



Original Research Article

Assessment of knowledge and practice towards tobacco and alcohol consumption among male adolescents in urban slums of Delhi

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ABSTRACT

Background: Tobacco and alcohol consumption has become a serious public health problem. Evidences show that both alcohol and tobacco consumption can cause substantial health related morbidity and mortality among adolescents. The Global Youth Tobacco Survey (GYTS), a cross-sectional survey conducted among school students, aged 13–15 years, highlighted that the overall prevalence of current tobacco users in India was (14.6%) in the year 2009.¹ The consumption of tobacco and alcohol among adolescents in India is increasing dramatically. Hence, a study was conducted to assess the level of knowledge and practice about alcohol and tobacco consumption among male adolescents. The objective of the study was to assess the level of knowledge and practice regarding tobacco and alcohol consumption among the male adolescents living in urban slum of Delhi.

Methods: A cross sectional study was carried out among 100 male adolescents from urban slums of Delhi. Data was collected using semi-structured, self-administered interview schedule. The collected data was entered using Microsoft Excel 2007 and was analyzed using IBM SPSS statistics 20. Chi-square test was applied and level of significance was kept at P value of <0.05. The study period was from 11th June to 31st July.

Results: The knowledge level among adolescents regarding tobacco and alcohol and its harmful effects found satisfactory. Almost all the participants had knowledge regarding different forms of tobacco and diseases caused by tobacco intake in various forms and alcohol consumption. In spite of having sound knowledge of harmful effect of tobacco and alcohol, high percentage was using them. Only (14.0%) of study participants never consumed any kind of tobacco and alcohol.

Conclusions: In our study we revealed that mere knowledge regarding tobacco intake and alcohol consumption is not important. Participants of the study having adequate knowledge didn't practice the same. The implementation of strict rules regarding prevention from tobacco and alcohol is needed.

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1. Introduction

Tobacco and alcohol abuse among adolescents is a major public health problem across the country.² Tobacco consumption in India starts during adolescence and early adulthood i.e., in the age group of 15–24 years. Worldwide, nearly, (88%) initiation to smoking occurs before the 18 years of age.³ The World Bank reports that nearly 82,000–99,000 children and adolescents all over the

world begin smoking every day.⁴ Adolescents are the most vulnerable population to initiate tobacco use. The children who start smoking at very early age continues to smoke to adulthood and half of them are expected to die prematurely due to smoking related diseases. If current smoking trends continue, tobacco will kill nearly 250 million of today's children.⁴ Globally, about (50%) of population takes alcohol. Currently, every person in the world aging 15 years or older drinks on the average of approximately 6 liters of pure alcohol per year.⁵ The consumption of tobacco and alcohol among adolescents

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in India is dramatically increasing. Like other developing countries, India is reporting a higher prevalence of risky behaviors among their young people. Due to globalization, the country's improved economic status and possibly the effect of the media, the frequency of risky behaviors among India's urban adolescents is approaching that of developed countries.⁶ A recent study revealed that the high prevalence of tobacco use among Indians may contribute to (13.3%) of total deaths by 2020.⁷ In India, alcohol is emerging as a major public health problem. India has found that (39%) of men between 18–49 years are current drinkers. Among them, about (15%) usually consume six or more drinks per occasion, (29%) indulge in heavy drinking and about (34%) get drunk at least monthly or more frequently.⁸

