Prevalence and Correlates of Intimate Partner Violence among HIV-negative, Heterosexual, Female Methamphetamine Users in San Diego

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Objective 1: To determine the prevalence of intimate partner violence and violence perpetrated by other types of sex partners (e.g., casual, sex client).

Objective 2: To identify factors independently associated with intimate partner violence.
Burden of Intimate Partner Violence

- In the U.S., 35.6% of women have experienced lifetime intimate partner violence (IPV)
  - Nearly 1 in 10 women (9.4%) has been raped by an intimate partner
  - About 1 in 4 women (24.3%) have experienced severe physical IPV

- High rates of lifetime IPV among U.S. African American women (43.7%), American Indian/Alaskan Native women (up to 46%), and multiracial non-Hispanic women (53.8%)

- IPV often results in adverse mental and physical health consequences including HIV/STIs

CDC, 2011
Burden of Methamphetamine Use in Women

- Worldwide, methamphetamine (meth) most widely used subgroup of amphetamine-type stimulants\(^2\)

- In U.S., 2005 prevalence of lifetime meth use: 8.6%\(^3\)
  - Proportion of female meth users is nearly equal to men\(^4\)

- In San Diego, CA, meth continues to be primary drug of abuse\(^5\)
  - In 2009, meth use accounted for ~30% hospital admissions
  - Of 4,170 people receiving meth use treatment, 55% were female

Female meth users have distinct risk profile\(^6,7\)
- Younger, lower educational levels, married
- Initiate to lose weight or cope with depression
- Frequent meth use, smoke vs. snort/inject

Mental health (e.g., depression, suicidality, mood disorders)\(^8\)

Physical health\(^8-10\)
- Increased HIV risk
- Reduced condom use self-efficacy, outcome expectancies

- Meth use involved in ~90% of U.S. domestic dispute cases\textsuperscript{11}

- Approximately 60-80% of meth-using women in drug treatment have reported IPV\textsuperscript{12,13}

- Violence and coercion may result from meth-using men’s demand for riskier sex acts due to increased arousability or intensification of emotions\textsuperscript{14}

Little is known about the prevalence of intimate partner violence or violence by other types of sex partners in meth users enrolled in HIV prevention interventions.

May indicate the need to address IPV or partner violence within HIV prevention programs for this at-risk population.
METHODS
FASTLANE

- HIV behavioral intervention trial for HIV-negative, heterosexual meth-using men and women designed to reduce...
  - High risk sexual practices
  - MA use
  - Depressive symptoms
- Study Period: 2006-2010
- Study took place in San Diego
Study Population

- **Eligibility Criteria (n=400; 200 men and 200 women)**
  - HIV-negative status
  - Aged ≥ 18 years
  - Self-identified as heterosexual
  - Had at least one opposite sex partner in the past 2 months
  - Snorted, smoked or injected meth at least once in the past 2 months and at least once in the past 30 days (i.e., minimum of twice in 2 months)

- **Current Study**
  - Only women enrolled in FASTLANE
  - n=209 women
Study Procedures

- Recruited through community outreach, referrals, word-of-mouth, advertisements

- Participants were randomized to one of two conditions
  - Tri-focal cognitive behavioral therapy (active experimental)
    - Nine 90-minute face-to-face counseling sessions
  - Standard care comparison group (control)
    - Nine weekly face-to-face individual counseling sessions
Data Collection

- Audio computer-assisted self-interviewing
  - Sexual/drug risk behaviors
  - Mental health
  - Abuse experiences

- Biological testing for STIs (baseline and 12 months)
  - Chlamydia and gonorrhea
  - HIV (using OraSure)

- Follow-up assessments at 4, 8 and 12 months
Lifetime Violence Measures

- **Physical Violence**
  - Participants asked if they “have ever been physically abused (hit or assaulted)?”

- **Sexual Violence**
  - Participants asked if they “have ever been forced or coerced to have sex against their will?”

- **Both Physical and Sexual Violence**
  - First time – age, type of perpetrator
  - Lifetime - # perpetrators, # different times
Recent Violence Measures

- Timeframe for recent violence is past two months
- Physical Violence
  - Cause or threaten to cause physical harm (e.g., slapping, punching, kicking, hitting with an object, assaulting w/knife or other weapon)
- Sexual Violence
  - Rape, forced sexual advances, or non-consensual sexual acts
- Questions asked for each type of sex partner
  - Spouse or live-in
  - Steady
  - Casual
  - Anonymous (i.e., hustler, someone they met at a park)
Measures

- **Dependent Variable: Lifetime Intimate Partner Violence**
  - Physical and/or sexual violence by a current or former spouse, live-in or steady partner

