

BACKGROUND

Crystal methamphetamine use (CMU) is associated with new HIV infections and other sexually transmitted infections (STIs) among urban men who have sex with men (MSM) and has not decreased despite numerous and novel interventions. Crystal methamphetamine users (CMUs), estimated at 8 – 13% of urban MSM¹, are especially risky sexual partners. More should be done to educate non-CMUs about the risks for exposure to HIV and STIs when choosing partners who use CM.

OBJECTIVES

1. Define odds ratios for CMU-associated HIV, Gonorrhea (GC), Chlamydia (CT), and Syphilis infections using local epidemiological data
2. Describe CMU frequency among urban MSM in Los Angeles County
3. Develop practical messages to enable more informed sexual partner choices for this population

METHODS

This retrospective analysis classified CMUs as individuals who reported methamphetamine use within the past calendar year, measured by electronic medical record variables. From January through December 2011, 9,356 unique clients visited the L.A. Gay & Lesbian Center for testing, of whom 772 (8.25%) reported meth use within the last year. Sexual orientation, gender, race/ethnicity and age group were controlled for in four generalized linear mixed models with CMU as the predictor and HIV, Gonorrhea, Chlamydia and Syphilis diagnosis, respectively, as the different outcomes. Incident HIV is defined as diagnosis in the previous 6 months. Frequency estimates for CMU and odds ratios were calculated using SAS statistical software (Version 9.2).

RESULTS

CMUs had significantly higher odds for contracting HIV (OR: 3.94, CI 2.96-5.25, p-value: <0.0001), GC (OR: 2.13, CI 1.77-2.58, p-value: <0.0001), CT (OR: 1.67, CI: 1.36-2.04, p-value: <0.0001), and Syphilis (OR: 4.49, CI: 3.30-6.11, p-value: <0.0001). Of incident HIV, GC, CT and Syphilis infections among CMUs, 61.76%, 62.18%, 62.70%, and 68.33% had used within the past month, respectively. CMU frequency was missing for 16.18% of incident HIV, 19.87% of GC, 17.46% of CT and 11.67% of Syphilis infections.

Figure 1 - STI Percent Positivity of CMU and Non-CMU Visits, January - December 2011.

