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Prevalence of Substance Abuse Among the Medical Students in Southern Iran.

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Abstract:

Introduction: Substance abuse is a serious problem .Incidence of substance abuse in Iranian students is high. The current study surveys of substance abuse in medical students in southern Iran.

Patients and Methods: From April 2008 to June 2009 in Iran, prevalence of substance use among 1000 Shiraz University medical students were assessed by a questionnaire based on DSM-IV.

Results: Overall 971 medical students completed the questionnaire. (54.8 %were males).. 22% of the male and 8% of the female students had a history of at least one episode substance abuse. The rate of substance abuse among the male students was significantly higher than females. (P value<0.05) The most important substance which was used was cigarette followed by water pipe.

Discussion: Overall prevalence of substance use among the medical students in Iran is lower than west. In this study prevalence of substance use was significantly higher among the males and such as the other studies in Iran cigarette, water pipe, Alcohol and opium, were the most prevalent substances which used.

Introduction:

Substance abuse is a serious problem that it interferes with an individual's physical and mental health. It also af-

fects on the individual social situation and responsibilities. The most common substances which are usually abused are alcohol, and tobacco.^(1, 2) Overall it is

clear that societies pay a significant cost. It is a health issue that requires effective policies to be managed⁽¹⁾ On the other hand; it has been shown that drugs abusers are usually suffering from different concurrent medical, psychological, and social pathologies.⁽²⁾

The prevalence of substance abuse in medical students may be different with the general population^(4, 13) Medical students are under pressure of heavy workload that may have negative impact on their mental health.⁽⁵⁾ For example, they may use drugs to overcome on their struggle with stress.^(5, 7)

Moreover, prevention of substance use as soon as possible in college students prevents some of the long term consequences of drug abuse.^(3, 8)

Incidence of substance abuse in Iranian students is high.⁽⁶⁾ it is gender related and the most common drugs are cigarettes, alcohol, and opium.^(6, 7)

The current study surveys prevalence and self reported motivations of substance abuse in medical students in southern Iran. The results may be beneficial for preventive programs planning

Methods:

For the purpose of the study we used a confidential questionnaire based on DSM-IV composed of a number of multiple-choice questions.⁽⁷⁾ The subjects were students of Shiraz University who were randomly selected in April 2009 to June 2009.

The students were free to select more than one choice .Special attention was paid to ensure that all the students clear-

ly understood the instructions about the questionnaire.

The students also asked not to write their name or any other symbol indicating their identity, and they were assured about their responses being kept confidential.

At the first part, the questionnaire asked for information on age, sex, marriage status and residence (with whom and household composition).

At the second part the questionnaire asked for drug use (cigarettes, alcohol, opium, heroin, cannabis) ever and in the 6 months prior to the survey.

The students were also asked about their reasons for taking the drugs for the first time and, the most important motivators and the reasons for continuing.

Revealed data was analyzed descriptively under the supervision of statistical specialist with SPSS 15.

Results:

Overall 971 medical students completed the questionnaire. (45.2 % (439) were females and 54.8% (532) were males) Mean age of the females was 20.7 and of males was 23.6.

87.4% (849) of the students were single and 11.8 % (114) were married. 0.8% (8) of the students were divorced. 35.6% (346) of the students lived with their family, 62.4% (606) of the students lived in the student dormitory and 2 % (19) of them lived alone. 84% (815) of the students hadn't any history of substance use. 156 of them (38 (24%) females and 118 (76%) males) had a history of at least one episode of substance usage.

The most important substance which was used was cigarette followed by water pipe Count and percentages of substance usage according to the kind of the substance among the students are summarized in table 1.

Table 1: count and percent of substance usage among the students according to the kind of the substance.

