

## **Knowledge and attitude of dormitory students of Shahid Beheshti University of medical sciences about substance abuse in 2013**

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### **ABSTRACT**

The increase in substance abuse among youths and its complications form one of the most pressing health problems among students as an important and vulnerable group in society. The purpose of this study is to assess the knowledge and attitude of dormitory students of Shahid Beheshti University of medical sciences regarding substance abuse in 2013. This is a descriptive-analytic cross sectional study carried out on dormitory students of Shahid Beheshti University of medical sciences regarding substance abuse in 2013. 604 male and female students living in the dormitories were selected via random sampling. Data were collected using a questionnaire developed by the researcher based on the questionnaire used by Dehghan, and on a review of relevant literature and expert opinion obtained from professors of the field. Data were analyzed by SPSS16 using descriptive and analytical tests (Pearson correlation, T-test and chi-square). The mean score of knowledge of dormitory students at Shahid Beheshti University of Medical Sciences was  $9.86 \pm 2.13$ . Most students (65.6%) had moderate knowledge about drugs. The subjects' mean score on attitude was  $61.99 \pm 10.10$ . Most students (58.3%) had moderate positive attitudes towards drugs. Students are considered as major assets of a country. Therefore, planning and developing intervention strategies to prevent and reduce substance abuse among university students is essential and plays a major role in improving their health.

**Key words:** Knowledge; attitude; students; substance

### **INTRODUCTION**

Patterns of substance abuse among young people can be a useful indication of this potential problem among adults in the future [1, 2]. Taking a realistic look at the issue of drug addiction, we find that the use of opioid drugs has existed for centuries, so that now a lot of men and women, especially from adolescence to middle age, take drugs and are dependent on it [3]. Substance abuse among adults typically begins in adolescence or early adulthood [4]. It is one of the most important social damages that not only endangers the health of the individual and the community but also leads to mental and moral

deterioration [3]. Substance abuse refers to a maladaptive pattern of substance use leading to adverse outcomes and frequent complications including cognitive, behavioral and psychological symptoms [5]. Drug addiction is a major problem in developing countries. Since these countries have a young population, they are at a greater risk in this regard. The youth as the most important and most vulnerable group are at higher risk among other groups of the society [6]. Drug and alcohol use among young people can lead to serious damages to their health and quality of life. There is so much concern about this. Therefore, there are many concerns in this respect [7]. A

number of factors, including poverty, family problems, marital conflicts, improper role models for assimilation and unemployment increase the tendency to addiction [3]. The increase in substance abuse among young people and the variety of drugs available and their side effects form one of the most pressing health problems in young people [8]. Like other young people, students are not immune from this problem [9].

Tendency to use stimulants or narcotics among young students who live away from their family – in student dormitories – is caused by low and inadequate recreational facilities, distance from family, lack of emotional support and other problems [10]. The effects of addiction is important in that its serious consequences are not confined to addicts, but usually families, friends and colleagues are also exposed to its destructive effects [6]. The effects of substance abuse in students are deep and sometimes fatal. These include: physical trauma, illegal activities, poor academic performance, high-risk sexual behaviors and high costs to the environment [9].

However, while addiction is referred to as the increase in demands for a substance resulting from physiological and psychological changes in the person, it should be noted that the first step is the result of the individual's subjective assessment of substance abuse. Therefore, while the information and knowledge about addiction and substance abuse is not low, it seems that victims, including students, do not have enough scientific and accurate knowledge and attitudes towards it [11].

A study carried out at Indiana University in the US showed that students have high knowledge and low attitudes towards smoking [12]. According to the National Institutes of Drug Abuse, 86 % of American students used alcohol during their lifetime, 81.7 % used alcohol in the last year and 66.2 % used alcohol in the past month. These figures were 50.7, 33.7 and 19.3 % respectively for cannabis and 12.9, 4.4, and 1% for ecstasy. In this report, 35.2 % smoked in the last year and 22.5% smoked in the last month [13].

In different studies, substance abuse is highly variable among students [12]. In Taremian's study on students in Tehran, prevalence of abuse was 17% for alcohol, 3.2% for opium, 2.2% for

cannabis and 0.7 % for ecstasy [14]. The exact prevalence of this problem among students of Medical Sciences is unclear, though some studies have reported different levels of 20 to 40% for the prevalence of substance abuse among Medical Sciences students in Iran [6].

