

# Substance Abuse, A Public Health Challenge: Study From Jizan City, Saudi Arabia

Aburrahman Mohammad Ali Salim, Aesha Farheen Siddiqui

Department of Family and Community Medicine, College of Medicine, King Khalid University, Abha, Saudi Arabia

(Received: June, 2015)

(Accepted: July, 2015)

## ABSTRACT

Poor knowledge could be a precursor to substance abuse among adolescents. Prior to program development, it is necessary to know about the knowledge, attitude and perceptions about drug abuse in this population. The objective of this study was to explore the knowledge, attitude, perceived consequences of substance abuse among secondary school students in Jizan city, Kingdom of Saudi Arabia. This descriptive study included a representative sample of male secondary school students. A multistage random sample was generated. A self administered validated and reliable Arabic questionnaire was used. Knowledge scores were computed such that correct answer was given a score of 1 while incorrect and unknown answers were given a score of zero. The percentage of correct answers was computed for the sample. Mean percentage of knowledge score  $>60\%$  was considered sufficient knowledge while  $\leq 60\%$  was considered insufficient knowledge.

Out of 1100 male secondary students invited to participate in the study, 1022 returned filled questionnaire giving a response rate of 92.9%. Their age ranged between 15 and 19 years with a mean of 17.33 and standard deviation of 0.98 years. The great majority of them (99.7%) have heard about substance abuse and 83.8% claimed that they have information about different abused substances. Their sources of information about substance abuse were internet (71.1%), TV/Radio (61%), friends (55.5%), schools (43.9%), family members (33.8%) and finally newspapers and magazines (31.2%). Most of male students in Jizan had sufficient knowledge regarding substance abuse.

**KEY WORDS:** adolescents, attitudes, knowledge, substance abuse

## INTRODUCTION:

Substance abuse is one of the epidemic diseases, the effects of which are not limited to the individual but extend to his or her family and society at large. It is a critical issue in most societies and is associated with social and economic consequences.<sup>[1]</sup> Drug-related problems cause huge waste of resources, both human and financial.<sup>[2]</sup> There is a substantial risk for initiating substance use during adolescence as it is a transitional stage of physical and mental human development. Adolescents are cognitively immature and vulnerable to social influences, thus experimentation with addictive substances often begins in this age. Several studies in adolescent population have reported positive association between knowledge about substance abuse and their attitudes toward substances.<sup>[3,4]</sup>

There is a diagnostic dilemma for this public health issue in Islamic countries as alcohol and drug abuse are categorically forbidden by Islam. Addictive behaviours are socially stigmatizing and tend to be concealed by the individual involved. This might interfere with the representativeness of the population screening methods, and consequently the reported incidence rates of substance abuse in Islamic countries. However, there is now enough evidence from recent (though few) studies to alert Arab/Moslem communities to the realities and the magnitude of the drug problem. There is also evidence, though scanty, that drug abuse is more common in the Saudi community than was previously thought, as reported in two similar studies.<sup>[5,6]</sup> Extensive mass media campaign and the establishment of specialized drug abuse centers (Al-Amal Hospitals) all over the country are further evidence of the urgency of the problem<sup>(1)</sup>.

For effective redressal of this public health problem in future and to ensure the success of any preventive or behavioural modification programmes, it is imperative to have an understanding of current

Corresponding Author: Aesha Farheen Siddiqui,  
Department of Family and Community  
Medicine, College of Medicine, King Khalid  
University, Abha, Saudi Arabia  
Phone No.: 00966-591472255  
E-mail: ashfarheen\_zsh@gmail.com,  
draeshasiddiqui@gmail.com



Frequencies, percentages, mean and standard deviation (SD) were used as descriptive statistics.

## RESULTS:

Table 1 presents the personal characteristics of the students. Their age ranged between 15 and 19 years with a mean of 17.33 and standard deviation of 0.98 years. Total number of siblings was more than 6 among 59.8% of the participants. Exactly half of the students reported from 2nd to 4th birth order while 15.9% reported first birth order. Almost a quarter (24.8%) of students reported that their fathers had no formal education and 40.3% of them reported that their mothers had no formal education. The fathers of one-fifth (20%) of the students were working as teachers while 29.5% were military persons. The majority of students' mothers (88.3%) were house wives. Approximately half of the students (51.9%) had a family income ranged between 5000 and 10000 SR/month whereas 20.6% of them had family income more than 10000 SR/month. Majority of the students (90.7%) were residing in private houses and (91.4%) had parents living together.

Figure 1 illustrates that majority of male secondary school students in Jizan (99.7%) reported having heard about substance abuse and 83.8% of them claimed that they have information about different abused substances while 92% perceived substance misuse as a problem among adolescents in Jizan.

Figure 1: Awareness and opinion regarding substance abuse among respondents.

