## Opiate and Alcohol abuse and related factors in Yasouj University of Medical Sciences (south of Iran)

Hashemi Mohammad Abad Nazir 1, Zadeh-Bagheri Ghader 2- and Ghafarian Shirazi Hamid Reza<sup>3,4\*</sup>

Department of Psychiatry, Faculty of Medicine, Yasouj University of Medical Sciences, Yasouj, Iran. <sup>2-</sup> Department of Psychiatry, Faculty of Medicine, Yasouj University of Medical Sciences, Yasouj, Iran. <sup>3-</sup> Research Center of Social Factors Affecting Health, Faculty of Medicine, Yasouj University of Medical Sciences, Yasouj, Iran, <sup>4-</sup> school of public health, Tehran University of Medical sciences, Tehran Iran. \*corresponding author. nazir.hashemi@gmail.com

**Abstract: Introduction:** Substance abuse is a major concern all over the word and among medical students and physicians should be taken more seriously. **Materials and methods:** samples were selected by randomized systematic sampling of all students of Yasouj University of medical sciences. Sample size was estimated 215 students. Data were collected using questionnaire prepared by researchers. **Result:** 30 (13.95%) of 215 students had usage of alcohol, 14 (6.5%) had usage of opium with inhalation method, 3 (1.39%) had usage of morphine and 2 (0.93%) had usage of heroin with inhalation method, with significant male and single predominance. **Conclusion:** There is substance abuse in medical students with high usage rate and most intuition factor is seeking pleasure. Hashemi Mohammad Abad Nazir, Zadeh-Bagheri Ghader and Ghafarian Shirazi Hamid Reza.. *Life Sci J* 2012;9(3):1195-1198]. (ISSN: 1097-8135). <a href="https://www.lifesciencesite.com">http://www.lifesciencesite.com</a>. 168

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### **Introduction:**

Substance abuse is a major concern all over the word and potentially holds a number of negative implications for the health. Different factors affect epidemiology of substance abuse (1).

Substance abuse among medical students and physicians should be taken more seriously because their own attitudes towards substances may influence their professional behavior (2).

Two of substance abuse that publicly despised and prohibited by law and religion in Iran are opiate and alcohol. There is anecdotal report of substance abuse with very wide range in Iran. Mohammad Poorasl et al., from Tabriz, a province of Iran, reported 12.7% Of students have ever used alcohol and 2% have used illicit drugs. The reasons for substance abuse were older age, having self injury and high socioeconomic class for use of alcohol (3). Ahmadi et al., from Shiraz, a province of Iran, reported 30% of high school students had usage of substance: alcohol 9.6%, opium3.5%, heroin 2% and morphine 0.8%. The most common reasons for substance abuse were seeking pleasure and release of tension (4). Ahmadi et al., in another report of nursing students reported 27.3% had usage of substances: opium 8.5% and alcohol 5.8%. The major reasons for usage of substance were pleasure purposes, habit and decrease tension (5). Ziaaddini H et al., from Kerman, a province of Iran, reported opium abuse was the most frequent substance abuse (17.1%), any one consumed alcohol and there was no injection. Drug abuse in male is more than female (6). In another report from Kerman by Nakhaee et al., the

most common substance abuse among male was alcohol 11.4%, the most common substance abuse among female was sedative tablets 12.2% (7). Alizade et al., from Kurdistan, a province of Iran, reported: substance abuse among medical students was: alcohol 17.1, opium 4.8% and heroin 0.7%. The most common motivation for opium use was Curiosity and the most common reason for alcohol and heroin use was pleasure. Drug abuse in male is more frequent than female (8). Momtazi et al., From Zanjan, reportd: alcohol and opium are one of the most frequently used illicit drugs between Zanjan University. Alcohol use with a lifetime rate of at least 9.9%, opiate use - mostly opium - was between 1.2% and 8.6%. Substance abuse could be due to role modeling by parents mainly fathers, also cultural tolerance of some substances and Early onset of tobacco smoking. It is necessary to design and implement drug prevention programs to protect them

