

Abstract

Objectives. Indicators (arrests, laboratory seizures, and treatment admissions) suggest that methamphetamine use is increasing in North Carolina. This study compares drug users in North Carolina who use methamphetamine with those who do not use it.

Method. A total of 800 current (past 30 day) hard drug (e.g., cocaine, crack, methamphetamine, heroin) users participated in a study of high-risk drug users and men who have sex with men in North Carolina between 2005 and 2006.

Results. Nine percent (72/800) of participants reported current methamphetamine use. Methamphetamine users were significantly more likely to be white and homeless; however, they were similar to other drug users in age, gender, education, and other sociodemographic characteristics. They were significantly more likely than other participants to report current use of speedball, powder cocaine, and heroin and to currently engage in injecting drug use. They were significantly less likely to have used crack. They were significantly more likely to report bisexual behavior and slightly more likely to report having sex with multiple partners. In multivariate analyses, methamphetamine use was associated with increased odds of multiple sexual partners and other sexual risk behaviors. An estimated 25% of methamphetamine users reported it was the first hard drug they had used. Most (97%) methamphetamine users reported current use of at least one other hard drug.

Conclusions. Although methamphetamine use is present in this sample, there were few if any traditional "speed freaks." Methamphetamine use was limited to users of other drugs who also used methamphetamine occasionally. Despite this, it was associated with higher risk sexual behaviors.

1. Background

- Methamphetamine use
 - has spread from the West to the East across the United States in recent years,
 - is concentrated among
 - gay men in cities and
 - white heterosexuals in rural areas, and
 - is increasing in North Carolina
 - where information is limited about who is using it.
- Differences are examined between drug users in North Carolina who use methamphetamine and those who do not use it.

2. Methods

- Where:** Two urban and two rural counties in central North Carolina
- When:** Recruited from 2005 through 2007
- Approach:** Respondent-driven sampling (specialized form of chain referral sampling)
- Who:** Users of powder cocaine, crack cocaine, heroin, or methamphetamine (n = 800)

3. Analysis

- Drug users who reported using methamphetamine in the previous 30 days were compared with those who had not used it.
- Bivariate analyses included chi-square tests and t-tests.
- Multiple logistic regression was used to assess independent associations.

4. Characteristics

Table 1. Demographics, by Methamphetamine Use

Demographic characteristic	Used methamphetamine in previous 30 days	
	No (n = 728)	Yes (n = 72)
Mean age (S.D.)	41.2 (9.4)	40.7 (10.1)
% male	66.6	67.6
% non-Hispanic white***	14.5	36.1
% African American***	84.7	63.9
% completed high school or greater	67.4	68.1
% married or living as married	9.1	9.9
% employed full or part time	23.2	21.1
% income > \$500 per month	28.2	23.6
% with health insurance	26.4	29.2
% homeless*	46.7	62.5
% own a car	16.7	12.5
% from a rural county	12.1	13.9

*p < .05, ***p < .001.

Table 2. HIV, HCV, and STI Prevalence

HIV, HCV, and STI prevalence	Used methamphetamine in previous 30 days	
	No (n = 728)	Yes (n = 72)
% HIV positive	7.9	7.0
% HCV positive	21.2	16.9
% syphilis	3.8	3.0
% gonorrhea	1.4	1.5
% chlamydia	4.5	4.5
% positive for syphilis, gonorrhea, or chlamydia	8.5	8.3

HIV = human immunodeficiency virus, HCV = hepatitis C virus, and STI = sexually transmitted infection.