According to Chadda RK et al. (June 15th, 2002) on tobacco use by Indian adolescents, the study revealed that adolescents are the most vulnerable population to initiate tobacco use. The tobacco companies are now aggressively targeting their advertising strategies in developing countries like India and hence attracting adolescents. It is important to understand various factors that influence and encourage young teenagers to start smoking or to use other tobacco products.⁵ Kumari Ranjeeta et al. (January 11th, 2008) did a study of intake of tobacco among male medical students in Lucknow, India. Among the tobacco users (28.8%), smoking was found in (87.5%) and tobacco chewing in the form of gutka, khaini, gulmanjan (locally available forms of tobacco) in (37.5%) as the predominant means of the use of tobacco. The factor initiating the use of tobacco was usually through peer pressure. Tobacco use was significant problem among the male medical students.⁹ Jaisoorya T.S et al. (2016) conducted a study on Prevalence & correlates of tobacco use among adolescents in Kerala, India. The study revealed that the overall lifetime prevalence of tobacco use was 6.9 per cent (12.5% males and 1.2% females). The prevalence of tobacco use increased from 3.1 per cent at 12-13 yr to 15.1 per cent at 18-19 yr. The prevalence was higher among students from urban backgrounds, lower socio-economic status and those with part-time jobs. The prevalence of tobacco use in adolescents reported in this study was relatively lower than those reported from other Indian States.¹⁰ Mahanta Beauty et al. (2016) conducted a study on Alcohol use among school-going adolescent boys and girls in an industrial town of Assam, India (2016). The study revealed that about (36%) out of 1285 students have tasted/used homemade alcoholic drinks (HADs) and (12.3%) used commercially available alcoholic drinks (CADs). They taste alcoholic drinks at a very young age. Parent's indulgence in taking tobacco, alcohol, or both was found to influence higher intake by their offspring.¹¹ According to Singh Avi et al. (August 8th, 2017), a cross sectional study on tobacco and alcohol abuse among medical students revealed that (61.29%) males and (8.24%) females consumed both tobacco and alcohol. Of all

the tobacco users, (70.97%) males and (15.29%) females consumed cigarettes. In case of alcohol consumption, (80.65%) males and (35.29%) of females consumed some form of alcohol. Overall (43%) respondents used alcohol and tobacco to relieve stress. Attempt to quit alcohol and tobacco was (44.6%). This study has shown that alcohol and tobacco are major substances being abused by young medical graduates, in spite of universal knowledge that they are source of major non communicable diseases.¹⁰

Although these studies discuss about the adolescent's knowledge and practice of on tobacco and alcohol consumption, however, it is pertinent to understand the knowledge and practice of tobacco and alcohol among adolescent living in slums. As the country is progressing in economic front, more and more slum dwellers especially adolescents are getting into tobacco and alcohol abuse.

2. Objective

To assess the level of knowledge and practice among the male adolescents residing in urban slum areas towards tobacco and alcohol consumption.

3. Methodology

A cross sectional study was conducted in urban slum in South-West Delhi, New Delhi between 11th June 2019 to 31st July 2019. The purpose of the study was to assess the level of knowledge and practice regarding tobacco and alcohol among male adolescents. The study was based on cross-sectional study design. A total of 100 samples were taken. Convenience sampling technique was used for data collection. Semi-structured interview schedule was prepared to conduct the study. The questions included regarding socio demographic details of participants, the knowledge and practice related to tobacco and alcohol consumption.

The Independent variable was Socio-demographic factors such as age, educational qualification, monthly income, religion. The dependent variable was tobacco and alcohol consumption. A written consent form was also taken from the participants. Participants who didn't give consent and not willing to participate were excluded from the study. Adolescents below the age of 12 were excluded. Adolescents aging 12-19 years of age were only included and only male participants were interviewed. Data was entered using Microsoft Excel 2007 and was analyzed using IBM SPSS statistics 20 and appropriate statistical tests were applied. Level of significance was kept at P value of <0.05

3.1. Findings

The study included 100 participants (males). The age of participants ranged from 12 to 19 years.

Among all the participants only (18.0%) had the knowledge about passive smoking. (18.0%) participants knew that passive smoking is harmful for health. All