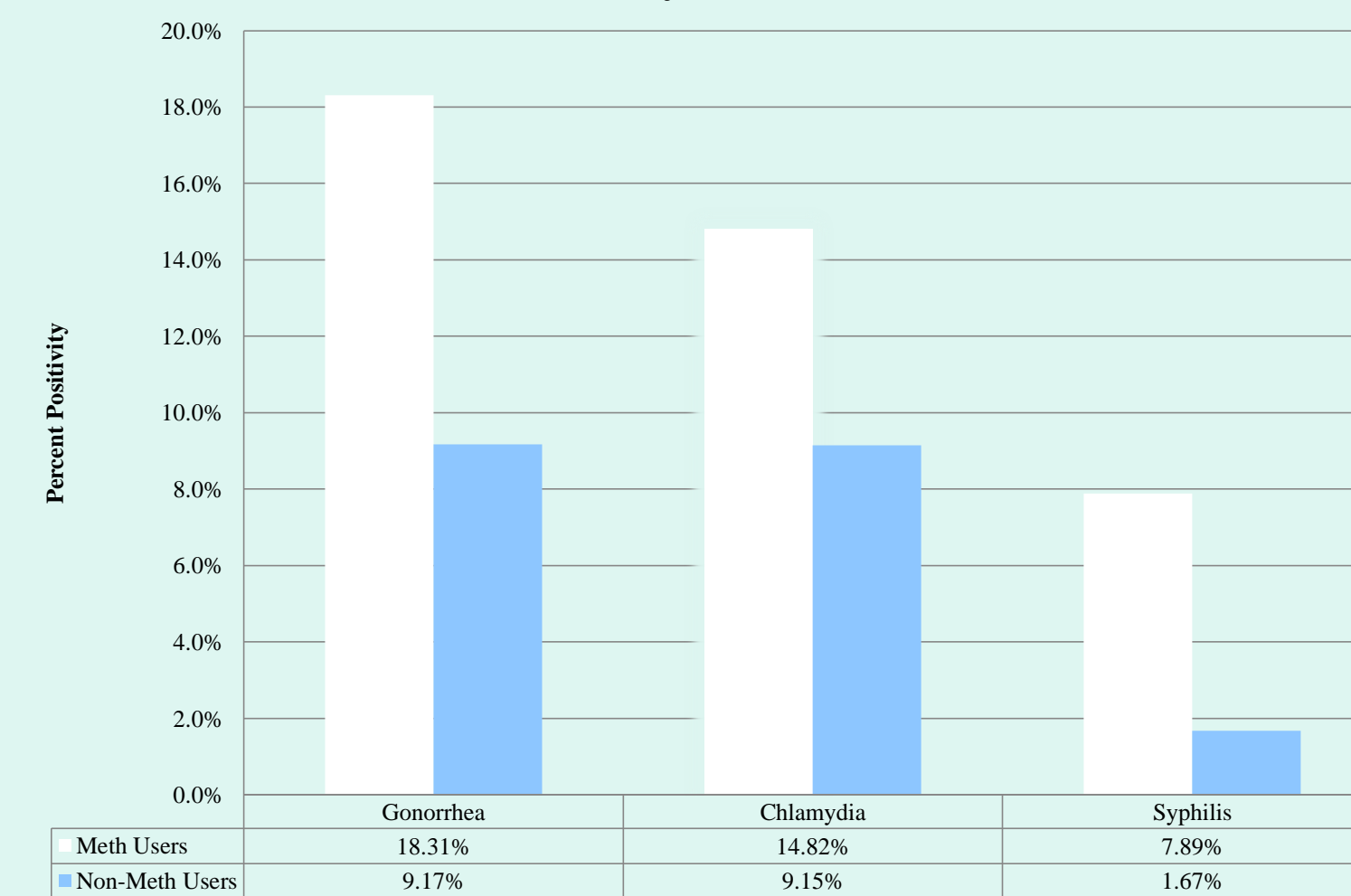


Figure 2 - Acute HIV Positivity of CMU and Non-CMU Visits, January - December 2011.

