

Dyadic Patterns of Alcohol, Marijuana and Illicit Drug Use are Associated with Intimate Partner Violence among an Urban Emergency Department Sample

PURPOSE

Past research has shown mixed results regarding the impact of each partner's marijuana use in relation to intimate partner violence (IPV). This study analyzes if dyadic patterns of alcohol, marijuana and illicit drug use contribute to IPV risk, and if these associations vary by gender among an urban Emergency Department (ED) sample.



METHODS

Research assistants recruited non-acute ED patients to the study at an Oakland, California safety-net hospital. Eligibility criteria included: ages 18-50; English or Spanish speaker; and married, cohabiting, or in a romantic relationship for the past 12 months. Cross-sectional survey data were obtained via confidential interviews (n=1037; 53% female). Sample characteristics are shown in Table 1.

Measurements:

- Past-year IPV – Revised Conflict Tactics Scale (CTS2) – physical assault
- Risky drinking – 5+(males);4+(females) drinks per occasion in past year
- Marijuana use – yes/no
- Illicit drug use – yes/no
- Spouse/partner's substance use:
 - Hazardous drinking – AUDIT-C
 - Marijuana use – yes/no
 - Illicit drug use – yes/no
- Control variables:
 - Participant's age, race/ethnicity, food insecurity, perceived neighborhood disorder, impulsivity, adverse childhood experiences, and PTSD

Analytic Approach

Participant's substance use was coded as risky drinking only; marijuana use only; or both risky drinking and marijuana use (reference category: neither). Spouse/partner substance use (as reported by the study participant) was similarly coded. Gender-stratified logistic regression models were used to estimate the adjusted odds ratio (AOR) for IPV perpetration, victimization, any IPV, and severe IPV. Models were adjusted for demographic and psychosocial factors.

	Males (n=484)	Females (n=550)
Age (Mean, SD)	36.5 (8.2)	34.0 (8.5)
Race/ethnicity		
Black	26.2	31.3
Hispanic	52.9	47.6
Other	14.5	14.5
White	6.4	6.5
Perceived neighborhood disorder (Mean, SD)	6.1 (5.4)	6.8 (5.6)
Impulsivity (Mean, SD)	5.3 (2.5)	5.4 (2.6)
Adverse childhood experiences (Mean, SD)	1.1 (1.4)	1.5 (1.6)
Food insufficiency	44.7	54.5
PTSD	22.1	27.6
Participant's substance use:		
At-risk drinking only	21.7	11.2
Marijuana use only	17.7	14.5
Both	12.7	9.4
Neither	47.8	64.8
Illicit drug use	17.0	8.1
Spouse/partner's substance use:		
Hazardous drinking only	11.3	12.9
Marijuana use only	10.1	16.6
Both	8.0	9.6
Neither	70.6	60.8
Spouse/partner's illicit drug use	4.6	6.9
Intimate partner violence		
Perpetration	14.6	19.3
Victimization	22.2	17.3
Any IPV	23.1	23.3
Severe IPV	9.3	12.7

RESULTS

Table 2 Female's report of dyadic substance use patterns & IPV

	IPV Perpetration (Model 1) AOR (95% CI)	IPV Victimization (Model 2) AOR (95% CI)	Any IPV (Model 3) AOR (95% CI)	Any Severe IPV (Model 4) AOR (95% CI)
Participant's Substance Use:				
At-risk drinking only	4.06 (1.82, 9.10) ^b	2.55 (1.10, 5.95) ^a	3.65 (1.70, 7.83) ^b	1.66 (0.60, 4.59)
Marijuana use only	3.46 (1.54, 7.78) ^b	3.36 (1.47, 7.68) ^b	2.83 (1.31, 6.15) ^b	3.43 (1.34, 8.75) ^a
Both (Ref: Neither)	8.55 (3.58, 20.42) ^c	4.04 (1.66, 9.84) ^b	5.31 (2.27, 12.42) ^c	3.74 (1.37, 10.20) ^a
Any illicit drug use (Ref: None)	1.02 (0.39, 2.63)	0.76 (0.28, 2.05)	0.72 (0.28, 1.90)	0.30 (0.10, 0.94) ^a
Spouse/Partner's Substance Use:				
Hazardous drinking only	1.12 (0.48, 2.61)	1.97 (0.86, 4.50)	1.42 (0.66, 3.07)	4.31 (1.63, 11.36) ^b
Marijuana use only	1.02 (0.45, 2.32)	1.40 (0.60, 3.23)	1.04 (0.47, 2.27)	2.52 (0.94, 6.72)
Both (Ref: Neither)	0.76 (0.31, 1.88)	1.52 (0.62, 3.76)	1.06 (0.45, 2.52)	2.35 (0.83, 6.65)
Any illicit drug use (Ref: None)	3.12 (1.16, 8.43) ^a	3.09 (1.16, 8.25) ^a	3.75 (1.39, 10.11) ^b	5.11 (1.81, 14.41) ^b

