the thirty-one women who reported recent events, 83.9% percent (n=26) recalled events in which there was some drug-involvement; 40% (n=13) indicated that both they and their partners were involved in drug-related activities; 35% (n=11) reported that their partners had used drugs or alcohol or were trying to get money to procure drugs; and only two women (6.4%) indicated that they alone had used drugs or alcohol. One-fifth (19.3%) of the women (n=6) indicated that they had used drugs immediately after the event because they were upset or in physical pain. The use of drugs after an abusive event to calm down or to alleviate physical pain lends some credence to a trauma theory approach to explaining the violence drug use nexus.

Crack/cocaine was the most prevalent drug that the women reported using immediately before, during or immediately after the most recent violent event. One-fifth (19.3%) of the women indicated crack/cocaine use in conjunction with the most recent violent episode; in comparison, one-tenth reported heroin use and 6.4% reported alcohol use. For male partners, however, alcohol and crack/cocaine use were the most prevalent substances reported in conjunction with the most recent violent episode. Almost one-third of the women (29%) indicated that their partners were drinking immediately before or during the episode. One-quarter (25.8%) also reported that their partners had used crack/cocaine and 6.4% indicated that their partners were high or going through withdrawal from heroin.

In addition to the effects of drug and alcohol use, other drug-related factors were mentioned in conjunction with the most violent episode, although they were less prominent. Four women (12.9%) indicated that their partner's negative comments about their drug use triggered the conflict. This type of verbal abuse, which reinforces the low social status of drug-involved women, was mentioned frequently in the focus groups for this study (57) and has been noted in other quali-

TABLE 4
Frequency of Drug-Related Activities and HIV Risk-Related Issues Immediately Before, During or Immediately After Most Recent Event of Partner Violence (n=31)

Drug-related activities before, during or after event	n	%
1. Any drug involvement by woman and/or partner	26	83.9
2. Drug involvement by woman <u>and</u> partner	13	41.9
3. Drug involvement by partner only	11	35.5
4. Drug involvement by woman only	2	6.4
Woman's drug use before, during or after event		
1. Woman's crack/cocaine use	6	19.3
2. Woman's heroin use	3	9.6
3. Woman's alcohol use	2	6.4
4. Any drug use by woman immediately after event	6	19.3
Partner's drug use before, during or after event		
1. Partner's crack/cocaine use	8	25.8
2. Partner's heroin use	2	6.4
3. Partner's alcohol use	9	29.0
Other drug-related involvement before or during event		
1. Arguments over partner spending money for drugs	3	9.6
2. Partner upset about woman's drug or alcohol use	4	12.9
3. Arguments over procuring or splitting drugs	2	6.4
Occurrence of HIV risk in conjunction with event		
1. Forced or unwanted, unprotected sex	6	19.3
2. Disclosure of an STD	0	—
3. Conflicts over condom use requests or refusals	0	—
4. Accusations of having outside affairs	9	29.0

tative studies (45, 58). Three women (9.6%) reported that an argument over their partners' asking for money or spending money on drugs set off or escalated the most recent violent event. This type of conflict suggests the presence of economic compulsive violence outlined in Goldstein's tripartite model (1985) (32). In addition, two women indicated that conflicts over procuring or splitting drugs set off or escalated the most recent violent event, which is typical of the systemic violence from drug use in Goldstein's model (1985) (32).

In terms of HIV risk behavior, one-fifth of the women (n=6) reported that they had had unwanted sex during or after the most recent incident. None of these women reported using condoms during these incidents. None of the women reported that the recent incidents were triggered

by disclosure of a sexually transmitted disease or conflict over using condoms. The lack of conflict over condom use may be related to the fact that few women reported that they had ever used condoms with their main partners. The occurrence of rape and low rate of ever using condoms with one's main partner may indicate that the need to protect oneself against HIV or HCV among this sample of abused women is overridden by the more pressing need to avoid violence.

The low rate of condom use among this group of women is of particular concern, given that two-thirds (67.7%, n=21) reported that they have had outside relationships or suspected that their partners have had outside relationships. In fact, almost one-third of the women (29%, n=9) reported that accusations of outside affairs triggered the most recent episode of abuse.

