

Treatment Impact on HIV Risk Behavior Among Methamphetamine Users

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May 8, 2007

Research Question

**Does treatment reduce
HIV risk behavior?**

*(injection and unsafe sexual
practices)*

**Changes from Baseline to
Treatment-End**

Treatment Data

**The Methamphetamine Treatment
Project (MTP)**
-AIDS Risk Assessment (TCU/ARU)

**Methamphetamine Clinical Trials Group
(MCTG)**
-HIV Risk Behavior Scale (HRBS)

Study Designs

- **MTP:** Multisite 1-year clinical trial (N=978): 16 week treatments (Matrix vs. Treatment-as-usual) in 8 treatment programs within Montana, Hawaii, and California funded by SAMHSA/CSAT.
- **MCTG:** Multisite study includes two MA pharmacotherapy trials (N=320) within Texas, Missouri, Iowa, Honolulu, and California (Ondansetron and Bupropion) funded by NIDA. Length of treatment varied per protocol (8 weeks and 12 weeks)

Sample Demographics

	MTP (N=784)	MCTG (N=320)
% Female	51.1%	34.4%
Average Age	32.8 (18-60)	36.0 (18-59)
Mean Years Education	12.2 (sd=1.7)	12.0
% White	65.5%	73.3%
Mean Years of MA use	7.5 (sd=6.0)	11.2 (sd=7.7)

Change in Injection Use

	Baseline	Tx-end
MTP: # of people injected in past 30 days*	128 (13.1%)	54 (5.4%)
MCTG: # of people injected in past 30 days*	68 (21.2%)	24 (10.3%)

* $p < .05$

MTP: Change in Injection Practices

	Baseline	Tx-end
Repeated measures on 193 injectors Past 30 days		
Mean # times inject**	19.7	7.8
Mean # times dirty needles**	3.9	0.91
Mean # times share cooker, cotton, etc.**	6.5	1.4

****p<.01**

MCTG: Change in Injection Practices

Repeated measures on 44 injectors Past 30 days	Baseline (N=44)	Tx-end (N=24)
Number of injectors who used needles after someone	7(16%)	0 (0%)
Number of injectors who reused needles	22 (50%)	9 (38%)
Number of injectors who reused needles AND cleaned with bleach every time	3/22 (14%)	3/9 (33%)

MTP: Change in Risky Sexual Practices

	Baseline	Tx-end
Repeated measures on 784 MA users Past 30 days		
Mean times had sex w/out condoms	14.7	13.2
Mean # times sex w/out condom w/IV user *	2.3	1.4
Mean # times sex w/out condom w/ MA user**	6.5	1.4
Mean times sex while high***	9.1	4.9
Mean risk composite (<i># of times engaged in risky behavior</i>)**	23.1	10.2