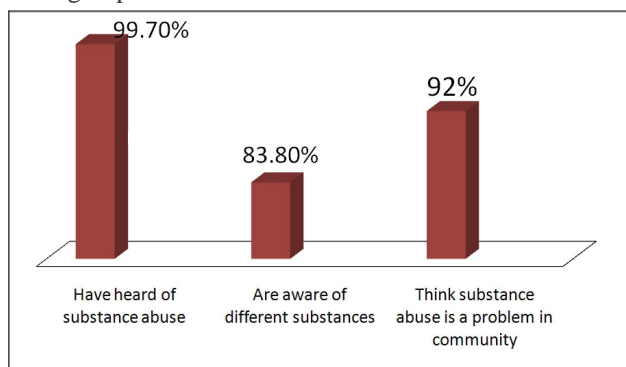


Table 2 illustrates the student's knowledge of health, social and economic consequences of substance abuse. As regards the individual statements pertaining to the consequences of substance abuse, majority of students (91.8%) disagreed with the statement that nothing happened to the health of substance abusers and 80.1% of them agreed that substance abuser always has unsatisfactory health. In

addition, 81.2% and 83.1% of them agreed that substance abuser develops respiratory and heart diseases, respectively.

Majority of students agreed that substance abuser spends money for nothing (94.6%), finally drops out of school (86.7%), gets sacked from employment because of irresponsibility (91.4%), always runs short of money (93%), against the norms of society (89.4%) and considered as a burden to society (90.9%). Similarly, majority of students agreed that family of a substance abuser as head always experiences poverty (87.5%), he/she and his/her family is looked down by others (88%) and people would not like the company of substance abusers (89.3%) and would not confide them (92.2%). The knowledge score regarding substance abuse among respondents ranged between 12.5% and 95.83% with a mean of 72.65% and standard deviation 17.16%. Overall, 842 (82.4%) students demonstrated sufficient knowledge (a score of 60% or more).

Most of the students believed that occasional as well as frequent use of cigarettes, alcohol and illicit drug use were extremely harmful. Table 3 lists the reported sources of information about substance abuse as internet (71.1%), TV/Radio (61%), friends (55.5%), schools (43.9%), family members (33.8%) and newspapers and magazines (31.2%).

## DISCUSSION:

The results of the current study point out that male secondary schools students in Jizan, KSA have a basic understanding of the nature of substance abuse. Subjects were also knowledgeable about the health, socioeconomic, and socio-cultural implications of substance abuse.

On one hand, this knowledge might reflect improved access to the mass media (i.e., Internet, satellite TV channels), resulting from improvement in the economic status. On the other hand, others assert that knowledge of substance abuse among adolescents may reflect their exposure to drug use within their peer group.<sup>[9]</sup> This is also suggested by the finding that a vast majority of students believed that drug abuse was an existent problem in their community. Researchers in related studies have found similar results, which show a high percentage of adolescents reflect good knowledge on substance abuse.<sup>[8,10,11]</sup>

Regarding the effects of cigarette and alcohol use, a few students believe that occasional as well as frequent use does not have harmful effect. These are disturbing findings which have been replicated in

prevailing behaviours, attitudes and beliefs about substance abuse among the adolescents. This important area of drug abuse research is grossly lacking in spite of the increasing prevalence of substance abuse in the Saudi Kingdom. Current study aims to address this issue of knowledge, attitudes and perceived consequences of drug abuse among adolescent students in southern Saudi Arabia.

## MATERIALS AND METHODS:

This is a cross sectional, descriptive study of male secondary school students in Jizan, Saudi Arabia, conducted between June 2013-June 2014. All the necessary official permissions were fully secured before data collection. The study was proposed to the ethical committee of King Khalid University, and permission was obtained. A letter of approval was obtained from the Director of Jizan Educational Affairs to the headmasters of each of the ten chosen schools and official access to students was gained. A multistage, random sampling technique was used to generate a sample size of 1100. Ten schools were randomly selected by lottery method. After that, three individual classes of students were selected from each school. All students in the selected classes were invited to participate in the study until the sample size of 1100 was reached. In the selected school, the questionnaires were distributed to all chosen students. A self-administered questionnaire designed was used to collect data on knowledge, attitudes and beliefs regarding substance abuse. This questionnaire was originally developed in 2002 by National Agency for the Treatment and Rehabilitation of Substance Abusers in Bangladesh to survey young people (aged 12-24 years) regarding substance use.<sup>[7]</sup> The Arabic version was developed for use in a Jordanian study<sup>(8)</sup>. The instrument was translated into Arabic using a comprehensive method to ensure equivalence and validity. It consisted of the following sections: a) background information of the respondents; b) knowledge about substance abuse, and its associated health, economic, and socio-cultural consequences and c) sources of information. Knowledge score was computed in the way that correct answer was given a score of 1 while incorrect and unknown answers was given a score of zero. The percentage of correct answers was computed. Mean percentage of knowledge score  $>60\%$  was considered sufficient knowledge while  $\leq 60\%$  was considered insufficient knowledge.