Case Studies

We selected three case studies which illustrate a range of the multiple ways in which drug-related activities and HIV risk-related issues insert themselves into episodes of partner violence. The case studies also provide the interpersonal and broader social context in which events occur.

Case 1

Elaine and Mike met in drug circles. They did crack and heroin, and both hustled to bring drugs for each other. During their relationship, Elaine's habit stayed pretty much the same, but Mike's habit got worse. As he became more addicted, he became more abusive. Elaine attributes much of his abuse to the drug use, although she admits that drug use also made her "mean" verbally.

The most recent event started over an argument as to whether Elaine should have an abortion. Elaine accused Mike of spending money on drugs rather than giving her money for an abortion. Mike claimed that he did not want her to end the pregnancy. They had an extended verbal argument. On the day of the fight, Elaine had done crack and heroin, and Mike had been smoking crack all day long. Elaine indicated that at the time of the fight she was not high, but she was physically exhausted and felt that the drug use had contributed to her feeling emotionally broken down. Mike, who was high on crack at the time, then started punching the walls and throwing things. When she tried to leave, he shoved her very forcefully away from the door and prevented her from exiting.

The fight ended when she threatened that she would never see him again if he did not let her go. Elaine indicated that Mike had turned violent because he had felt cornered by her accusations and that the crack had intensified those feelings. Immediately after the event, Elaine reported that she sniffed more heroin to calm down and had asked her friend to bring her some Valium.

In this particular event, drug use is integral to the context in which the abuse evolves and plays out, most directly in terms of the effect of crack use on Mike's violent response to Elaine's accusations and on Elaine's need to use heroin and Valium after the event. Elaine's state of exhaustion from drug use and the conflict over spending their money on Mike's drug use rather than the abortion also played a role in escalating the conflict into violence. Although HIV risk behavior was not directly linked to this event, their argument over whether or not to terminate Elaine's pregnancy demonstrates how HIV risk behavior may be related to wider conflicts over contraception and reproduction. This case illustrates the inherent difficulties of introducing condom use to couples like Elaine and Mike, where the male partner wants to have children and maintain control of reproduction decisions.

Case 2

Lenore and Ron have been together on and off for 20 years. They have four children together but are no longer living with each other. Ron introduced Lenore to heroin shortly after their first baby was born. He told her that heroin would increase her sex drive. Lenore believed that heroin did improve their sex life. She has been using heroin for the last ten years, although she has reduced her intake significantly since she entered methadone treatment two years ago. Lenore has never used condoms with Ron, even though she has had outside partners over the last three years. She claims that asking Ron to use a condom would make him think that she is having affairs, even though Ron has also had outside relationships while they have been together. Lenore is worried that if Ron ever found out about these affairs, he would kill her. She tested negative for HIV a couple of years ago, but he has never been tested.

During the most recent episode of violence, Lenore indicated that both she and Ron were high on heroin. They were lying in bed after having had vaginal sex, when Ron attempted to have anal sex. Lenore refused, but Ron yanked her ponytail and tried to penetrate by force. She then

screamed and threatened to kill him, at which point he stopped. Lenore was so furious at Ron after this incident that she refused to have sex with him. One week later, when she was getting out of the shower, he threw her down on the bed and forced her to have vaginal intercourse.

For both Ron and Lenore, heroin has had strong sexual associations. In this event, expectancies about heroin use and sexual desire may have fueled Ron's attempt to force anal sex. Ron might have felt that his attempt to force anal sex while high on heroin would be forgiven. This explanation is consistent with the view that drug use is an instrument of domination and control used to excuse the exercise of violence against intimates (34, 35). Or alternatively, Ron might have misjudged cues, assuming that Lenore wouldn't object to having anal sex because she was high on heroin, which is more consistent with the psychopharmacological explanation that substance use induces cognitive disruption, which impairs the ability to process social interactions (33).