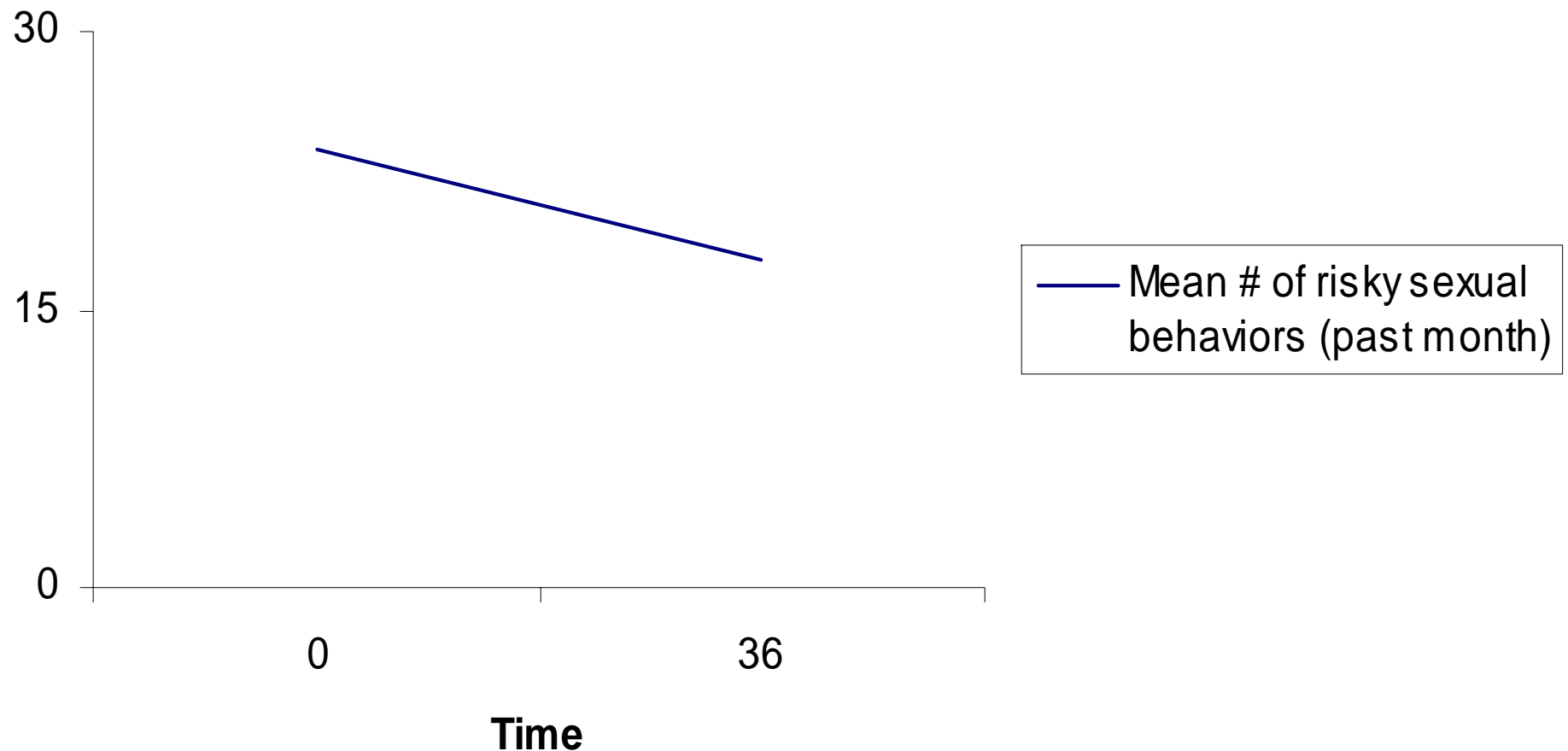
* $p < .05$ ** $p < .01$; *** $p < .001$

MCTG: Change in Risky Sexual Practices

Repeated measures on 199 MA users Past 30 days	Baseline	Tx-end
Unsafe sexual behavior mean composite score *	5.2	4.4

**p<.05*

MTP: Long-Term Change Risk Behavior



Significant reduction in mean # of risky behaviors from baseline to 3 year follow-up among 574 MA users from MTP.

