

Research Article

# AMPHETAMINE-TYPE STIMULANTS USERS- EXPERIMENTAL STUDY ON PSYCHOLOGICAL AND SOCIAL INTERVENTIONS

*Nguyen Trung Hai, Dang Quang Trung#*

Department of Social Work, University of Labor and Social Affairs, Hanoi, Vietnam

## Abstract

The drug addiction problem in Vietnam is becoming increasingly complicated, especially for the group of addicts using Amphetamine-Type Stimulants (ATS). The trading market and ATS user increase quickly with an estimated 36 million people using ATS globally. Long-term use of ATS may have unwanted psychological effects such as mood changes, depression, paranoia, hallucinations, insomnia, and anxiety. From there, are unwanted behaviors such as violence and aggression. The use of ATS also has caused many negative effects for families, communities, and society. The current problem is that these narcotics and psychotropic substances have very serious effects on the brain. Many deaths caused by psychotropic drugs also stem from the abuse of these toxins. It is also a challenge because the intervention of Methadone, which is an effective treatment for heroin users, is not effective with ATS users. Very concerned about this issue, in 2019, Vietnam issued the guidelines for intervention on drug abuse in the form of ATS including social and psychological intervention. It is a comprehensive approach with the expectation of more effective intervention and support for ATS users. The study used psychological and social experimental study for 45 ATS users in 3 ATS treatment clinics in Hanoi and Haiphong-Vietnam. The results showed that psychological and social intervention has brought positive effects for ATS users both in terms of reducing ATS use as well as having positive results on mental health problems. *ASEAN Journal of Psychiatry, Vol. 25 (6) June, 2024; 1-6.*

**Keywords:** Amphetamine-Type Stimulants; Drug; Psychological Intervention; Social Intervention; Autonomic Nervous System

## Introduction

In Vietnam, according to data from the Ministry of Public Security announced in mid-2022, out of more than 2,35,000 drug addicts with management records nationwide and number of ATS users account for about 48% substances [1-6]. Drug users using ATS are caused by many factors which are personal and environmental factors [7]. Environmental factors include group culture (friends use should feel the need to use and acceptable use), living in an environment with drug trafficking problems [8,9]. Personal factors include biological and genetic characteristics (e.g., people feel like the effects of methamphetamine from the first time they are used, while most people find it uncomfortable), psychological (e.g.,

injury psychology due to family conflict, abuse when young) or mental disorder (e.g. depression) [7,10]. Therefore, the intervention should pay special attention to environmental factors and personal factors of ATS users. In recent years, research results compiled and described in the United Nations Office on Drugs and Crime (UNODC) report show that Methadone treatment for ATS users is not very effective [1]. On the other hand, National Institute for Health and Care Excellence (NICE) training materials, Samhsa, Ministry of Health as well as studies show that supporting ATS users based on psychological and social interventions has positive results [6,11-16]. Therefore, conducting research on the issue of supporting ATS users is very important for further effective interventions.

## Materials and Methods

### Intervention explanation

The intervention was implemented for 4 months at 2 addiction treatment clinics in Hanoi, Center No. 05; Dongda clinic and 1 addiction treatment clinic in Hai Phong. According to a report from the Ministry of Health, these are the addiction treatment clinics that currently have the largest number of ATS users nationwide [17]. The study applied the ATS psychological and social intervention guidance based on decision No. 786/2019 [6]. In this intervention, firstly, the University of Labor and Social Affairs conducted training and workshops to enhance the capacity of staff about ATS intervention based on psychological and social aspects. Secondly, during the intervention, experts from University of Labor and Social Affairs, who are well trained about drugs, and holding Master and Doctor of Psychology, Social Work degree, give technical assistance. Specific psychological and social intervention steps are described in Table 1.

**Table 1. Steps in psychology and social interventions for ATS users.**

ATS intervention steps
Step 1: Forming education group
Step 2: Screening and assessing pre-intervention
Step 3: ATS intervention (using IM, MI-MET, urine test and CM and social support in 7 weeks)
Step 4: Assessing post-intervention

**Education group:** Activities that provide information to groups of ATS users using ATS so that they can improve drug awareness, readiness, and determination to participate in intervention programs.

**Alcohol, Smoking, Substance Involvement Screening Test (ASSIST):** Is a screening tool for assessing levels of risk associated with alcohol, tobacco, and drug use, developed by professionals and clinical interventions of the World Health Organization [2].

**DASS-21 (The Depression, Anxiety and Stress Scale-21 Items):** DASS-21 is a set of three self-reports scales designed to measure the emotional states of depression, anxiety, and stress [18].