This event is laced with HIV implications. Unprotected anal sex is a particularly risky act. This event also involved a forceful attempt on Ron's part to restore sexual relations as a way of countering Lenore's refusal to have sex. The risk factors for HIV for Lenore and Ron are numerous. They have never used condoms with each other although both have had outside partners in the last three years, and both have had a long history of injecting drug use.

Case 3

The third case involves Rosa and her husband of 8 years, Juan. She had left Juan two months prior to the interview. Their relationship started to fall apart when Rosa stopped doing drugs. She lost her attraction for him and had less to say to him. She was more reluctant to give him any money. Juan suspected that her withdrawal of affection was a sign that she was seeing another man and became increasingly abusive. Rosa is HIV positive, and Juan has so far tested HIV negative. According to Rosa, Juan doesn't care if he gets the virus. He refuses to use male condoms—occasionally she has been able to use a female condom with him, but not consistently. Juan has had outside relationships, but Rosa has not.

The most recent event was triggered when Juan, who was drunk at the time, demanded money from Rosa for drugs. Rosa refused because she had planned to use the money to take her kids to the movies. Juan responded, "You

ain't going nowhere, you f— bitch" and hit her hard in the face, causing her to crash into a steampipe. After the event she moved out to her mother's home, but after three days she was feeling lonely and, thinking that maybe she could work things out with Juan, she went back to the apartment. After talking to him and realizing that the relationship would not work, she started to pack her bags. When it became clear to Juan that she intended to leave him for good, Rosa said that he grabbed her by the hair, threw her down and started choking her. Rosa began to cry and told him that she wouldn't leave him. He stopped and told her he wanted to make love to her. She realized that she had no choice but to consent, although she said it made her feel dirty and hurt. They did not use condoms. Rosa then told him she had to go get her methadone. At this point she went with her kids to the battered women's shelter.

In this case, unprotected sex and drug involvement were integral to the way the abuse unfolded. For Rosa as well as Lenore, having sex after the event was critical to the cycle of contrition, a sign that the abuse was forgiven and normal relations resumed. Yet for these women, having unprotected sex after abuse was experienced as an unwanted but necessary act for avoiding further conflict. Clearly, in Rosa's case, refusing unprotected sex would have meant risking further life-threatening abuse.

For women like Rosa, the competing pressures of having to finance their partner's drug needs and to run a household inevitably forces them to make difficult decisions. Do they spend their dwindling dollars on their children or on preventing their partner from going through withdrawal? For some abused women in our sample, this kind of "economic compulsive" violence was chronic, with devastating repercussions of hunger, homelessness and loss of children to placement.

The success or failure of a woman's efforts to enter drug treatment or abstain from drugs will depend largely on the extent to which she has extricated herself from the influence of drug-using relationships. Yet this can be dangerous for women like Rosa, who are in abusive relationships. After she entered drug treatment, Juan's abuse escalated. Her attempt to leave drugs behind was perceived by Juan not only as a threat to the whole context of intimacy in their relationship but also as a threat to his access to drugs.

Discussion

By any measure, the prevalence of recent drug use, particularly crack/cocaine use and HIV

risk behavior among this sample of abused women is disconcertingly high. The event analysis of recent episodes of partner violence in this study further suggests that drug-related activities played a significant role in contributing to and recovering from partner violence among this sample of women in MMTPs. Although no direct evidence implicated requests or refusals over condom use as a trigger for the most recent episode of partner violence, the underlying pervasive context of fear of partner violence may have preempted any negotiation of condom use. The multiple ways in which drugs inserted themselves into episodes of partner violence and the occurrence of coerced, unprotected sex during or after these episodes raises serious concerns about addressing relapse, and HIV and HCV prevention, among abused women in MMTPs.

The findings of this study suggest that the relationship between drug-related activities and partner violence is multi-faceted and complex. Consistent with the psychopharmacological explanations afforded by Goldstein's tripartite model (32), women in our sample attributed their experiences of abuse to their partner's drug use and to a lesser extent to their own drug use. For women, crack/cocaine use was most often implicated in partner violence episodes; whereas for male partners, alcohol and crack/cocaine use were the primary drugs cited in connection with partner violence episodes. Although a few women believed that their partners used drugs and alcohol as a way of excusing their violent behavior, most women believed that the pharmacological effects of drugs or alcohol unleashed their partner's violence or distorted their judgment or perception of situations, leading to violence.