Statistical Package for Social Sciences (SPSS version 18.0) was used for data entry and analysis.

Table 1. Sociodemographic characteristics of respondents

Variable	No.	%
<b>Age in years</b>		
15	49	4.8
16	124	12.1
17	398	38.9
18	347	34.0
19	104	10.2
<b>Total number of siblings</b>		
1-3	92	9.0
4-6	319	31.2
>6	611	59.8
<b>Birth order</b>		
1st	162	15.9
2nd-4th	512	50.0
>4th	348	34.1
<b>Father's education</b>		
Illiterate	253	24.8
Primary school	173	16.9
Intermediate school	143	14.0
Secondary school	217	21.2
University	198	19.4
Postgraduate	38	3.7
<b>Mother's education</b>		
Illiterate	413	40.3
Primary school	246	24.1
Intermediate school	183	17.9
Secondary school	98	9.6
University	61	6.0
Postgraduate	21	2.1
<b>Father's occupation</b>		
Not working	104	10.2
Teacher	204	20.0
Military	303	29.5
Employee	110	10.8
Business/trading	52	5.1
Retired	146	14.3
Farmer	47	4.6
Others	56	5.5
<b>Mother's occupation</b>		
Not working	902	88.3
working	120	11.7
<b>Family income (SR/month)</b>		
<5000	281	27.5
5000-10000	530	51.9
>10000	211	20.6
<b>Residence</b>		
Rent	95	9.3
Private	927	90.7
<b>Parental marital status</b>		
Living together	934	91.4
Separated/divorced	33	3.2
One /both died	55	5.4

Table 2 : Respondent's perceptions regarding health, social and economic consequences of substance abuse.

Substance abuse related statement	Student opinion		
	Agree	Disagree	Don't know
Nothing happens to the health of a substance abuser.	46 (4.5)	938 (91.8)	38 (3.7)
A substance abuser always has unsatisfactory health.	819 (80.1)	88 (8.6)	115 (11.3)
A substance abuser develops respiratory diseases.	830 (81.2)	57 (5.6)	135 (13.2)
A substance abuser develops heart diseases.	849 (83.1)	39 (3.8)	134 (13.1)
A substance abuser spends money for nothing else .	967 (94.6)	37 (3.6)	18 (1.8)
A substance abuser finally drops out of school.	886 (86.7)	62 (6.1)	74 (7.2)
A substance abuser always runs short of money.	951 (93.0)	9 (0.9)	62 (6.1)
A substance abuser gets sacked from employment because of irresponsibility.	934 (91.4)	37 (3.6)	51 (5.0)
The family of a substance abuser as head always experiences poverty.	894 (87.5)	32 (3.1)	96 (9.4)
Substance abuse is against the norms of society.	914 (89.4)	47 (4.6)	61 (6.0)
The substance abuser and his family is looked down by others.	900 (88.0)	15 (1.5)	107 (10.5)
People do not like the company of substance abusers.	913 (89.3)	43 (4.2)	66 (6.5)
Substance abusers are considered as a burden to society.	929 (90.9)	37 (3.6)	56 (5.5)
People do not confide in substance abusers	942 (92.2)	23 (2.3)	57 (5.5)

Table 3: Sources of information regarding substance abuse.

Source of information	No. (%)
Friends	567 (55.5)
Family	345 (33.8)
Tv/Radio	623 (61)
Internet	727 (71.1)
Newspapers/magazines	319 (31.2)
School	449 (43.9)

surveys in Philippines<sup>[12]</sup> where students believed that psychoactive use entailed no or slight risk, and in South Africa where youth approval of cigarette use and drinking was high. Also, disapproval was high only for using heroin and mandrax in Tanzania.<sup>[13]</sup>

An important finding of this study is that a negative image of the drug addict in the society is well established in the mind of the participants. Any preventive campaign can take advantage of this fact and strengthen this image to discourage future abusers. This finding however, also has a negative side as negative attitudes, particularly if expressed through negative or prejudiced behavior, may further alienate a

social group that is already socially marginalized. This in turn may prevent such group members from seeking the help they require.<sup>[14]</sup>

Similar was found in Bangladesh where participants appeared to be socially conscious in their attitude towards substance/drug abuse. Majority of them were aware of the harmful effects of substance/drug abuse on society and human body as well as negative image of addicts in society, linked substance/drug abuse to disturbed family peace, and cited it to be responsible for poor academic performance.<sup>[7]</sup>

Mass media emerges as the major source of Information which is similar to findings from Bangladesh, India and Africa.<sup>[7,10,15]</sup> However, it is to be noted that internet has surpassed TV as the major source of information when compared to past studies. The findings of this study provide the basis for developing comprehensive prevention programs that are directed to adolescents. These school-based educational programs should include information concerning addiction and forms of treatment as well as appropriate treatment services. School and public health programs must address the importance of smoking cessation and the addictive nature of nicotine as a gateway substance.