**Motivational Interviewing (MI):** It is a

counseling method that helps ATS users resolve ambivalent feelings and insecurities to find the internal motivation they need to change their behavior. It is a practical, empathetic, and short-term process that takes into consideration how difficult it is to make life changes.

**Motivational Enhancement Therapy (MET):** It is an approach that helps ATS users resolve their ambivalence about engaging in treatment and stopping their drug use. This approach aims to evoke rapid and internally motivated change, rather than guide the ATS users stepwise through the recovery process.

**Case Management (CM):** During this intervention, positive behavioral management is selected to encourage and encourage ATS users to be “negative” with ATS use when tested for urine. Positive behavior management activities will be rewarding that ATS users wish to receive (not cash) such as phone cards and compliments.

**Urine test:** Once a week, staff at the facility will use test strips to test whether the ATS users are negative (drug free) or positive (drug use). Through the urine test results, the staff will know the ATS use, thus plan to have appropriate psychosocial interventions.

## Results

### Step 1-Forming education group

The study conducted 4 group opening education sessions at each clinic with a total of 705 ATS users. The opening education groups provide information about the identification and negative impacts of ATS. The study expects is to enhance knowledge about ATS so they could know how to avoid drug and ATS. Furthermore, through opening education groups, the study also hopes to encourage ATS users to participate in psychological and social intervention. Specific contents in group education include:

- Overview of substances abuse
- The relationship between ATS use and HIV
- Information on HIV/AIDS and delivery services
- Deal with the craving for memory

### Step 2-Screening and assessing pre-intervention

After opening group education sessions, 705 ATS

users were screened by ASSIST tool to classify the level of using ATS. Then 45 ATS users were selected (15 ATS users in each clinic) for the psychological and social intervention. They are at the level of Medium and Low because as suggested by the guidance in decision No. 786/2019 of Ministry of Health, the high level of ATS usage should be treated with medicine first [17]. They were also informed about the intervention and voluntary to participate in this intervention. 45 ATS users also were equipped with knowledge about drugs, ATS, HIV, and skills to cope with the cravings. Thus, it helps to encourage them to join the intervention activities.

*Step 3-ATS intervention*

Before intervention, the 45 selected ATS users would continue to be screened by tools such as DASS-21, and Psychotic Disorder to evaluate mental disorders as well as negative behaviors. Then 45 ATS users received weekly intervention during their visits to the clinic through Psychological and Social intervention tools, specifically Motivation Interviewing (MI) and Motivational Enhancement Treatment (MI-MET).

During this step and together with psychological intervention, workers also use social intervention for ATS users. Specifically, evaluate how the social environment affects ATS users? What social causes influence the use of ATS? What problems and needs do they have at home and in the community? After having the above information, a plan will be made for the each ATS user to be able to have specific social interventions. However, the results show that because social issues are quite complex and require the participation of many officials in different fields, there are some social issues that have not been resolved in a short time.

Issues that are difficult to resolve can include employment, discrimination, and policy-related issues. These things greatly affect the effectiveness of ATS treatment.

*Step 4-Assessing post-intervention*

At weeks 6 and 7, ATS users had urine tests to evaluate ATS use. For ATS users with many positive test results, intervention staff will meet individually to find out the cause as well as provide psychological and social interventions with the expectation that they will help them stop or reduce their use ATS. Finally, after week 7, the assessments from the first week will be re-evaluated to see the level of change of ATS users in different aspects and plan to maintain the results. Specific results of intervention are described in Tables 2 and 3.

After intervention, staff in clinics conducted random urine samples. After having urine test results, all ATS users met separately to discuss with the staff about test results as well as reasons of positive and negative results. Result showed that many ATS users have very positive urine test results: 8 weeks of negative results; There are many ATS users, the first weeks of intervention still have positive results, but after participating in the intervention, receiving encouragement as well as being equipped with knowledge about ATS, so it reduces the use of ATS which demonstrated with negative results. However, some ATS users still have positive results. So, they need the maintenance step to keep interventions with ATS users who have positive result.

At each clinic, urine test results will be compiled based on the negative test results of ATS users in each week (Table 4).