- **Independent Variables**
  - **Demographics:** age, race/ethnicity, employment, marital status
  - **Substance abuse behaviors** (e.g., binge meth use, meth use during unprotected sex)
  - **Sexual risk behaviors** (e.g., unprotected vaginal sex, #sex partners)
  - **Abuse history** (e.g., history of forced first sex)
Statistical Analysis

- Descriptive Statistics
  - Frequencies and percentages

- Focus on IPV and associated factors using chi-square tests
  - Variables considered in the multivariate model had a p<.20

- Logistic Regression Model
  - Multivariate model
    - Backward stepwise regression method used
    - Model fit assessed by Akaike information criterion (AIC)
    - Obtained adjusted odds ratios and 95% confidence intervals
RESULTS
# Demographic Characteristics (n=209)

<table>
<thead>
<tr>
<th>Variable</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age in yrs, mean (SD)</td>
<td>36.4 (9.1)</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>77 (36.8)</td>
</tr>
<tr>
<td>African American/Black</td>
<td>56 (26.8)</td>
</tr>
<tr>
<td>Latina</td>
<td>44 (21.1)</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
</tr>
<tr>
<td>Never married</td>
<td>100 (47.9)</td>
</tr>
<tr>
<td>Married</td>
<td>22 (10.5)</td>
</tr>
<tr>
<td>Separated/Filing for Divorce</td>
<td>33 (15.8)</td>
</tr>
<tr>
<td>Children &lt;18 yrs</td>
<td>112 (74.2)</td>
</tr>
<tr>
<td>No H.S. Diploma/GED</td>
<td>60 (28.7)</td>
</tr>
<tr>
<td>Unemployed</td>
<td>167 (79.9)</td>
</tr>
</tbody>
</table>

SD, standard deviation
Lifetime Prevalence of Physical and/or Sexual Violence (n=209)

- Physical & Sexual: 51%
- Physical only: 27%
- Sexual only: 6%
- Neither: 16%
<table>
<thead>
<tr>
<th>Contextual Factor</th>
<th>Physical (n=164)</th>
<th>Median (IQR)</th>
<th>Sexual (n=120)</th>
<th>Median (IQR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age at first incident</td>
<td>14 (11,19)</td>
<td></td>
<td>19 (16,24)</td>
<td></td>
</tr>
<tr>
<td>No. times occurred in lifetime</td>
<td>10 (4,22)</td>
<td></td>
<td>3 (1,6)</td>
<td></td>
</tr>
<tr>
<td>No. perpetrators in lifetime</td>
<td>3 (2,5)</td>
<td></td>
<td>3 (1,5)</td>
<td></td>
</tr>
</tbody>
</table>

Notes: IQR, interquartile range
Perpetrator of First Physical/Sexual Abuse Incident

- Intimate partner: 78.7%
- Male relative: 30%
- Sexual client: 4.2%
- Female relative: 7.9%
- Stranger: 9.2%
- Other: 10.4%

- Physical:
  - Intimate partner: 78.7%
  - Male relative: 21.9%
  - Sexual client: 4.3%
  - Female relative: 7.9%
  - Stranger: 9.2%
  - Other: 10.4%

- Sexual:
  - Intimate partner: 24.2%
  - Male relative: 30%
  - Sexual client: 4.2%
  - Female relative: 3.3%
  - Stranger: 4.3%
  - Other: 37.5%
Prevalence of Physical/Sexual Violence in the Past 2 Months by Type of Sex Partner

Overall: 22.1%
Stranger: 7.4%
Casual: 3.6%
Steady: 6.7%
Spouse/live-in: 8.1%

Positive response rates for sexual and physical violence are indicated with blue and orange bars, respectively.
Lifetime Intimate Partner Violence

Distribution of Lifetime IPV (n=209)

- IPV 66%
- No IPV 34%
Bivariate Associations Between Sociodemographics and IPV

Race/ethnicity and Lifetime IPV

- White: 39.1% IPV, 32.4% No IPV
- African American: 26.1% IPV, 28.2% No IPV
- Latina: 21.7% IPV, 19.7% No IPV
- Multiracial/Other: 13% IPV, 19.7% No IPV

Marital Status and Lifetime IPV

- Never married: 44.9% IPV, 53.5% No IPV
- Married: 7.9% IPV, 15.5% No IPV
- Sep/Filing Div: 16.7% IPV, 14.1% No IPV
- Div/Wid: 30.4% IPV, 16.9% No IPV
Bivariate Associations Between Sociodemographics and IPV

Employment Status and Lifetime IPV

- Yes: IPV (n=138), No IPV (n=71)
- No: IPV (n=138), No IPV (n=71)