Table 1: Socio demographic details of the participants

Characteristics	Category	Numbers of respondents (N=100) (%)
Age	12-15	(18.0)
	15-18	(28.0)
	18-19	(54.0)
Educational status	Illiterate	(10.0)
	Primary	(6.0)
	Elementary	(26.0)
	Secondary	(32.0)
Father's qualification	Senior-secondary	(26.0)
	Illiterate	(22.0)
	Primary	(34.0)
Mother's qualification	Secondary	(44.0)
	Illiterate	(46.0)
Father's occupation	Primary	(26.0)
	Secondary	(18.0)
Mother's occupation	Unemployed	(8.0)
	Private employee	(64.0)
	Govt. employee	(18.0)
Monthly income	Daily wages	(10.0)
	House-wife	(40.0)
	Private employee	(50.0)
Family type	Daily wages	(10.0)
	5000-10,000	(18.0)
	10,000-20,000	(58.0)
No. of family members	>20,000	(24.0)
	Nuclear	(92.0)
	Joint	(8.0)
Religion	2-4	(36.0)
	5-10	(60.0)
	>10	(4.0)
	Hindu	(94.0)
	Muslim	(6.0)

Table 2: Knowledge level of participants regarding tobacco and alcohol consumption

Knowledge level of participants	No. of respondents with correct response (N=100) (%)
Know tobacco and alcohol consumption is harmful	(100)
Different forms of tobacco intake	(40.0)
Smoking in public place is punishable	(100.0)
Fine applicable for smoking in public place	(40.0)
Knowledge about passive smoking	(18.0)
Is passive smoking harmful	(18.0)
Diseases caused by tobacco consumption	(40.0)
Disease caused by alcohol consumption	(30.0)

participants knew that smoking in public place is punishable but only (40.0%) had the knowledge of fine applicable for smoking in public area. Among the participants, (40.0%) participants knew about the diseases caused by tobacco consumption. (30.0%) participants knew that alcohol consumption caused diseases.

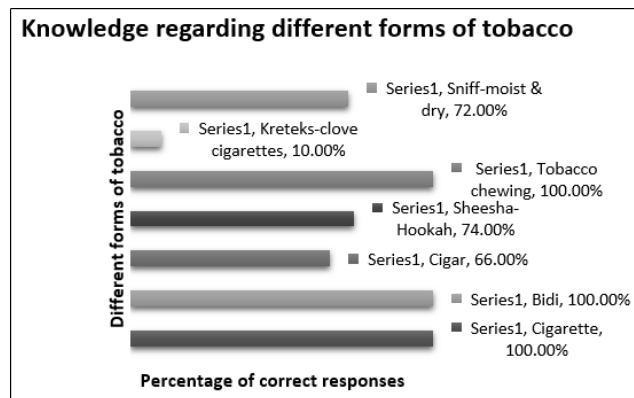


Fig. 1: Knowledge regarding different forms of tobacco among all participants

Knowledge regarding different forms of tobacco, almost all forms of tobacco was well known by the adolescents. Only kreteks- clove cigarettes was known by (10.0%), Cigar (66.0%) Hookah (74.0%) and sniff- moist & dry (72.0%) were less known. Cigarette, bidi, tobacco chewing were known by all the participants (Figure 1).

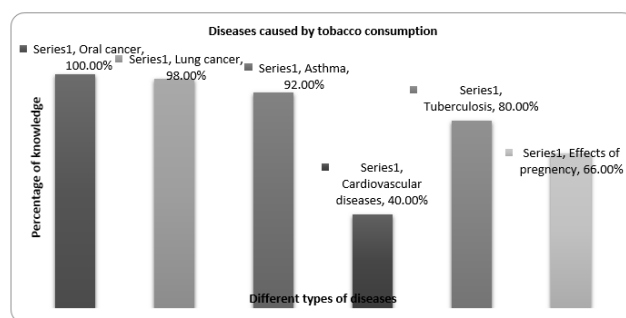


Fig. 2: Knowledge regarding diseases caused by tobacco consumption

Figure 2 revealed the knowledge regarding different diseases caused by tobacco intake. Among the participants, only (40.0%) knew that cardiovascular diseases are caused by tobacco consumption. (66.0%) had the knowledge that there can be negative effect on pregnancy while smoking. Four-fifths of the participants had knowledge about tuberculosis caused by tobacco consumption. Asthma as result of smoking was known by (92.0%) respondents. Only 2 percent participant didn't know that lung cancer was caused by tobacco consumption. All participants had the knowledge that tobacco chewing caused oral cancer.