**Table 2. Evaluation before intervention.**

<b>Dongda clinic</b>			
	<b>High/Serious</b>	<b>Medium</b>	<b>Low/Light</b>
ASSIST	-	15	-
DASS21	1 depression, 2 anxieties	-	-
Psychosis screener	6/15 ATS users have at least one sign of mental disorder		
<b>Kienan clinic</b>			
	<b>High/Serious</b>	<b>Medium</b>	<b>Low/Light</b>
ASSIST	-	15	-
DASS21	1 depression, 2 anxieties	-	-
Psychosis screener	1/15 ATS user has at least one sign of mental disorder		

Number 05 clinic			
	High/Serious	Medium	Low/Light
ASSIST	-	15	-
DASS21	2 anxieties	-	-
Psychosis screener	No sign of mental disorder		

**Table 3. Evaluation after intervention.**

Dongda clinic			
	High/Serious	Medium	Low/Light
ASSIST	-	12	-
DASS21	1 anxiety	-	-
Psychosis screener	1/15 ATS user has at least one sign of mental disorder		
Kienan clinic			
	High/Serious	Medium	Low/Light
ASSIST	-	14	1
DASS21	0	-	-
Psychosis screener	1 no sign of mental disorder		
Number 05 clinic			
	High/Serious	Medium	Low/Light
ASSIST	-	12	3
DASS21	0	-	-
Psychosis screener	No sign of mental disorder		

**Table 4. Urine test results (N=45).**

Number 05 clinic: (15 ATS users)	There were 4 ATS users who had results of (-) after 4 weeks and 10 ATS users had results of (-) for 7 weeks. Only 1 ATS user who had result of (+) after 7 weeks participating in the program. It is because he could not find job and get discrimination from his neighbour around.
Dongda clinic: (15 ATS users)	There were 3 ATS users who had result of (+) until the third week and there are 2 ATS users had resulted of (+) until the fourth week. Only one ATS user had result of (+) to the 7 <sup>th</sup> week: This ATS user is experiencing problems in family relationships (conflicts with his parents and often quarrelling with his wife), the ATS user himself did not have a stable job and still socialized with his friends.
Kienan clinic: (15 ATS users)	There were 4 ATS users who kept the results of (-) from the beginning to the end of the intervention. These ATS users are people with good determination and adherence to MMT treatment. There were 02 ATS users who have result of (+) in the first 2 weeks, after participating in the program, there has been marked improvement after they have been clean during the remaining 5 weeks of the program. Other ATS users with results (-) (+) interwoven, some ATS users keep clean for 1 week, but when friends invite them to go for birthday, for other events, or even they have family problems, they will continue to use ATS.

## Discussion

Most ATS users, in the beginning stage, are not ready for intervention. Based on the theory of stages of behavior change, if people are in the first stage (do not want to change), interventions are almost ineffective because they always think they are right [19]. Thus, helping them transition from the first stage to the next stage is very important. In this study, after MI intervention, the ATS users turned to the “Action” stage that means they are encouraged and ready to stop using ATS. This result shows that using MI is very effective and important for ATS users in the early stages.

Evaluation results show that addicts who still test positive for ATS after intervention often have many psychological problems such as: Family conflicts, stress, and mental health problems. According to Jorge, Barratt and Jhanjee, ATS users need to have more psychological intervention such as MI and MI-MET, combined with social interventions with family and community because these are the causes of the problem [14-16]. Research results show that it will help ATS users be aware of the problems they are facing as well as create motivation to help them change. In addition, this is also an effective tool to change mental health problems and negative behaviors [20].

ATS users also involved in social problems in their lives such as economic difficulties, discrimination from community, invited ATS using by friends. It could be seen that interventions for ATS users focus on the clinic while ATS user’s time is mostly spent in community and family. So, besides psychological intervention, they also need social intervention and support activities in the community [21]. Karoll suggested that those interventions should be conducted by social workers because they could provide well social services in communities and families for ATS users [22].

This study results show that the intervention results are not effective for some ATS users because they all have their own psychosocial problems. The psychosocial and social perspective shows that with the above problem, interventions should be designed to suit each ATS user [16].

Interventions need maintenance step (follow-up) because even though the ATS users have kept clean (without using drugs), they still need to be monitored and encourage maintaining the cleanliness [19]. For the maintenance, based on social work perspective, ATS users should

be referred to active groups, community actives and helped them to have job. It could help them to integrate better in community and family thus avoid drug [21,22]. There is also a need for the involvement of local authorities to make intervention more effective and sustainable [22-26].

## Conclusion

As analyzed above, the current problem of ATS addiction in Vietnam and in the world is a great concern to society. The complexity of this new addiction requires new and more comprehensive interventions including Medical, Psychological, and Social Intervention.

The results of the experimental study showed positive changes for ATS users when receiving psychological and social intervention. However, the limitations of experimental research also pointed out those interventions need more time, especially in the doing and following-up phases. Workers also need to be professionally and well trained. Furthermore, these officials need to have close cooperation with officials and social workers in the community. Only then will supporting ATS users bring the best results.

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**Corresponding author: Dang Quang Trung, Department of Social work, University of Labor and Social Affairs, Hanoi, Vietnam**

**E-mail:** [trungulsa@gmail.com](mailto:trungulsa@gmail.com)

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