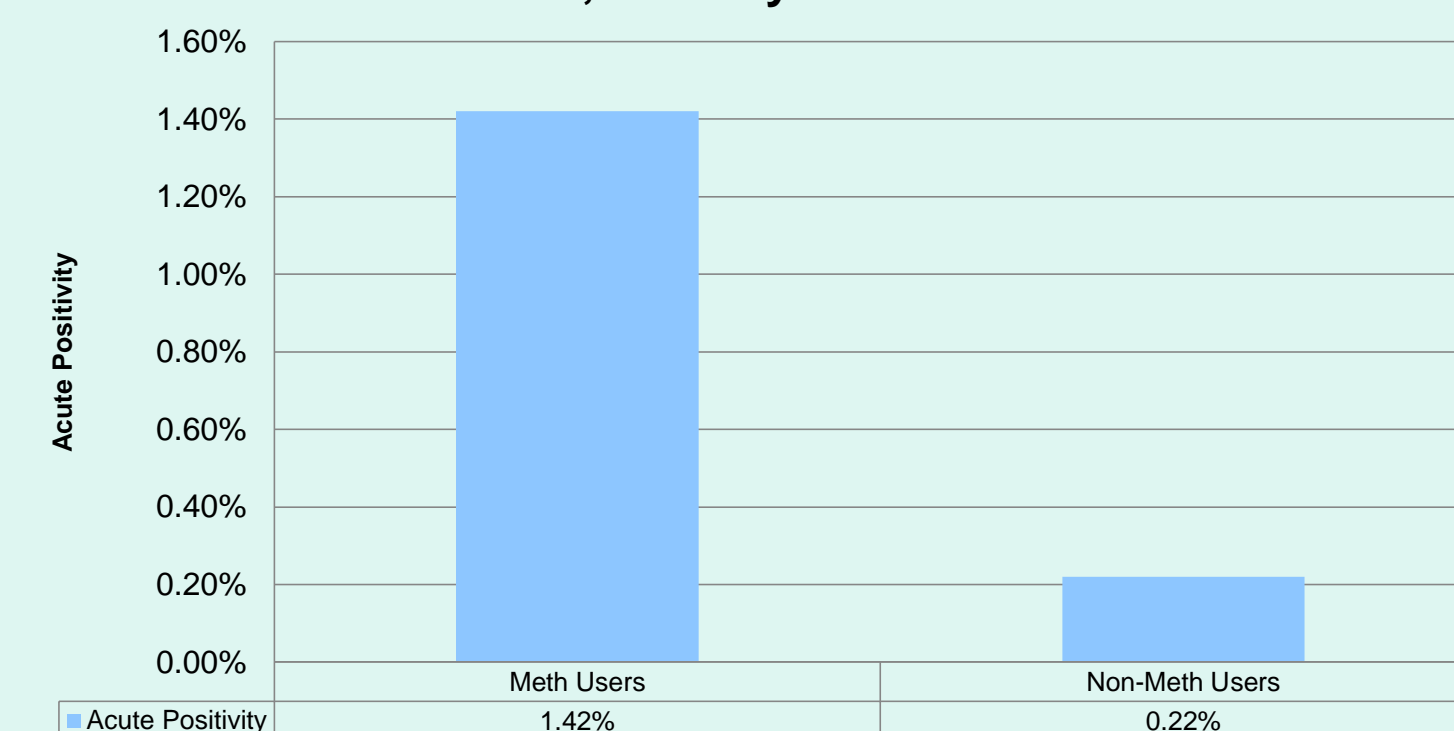


Table 1 - Last Meth Use for Individuals Testing Positive for HIV, January 2011 - December 2011 (N=68)

Last Meth Use	N	Percent
Past Week	22	32.35%
Past Month	20	29.41%
Past 3 Months	6	8.82%
Past 6 Months	6	8.82%
Past Year	3	4.41%
Missing	11	16.18%
Total	68	100%

Table 2 - Frequency of Unique HIV NAAT Positive Tests, January 2011 - December 2011 (N=10,319)

NAAT Results	Positives*	Tests	Percent
Meth Users	10	703	1.42%
Non-Meth Users	21	9,616	0.22%
Total	31	10,319	0.30%

*Individuals were only counted as NAAT positives if their infection was acute, i.e. they tested rapid blood negative but HIV NAAT positive

DISCUSSION

To date, prevention campaigns that address CM use focus on the CMUs themselves. None directly speak to non-CM using MSM about their excess risk for exposure to HIV and STIs when choosing a sex partner who does use CM. Our data, which show incremental risks for incident HIV, GC, CT, and syphilis associated with CM use among an urban MSM population, will allow concrete and succinct messages that may help MSM make more informed choices.

Risk stratification is a familiar concept to sexually active MSM because many already use serosorting and other so-called seroadaptive strategies in an intuitive way to help make sexual behavior choices.^{2,3} Most health educators caution against exclusively using such strategies because of their fallibility, since the problem with serosorting (one author has called it “seroguessing”⁴) is failing to use condoms with a partner incorrectly believed to be negative. We must continue to stress the importance of consistent condom use with all partners. However, recent CM use can identify individuals who are more likely to be infected with both HIV and STIs. MSM should understand that if, for whatever reason, one does not use a condom for intercourse, or if it fails, there is a significantly greater risk of infection with a partner who uses CM than with one who does not.

CONCLUSIONS

Because 60-68% of each of the incident infections among this high risk group is associated with CMU within the previous month, asking potential partners about CMU during the past month is a useful risk reduction strategy for MSM to avoid excess exposure to these infections.

REFERENCES

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2. McFarland W, et al. *AIDS Behav*. 2012; 16:121-131.
3. McDaid LM, Hart G.J. *Curr Opin HIV AIDS*. 2010 Jul; 5(4):311-15. Review.
4. Zablotska IB, et al. *AIDS Care*. 21:501-510.