



## Research article

**Methamphetamine abuse and educational level in Ahvaz**Farkhondeh Jamshidi<sup>1</sup>, Elham Mohammadi\*<sup>2</sup><sup>1</sup> Department of Forensic Medicine and Toxicology and Social Determinant of Health Research Center, Ahvaz Jundishapur University of Medical Sciences, Iran<sup>2</sup> Student Research Committee, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran**Corresponding author:** Elham Mohammadi, ✉

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Farkhondeh Jamshidi, Elham Mohammadi, 2016. Methamphetamine abuse and educational level in Ahvaz. Journal of medical pharmaceutical and allied sciences, V 6 - I 1, Pages -447 – 449. Doi: <https://doi.org/10.55522/jmpas.V6I1.0119>.**ABSTRACT**

Methamphetamine abuse is a worldwide problem that imposes substantial global public health and costly social burdens. Methamphetamine is a potent psychomotor stimulant drug with strong physiological effects on peripheral and central systems, resulting in both physical and psychological alterations. Educational level and changes in lifestyle and culture due to educational development can affect on addiction. So, the aim of this study is to assessment educational levels in patient addicted to Methamphetamine.

This epidemiological study started to assessment educational levels in patient addicted to Methamphetamine. In this study we evaluated 45 patients addicted to Methamphetamine. All patient that addicted to Methamphetamine that referred to Ahvaz Educational Hospitals entered to this study and educational levels of this patient was recorded. This patient signed agreement before entered to this study and it should be noted that in order to maintain confidentiality of patients, the file code is used rather than their names. In order to analyze the data using descriptive statistics including frequency tables, diagrams and numeric indices the variables will be described. Data analysis was done by SPSS Version 22 software. In this study 45 patients were evaluated, data showed that average age of this patient was  $37.25 \pm 10.63$  years. Mean age of Illiterate patients was  $58.00 \pm 0.0$ , Primary School patients was  $42.80 \pm 11.10$ , middle School patients was  $38.38 \pm 12.17$ , and High school patients was  $33.19 \pm 8.10$  and Higher Education patients was  $37.60 \pm 8.50$  (table 1). Also from 45 patients, one of them was Illiterate, 6 of them was Primary School, 16 of them was middle School, 17 of them was High school and 6 of them Higher Education. The highest prevalence of Methamphetamine addiction was observed in patients with a high school degree and then middle School. So, we suggest that more research and studying in patient with this level of education. Also, mean age of High school patients was  $33.19 \pm 8.10$  that show critical age that need to more attention.

**Keywords:** Methamphetamine, Addiction, Educational level.**INTRODUCTION**

In recent years, a manifest transition from the traditional pattern of opium use to impure methamphetamine use has been reported in the Iran. 1 decade ago, methamphetamine use was rare in this country. High purity and expensive methamphetamine were first imported from Southeast Asia. But after a few years, its production was illegally initiated with inexpensive ingredients in clandestine laboratories in Iran. This issue became a main reason for methamphetamine use in the Persian society. Methamphetamine (MA) (also known as 'ice' or 'crystal meth') is a psychostimulant drug with

significant abuse potential and neurotoxic effects that acts principally to cause central and peripheral release of monoamine. Methamphetamine abuse is a worldwide problem that imposes substantial global public health and costly social burdens. Methamphetamine is an addictive illegal psychostimulant according to last estimations from the United Nations Office on Drugs and Crime, consumed by between 14.3 - 53.1 million users in the worlds. Methamphetamine is the second most popular illicit drug world-wide, with an annual global prevalence estimated at 0.4%. Use of the drug is particularly common in Asia, Oceania and North America [1, 2].

Methamphetamine is a potent psychomotor stimulant drug with strong physiological effects on peripheral and central systems resulting in both physical and psychological alterations. Methamphetamine is notorious for its association with violent behavior and epidemics of use have been marked by rises in assaults and violent crime and case reports have implicated the drug in homicides. Methamphetamine is a potent CNS stimulator. As such, the clinical response to methamphetamine administration at low to moderate doses includes euphoria, reduced fatigue, arousal, euphoria, tachycardia, positive mood, hypertension, peripheral hyperthermia, pupil dilation, reduced appetite, short-term improvement in cognitive domains, behavioral disinhibition and anxiety. The results of the four decades of addiction prevalence in Iran show that in according to the size of the threat of drugs and psychotropic drugs and addiction prevalence and also the change of gender, matrimony, age, job and the level of addicts' education, less attention has been given to the drug abuse prevalence researches in public, youngsters, students and governmental and governmental non- officials. Among this several factors, one of the important factors in these patients is educational levels. Researchers believe that educational level and changes in lifestyle and culture due to educational development can effect on addiction. So, the aim of this study is to assessment educational levels in patient addicted to Methamphetamine [3].

