Background

Amphetamine type stimulants (ATS) consist of amphetamine-group substances and ecstasy-group substances. Amphetamine-group substances include amphetamine, methamphetamine and their derivatives, such as methcathinone, fenetylline, and methylphenidate. Methamphetamine (commonly called “speed,” “ice,” “crystal,” “glass”) can be easily made in clandestine laboratories from readily available, inexpensive ingredients. Laboratories producing amphetamine-group substances, including large scale laboratories capable of industrial-scale manufacture, have been identified in most countries in the Asian region. In addition, there is increase in the use of ecstasy-group substances (i.e. MDMA, MDA, MDE) in the region.

UNODC (2010) estimated that up to 20.7 million individuals in Asia and the Pacific have used ATS in the past year\(^1\). Its use is increasing in east and south east Asia and the Middle Eastern region. Amphetamine-type stimulants can be snorted, smoked, injected, or used rectally. Compared with opioids, most users of ATS administer the drug through non-injecting route.

Intake of ATS, notably the amphetamine-group substances results in euphoria, increased alertness, arousal and libido and elevated heart rate, respiratory rate, blood pressure; in addition, users perceive heightened confidence, energy levels and physical strength\(^2\). The HIV-related risks associated with amphetamine group substance use are well documented in the literature and majority of studies demonstrate an association between amphetamine-group substance use and risk of HIV infection, in particular among men having sex with men\(^3\).

In India, the extent, pattern and consequences of ATS use has not been studied. Over the last few years, laboratories producing amphetamine-group substances have been unearthed by law enforcement agencies from several parts of the country. India along with China is the most frequently mentioned source country of seized illicit shipments of ephedrine and pseudoephedrine which can be used to manufacture ATS\(^4\). Anecdotal reports and clinical data indicate the emergence of use of these substances in several parts of the country.

UNODC with its mandate to assist the partner countries with necessary evidence generation to effectively design and implement appropriate interventions that reduce the adverse consequences associated with its emerging pattern of drug use under took

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this exploratory study to assess this situation in seven selected sites with reported ATS use.

**Objectives**

The study was conducted with the following objectives:

- To determine the range, pattern and frequency of use of ATS among a purposive sample of young persons from the select locations in the five states of Manipur, Mizoram, Punjab, Tamil Nadu and West Bengal, in India.
- To understand and explore the factors associated with the use of ATS.
- To assess the adverse consequences related to the use of ATS.

**Methodology**

The methodology included the following:

- Survey questionnaire based interviews with people who had ever used ATS to elicit demographics, pattern of non ATS drug use, ATS use pattern, dependence on ATS, adverse health consequences, other consequences faced due to ATS use, and help seeking behaviour among ATS users form seven select sites.
- In-depth interviews exploring demographics, history of non ATS drug use, ATS use, experiences/awareness of harmful effects of ATS use and perceptions on treatment with ATS users who agreed to provide detailed information.

**Sites and data collection**

Data was collected from five states- Manipur, Mizoram, Punjab, Tamil Nadu and West Bengal. One hundred respondents who had ever used ATS participated in the survey questionnaires and among them 47 who agreed to provide detailed information underwent ‘in depth interviews’.

**Findings from the study**

One hundred respondents with experience of ATS use participated in the survey questionnaire and among them 47 agreed to provide detailed inputs as required in the in-depth interviews.

Most of the respondents were youths with the median age of 25 years. A quarter of the respondents (25%) were females. About two third (63%) of the respondents had received college level education and more than half were engaged in full time employment with about one fifth (19%) reporting being in business. A similar proportion (19%) reported earning more than Rs. 30,001/- per month. Majority (62%) were single.
**Drug use history**

The respondents reported using tobacco (98%), alcohol (97%), cannabis (65.6%) and pharmaceutical drugs (16.7%) prior to the use of ATS.

The mean age of first use of tobacco was 14.6 years followed by alcohol (15.4 years). Initiation into illicit drugs was reported to begin with cannabis and pharmaceuticals at the mean age 16.8 years. The mode of first drug use was reported to be smoking.

Use of ATS was reported to commence by the (mean) age of 21.7 years.