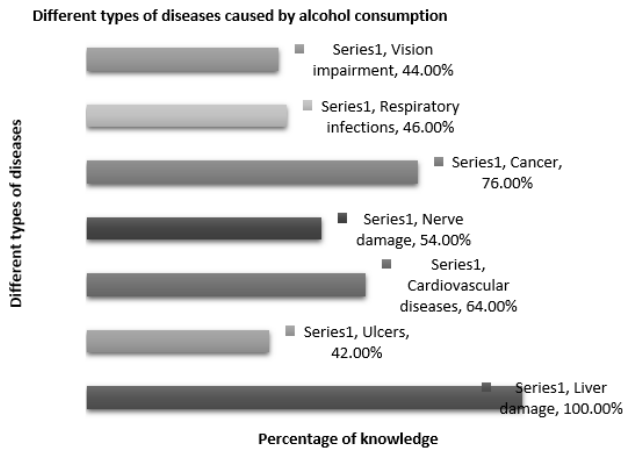


Fig. 3: Knowledge regarding different types of diseases caused by alcohol consumption

Among all the participants as we can see from Figure 3, knowledge regarding different types of diseases caused by alcohol consumption varied from one disease to another. Only two-fifths (42.0%) participants knew that ulcers were caused by excessive of drinking. Only (44.0%) knew that alcohol consumption can lead to vision impairment. (46.0%) had the knowledge that alcohol consumption can cause respiratory infections. Nerve damage disease was known by (54.0%) participants. Cardiovascular diseases are also caused by the use of alcohol; this was known by (64.0%) participants. (76.0%) participants had the knowledge of cancer related to alcohol consumption. All participants had the knowledge that liver damage is caused by excessive alcohol consumption.

Table 3: Family history of tobacco and alcohol among all the respondents

Types	No. of respondents who have family history (N=100) (%)	Family members	No. of respondents whose family members practice (N=100) (%)
Tobacco chewing	(48.0)	Father	(44.0)
		Mother	(8.0)
		Sibling	(10.0)
Smoking	(76.0)	Father	(74.0)
		Mother	(6.0)
		Sibling	(14.0)
Alcohol	(90.0)	Father	(95.0)
		Mother	(2.0)
		Sibling	(20.0)

The participants of the study were asked about the family history of tobacco and alcohol consumption. Table 3 revealed parents and sibling had experience

of alcohol consumption, smoking and tobacco chewing. (90.0%) participants had family history of alcohol. (76.0%) participants had family history of smoking. Only (48.0%) had the family history of tobacco chewing. Father had more experience of alcohol (95%), smoking (74%) and tobacco chewing(44%) in comparison to mothers and sibling of the study participants.

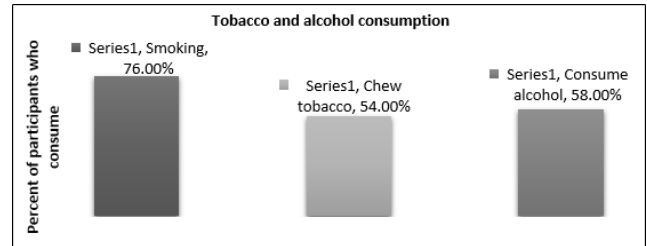


Fig. 4: Tobacco and alcohol consumption habit among the respondents

Among the study participants, (76.0%) were having the habit of smoking. (54.0%) chew tobacco and (58.0%) consume alcohol. (Figure 4)

Table 4: Types of tobacco consumption among therespondents who consume tobacco

Types	No. of respondents who consume (N=80) (%)
Cigarette	(92.5)
Bidi	(87.5)
Sheesha-hookah	(55.0)
Tobacco chewing	(67.5)
Sniff- moist & dry	(45.0)

Among the participants (Table 4) who consumed tobacco (smoking and chewing), (92.5%) had the habit of cigarette smoking. (87.5%) smoked bidis. Tobacco chewing was done by (67.5%) participants. Hookah was used by (55.0%) participants. Only (45.0%) participants were using Sniffing type of tobacco. (Both moist and dry)

Table 5: Types of alcohol consumption among participants who consumed alcohol

Types	No. of respondents who consume (N=58) (%)
Beer	(96.6)
Whisky	(86.2)
Rum	(55.2)
Vodka	(82.8)
Desi	(82.8)

Table 5 shows that those participants who consumed alcohol, about (96.6%) consumed Beer. (86.2%) participants consumed Whisky. (82.8%) consumed both Vodka and Desi type of alcohol. Only (55.2%) consumed rum.