#### MATERIALS AND METHODOLOGY

After obtaining approval from medical ethic committee of Ahvaz Jundishapur University of medical sciences, this epidemiological study started to assessment educational levels in patient addicted to Methamphetamine. In this study we evaluated 45 patients addicted to Methamphetamine. All patient that addicted to Methamphetamine that referred to Ahvaz Educational Hospitals entered to this study and educational levels of this patient was recorded. This patient signed agreement before entered to this study and it should be noted that in order to maintain confidentiality of patients, the file code is used rather than their names. In order to analyze the data using descriptive statistics including frequency tables, diagrams and numeric indices the variables will be described. Data analysis was done by SPSS Version 22 software [4, 5].

#### RESULTS AND DISCUSSION

In this study 45 patients were evaluated, data showed that average age of this patient was  $37.25 \pm 10.63$  years. Mean age of Illiterate patients was  $58.00 \pm 0.0$ , Primary School patients was  $42.80 \pm 11.10$ , middle School patients was  $38.38 \pm 12.17$ , and High school patients was  $33.19 \pm 8.10$  and Higher Education patients was  $37.60 \pm 8.50$  (table 1). Also educational levels of this patient divided into 5 groups: Illiterate, Primary School, middle School, High school and Higher Education. As shown on the table 2 and figure 1, from 45 patients, on 3 of them was Illiterate, 6 of them was Primary

School, 16 of them was middle School, 17 of them was High school and 6 of them Higher Education.

**Table 1:** Age of Patients

Educational Level	Mean	N	Std. Deviation
Illiterate	58.00	1	.
Primary School	42.80	5	11.100
middle School	38.38	13	12.176
High school	33.19	16	8.109
Higher Education	37.60	5	8.503
Total	37.25	40	10.638

**Table 2:** Frequency of educational levels in patients

Educational Level	Frequency	Percent
Illiterate	1	2.2
Primary School	6	13.3
middle School	16	35.6
High school	17	37.8
Higher Education	5	11.1
Total	45	100.0

Discussion and Conclusion: Methamphetamine, called meth, crystal, or speed, is a central nervous system stimulant that can be injected, smoked, snorted, or ingested orally; prolonged use at high levels results in dependence. Although MA was first synthesized in the late 1800s in Japan, it did not become widely used until World War II, when Japanese, United States, and German military personnel used it to combat fatigue and increase alertness. The past decade has seen a marked increase in the popularity of methamphetamine use, particularly crystalline methamphetamine use, through the world. Generally, acute MA use results in a number of effects on the sympathetic branch of the autonomic nervous system, including hypertension, tachycardia, hyperthermia, increased breathing rate, and constriction of blood vessels. The desired cognitive and emotional effects include euphoria, enhanced energy and alertness, feelings of increased physical and mental capacity, and a surge in productivity. Chronic Methamphetamine addiction or dependence can occur in a host of medical, psychiatric, and psychosocial concerns. Several cardiovascular effects from chronic MA use have been reported, including acute aortic dissection, pulmonary hypertension, myocardial infarction, and ischemic and hemorrhagic strokes. Also the change of gender, matrimony, age, job and the level of addicts education, less attention has been given to the drug abuse prevalence researches in public, youngsters, students and governmental and governmental non-officials. Among this several factors, one of the important factors in these patients is educational levels. Researchers believe that educational level and changes in lifestyle and culture due to educational development can affect on addiction. So the aim of this study is to assessment educational levels in patient addicted to Methamphetamine. As showed on the results section, educational

levels of this patient divided into 5 groups: Illiterate, Primary School, middle School, High school and Higher Education. The highest prevalence of Methamphetamine addiction was observed in patients with a high school degree and then middle School. So we suggest that more research and studying in patient with this level of education. Also, mean age of High school patients was 33.19.  $\pm 8.10$  that show critical age that need to more attention <sup>[6]</sup>.

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