

Amphetamine Type Stimulant Use among MSM Living with HIV in the Mekong Delta, Vietnam

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BACKGROUND

The Mekong Delta in Vietnam presents a unique intersection of health challenges, with a growing concern about the co-occurrence of substance use and HIV infection among MSM and TGW. By investigating factors associated with the use of amphetamine type stimulants (ATS), the study aims to provide insights that can inform targeted interventions and public health strategies tailored to address the complex needs of MSM living with HIV in the Mekong Delta, Vietnam.

METHODS

MSM and transgender women (TGW) were recruited at two antiretroviral therapy clinics for people living with HIV in Ho Chi Minh City and Can Tho, Vietnam. Participants provided informed consent at the first visit and had a second visit after 12 months. At each visit, participants completed a questionnaire on risk behaviors (sexual behavior and substance use) and had blood drawn for HCV antibody testing. The study was approved by supervising IRB in Vietnam.

ATS use, including methamphetamine, was reported by 21% of MSM living with HIV in the Mekong Delta, Vietnam.

Methamphetamine use was significantly associated with residence in HCMC, participation in group sex, and increased age.

Methamphetamine users were more likely to engage in condomless anal sex and have sex while under the influence of drugs or alcohol.

Comprehensive interventions incorporating harm reduction and substance use counseling should be integrated into routine HIV care for MSM to reduce associated risks and improve health outcomes.

RESULTS

Enrollment comprised 532 participants; 523 (98%) completed two study visits and were included in the analysis. The study population consisted of 76% MSM and 24% TGW, with a median age of 27 (IQR 24-30). Over 12 months, reported use of ATS included ecstasy in 3% and methamphetamine in 21%. Most reported only inhalation use of methamphetamine, but 3 (0.6%) also reported injection use. In multivariable analysis, methamphetamine use was associated with residence in HCMC (aOR 9.96, 95% CI 4.06-24.5), group sex (aOR 4.59, 2.43-8.67), and age (aOR 1.07, 1.02-1.12, per year increment). Methamphetamine users were more likely to report condomless anal sex (OR 6.0, 3.72-9.66) and having sex while under the influence of drugs or alcohol (OR 2.22, 1.44-3.41). There were 7 incident cases of HCV over 12 months, none of whom reported methamphetamine use.

CONCLUSIONS

- The study shows concerning trends among 523 participants in the Mekong Delta, revealing high-risk behaviors and emerging patterns in substance use. Particularly noteworthy is the newfound risk of methamphetamine injection in Vietnam.
- These findings emphasize the critical need for comprehensive public health strategies that integrate person-centered care (PCC) approaches.
- Tailoring services that provide HIV care to MSM clients should focus on the individual needs, experiences, and risk factors of MSM and TGW can enhance engagement in care, reduce barriers to treatment adherence, and address the intersection of substance use and sexual health.
- Integrating harm reduction strategies, mental health support, and culturally sensitive interventions within HIV care models can provide more holistic, effective responses to the evolving dynamics of HIV, HCV, and substance use in these communities.

Table 1: Frequencies for all 4 variables at baseline and follow-up (n=532)

	Baseline		Follow-up	
	#	%	#	%
Ever smoke ice				
No	518	97.37	415	78.01
Yes	5	0.94	108	20.30
Missing	9	1.69	9	1.69
# times smoke ice last 6 months				
not yet	3	0.56	6	1.13
1 per month or less	2	0.38	47	8.83
1-4 times/months	0	0	35	6.58
2-3 times/week	0	0	12	2.26
4 times/week or more	0	0	8	1.50
Missing + Never smoke ice	527	99.06	424	79.70
ever inject ice				
No	523	98.31	520	97.74
Yes	0	0	3	0.56
Missing	9	1.69	9	1.69
# times inject ice last 6 months				
not yet	0	0	1	0.19
1 per month or less	0	0	2	0.38
1-4 times/months	0	0	0	0
2-3 times/week	0	0	0	0
4 times/week or more	0	0	0	0
Missing + never inject ice	532	100.0	529	99.44

Table 2: substance use at baseline and 12 months (n=523)

	Baseline n (%)	Follow-up n (%)
Ever smoke methamphetamine		
No	518 (99)	415 (79)
Yes	5 (1)	108 (21)
Ever inject methamphetamine		
No	523 (100)	520 (99)
Yes	0 (0)	3 (1)
Ever use alcohol/drugs with sex		
No	389 (74)	280 (54)
Yes	93 (18)	179 (34)
Ever have group sex		
No	484 (93)	360 (69)
Yes	8 (2)	156 (30)

The study was funded by a research grant from Gilead Sciences, Inc.



ADDITIONAL INFORMATION

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