Conflicts over spending money and procuring drugs were also cited as a trigger for partner violence episodes, consistent with economic compulsive explanation of violence (32). These conflicts often stemmed from an imbalance in gender role expectations, in which women were expected to provide drugs for their partners at the expense of their own needs and their children's needs. Many women in our sample felt that their partners demanded more from them and treated them worse because of their tarred reputation as drug-using women. Other researchers have also suggested that the low social status of drug-using women exacerbates the power imbalance in intimate relationships (20, 24, 48). Although only two women indicated conflicts over procuring or sharing drugs in the partner violence episodes reported in the in-depth interviews, many women in this study suggested that fights with their part-

ner over how to divide drugs played a significant role in their victimization (57), consistent with a systemic explanation of violence (32).

Women were able to identify bi-directional connections between their drug use and their experiences of abuse. Most notably, several women indicated that they used drugs to alleviate the physical and emotional pain from the abuse, consistent with trauma theory. For women such as Elaine, the immediate use of drugs to calm down after an event may represent a "learned" response over years of coping with frequent stressful or traumatic situations. As long as drug use remains a primary coping mechanism in response to experiencing partner abuse, relapse is inevitable and termination of violence in the relationship is unlikely.

Women in this study are at very high risk of contracting HIV and HCV, for multiple reasons. Only a minority of our sample have ever used condoms with their partners although a majority reported that they or their partners have had outside relationships. Furthermore, one-fifth of the women injected drugs in the past year; another one-fifth of the women indicated that they had exchanged sex for money or drugs in the past 90 days, and almost one-fifth reported having had sex with an HIV-positive partner in the past 90 days.

Couples like the ones in the case studies present a serious challenge to HIV and HCV prevention efforts for many reasons. First, how do you introduce condom use in an abusive relationship, when condom use connotes outside affairs and any hint of other lovers is a powder keg for violence? Jealousy and suspicion of affairs played a significant role in triggering episodes of partner violence in this study. Even if a woman suspects infidelity, injection drug use, or other risk indicators, requesting that her partner use condoms or get tested for HIV may signal a lack of trust or caring on her part (59–61), may imply to her partner that she herself has engaged in other risky behaviors, and may threaten the stability of the partnership, increasing the likelihood of a violent outcome (62). Second, drug-involved poor women in power-imbalanced relationships, such as the women in our sample, perceive or face potential negative economic, social, and other acute consequences for denying sex to their partners or insisting on condom use (63–65). Third, given the wider constellation of pressing problems such as extreme poverty, homelessness, and loss of children to placement that many drug-involved women confront, their concern over HIV or HCV and their motivation to use condoms

may rank low in priority (62). Moreover, for some women who subscribe to traditional gender roles, requesting or insisting that a man use a condom or get an HIV test runs against the grain of broader cultural norms which discourage women from talking about sex, initiating sexual practices, or otherwise controlling an intimate heterosexual encounter (64, 66–68). Weighing the benefit of using condoms against these potentially negative consequences (e.g., violence, loss of economic resources and compromised social status), it is not surprising that so few women in our sample had ever used condoms with their partners, despite their substantial risk of contracting HIV.

Health and social service personnel need to consider the multiple reasons why abused, drug-involved women do not use condoms. The standard skills taught to empower women to negotiate condom use with their partners is clearly contraindicated for abused women because of the potential violence they may encounter in response to suggesting condom use.