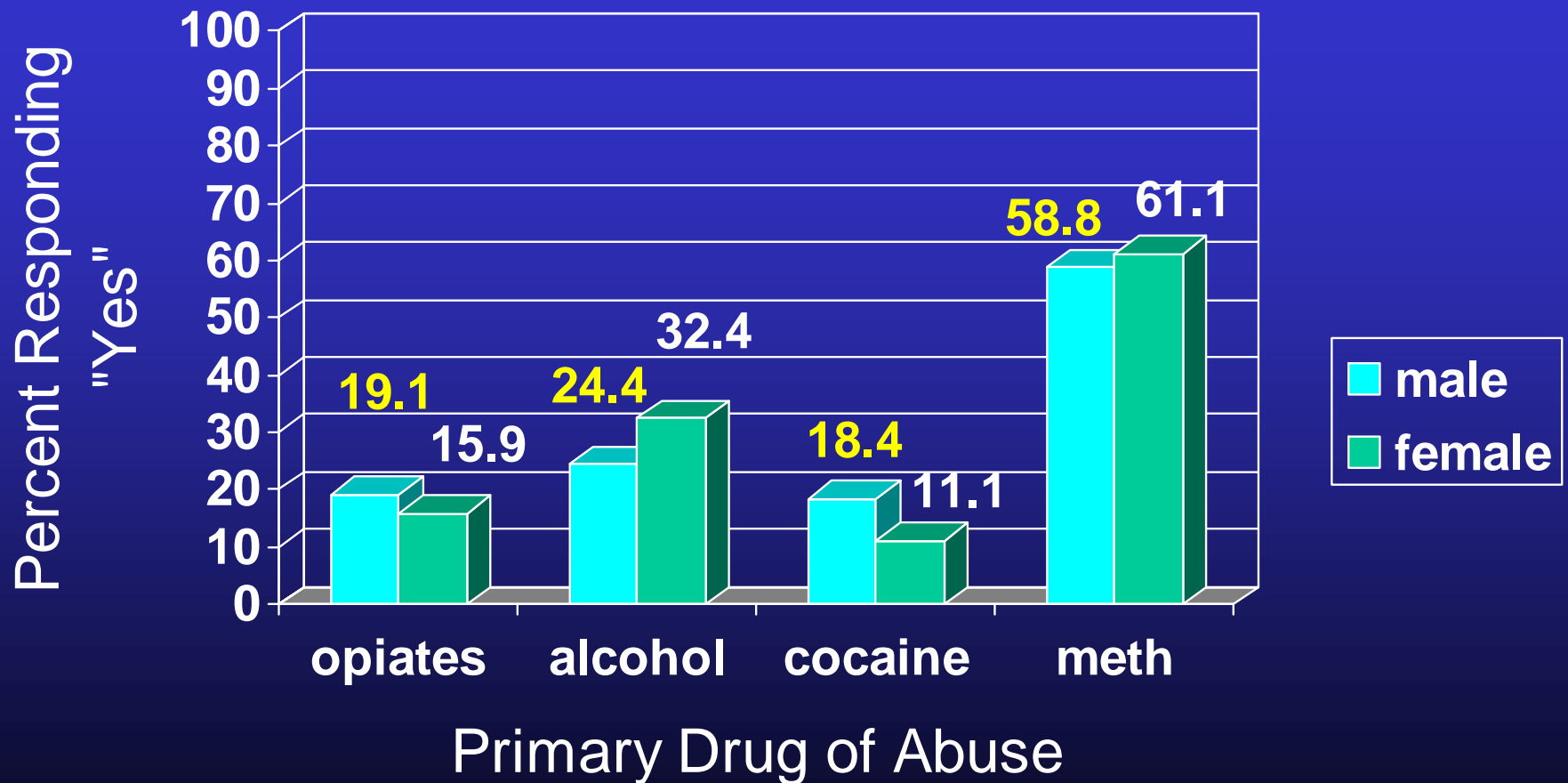
MTP: Treatment Impact on Risky Behavior

- Longer treatment retention is significantly associated with *less risky behavior* (based on sex risk score) among MA users (B=-.043, $p<.001$).
- Treatment completion is significantly related to *less risky sexual behavior* among MA users (B=-.565, $p<.001$).
- Significant *reduction in injection behavior* for completers than non-completers ($p<.05$).

MCTG: Treatment Impact on Risky Behavior

- Paired samples t-tests show that treatment completion had a statistically significant impact on reducing high sex risk behavior compared to those who did not complete treatment ($p < .01$).
- Treatment completion was significantly associated with reducing injection use ($p < .05$):
- Over half of the injectors who completed treatment reported no current injection use at discharge compared to no reduction in injection for non-completers.

My Sexual Performance is Improved by the use of:



Methamphetamine in RSA*

- The use of methamphetamine ('tik') and methcathinone is on the increase in South Africa, especially in Cape Town.
- In treatment centres in Capetown, treatment admission rates for MA have increased from 3% in 2002 to 32.4% in 2005.
- Most of the patients (92%) were Coloured, 7% were White, 0.5 Indian/Asian and 0.5% were Black/African.
- Almost 50% of the patients were younger than 20 years of age (see Figure 2). The ages ranged from 12 to 53 years.
- 90+% report smoking methamphetamine as the preferred route of administration.
- 41% report daily use.

*Parry et al 2005

Study Implications

- **MA treatment is associated with substantial reductions in HIV risk behaviors.**
- **Retention and treatment completion play a critical role in preventing the escalation of HIV risk behaviors.**

Acknowledgements

- Investigators of the NIDA Methamphetamine Clinical Trials Group and the CSAT Methamphetamine Treatment Project
- Funding from NIDA and SAMHSA