Each model is adjusted for age, race/ethnicity, food insecurity, perceived neighborhood disorder, impulsivity, adverse childhood experiences, and PTSD.

^a P < 0.05
^b P < 0.01
^c P < 0.001

Table 3 Male's report of dyadic substance use patterns & IPV

	IPV Perpetration (Model 1) AOR (95% CI)	IPV Victimization (Model 2) AOR (95% CI)	Any IPV (Model 3) AOR (95% CI)	Any Severe IPV (Model 4) AOR (95% CI)
Participant's Substance Use:				
At-risk drinking only	1.05 (0.41, 2.72)	1.50 (0.71, 3.14)	1.23 (0.59, 2.58)	0.98 (0.30, 2.79)
Marijuana use only	1.54 (0.61, 3.94)	1.62 (0.74, 3.57)	1.52 (0.69, 3.33)	2.20 (0.75, 6.40)
Both (Ref: Neither)	2.56 (1.00, 6.59)	1.16 (0.49, 2.74)	1.33 (0.57, 3.10)	1.06 (0.32, 3.51)
Any illicit drug use	1.58 (0.73, 3.44)	1.72 (0.88, 3.37)	2.15 (1.11, 4.18) ^a	2.13 (0.89, 5.06)
Spouse/Partner's Substance Use:				
Hazardous drinking only	2.55 (1.07, 6.08) ^a	3.69 (1.78, 7.65) ^c	3.68 (1.78, 7.60) ^c	2.61 (0.94, 7.30)
Marijuana use only	2.37 (0.91, 6.16)	2.73 (1.17, 6.39) ^a	3.02 (1.30, 7.03) ^a	2.80 (0.91, 8.64)
Both (Ref: Neither)	4.62 (1.67, 12.79) ^b	5.06 (1.95, 13.12) ^b	5.10 (1.96, 13.26) ^b	4.89 (1.52, 15.68) ^b
Any illicit drug use	0.39 (0.09, 1.64)	0.96 (0.28, 3.30)	0.67 (0.19, 2.36)	0.27 (0.06, 1.28)

Each model is adjusted for age, race/ethnicity, food insecurity, perceived neighborhood disorder, impulsivity, adverse childhood experiences, and PTSD.

^a P < 0.05
^b P < 0.01
^c P < 0.001

Table 2 – females: Across models, female participants' risky drinking only (AORs 3.65 – 4.06), marijuana use only (AORs 2.83 – 3.46), and joint risky drinking/marijuana use (AOR 3.74 – 8.55) were associated with each IPV outcome. Female participants who reported that their spouse/partners used illicit drugs were at risk for each IPV outcome (AORs 3.09 – 5.11).

Table 3 – males: Male participants' risky drinking and marijuana use patterns were not associated with any IPV outcomes. Male participants who reported that their spouse/partners were hazardous drinkers only (AORs 2.55-3.69), marijuana users only (AORs 2.73 - 3.02), and joint hazardous drinkers/marijuana users (AORs 4.62 – 5.10) were at risk for each IPV outcome.

CONCLUSION

Among an urban ED sample, patterns of alcohol and marijuana use among female study participants, and the female spouse/partners of male study participants, were linked with increased IPV risk. Females who reported that their spouse/partners used illicit drugs were also at risk. Dyadic substance use patterns should be considered by ED staff when screening patients for IPV and formulating treatment and prevention strategies.

LIMITATIONS

The cross-sectional study design precludes causal inference. The sample was obtained from a single safety-net ED, which may limit the generalizability of findings. The study lacks concurrent dyadic reports on IPV since participants' spouses and romantic partners were not interviewed. This may result in an underestimate of IPV. Recall bias may have affected participants' ability to recall past-year drinking, drug use, and other behaviors.

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