

Knowledge of effects of drinking alcohol and attitude towards anti-substance use campaign among school students in Ajman, UAE

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ABSTRACT

Objectives: Alcohol consumption is an important epidemiological problem affecting health and is on a rise among the adolescents. Knowledge about effects of alcohol consumption and attitude towards anti-substance use campaign among school students in Ajman, UAE was assessed.

Material and methods: A population-based cross-sectional study was conducted among students in four schools of Ajman, grades IX-XII. A pre-tested, close-ended questionnaire relating to knowledge of health and social effects of alcohol and attitude towards anti-substance use campaign was administered to the students. Chi-square test was applied to determine association between variables using SPSS.19.

Results: 411 students between 15-17 years of age participated (Male students constituted 55.7%, mean age: 15.65±1.1 years). 375 (91.2%) students indicated alcohol consumption was harmful that . 288 (70.1%) were aware of the use alcohol among school students. Severe health-associated risk was attributed to drinking alcohol by 63%. About 334 (81.3%) responded that social problems were associated with alcohol consumption. Common social problems mentioned were problems with parents, friends, and teachers, and the other effects included poor academic performance. Female students were more aware of the reasons for initiation and health and social problems than the males ($p < 0.05$). Television, internet and newspaper constituted the most common source of their knowledge. About 66% had advised individuals to quit the habit; about 21.2% students had participated in anti-substance use campaigns. Media, seminars and workshops in schools were the possible ways suggested for increasing awareness. 81% were willing to organize and participate in anti-substance use campaign in their school.

Conclusion: High proportions of students were aware of the harmful effects of alcohol and had positive attitude towards anti-substance use campaigns that are necessary to reduce unhealthy behaviors among adolescents.

Key words: Alcohol consumption, anti-substance use campaign, adolescents

INTRODUCTION

Adolescence is a time of rapid physiological, psychological and social development, and also a key period for the adoption of substance use. The use and misuse of alcohol, tobacco and other drug are important problems that typically begin during adolescence. Alcohol-related behavior in adolescents is influenced by various factors; friends, family settings and psychological factors¹.

The consumption of tobacco, alcohol, and other substances has increased all

over the world. According to the recent WHO Global Status Report on Alcohol and Health (2011), "the health impact from alcohol strikes relatively early in life, it is the leading risk factor for mortality and the overall burden of disease in the 15-59 age group"²

Alcohol consumption is associated with serious health and social consequences due to intoxication, dependence and other biochemical effects. Alcohol is estimated

to cause about 20-30% worldwide diseases of oesophageal cancer, liver cancer, cirrhosis, homicide, epilepsy, and motor vehicle accidents³. The knowledge of the diverse reasons influencing alcohol consumption among the adolescent age group is essential to intervene early and tackle this important problem among the young. The present study evaluated the knowledge of school students in Ajman, UAE regarding the various effects of alcohol consumption and their attitude towards anti-substance use campaign.

MATERIALS AND METHODS

A population based cross-sectional study was conducted among students from four schools (Grades IX to XII) in Ajman. Students, both males and females, in the high schools in Ajman from 9th to 12th grades irrespective of their nationality were included. Students who gave informed consent were included while those who were not willing to participate in the study and incomplete questionnaires were excluded.

A pre-tested, close ended, structured, self-administered questionnaire in English was used focusing on the knowledge regarding the effects of alcohol among adolescents, perceived reasons for initiation, associated health risks and social problems, previous participation and willingness to participate in anti-substance use activities. Anonymity and confidentiality of the students' information and the schools were observed throughout the study. Descriptive and inferential analysis was performed using SPSS.19. Chi square test was used to determine any association between variables. The level of significance was set at $p < 0.05$ and confidence interval at 95%.

RESULTS

Socio-demographic Characteristics

A total of 411 students were included into the study based on the inclusion and exclusion criteria. The age of the study population ranged from 15 to 17 years with an average of 15.65 ± 1.1 years. Students were of diverse nationalities with Asians predominant. Male students constituted 55.7% of the total participants.

The demographic characteristic of the respondents is shown in Table 1.

Table 1. Demographic characteristics of the participants

Item	Variable	Number/ mean \pm SD	%
Grades	9 th	39	9.5
	10 th	122	29.7
	11 th	121	29.4
	12 th	129	31.4
Gender	Male	229	55.7
	Female	182	44.3
Age	Mean	15.65 \pm 1.1 years	
	Range	14-19 years	

Knowledge of Alcohol and its Effects

A majority of the students, 375 (91.2%), perceived alcohol consumption as harmful. 288 (70.1%) were aware of the use of alcohol among school students. A total of 308 (74.9%) stated that they knew the possible reasons for alcohol consumption, the reasons being to blend with friends and to elevate mood. Severe health-associated risks were attributed by 63% to drinking alcohol. The level of risk attributed by substances commonly abused is listed in Table 2.