The rapid spread of substance abuse among students and the related problems and availability of laboratory drugs like methamphetamine and its adverse consequences like educational discouragement, educational failure, physical and mental diseases, suicide, careless driving, destruction of public property, aggressive behavior, identity crisis and risky sexual behaviors [15, 16] are reasons that make it necessary to plan and develop preventive intervention strategies for university students to improve their attitude and knowledge in this regard. Given what said above, and the point that a person's attitude plays an important role in development of his/her personality and stability of their behaviors [17], the purpose of this study is to assess the knowledge and attitude of dormitory students of Shahid Beheshti University of medical sciences regarding substance abuse in 2013.

#### **Materials and Methods**

This is a descriptive-analytic cross sectional study carried out on dormitory students of Shahid Beheshti University of medical sciences regarding their attitude and knowledge about substance abuse in 2013. 604 students (299 male and 365 female ) with a range of 18 to 45 years who had been living in the dormitories for more than 6 months were selected via random sampling. Data were collected using a questionnaire developed by the researcher based on the questionnaire used by Dehghan et al [6], and on a review of relevant literature and expert opinion obtained from professors of the field. The content validity and reliability of the questionnaire was confirmed based on comments of ten faculty members with Cronbach's alpha of 0.84. The questionnaire included 7 questions on demographics, 11 multiple-choice questions on knowledge (1 point for the correct answer and 0 for other choices), and 17 multiple-choice questions on attitude (based on the Likert scale with a score of 5 for strongly disagree and 1 for strongly agree).

The questionnaires were administered after necessary coordination with officials of

dormitories, description of the research objectives and explanation of the research for students. In addition, questionnaires were collected using sealed boxes to reduce potential bias. Then, the data collected were analyzed using SPSS16 via descriptive and analytical tests (Pearson correlation, T-test and chi-square).

## RESULTS

The sample of 604 dormitory students of Shahid Beheshti University of Medical Sciences included 62.9 % (N=380) female and 37.1 % (N=224) male. 92.9 % of the participants were single and others were married. Their ages ranged

between 18 and 45 years and the most frequent age was 21 years old (20%). The mean age of students participating in this study was  $22.16 \pm 2.97$ . 67.5 % (N=408) had lived in the dormitory for more than one year and less than four years. Regarding education, 40.6 % (N = 245) had BA, 8.8 % (53 students) had MA, 45.9 % (N=277) were GP and 4.8 % (N = 29) had PhD degrees. Students of the School of Medicine constituted the largest number of participants (over 30%) in this study followed by Dentistry school with 17.5%, and Health school with 11.9 % (Table 1).

**Table 1.** Frequency of subjects according to gender, marital status, age, duration of residence in the dormitory, education and faculty

Variable		Frequency	Percentage
Gender	Male	224	37.1
	Female	380	62.9
Marital Status	Single	561	92.9
	Married	43	7.1
Age	18-20	177	29.3
	21-24	338	56
	Over 25	89	14.7
Duration of residence	More than 25	140	23.2
	one year and less	408	67.5
	More than one year to four years	56	9.3
	Over four years	245	40.6
Education	BA	53	8.8
	MA	277	45.9
	GP	29	4.8
	PhD and resident	72	11.9
Faculty	Public Health	184	30.5
	Medicine	66	10.9
	Nursing and Midwifery	29	4.8
	Para Medicine	71	11.8
	Nutrition	32	5.3
	Pharmacology	44	7.3
	Dentistry	106	17.5

**Table 2.** Frequency distributions and mean scores of students' knowledge by gender

Knowledge score	Male		Female	
	Number	Percentage	Number	Percentage
Poor (less than 8)	42	18.8	31	8.2
Moderate (8-11)	141	62.9	255	67.1
Good (more than 11)	41	18.3	94	24.7
Total	224	100	380	100
Mean	9.52		10.07	
SD	2.35		1.97	

**Table 3.** Frequency and percentage of subjects' attitude scores

Attitude scores	Frequency	Percentage
Good	226	37.4
Moderate	352	58.3
Weak	26	4.3

The score of awareness scale ranges from 1 to 14. The score of 7 or less is considered as poor, 8 to 11 as medium and more than 11 as good. Those who answered correctly to all questions in this part obtained the score of 14. The mean score of students' knowledge was  $9.86 \pm 2.13$ . The mean score of female subjects (10.07) was more than that of males (9.52). Most students (65.6%) had moderate knowledge about drugs (Table 2). In the attitude scale, a score of 44 or less was considered as poor, 45 to 65 as moderate, and higher than 65 as good. The subjects' mean score on attitude was  $61.99 \pm 10.10$ . Most students (58.3%) had moderate positive attitudes about drugs. The mean score of females (63.41 %) was higher than that of males (59.58 %) (Table 3). The prevalence of substance abuse among students was 15.4 percent. This figure was 34.4% for males and 4.2 % for females (Table 4).