Substance	Count	Percent %
Alcohol	11	1.1
Cigarette	64	6.7
Water pipe	62	6.3
Pipe	3	0.3
Opium	2	0.2
Heroin	1	0.1
LSD	1	0.1
Cocaine	1	0.1
Cannabis	1	0.1
Grass	1	0.1
Morphine	2	0.2
Others	7	0.7
Total	156	16

22% of the male and 8% of the female students had a history of at least one episode substance abuse in this study. The rate of substance abuse among the male students was significantly higher than females. (P value<0.05)

The mean age of the beginning of the substance usage among the males and females was 19.3 years old and 18.9 years old respectively the difference was not statistically significant. (P value >0.05)

17% (145) of the single, 4% (5) of the married, 75 % (6) of the divorced had a history of at least one episode substance abuse. The rate of substance abuse was significantly lower among the married students. (P value< 0.05)

22% (131) of the students who lived in the student dormitory, 4% (14) of the students who lived with their families and 57% (11) of the students who lived alone had a history of at least one episode sub-

stance abuse. Rate of substance abuse among the students who lived with their family was significantly lower than other students. (P value<0.05)

12.5 % (122) of the students (5%of females and 19% of males) reported using of substances occasionally (at least once a month): cigarette (5.9%), water pipe (3.6%), alcohol (1.9%), opium (0.2%), LSD (0.1%), cocaine (0.1%), pipe (0.3%), morphine(0.1%) and others (0.3%), Some used or were using more than one substance.

8% (79) of the participants (3% of females and 12% of males) reported still using substances: cigarettes (3.4%), water pipe (1.1%), alcohol (0.3%), opium (0.1%), pipe (0.1%) and others (0.1%).

The most important motivator for beginning of the substance usage was curiosity among our students. Other motivators are summarized in table 2.

Table 2: The most important motivators for beginning the substance usage among the students.

The most important motivators	Count	Percentage
Coping of others	15	9.6
Curiosity	93	59.7
Seeking pleasure	30	19.2
Release of tension	14	8.9
Release of depression	2	1.3
Others	2	1.3
Total	156	100

Necessity (82, 52.4%) is the most important cause of continuing the substance abuse among the students in this study. Habitual usage (23, 14.7%), seeking pleasure (19, 12.1 %), release of tension (16, 10.4%), release of depression (12, 7.7%) and others (4, 2.7%) were the

other causes of continuing the substance abuse in this study.

Conclusion:

Overall prevalence of substance use among the medical students in Iran is significantly lower than west.^(10, 12)

Everett SA et al in the study about Smoking initiation and smoking patterns among American college students reported that 70% of American college students had tried smoking⁽¹⁴⁾

Singh et al. showed that 7 out of 10 undergraduate students had used drugs in the past (the commonest was alcohol (58%))⁽¹⁵⁾

In the other study Daughton et al. showed that 84% of high-school seniors reported history of alcohol use⁽¹⁶⁾

Khan N⁽¹⁷⁾ studies on Substance use among rural secondary school in Zimbabwe showed that alcohol was the commonest (34.9%) substance in this area

In the current study, our results show that overall only 16% of the students in this study had any history of substance usage which was lower than the previous study conducted in the Islamic Republic of Iran, it was reported that about 24% of students had used at least one drug at least once in their life, and 75% had never used drugs⁽¹⁸⁾

Alcohol consumption among the Iranian medical students was significantly lower than west which can be because of Islamic prohibition of the use of alcohol.

In this study such as other studies, prevalence of substance use was significantly higher among the males. The most prevalent substance among the Iranian

medical students is different with the most prevalent substance in the west. In this study as the other studies in Iran, Alcohol, opium and cigarette were the most prevalent substances which used among medical students, but the results of this study showed that water pipe is another substance which used prevalent among medical students.^(6, 7, 9, 11)

Such as Ghanizadeh A study at 2001⁽¹³⁾ Curiosity and usage of drugs to find out what it was like, was the most important cause of beginning of the substance use in this study while in the other study which was done at 2004 by Ahmadi et al Pleasurable purposes was the major reasons for substance use among the medical students in Iran.⁽¹⁰⁾

Prevalence of substance use was significantly lower in the married students in this study. Moreover the students who lived with their family had lower rate of substance use.

In this study the results suggest the protective effect of marriage and living with the family for substance use in the medical students in our society

Although the results of this study is different from the west but there are some overlaps. Cultural attitudes have important effects on type and pattern of substance usage. These findings can be considered when planning preventive and therapeutic program. According to these results we can plan preventive programmes more effectively.