About 334 (81.3%) responded that social problems were associated with alcohol consumption. Common social problems mentioned were poor academic performance, and problems with parents, friends, and teachers. The other social problems mentioned by both male and female students are enumerated in Table 3.

The common source of their knowledge regarding effect of alcohol were the internet 64.2%, television 61.5%, newspaper 46.5%, radio 35.8%, books/magazines 35.4% and school 15.5%.

Attitude towards prevention of Alcohol use among students

About 66.2% had advised individuals to quit alcohol; 21.2% participated in alcohol prevention campaigns. The suggested measures to increase awareness were

Table 2. Level of health risks associated with use of alcohol and other substance use

Items	No risk/ Mild risk No. (%)			Moderate risk No. (%)			Severe risk No. (%)			P value
	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Alcoholic	31(15.3)	7(4.2)	38	45(22.2)	32(19.0)	77	127(62.6)	129(76.8)	256	<0.01
Marijuana	17(10.4)	4(4.1)	21	19(11.6)	17(17.5)	36	128(78.0)	76(78.4)	204	NS
LSD	15(11.6)	2(3.2)	17	15(11.6)	12(19.0)	27	99(76.7)	49(77.8)	148	0.79
Ampheta mine	17(13.5)	2(3.2)	19	18(14.3)	5(7.7)	23	91(72.2)	58(89.2)	149	<0.05
Cocaine	19(10.3)	6(4.6)	25	18(9.8)	9(6.9)	27	147(79.9)	115(88.5)	262	NS
Heroin	15(8.2)	3(2.2)	18	23(12.5)	7 (5.1)	30	146(79.3)	126(92.6)	272	<0.01
Ecstasy	25(16.2)	3(3.2)	28	26(16.9)	11(11.8)	37	103(66.9)	79(84.9)	182	<0.01

Table 3. Social problems associated with use of alcohol and gender based knowledge

Items	Male		Female		P value
	No	%	No	%	
Scuffle or fight	53	27.7	50	29.8	NS
Accident or injury	57	29.2	39	23.1	NS
Loss of money or valuables	77	40.5	51	33.3	NS
Damage to objects	72	40.0	61	41.8	NS
Problems with parents	83	43.9	84	51.5	NS
Problems with friends	73	38.4	84	53.5	<0.01
Problems with teachers	74	39.8	77	51.3	<0.05
Poor academic performance	81	42.9	86	54.1	<0.05
Trouble with police	71	37.2	64	40.0	NS
Admitted to emergency	84	45.4	79	53.4	NS

through media, seminars, workshops and student groups in schools. With regard to the attitude towards alcohol control activities, 346 students (84.5%) were willing to participate in campaigns against alcohol, 304 (87.6%) were keen to organize programs in their schools, and 261(78.6%) were interested in giving talks on the ill effects of alcohol and other substances among school students.

The majority of the students responded that school seminars (67.8%), workshops (47.8%), curricular activities (35.6%), and role play (31.7%) and media (75.0%) were the best mediums to impart awareness regarding the adverse consequences of substances commonly abused.

DISCUSSION

The current study indicates the knowledge level of high school students about alcohol and particularly their harmful effects. The results in the present study may be considered as representative of the 15–18-year-old adolescents in Ajman, UAE. The school environment can be a risk or a protective factor in students' initiation and continued use of alcohol as well as for promoting alcohol control measures among the young. Peer influence and family pressure were the perceived mentioned initiation of alcohol among school students. Chikere et al. reported pleasurable effects of alcohol and peer influence as the key reasons for initiation of alcohol use⁴. Kelly et al. carried out

focus group discussions among the rural middle school youth and found that boredom as the main reason for alcohol use⁵. In another study, from India, easy availability was the most common reason for initiation and continuation of alcohol⁶. Yet another study from India documented that the pleasurable effects, boredom and curiosity as the reasons for initiating the substances⁷. Students of a survey from Africa stated relief from stress as the prime reason⁸.

Family background plays a significant role as either a risk or protective factor against substance use. Consequently, efforts to reduce alcohol use among young people should be directed at supporting and educating parents by taking efforts to increase the frequency and depth of parent-child communication about substance use⁹. Parental awareness and information about the child's activities and association can help lower the substance use among adolescents. As regards peer influence, possible interventions in this area could be educational programs in school campaigns centering on improvement of skills such as decision making and resisting peer pressure, utilizing local role models and reformed alcohol users to promote behavior change among young people¹⁰.