Epidemiology of opiate and alcohol and related factor are vary in other part of the word for example in USA opioids are commonly administrated for the treatment of moderate to severe pain and are among the most widely prescribed drugs, while these drugs have an essential role in pain management. Opioids regularly used in us population were 2% and at previous week were 5%. Pain dominated the reasons reported for opioid use (10). In the United States: among university students, the prevalence rates of lifetime alcohol use 84.7% (1). Drinking and smoking among 15- and 16- year- old in the UK, 94% had at some time consumed alcohol. Living in single-

parent family, lack of constructive hobbies, presence of psychiatric symptoms, and an aggressive outgoing delinquent lifestyle bore the strongest association with use of alcohol and illicit drugs (11 and 12). The prevalence of current drinkers of alcohol has risen over the period, to 82.5% among western students of Irish University in 2002. Findings show a marked increase in alcohol and drug consumption between 1973 and 2002. Missing study, more sexually involved and getting into a physical fight or argument, stress and high anxiety, personality traits were implicated in alcohol consumption (13). 86% of the students of Leeds University drank alcohol and among those who drank, a high proportion (52.6% of the men and 50.6% of the women), exceeded the recommended weekly limit of alcohol consumption of 21 units for men and 14 units for women per week (14). Nearly half of the Turkish medical students (46%) were alcohol-drinkers, risky alcohol use was 7.4%. Alcohol was the most frequently used substance in both groups (male and female). Senior students are more likely to use alcohol than junior students. Only 4% of students reported using illicit drugs at least once in their lifetime. 25.5% of the students had anxiety and 36.8% had depression (2). There was an increase use of illicit drugs between students of Brazil University, especially among male's students in the early undergraduate years. Lifetime prevalence of alcohol use was 94.8% and previous 12 months was 85.7% and lifetime prevalence of opiates use was 1.9% and previous 12 months was 1.4%. There was no significant gender difference between them (1).

Therefore, due to publicly despised and prohibited by law and religion of opium and alcohol in Iran, and there is no any report of substance abuse drug in Yasuj province, this is the purpose of this research.

# Materials and methods:

**Subject**: samples were selected by randomized systematic sampling of all students of Yasouj University of medical sciences (214 medical students, 167 under graduate students, 274 Resourceful students).

**Sample size**: based on purpose and type of study with considering sampling error ( $\alpha$ =0.05), conservative rate value of drug abuse (p=0.50),

maximum error estimation (d=0.1) and taking 2 level for categorical sampling, sample size was estimated 215 students.

Collecting data instruments: data were collected using questionnaire prepared by researchers for purposes of this study; the questionnaire contains 50 questions in two parts. Parts one include demographic data and part two include related questions to drug abuse. Its validity confirmed by specialist. Its reliability calculated by  $\alpha$ -Kranbakh method ( $\alpha$ =0.74).

Students were free to answer in any way or no answer to some questions. A "ballot box" placed in front of the salon entrance ensured anonymity.

**Data analysis:** Collected data were analyzed by SPSS version 17, percents, central, Dispersion indices and tables were used for descriptive study and appropriate test use for analytics.

### **Results:**

Among 215 participants, 126 (58.6%) students were male and 89 (41.4%) were female. 161(74.9%) were single and 54 (25.1%) were married. 39 (18.0%) were medical students, 90 (42.0%) were undergraduate students and 86 (40.0%) were resourceful students. their age were between 19-35 years with mean SD (21±2.8). Among 215 students, 49 (22.8%) had substance use: 30 (13.95%) had usage of alcohol, 14 (6.5%) had usage of opium with inhalation method, 3 (1.39%) had usage of morphine and 2 (0.93%) had usage of heroin with inhalation method. Among 49 students with substance usage, 31(63.2%) were male and 18(36.7%) were female. Among 215 students, the most opiate and alcohol abuse were between medical students and the lowest between undergraduate students. Using per year was the most patterns and daily use was the lowest [Table 1 and 21.

The most intuition toward substance abuse by their self were seeking pleasure (more than 50%), socializing with unsavory friends (25%), educational problem (8.3%), psychiatry disorder (5.7%), social problem (6%), economical problem (5%).

The most source of taking information about substance were radio and TV (45.1%), study of journal (27%), conversation with friends (22.4%), study of newspaper (4.6%).

**Table 1: Demographic characteristics of Participant students** 

No.	single	married	medical student	under graduate student	resourceful student

male	126(58.6%)	96(44.6%)	30(14.0%)	18(8.0%)	56(26.0%)	52(24.0%)
female	89(41.4%)	65(30.2%)	24(11.1%)	21(10.0%)	34(16.0%)	34(16.0%)
total	215 (100%)	161(74.9%)	54(25.1%)	39(18.0%)	90(42.0%)	86(40.0%)

Table 2: distribution of studied students with abused and their related factors

	alcohol	opium	morphine	heroin	total
male	17(54.0%)	9(29.0%)	3(9.6%)	2(6.4%)	31(100%)
female	13(72.2%)	5(27.7%)	-	-	18(100%)
single	22(59.4%)	10(27.0%)	3(8.1%)	2(5.4%)	37(100%)
married	8(66.6%)	4(33.3)	-	-	12(100%)
daily	5(50%)	2(20%)	2(20%)	1(10%)	10(100%)
sometimes per month	10(58.8%)	5(29.4%)	1(5.8%)	1(5.8%)	17(100%)
sometimes per year	15(68.1%)	7(31.8%)	-	-	22(100%)
medical student	7(58.3%)	3(25%)	1(8.3%)	1(8.3%)	12(100%)
undergraduate student	10(62.5%)	5(31.2%)	1(6.2%)	-	16(100%)
resourceful student	13(61.9%)	6(28.5%)	1(4.7%)	1(4.7%)	21(100%)