Felony Conviction and Lifetime IPV

- Yes: IPV (n=138), No IPV (n=71)
- No: IPV (n=138), No IPV (n=71)
## Bivariate Associations Between Sexual/Drug Risk Behaviors and IPV (n=209)

<table>
<thead>
<tr>
<th>Sexual/Drug Risk Behavior</th>
<th>IPV (n=138)</th>
<th>No IPV (n=71)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N (%)</td>
<td>N (%)</td>
<td></td>
</tr>
<tr>
<td>Binge meth user</td>
<td>66 (31.6)</td>
<td>37 (52.1)</td>
<td>0.56</td>
</tr>
<tr>
<td>Sex w/HIV+ partner in past 2 months</td>
<td>90 (65.2)</td>
<td>40 (56.3)</td>
<td>0.20</td>
</tr>
<tr>
<td>High on meth during unprotected sex w/steady partner</td>
<td>74 (63.8)</td>
<td>25 (42.4)</td>
<td>&lt; 0.01</td>
</tr>
<tr>
<td>High on meth during unprotected sex w/casual or anonymous partner</td>
<td>70 (68.6)</td>
<td>24 (53.3)</td>
<td>0.08</td>
</tr>
<tr>
<td>2+ sex partners in past 2 months</td>
<td>81 (58.7)</td>
<td>43 (60.6)</td>
<td>0.79</td>
</tr>
<tr>
<td>Exchange sex partner in past 2 months</td>
<td>49 (35.5)</td>
<td>25 (35.2)</td>
<td>0.99</td>
</tr>
<tr>
<td>Anonymous sex partner in past 2 months</td>
<td>41 (29.7)</td>
<td>13 (18.3)</td>
<td>0.07</td>
</tr>
<tr>
<td>Unprotected sex w/steady in past 2 months</td>
<td>134 (97.1)</td>
<td>64 (90.1)</td>
<td>0.04</td>
</tr>
<tr>
<td>Forced first sex*</td>
<td>34 (38.2)</td>
<td>5 (16.1)</td>
<td>0.02</td>
</tr>
</tbody>
</table>

*Assessed only among 120 women with histories of sexual violence.
## Logistic Regression

<table>
<thead>
<tr>
<th>Sexual/Drug Risk Behavior</th>
<th>OR (95% CI)</th>
<th>AdjOR (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2+ sex partners in past 2 months</td>
<td>0.93 (0.52-1.66)</td>
<td>---</td>
</tr>
<tr>
<td>Exchange sex partner in past 2 months</td>
<td>1.01 (0.56-1.84)</td>
<td>---</td>
</tr>
<tr>
<td>Anonymous sex partner in past 2 months</td>
<td>1.89 (0.93-3.81)</td>
<td>---</td>
</tr>
<tr>
<td>Sex w/HIV+ partner in past 2 months</td>
<td>1.45 (0.81-2.61)</td>
<td>---</td>
</tr>
<tr>
<td>Unprotected sex w/steady in past 2 months</td>
<td>3.66 (1.04-12.97)</td>
<td>4.33 (1.01-17.03)</td>
</tr>
<tr>
<td>Forced first sex</td>
<td>4.31 (1.61-11.59)</td>
<td>5.48 (1.87-16.07)</td>
</tr>
<tr>
<td>High on meth during unprotected sex w/steady partner</td>
<td>2.13 (1.18-3.84)</td>
<td>2.76 (1.41-5.40)</td>
</tr>
<tr>
<td>High on meth during unprotected sex w/casual or anonymous partner</td>
<td>2.02 (1.11-3.65)</td>
<td>---</td>
</tr>
<tr>
<td>Binge meth user</td>
<td>0.84 (0.48-1.49)</td>
<td>---</td>
</tr>
</tbody>
</table>

OR, odds ratio; CI, confidence interval; *Adjusted for age, race/ethnicity, marital status, and intervention group.
CONCLUSIONS
Conclusions

- High rates of physical and sexual abuse among meth-using women in San Diego, CA
  - Context of abuse experiences significant
- High rates of intimate partner violence
- High rates of partner violence
- High risk sexual behaviors and forced first sex are independently associated with IPV
Examine the role of mental health (i.e., depression, PTSD) in associations between IPV and HIV risk

Conduct event-level analyses on violence in the context of high-risk behaviors

Improved research study designs
  ▪ Longitudinal
  ▪ Mixed methods (qualitative and quantitative)
Women in substance abuse treatment programs need further assessment to include IPV

Women in substance abuse treatment need assessment and interventions for IPV and HIV risk

HIV prevention interventions focused on drug-using women need to integrate partner violence and sexual relationship power dynamics in the context of safer sex behaviors

Implications
Thank You

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