

## A STUDY OF DRUG ABUSE IN MEDICAL STUDENTS: A CROSS-SECTIONAL STUDY

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**Abstract.** Objective: This study examines drug tendencies of medical science students.

Study Design: Cross-sectional study.

Place and Duration of study: 3 months in Kerman University of medical science

Materials and methods: This descriptive study was conducted on 413 (from 645) students, ages of 18-19 years old, of the colleges affiliated with Kerman University of Medical Sciences for 60 days from November 3, 2014, to January. 2, 2015. Data analysis was done by SPSS software version 21.

Results: Medical students had gained highest average score ( $12.26 \pm 2.68$ ) and management students had gained the lowest average score ( $10.40 \pm 2.31$ ) in the environmental dimension tendency toward drug addiction. The highest average of the total drug tendency was for laboratory non-continuous students (and the lowest average of the total tendency was for midwifery students ( $34.23 \pm 5.80$ )). May it could be because of their female gender. There is also a significant difference between the total score and the different dimensions of drug tendency in terms of field of study. Conclusion: The main cause of drug orientation among students is social dimension especially friends. The emphasis of families and Higher education officials is on choosing a good friend. Student justification provided by the Department of Cultural and Student Affairs Can be helpful.

**Keywords:** Drug Abuse, Addiction, Medical Sciences, Kerman.

## 1. INTRODUCCIÓN

One of the most serious dangers of this period is the tendency of adolescent toward drug. Addiction and drug abuse are the results of social and family factors (Le Bon O et al., 2004). Some studies have shown that drug use leads to the avoidance orientation, the confusion associated with alcohol and drug use and the difficulty in recovering from drug use (From Hayes S et al., 2015). Among the most commonly listed reasons for drug use between students the availability of drugs, the creation of sleep and relaxation, living in a dormitory environment, curiosity, family background, and academic pressure can be mentioned (Tarter RE et al., 2006).

In investigating the roots of social background in students who tend to be a drug user, factors such as age, smoking and alcohol, distance from the family, and participation in parties where families are not present can be listed (Barati M et al., 2011). According to health statistics, today there are 218 million addicts in the world; On average, 5 million people die every year because of drug use and due to drug abuse About 42 million people in the world become infected with AIDS (Wen T et al., 2016). In Iran, addiction growth is three times higher than population growth; the growth rate of addiction in Iran is about 8 percent annually while the country's population grows by about 1.2 percent every year, so the number of addicts grows 3 times more than the population per year (Walton Me et al., 2013). Accordingly, in countries such as Iran, which have a young construction and infrastructure young people are considered as an opportunity at the same time and they also considered as a threat. In terms of drug addiction as the youth population increases, the vulnerability of these communities (Iran) are also doubled (Adrom M et al., 2012).

Although harmful effects of tobacco use have been proven and the community expects health personnel to have a healthy lifestyle, Unfortunately, smoking is common among medical students, besides the nature of the discipline, the campus environment and living in a dormitory environment can have a significant impact on the educational development and personality of the individuals. On the one hand, it is believed that health care personnel are exposed to physical and psychological problems and they are susceptible to dependence on drugs such as morphine, pethidine, and analgesics (Tarter RE et al., 2006). Twenty-five percent of tobacco use has reported among medical students, and many have begun drug use since they enter the university. In the following years, their smoking has increased, so that among nursing

students reached 35% in the last years of studying (Berzonsky MD et al., 2005).

Considering the specific cultural and geographical situation of Kerman and considering that so far this issue has not been studied among the students of this university we decided to carry out a study entitled the relationship between styles of identity and drugs to use tendencies among students of Kerman University of Medical Sciences in 2014.

## 2. METHODS

This is a correlation research that is one of the types of descriptive research methods. This study conducted on 413 (from 645) students of the colleges affiliated with Kerman University of Medical Sciences for 60 days from November 3, 2014, to January. 2, 2015. The criteria for entering this study were also Newcomer of Kerman University of Medical Sciences in 2014 and were aged 18 and 19 years old. The statistical population includes 645 newcomer students of Kerman University of Medical Sciences. By using previous studies and using size formula and the sample was considered 413 people. And Data collection is quotas. The completion of the questionnaire was done by students in the form of student availability in the age group of 18-19 years old studying in 2014-2015; they are involved in Nursing and Midwifery, Management and Information, Health, Paramedical, Pharmaceutical, Medical and Dental Schools, Kerman University of Medical Sciences. After obtaining the referral, the college has been visited and the statistics and information have been obtained. After explaining about the research the relevant questionnaires were provided to the students who were available and due to justification by the investigator they are accepted to participate in the study; the questionnaire was distributed by the researcher himself in time other than the class hours, they were deprived of challenge and stress and by giving them appropriate time. The questionnaire has 16 questions and its overall aim is to measure the inclination of addiction from three social, individual and environmental dimensions in different individuals. The response to the questionnaire is as Likert, as indicated in the following table: in this way, in order to obtain the overall score of the questionnaire, we sum up the total score of all the questions. Obviously, this will have a range of 16 to 80. And as the higher the score, the greater the willingness of the person responding to addiction, and vice versa. This study was conducted with obtaining necessary permission from Kerman University of Medical

Sciences to collect information and attendees were allowed to enter and leave the research and they were given confidence in the confidentiality of the information and also their oral consent was obtained. Data analysis was performed by SPSS software version 21 using descriptive statistics (frequency, percentage, mean, standard deviation) and inferential tests (Pearson correlation coefficient, independent t-test, one-way analysis of variance due to the normal description of the data).