**ATS use**

Ninety three percent of the respondents reported having friends who used ATS. On an average, respondents spent Rs. 3300 for one episode of ATS use. They also reported using ATS in combination with other drugs.

Ecstasy was most commonly used among the ever-used ATS drugs and 55% reported ever using it. Methamphetamine pills were used by 42% of the respondents followed by Methamphetamine powder (36%) and Amphetamines (35%).

When enquired about last use- 27.1 percent reported using Methamphetamine pills and 5.1 percent Methamphetamine powder during the week of the interview. Ecstasy was reported to be last used in the past one-month by 13.1 percent and amphetamine by 8.2 percent.

Most commonly reported mode of use was ‘swallowing’. None of the respondents reported injecting ATS drugs.
**Reasons for ATS Use**

When enquired about reasons for initiation of ATS – more than half (57%) reported curiosity followed by peer influence (17%). In response to the reasons for continuation one third (33.7%) said “like the effect” and one fifth (21%) “to get pleasure”. While citing reasons for their current use 30.8 percent reported “to be more energetic”.

**ATS use and sexual behaviour**

Ninety three percent had the experience of sexual intercourse reporting mean age of first sexual experience as 17.2 years. Ninety one percent reported having sex with the opposite sex. More than half (58.2%) reported having used ATS before sex with a regular partner, almost half (49%) used ATS before sex with a casual partner and 12.2 percent said that they had used it before sex with a sex worker. Condom use during sex after ATS use was 30.6 percent.

**ATS dependence**

About half of the respondents (48%) are dependent users of ATS as they fulfilled three or more criteria for substance dependence recommended by WHO - ICD-10. Proportionately, more people from the north-east (65%) fulfilled the criteria for ATS dependence than the major cities (37%).

![Bar chart showing signs of ATS dependence](chart.png)

**Other health related issues**

While, 44 percent reported having “physical problems due to ATS use” the same proportion of respondents reported “having lots of energy after starting to use ATS”.

**Mental Health**

While, 15 percent of the respondents reported having “felt peaceful or calm after ATS use”, more than half (57.6%) reported feeling “aggressive or hostile after ATS use”, half of them (49.5%) “felt sad and depressed after ATS use” and more than half
(53.5%) reported “feeling nervous after ATS use”. Forty two percent reported “fear of being talked about or harmed after ATS use”, 38 percent experienced “sleep problems after ATS use, 31 percent reported having “heard voices or seen figures after ATS use” and a quarter (25.3) of the respondents reported experiencing “mental problems after ATS use”.

**Legal Issues**

18 percent of the respondents had been apprehended by the police after ATS use and 7 percent had been in police lock up after ATS use, 1 had been apprehended by the pressure groups and 2 had been in their lock ups after ATS use.

**Help seeking**

While 28 percent reported seeking help from friends, 15 percent “ever sought help with any psychosocial /mental health services for ATS use”, six percent each reported ever seeking help from any medical or any drug use treatment services for ATS use.

**Help required**

Almost half or the respondents (49%) said that they required some help/assistance for ATS use. While one third reported that they needed medical help, 31 percent expressed the need for psychosocial services and 21 percent said that they needed education on ATS.

**ATS use and gender**

There were no significant differences in ATS use or its reported effects among the male and female respondents. However, the male respondents more often reported use of ATS in risky situations when compared with females and more males used ATS before sex with casual / regular partners than their female counterparts.

**Major cities and the NE states**

In comparison the respondents from the major cities were younger and initiated into ATS at an earlier age. There were more students, more college level education and greater income among those from the major cities than those from NE locations. While greater proportion of respondents from the major cities reported use of Ecstasy, methamphetamine powder and amphetamine, those from the NE reported greater use of methamphetamine pills. Proportionately more respondents from the NE fulfilled the criteria for dependence (67%) than those from the major cities (37%) and also reported greater experience of physical problems due to ATS use. Subsequently, proportion of respondents seeking assistance for ATS use, desiring education, medical help, drug treatment, drug rehabilitation and help from families were higher from the NE than the major cities. ATS related encounters with the law enforcement were reported to be higher in the major cities than the NE states.