5. Results

Figure 1. Drug Use and Injecting Drug Use in the Previous 30 Days

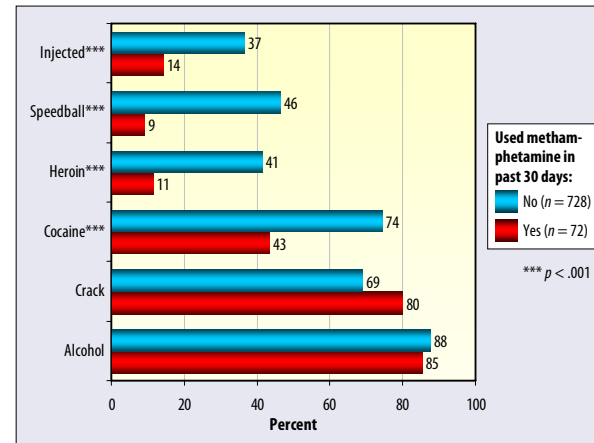


Figure 2. Drugs Used in the Lifetime

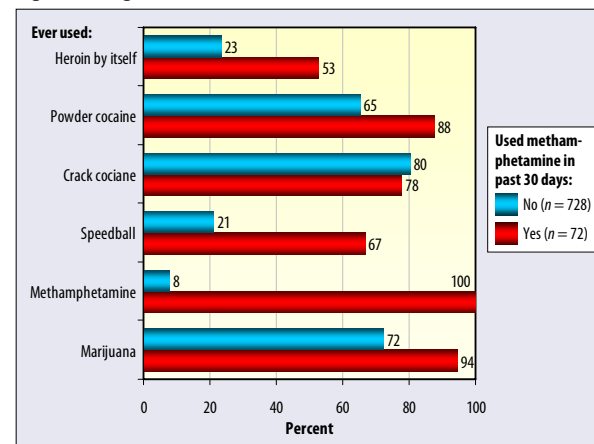
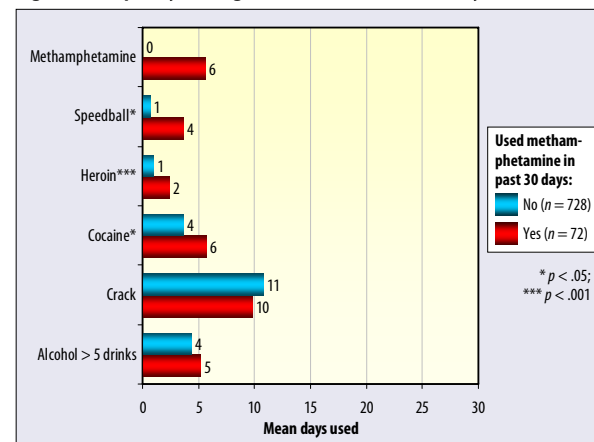


Figure 3. Frequency of Drugs Used in the Previous 30 Days



5. Results (continued)

Figure 4. Recent Sexual Behaviors

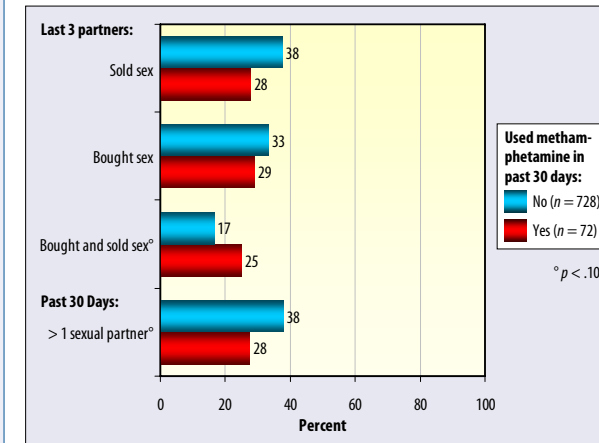


Figure 5. Gender of Women's Sexual Partners in the Past 6 Months

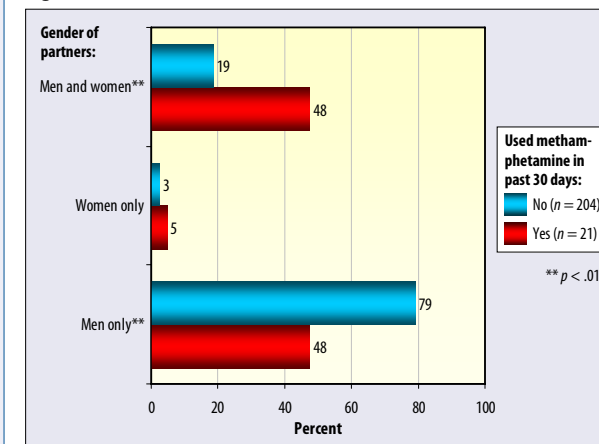
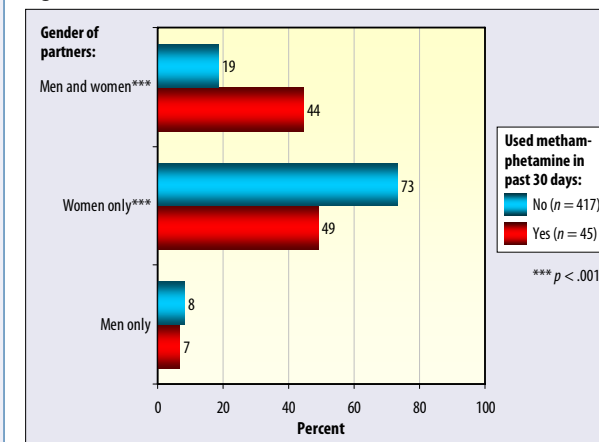


Figure 6. Gender of Men's Sexual Partners in the Past 6 Months



5. Results (continued)

Table 3. Model for More Than One Sexual Partner in the Past 30 Days

Characteristic	β	Odds Ratio (95% C.I.)	p-value
Age \geq 35 years	0.40	1.49 (0.92, 2.41)	.101
African American	0.68	1.97 (1.09, 3.55)	.024
Male	0.28	1.33 (0.89, 1.99)	.170
Used methamphetamine in past 30 days	0.63	1.88 (1.01, 3.51)	.047
Used heroin in past 30 days	-0.37	0.69 (0.38, 1.24)	.217
Used powder cocaine in past 30 days	0.47	1.60 (1.07, 2.40)	.023

6. Differences between Methamphetamine Users and Nonusers

- In bivariate analyses, methamphetamine users were significantly more likely than nonusers to
 - be non-Hispanic white
 - be homeless
 - inject drugs
 - use heroin, speedball, and powder cocaine
 - report bisexual behavior
- In multiple logistic regression analysis, methamphetamine users were almost twice as likely to report multiple sexual partners in the past 30 days.

7. Conclusions

- Most methamphetamine users were polydrug users.
- There were few "speed freaks," and high-frequency methamphetamine use was uncommon.
- Only about one quarter reported that methamphetamine was the first hard drug they had used.
- Despite these differences, methamphetamine users reported significantly higher sexual risk behaviors than nonusers.

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