### 3. RESULTS

Age information of 413 participants was available. 60.6 percent of participants were 19 years old and 39.4 percent of them were 18 years old. According to the results most of the students (60.6%), are 19 years old and female. And in terms of marital status, the single ones (93.5%) have the highest rates. Among the dimensions of the tendency to addiction; the only mean score of environmental dimension was statistically significant ( $p < 0/0$ ). Overall score and other dimensions of addiction tendency were not statistically significant. Also, there was no significant difference between the total score and the dimensions of drug tendency in terms of age; Among the dimensions of drug tendency, only the mean scores of individual dimension in terms of dormitory showed a significant difference ( $p < 01/0$ ). Also, among the dimensions of drug tendency, only the mean percentile score of environmental dimension ( $p < 001/0$ ) and the total score ( $p < 001/0$ ) were statistically significant in Terms of Addiction in The Family.

Medical students had gained highest average score ( $12.26 \pm 2.68$ ) and management students had gained the lowest average score ( $10.40 \pm 2.31$ ) in the environmental dimension tendency toward drug addiction. And the students of anesthesiology had gained highest average score ( $9.5 \pm 4.5$ ) and management students had gained the lowest average score ( $6.77 \pm 2.10$ ) in the individual dimension tendency toward drug addiction. And the laboratory non-continuous students had gained highest average score ( $93.19 \pm 59.3$ ) and midwifery students had gained the lowest average score ( $15.16 \pm 84.3$ ) in the social dimension tendency toward drug addiction According to results, in the social dimension tendency toward drug addiction in the families of student the highest average score related to smoking ( $50.13 \pm 90.1$ ) and the lowest average score related to crack drugs ( $00.12 \pm 24.4$ ). in the individual dimension tendency toward drug addiction the highest average score related to crack drugs ( $9 \pm 21.0$ ) and the lowest average score

related to smoking ( $40.7 \pm 71.2$ ). in the social dimension tendency toward drug addiction the highest average score related to crack drugs ( $50.19 \pm 36.6$ ) and the lowest average score related to smoking ( $80.18 \pm 42.3$ ).

### 4. DISCUSSION

The mean and standard deviation of drug tendency among students of Kerman University of Medical Sciences showed drug inclination in students are moderately downward. The results of Reza Khani-Moghaddam's study as the comparison of drug use and its causes among students in Tehran showed The mean and standard deviation are in the downward level, which is in agreement with the present study (Rezakhani Moghadam H et al., 2013). The average dimension of drug tendency is the average of the individual, environmental and social dimensions Which indicates the extent of the tendency to addiction is at a weakly downward pace. And Social dimension has the most common causes towards addiction tendencies and the individual dimension has the lowest score in this study Which is consistent with the present study. The results of the study of Friedman et al. (2003) showed that among tendencies toward addiction the social tendency has the highest average which is consistent with the present study but in this study family dimension has the lowest average score (Friedman SR et al., 2003). Maybe for that reason, Friedman's research has not been done in Iran, the environment and the culture of the participants are different. In the individual dimension, the tendency of anesthesiology students towards drugs had the highest mean and standard deviation, while the tendency of management students had the lowest mean and standard deviation. Findings of the study by Mohammadi et al. (2013) on the frequency of drug abuse in Hamedan University of Medical Sciences students showed that the highest score in the individual dimension belonged to nutrition students, which is inconsistent with the results of the present study. This may be due to differences in nature of the field of study (Mohamadi N et al., 2012). In the social dimension, the tendency of laboratory sciences students towards drugs had the highest mean and standard deviation, while the tendency of midwifery students had the lowest mean and standard deviation. Findings of the study by Mohammadi on the frequency of drug abuse in Hamedan University of Medical Sciences students showed that the highest score in the social dimension belonged to midwifery students, which is in agreement with the findings of the present

study (Mohamadi N et al., 2012). Tendency towards drug among medical sciences students may originate from hard schoolwork, being uninterested in their field of study, and prolonged duration of study. Regarding the mean and standard deviation of tendency towards drugs in the families of students, the highest and the lowest mean values corresponded to cigarettes and crack, respectively. Consistent with the present study, findings of the study by Mohammadi et al (2008), which investigated the drug abuse frequency in Hamadan University of Medical Sciences students, showed that in the individual dimension, the most commonly-used drug is cigarettes. In the individual dimension of tendency towards drug, crack and cigarette had the highest and lowest mean scores, respectively. Similarly, in the social dimension, crack and cigarette had the highest and lowest mean scores, respectively. Findings of the study by Mohammadi et al (2008), which investigated the drug abuse frequency in Hamadan University of Medical Sciences students, showed that, in the social and individual dimension, crystal and crack abuse had the lowest mean and standard deviation, which is inconsistent with our findings. This may be due to the easy access to crack and crystal in the studied population (Din Mohammadi M et al., 2007). No significant relationship was found between drug use and the type of drug among students' families. Findings of the study by Mohammadi et al (2007), which investigated the drug abuse frequency in Hamadan University of Medical Sciences students, are inconsistent with the present study, which may be due to differences in research environment and culture (Din Mohammadi M et al., 2007).

### CONCLUSION

Considering the students' tendency to addiction, the help of families and the higher education authorities on selecting good friends and promoting students' awareness at the start of their education by cultural and student authorities of the university can be helpful. Non-resident students should be housed in on-campus facilities as much as possible, and these facilities should be equipped with amenities and recreational facilities to increase new students' willingness to live in dormitories so that they can tolerate being away from their families and have a lower tendency towards drugs. In order to reduce the tendency towards drugs, it is necessary to examine the underlying factors and mitigate them. A factor is person's identity formation, and if the identity of the person is vulnerable, the tendency towards drugs increases.

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