## CONCLUSION:

There is a fair amount of general knowledge regarding substance abuse among the adolescents. They also believe that substance abuse is a problem in their community. These findings can be utilized for developing comprehensive prevention programs targeted to adolescents. These educational programs can be school based and should include information concerning addiction and forms of treatment as well as appropriate treatment services. School and public health programs must address the importance of smoking cessation and the addictive nature of nicotine as a gateway substance for drug abuse.

## STRENGTH AND LIMITATIONS:

The study used a validated Arabic questionnaire and was the first of its kind study in the southern part of Saudi Arabia. Also a large sample of students was studied. However, as Saudi Arabia is a vast country, the study findings cannot be generalized. More such studies are recommended.

## REFERENCES:

1. Alibrahim O, Elawad N, Misau YA, Shaikh TM, Allam N. Psychotic symptoms: a retrospective study of adolescents who abuse drugs at Al-Amal Hospital in Jeddah, Saudi Arabia. *Journal of Public health in Africa* 2012;3:e5
2. Drugs; What Every Parent Should Know, Institute for the Study of Drug Dependence, London, 1989.
3. Gassman RA, Demone HW, Albilal R. Alcohol and other drug content in core courses: Encouraging substance abuse assessment. *Journal of Social Work Education* 2001;37:137-145.
4. Giannetti VJ, Sieppert JD, Holosko MJ. Attitudes and knowledge concerning alcohol abuse: Curriculum implications. *Journal of Health and Social Policy* 2002;15:45-58.
5. Osman, AA. Substance abuse among patients attending a psychiatric hospital in Jeddah: a descriptive study. *Ann Saudi Med.* 1992;12; 289-293.
6. Qureshi NA. Socio-demographic correlates, pattern and comorbidity of drug abuse among psychiatric patients. *Arab J Psychiatry* 1992;3: 98-106
7. Ahmed S, Rana A, Chowdhury S, Mills A, Bennett S. Substance and drug abuse: Knowledge, attitude and perception of school going adolescents in Bangladesh. *Regional Health Forum, World Health Organization, South-East Asia Region.* 2002;6: 59-71.
8. Haddad L, Shotar A, Umlauf M, Al-Zyoude S. Knowledge of substance abuse Among High School Students in Jordan. *Journal of Transcultural Nursing* 2010;21(2) 143-150
9. Htoon P, Myint Y, Thwe M. Risk behaviors, attitudes and subjective norms among ninth standard students in Hlaing Township. *Regional Health Forum, WHO South-East Asia Region.* 1999; 3: 1-10.
10. Dechenla Tsering, Ranabir Pal, and Aparajita Dasgupta. Substance use among adolescent high school students in India: A survey of knowledge, attitude, and opinion. *J.Pharm Bioallied Sci.* 2010 Apr-Jun; 2(2): 137-140.
11. Naresh Nebhinani, Mamta Nebhinani, Arun Kumar Misra, Seema Grewal Substance-Related Knowledge and Attitude In School and College Students. Reprinted from the *German Journal of Psychiatry* <http://www.gjpsy.uni-goettingen.de>
12. Substance Use in South-East Asia: Knowledge, Attitudes, Practices and Opportunities for Intervention Summary of baseline assessments in Thailand, the Philippines and Viet Nam. WHO/UNDCP Global Initiative on Primary Prevention of Substance Abuse "Global Initiative".WHO-2003
13. Substance Use in Southern Africa: Knowledge, Attitudes, Practices and Opportunities for Intervention .Summary of baseline assessments in the Republic of South Africa, the United Republic of Tanzania and the Republic of Zambia WHO/UNDCP Global Initiative on Primary Prevention of Substance Abuse "Global Initiative".WHO-2003
14. Bryan A, Moran R, Farrell E, O'Brien M. Drug-Related Knowledge, Attitudes and Beliefs in Ireland: Report of a Nation-Wide Survey. Dublin: The Health Research Board, 2000.
15. Om Prakash, Arun kumar, Santosh Kumar, Parmanand Kulhara. Knowledge and attitude of Indian adolescents towards addiction: Findings from an exploratory survey. *Journal of Mental Health & Human Behavior* 01/2009; 14:74-79.

**Cite this article as:** Salim AMA, Siddiqui AF: Substance Abuse, A Public Health Challenge: Study From Jizan City, Saudi Arabia. *PJSR.* 2015;8(2):1-5.

**Source of Support :** Nil, **Conflict of Interest:** None declared.