References:

1. Monroe T, Addressing substance abuse among nursing students: development of a prototype alternative-to-dismissal policy. *J Nurs Educ.* 2009 May; 48 (5): 272-8.
2. Ndetei DM, Khasakhala LI, Mutiso V, Ongecha-Owuor FA, Kokonya DA., Psychosocial and health aspects of drug use by students in public secondary schools in Nairobi, Kenya. *Subst Abus.* 2009 Jan-Mar; 30 (1): 61-8.
3. Cerame G, Meli V, Vitale F, Firenze A, Viviano E, Mazzucco W et al; A study to evaluate the lifestyle of medical students in Palermo (Italy), *Ig Sanita Pubbl.* 2008 Jul-Aug; 64 (4): 469-84.
4. Nadelson CC, Notman MT, Preven DW. Medical student stress, adaptation, and mental health. In: Scheiber SC, Doyle BB, eds. *The Impaired Physician.* New York, NY: Plenum Book Co; 1983:75-93.
5. Yousafzai AW, Ahmer S, Syed E, Bhutto N, Iqbal S, Siddiqi MN et al; Well-being of medical students and their awareness on substance misuse: a cross-sectional survey in Pakistan, *Ann Gen Psychiatry.* 2009 Feb 19; 8: 8.
6. Mohammadpoorasl A, Fakhari A, Rostami F, Vahidi R., Predicting the initiation of substance abuse in Iranian adolescents, *Addict Behav.* 2007 Dec; 32 (12): 3153-9. Epub 2007 Aug 6.
7. Ahmadi J, Hasani M. Prevalence of substance use among Iranian high school students. *Addict Behav.* 2003 Mar; 28 (2): 375-9.
8. Ahmadi J, Fallahzadeh H, Salimi A, Rahimian M, Salehi V, Khaghani M et al Analysis of opium use by students of medical sciences, *J Clin Nurs.* 2006 Apr; 15 (4): 379-86.
9. Jodati AR, Shakurie SK, Nazari M, Raufie MB, Students' attitudes and practices towards drug and alcohol use at Tabriz University of Medical Sciences, *East Mediterr Health J.* 2007 Jul-Aug; 13 (4): 967-71.
10. Ahmadi J, Maharlooy N, Alishahi M, Substance abuse: prevalence in a sample of nursing students, *J Clin Nurs.* 2004 Jan; 13 (1): 60-4.
11. Da Silveira DX, Rosa-Oliveira L, Di Pietro M, Niel M, Doering-Silveira E, Jorge MR, Evolutional pattern of drug use by medical students, *Addict Behav.* 2008 Mar; 33 (3): 490-5. Epub 2007 Oct 24.
12. Kenna GA, Wood MD, Substance use by pharmacy and nursing practitioners and students in a northeastern state, *Am J Health Syst Pharm.* 2004 May 1; 61 (9): 921-30
13. Ghanizadeh A. Shiraz University students' attitude towards drugs: an exploratory study. *East Mediterr Health J.* 2001; 7 (3): 452-60.
14. Everett SA, Husten CG, Kann L, Warren CW, Sharp D, Crossett L. Smoking initiation and smoking patterns among US college students. *Journal of American college health,* 1999, 48 (2): 55-60.
15. Singh G, Singh RP. Drugs on a medical campus I. Drug use among medical undergraduates. *Drug and alcohol dependence,* 1979, 4 (5): 391-8.
16. Daughton JM, Daughton DM, Patil KD. Self-recognition of alcohol and cigarette dependency among high school seniors. *Perceptual and motor skills,* 1997, 85 (1): 115-20.
17. Khan N, Arnott R. Substance use among rural secondary school in Zimbabwe: patterns and prevalence. *Central African journal of medicine,* 1996, 42 (8): 223-9.
18. Merchant NM, Pournadeali E, Zimmer SP, Ronaghy HA.. Factors related to drug abuse among Iranian university students. *Pahlavi medical journal,* 1976, 7: 516-28.