#### Discussion:

This study shows 22.8% of Yasouj University of Medical students had substance use. 13.95% had usage of alcohol and 8.8% had usage of opiate, with significant male and single predominance. This ranges of alcohol usage approximately the same as Kurdestan University, as but more than Kerman, Zanjan, Shiraz and Tabriz Universities (some Universities of Iran). This rate of alcohol usage is very lower than USA, UK, Turkish, Brazil, Irish and Leeds Universities. Therefore usage of alcohol in Iranian Universities is very lower than European and American countries, may be due to prohibition by religious and law.

The opium usage in this study by students of Yasouj University of Medical sciences lower than Kerman University but approximately the same as Zanjan and Shiraz Universities and more than Kurdestan and Tabriz Universities( some universities of Iran). This rate of opiate usage is more than USA, UK and Brazil. Therefore usage of opiate in Iranian Universities is more than European and American countries may be due to prohibition by religious and law.

Male predominance usage of alcohol and opiate is the result of this study, approximately the same as other Iranian Universities and opposite to European American countries. This result may be due to social and cultural idea of male predominance, because male is responsible for all thing of family e.g. income, having house, having car, welfare, safe, security and etc in Iran.

Some related factor to alcohol and opiate usage in this study is the same as other study in Iran, Turkish,

UK, Irish Universities e.g. seeking pleasure, educational problem and psychiatry disorder, but in USA the most related factor is treatment of pain. These results shows radio, television, journal and newspaper had the most effect on the Iranian students lives, so planning preventive and therapeutic program is considered in their program.

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### Refrences:

- 1- Galduróz J.C.F., Noto A.R., Nappo S.A. and et al. Drug consumption among medical students in São Paulo, Brazil: influences of gender and academic year. Braz J Med Biol Res. 2004; 37(4):523-531.
- 2- Akvardar Y., Demiral Y., Ergor G. et al. Substance use among medical students and physicians in a medical school in Turkey. Soc Psychiatry Psychiatr Epidemiol. 2004;39(6):502-6.
- 3- Mohammad Poorasl A. Vahidi R. Fakhari A. et al. Substance abuse in Iranian high school students. Addictive Behaviors. 2007; 32(3): 622-627.
- 4- Ahmadi J., Fallahzadeh H., Salimi A. et al. Analysis of opium use by students of medical sciences. Journal of Clinical Nursing. 2006; 15: 379-386.
- 5- Ahmadi j., Saxby Pridmore S., Alimi A., et al. Epidemiology of Opium Use in the General

- Population. The American Journal of Drug and Alcohol Abuse. 2007; 33(3): 483-491.
- 6- Ziaaddini H., Ziaaddini MR. The Household Survey of Drug Abuse in Kerman, Iran. Journal of Applied Sciences. 2005; 5 (2): 380-382.
- 7- Nakhaee N., Ziaadini H., Karimzade A. Epidemiologic study on drug abuse among first and second grade high school students in Kerman. Addiction and health. 2009; 1(1): page.
- 8- Alizadeh NS., Moghadam M., Mohsenpour B. et al.Prevalence of substance abuse in medical students of Kurdistan University. Scientific Journal of Kurdistan University of Medical Sciences. 2008; 13(48):18-26.
- 9- Momtazi S., Rawson R. Substance abuse among Iranian high school students. Curr Opin Psychiatry, 2010; 23(3):221-226
- 10- Kelly JP., Cook SF., Kaufman DW., et al. Prevalence and characteristics of opioid use in the

- US adult population. Pain. 2008;\_138(3): Pages 507-513.
- 11- Miller P. and Plant MA. Drinking and smoking among 15-and 16-year-olds in the United Kingdom: a re-examination. Journal of Substance Use. 2001, 5(4): 285-289.
- 12- Miller P and Plant MA. Truancy and perceived school performance: an alcohol and drug study of UK teenagers. Alcohol Alcoholism. 1999; 34(6):886-93.
- 13- Bolanda M., Fitzpatricka P., Scallana E., et al. Trends in medical student use of tobacco, alcohol and drugs in an Irish university. Drug and Alcohol Dependence. 2006; 85(2):123-128.
- 14- Pickard, M., Bates, L., Dorian, M. and et al. Alcohol and drug use in second-year medical students at the University of Leeds. Medical Education 2000; 34(2): 148-150.

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