The majority of the students (90%) were aware of the negative social and health impact associated with alcohol use, in contrast to Oshodi et al. wherein about three-quarters of the respondents (73.0%) were ignorant of the adverse consequences of substance use⁸. Of all the social risks associated with alcohol use, most students, especially the females, highly perceived decline in academic performance and problems with parents as a major consequence of consuming alcohol. Participants in another study from the US reported accidents from drunken driving as a major social consequence⁵. In a more recent report from India poor academic performance was reported as the major social impact of alcohol consumption⁷. Surveys of young people in other countries have looked at a

wide range of behavioral consequences of alcohol use such as reduced performance at school or at work, damage to objects or clothing, loss of money or other valuable items, and accident or injury as a result of alcohol use^{11,12}.

About 90% of the students believed that alcohol use was associated with moderate to severe health risks. This observation endorses the findings of Chikere et al. and Sailaja et al.^{4,7} Chikere et al. reported that 68.5% of the participants accepted that it formed high risk factor for major health issues such as lung cancer, liver, sexually transmitted disease, HIV/AIDS, low birth weight in women, stroke and sudden death.⁴ The immediate and severe adverse health effect of alcohol among young people is attributed to their smaller muscle mass than that of adults³. Hence continued health and drug education at schools can help reduce the prevalence of alcohol and substance use among the students.

It was also noted that female students had better awareness than the males of the health risks and social consequences. Researchers in comparable studies also reported similar results^{11,12}.

The common source of knowledge regarding effects of alcohol were internet, television, and newspaper. Tsering et al. and Sailaja et al. also reported media and family were the main sources of information regarding the harm related to alcohol and related substance of abuse^{6,7}.

Over 80% of the students responded positively towards implementation of awareness program such as seminars, workshops, crusades (campaigns) and conferences to be held at their schools. A similar observation was mentioned in a study from Nigeria⁴. Greater effort should be put to reinforce these existing programs to combat this growing problem among the adolescents. Since media (television) remain the major format for alcohol advertisement, they can serve in campaigns against alcohol use in the society. Schools may adopt a variety of methods to promote anti-alcohol and

addictive drug campaigns such as drug education curricula, providing counseling, identifying problem behaviors for early intervention, and promptly counseling students who are in need of such help.

CONCLUSION

Both male and female students were knowledgeable about harmful effects on the health and society. They possessed a positive attitude towards anti-substance use campaigns which is necessary to reduce unhealthy behaviors among adolescents. Effective school-based policies, programs, practices and parental education may be implemented. Direct involvement of the youth in campaigns against substance would be effective in curbing this issue.

REFERENCES

1. Tur JA, Puig MS, Pons A, et al. Alcohol consumption among school adolescents in Palma de mallorca. *Alcohol and Alcoholism* 2003;38(3):243-248.
2. World Health Organization. *Global Status Report on Alcohol and Health*. Geneva: World Health Organization; 2011.
3. WHO World Health Report. *Management of substance abuse: Alcohol*. Geneva; 2009. Available from: URL: <http://www.who.org>
4. Chikere EI & Mayowa MO. Prevalence and perceived health effect of alcohol use among male undergraduate students in Owerri, South-East Nigeria: a descriptive cross-sectional study. *BMC Public Health* 2011 Feb 18;11:118.
5. Kelly KJ, Comello MLG, Edwards RW. Attitudes of rural middle-school youth toward alcohol, tobacco, drugs, and violence. *The Rural Educator* 2004;25(3):19-24.
6. Tsering D, Pal R, Dasgupta A. Substance use among adolescent high school students in India: A survey of knowledge, attitude, and opinion. *J Pharm Bioall Sci* 2010;2:137-40.
7. Sailaja P & Rao KV. Substance Abuse among School Children: a study in Andhra University High School, Visakhapatnam of Andhra Pradesh. *International Journal of Multidisciplinary Educational Research* 2012;1(2):135-144.
8. Oshodi OY, Aina1 OF, Onajole AT. Substance use among secondary school students in an urban setting in Nigeria: prevalence and associated factors. *Afr J Psychiatry* 2010;13:52-57.
9. Kelly KJ, Comello ML, Hunn LCP. Parentchild communication, perceived sanctions against drug use, and youth drug involvement. *Adolescence* 2002;37(148):775-87.
10. Botvin GJ. Preventing drug abuse in schools: Social and competence enhancement approaches targeting individual-level etiologic factors. *Addictive Behaviors* 2000;25:887-97.
11. Geramian N, Akhavan S, Gharaat L, et al. Determinants of Drug Abuse in High School Students and their Related Knowledge and Attitude. *JPMA* 2012;62:62-66.
12. Rockville M. *The NSDUH Report: Perceptions of Risk from Substance Use among Adolescents: Substance Abuse and Mental Health Services Administration, Office of Applied Studies; 2009.*