Because this study did not ask separate questions about risk behavior for HCV, we can only speculate how partner violence may be linked to HCV, based on the findings related to HIV risk. Clearly, this sample of women is at risk of HCV by virtue of their injecting drug use: one-fifth of the women report recent injection drug use, and the vast majority have injected drugs in the past. Further qualitative and quantitative research is needed to examine the relationship between partner violence and risk behavior, which is more specific to HCV. For example, are there types of violent sex or physical violence involving the exchange of blood which place women at risk of HCV? How does a woman's disclosure of HCV to her partner increase her risk of partner violence? Does the stress of living with HCV or living with an HCV-infected partner increase a woman's risk of partner violence? Do injecting-related practices (e.g., sharing needles, rinse water, cookers, cotton, backloading, and front-loading) vary in abusive and non-abusive intimate relationships? Given the host, environmental and viral factors which favor a rapid spread of HCV among IDUs (15), the need to explore these type of questions is especially paramount.

Implications for Treatment and Policy

Understanding how partner violence contributes to HIV and HCV risk and drug use is important if we are to develop policy, prevention and treatment strategies that will address more effectively the constellation of problems that

abused, drug-involved women confront. Several prevention and treatment recommendations for abused women in MMTPs should be considered from the study findings, including:

1. Instituting routine screening for partner violence during intake and annual physical exams — If women are currently involved with abusive partners, counseling staff should at minimum be trained to develop a safety plan for women, and to provide referrals for ongoing treatment for problems related to domestic violence. Failure to address the basic need of safety for abused, drug-involved women may jeopardize their recovery. Women who are dealing with the dual problems of partner violence and substance abuse are unlikely to remain in drug treatment as long as the pull of their drug-dependent, abusive partner persists. It is also important for MMTP staff to understand that an abused woman's decision to enter treatment may increase the likelihood of violence if her partner perceives it as a threat to his access to drugs and the whole context of intimacy.

2. Providing concrete services (e.g., housing, job training and placement, and securing benefits) and enhancing the social support network to increase financial and emotional independence of abused women from their partners — Financial and/or emotional dependency on a partner may impede a woman from leaving an abusive situation, protecting herself from HIV and HCV, or refusing to engage in drug-related activities. In comparison to the chronic stress women experience from living in substandard conditions (e.g., hunger and homelessness), their concern about protecting themselves against HIV and HCV, relapse, or abuse may register low in priority.

3. Addressing underlying trauma and related stress that many abused, drug-involved women present — The use of drugs to numb the physical or emotional pain from a violent episode underscores the importance of developing alternative ways of coping with stressful situations and undoing the "learned response" of drug use. Furthermore, other research indicates that women who experience multiple traumas, including partner abuse, and exhibit the presence of post-traumatic stress disorder, are more likely to engage in HIV risk behavior (52–54).

4. Raising awareness of the multiple ways in which drug-related activities increase risk of partner violence at an individual level as well as an interpersonal level and broader macro-level — Using a cognitive behavioral skills building approach, women may learn to identify and

avoid drug-related triggers for partner violence as well as partner-violence-related triggers for drug relapse and HIV or HCV risk. By further increasing women's recognition of gender discrepancies in power and control over reproductive and drug-using practices, women can select more appropriate HIV and relapse-risk-reduction strategies, which may take into account their immediate need for safety, but which may ultimately redress the balance of power and control in their relationship. Finally, it is critical to raise awareness of these converging epidemics at a broader community level. Through targeted media and peer network approaches, women and men at risk may increase their awareness of the devastating impact of domestic violence, HIV, HCV and substance abuse on their community. Such heightened awareness may lead to increased participation in community activities and/or organizations that may further redress these problems by changing social norms and demanding increased prevention and treatment resources.

Conclusion

The findings of this study highlight the need for an integrated service system that can address the overlapping problems of partner abuse, HIV, HCV and addiction. MMTPs have played a pivotal role in reducing HIV risk behavior and drug use among IDUs (69). MMTPs may be an ideal setting to launch a contextually specific HIV, HCV and drug-relapse intervention program for abused, drug-involved women, given their substantial experience in HIV and relapse prevention, their frequent, ongoing contacts with patients, and the large number of abused women they serve. Clearly, such an intervention would require funding more support services than are currently available in most MMTPs. In addition to the social welfare benefits of providing such enhanced, integrated services, policy makers should consider the long-term economic costs of treating the disproportionately high number of cases of HIV infection, STDs, physical injuries, substance-abuse-related complications and other medical problems that abused, drug-involved women are likely to present.

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