## DISCUSSION

The purpose of this study was to assess the knowledge and attitude of dormitory students of Shahid Beheshti University of medical sciences regarding substance abuse in 2013. Most subjects (62.9%) were females. This was predictable considering that most students accepted in Iranian universities in recent years have been female [17]. 84.6% of students did not have the experience of taking any kind of substance. It is expected since the majority of students were female. Piko found that girls were more concerned about social effects of smoking than boys resulting in lower smoking rates among girls than boys [18]. Fayaz Bakhsh et al showed that male students used all forms of tobacco more than female students [19]. In Reza-Khani et al's study, the prevalence of substance abuse among students of Tehran University of Medical Sciences was reported as 33%. This result is consistent with the prevalence of substance abuse in male subjects in this study but is different from the total prevalence [20]. Higher prevalence of substance abuse in males

**Table 4.** Frequency and percentage of subjects' substance abuse

Substance abuse	Frequency	Percentage
Yes	93	15.4
No	511	84.6
Total	604	100

can be due to their higher freedom level in family and society, easier access to substances, and higher psychological pressure levels. Lower prevalence of substance abuse in females can be due to higher levels of parental control for them and their perception of specific cultural and social behaviors acceptable for women in our society [21].

Most students in this study (32.3 %) had smoker friends. In Piko's study, 40% of smokers participating in the study had a smoker friend [18]. The results of a study by Seyed Fazel Pur indicated that about 20% of students had smoker friends, 25% had smoker parents and 4% had smoker wives [17]. Interaction and friendship with peers addicted to drug abuse is the most important factor affecting abuse of stimulant substances. The intensity of its effect depends on people's life style. It is a strong risk factor for prevalence of addiction in adolescents and young adults. Approximately 60% of first substance abuse occurs after offering by friends [22]. Students at this age level are more influenced by peer pressure regarding substance abuse. Teaching refusal skills when dealing with peers plays an important role in preventing substance abuse. Several studies in this area have emphasized with peer pressure [22, 23].

In this study, the substances used by the subjects included 30.7 % cigarette and 29.3% tobacco (hookah). The findings of a study entitled investigation of knowledge, attitudes and performance of students at Tehran University of Medical Sciences toward smoking showed that tobacco (hookah) was used the most followed by cigarette [19]. Atwoli's study in Kenya showed a prevalence of 51.9 % for alcohol and 42.8 % for smoking [24]. However, studies by Rezakhani [20], Dehghan [6], Taremiyan [14] and Taraqi Jah [25] reported the highest prevalence rates for smoking and tobacco use. In general, these differences can be due to use of different questionnaires, methods of data collection and

sampling methods as well as the change of consumption patterns among students.

In many studies in other countries, alcohol use among students is significantly higher than its use in our country [24, 26, 27]. This can be due to Iranian's religious beliefs and unlawfulness of alcohol use in Islam. 37 % of students who used drugs had at least one smoker family member. This is consistent with findings of Karimi et al [28]. Also, according to researchers, smoking by family members increases the risk of adolescents' smoking [29, 30]. Family is the first social environment for a person and is an important institution affective in socialization and transmission of the values to members [28]. In this study, More than 90 % of students had moderate and good attitude towards drugs, i.e. they believed that drugs are harmful and have side effects. Abolfath et al concluded in their study in Saudi Arabia that most students had strong anti-smoking attitudes. The results of a study entitled evaluation of student attitudes towards smoking in Guilan University of Medical Sciences showed that 86.9 % of the subjects had good anti-smoking attitude [17]. The subjects of this study were students of medical sciences; therefore, they were aware of the consequences of tobacco use and the disease caused by it leading to their negative attitudes toward drugs [19]. Even though sealed

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boxes were used to collect questionnaires anonymously, there was a possibility of lack of students' honesty in responding to questions due to social sensitivity of the issue. Heterogeneous distribution of students in different dormitories (based on major and degree) was another limitation of the study.

## CONCLUSION

Students are major assets of each country. Therefore, given the increasing prevalence of substance abuse among students, preventive intervention measures have to be designed and taken in universities for students to increase their level of knowledge regarding substance abuse. To this end, cooperation between relevant authorities is necessary to protect students before they experience drug abuse.

## ACKNOWLEDGEMENT

This article is the result of the approved research project No. 1762 Hereby, the authors appreciate the support and assistant of the Research & Technology Deputy and Student and Culture Deputy of Shahid Beheshti University of Medical Sciences as well as all students participated in the study.

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