Table 6: Participants who tried to quit tobacco consumption and results

Succeed to quit tobacco consumption	No. of respondents (N=100) (%)
Yes	(2.0)
No	(32.0)
Reduced	(14.0)
Never tried	(32.0)
No tobacco consumption	(20.0)

Table 7: Participants who tried to quit alcohol consumption and results

Succeed to quit alcohol consumption	No. of respondents (N=100) (%)
Yes	(2.0)
No	(18.0)
Reduced	(10.0)
Didn't tried	(28.0)
No alcohol consumption	(42.0)

Table 8: Relationship between smoking pattern and age among the participants

Variable	Pattern	Age (%)			Total (N=76) (%)	P value
		12-15	15-18	18-19		
Smoking since when	<1 year	(16.6)	(40.0)	(18.1)	(23.6)	0.044
	1-3 years	(83.3)	(50.0)	(18.2)	(36.8)	
	3-5 years	(0.0)	(10.0)	(36.4)	(23.7)	
	>5 years	(0.0)	(0.0)	(27.3)	(15.8)	
Frequency of Smoking per day (bidis/cigarettes etc.)	1-3 times/day	(16.7)	(20.0)	(27.3)	(23.7)	0.452
	4-6 times/day	(33.3)	(30.0)	(9.1)	(18.4)	
	7-9 times/day	(50.0)	(20.0)	(31.8)	(31.6)	
	>10 times/day	(0.0)	(30.0)	(31.8)	(26.3)	

Table 9: Relationship between alcohol consumption pattern and age among the participants

Variable	Pattern	Age (%)			Total (N=58) (%)	P value
		12-15	15-18	18-19		
Consuming alcohol since when	<1 year	(100.0)	(28.6)	(5.0)	(17.2)	0.000
	1-3 years	(0.0)	(71.4)	(45.0)	(48.3)	
	3-5 years	(0.0)	(0.0)	(40.0)	(27.6)	
	>5 years	(0.0)	(0.0)	(10.0)	(6.9)	
Alcohol consumption pattern	Daily	(0.0)	(0.0)	(5.0)	(3.4)	0.290
	Weekly	(0.0)	(0.0)	(35.0)	(24.1)	
	Occasionally	(100.0)	(100.0)	(60.0)	(72.4)	

Among all the participants who tried to quit tobacco consumption, only (2.0%) participants succeeded in quitting tobacco consumption. (32.0%) participants didn't succeed in quitting tobacco. (14.0%) reduced tobacco consumption. (32.0%) never tried to quit and (20.0%) never consumed tobacco (Table 6).

Among all the participants only (2.0%) participant succeeded in quitting alcohol. (18.0%) didn't succeed to quit alcohol consumption. The participants who reduced alcohol consumption were (10.0%). (28.0%) never tried to quit and (41.0%) never consumed alcohol (Table 7).

Among all the respondents who practice smoking the significant association between age and smoking period was found (P value 0.04). There was no association between age and frequency of smoking pattern per day (Table 8).

Among the respondents who consumed alcohol the significant association between age and alcohol consuming period was found. (P value 0.000) There was no association between age and consuming pattern (Table 9).

4. Conclusions and Recommendations

Knowledge of adolescents regarding tobacco and alcohol consumption was found to be good. Almost all the participants had knowledge of different forms of tobacco. The diseases caused by tobacco and alcohol consumption were well known by the participants. The practice of alcohol consumption was found to be very high among the participants. In spite of having knowledge regarding that tobacco and alcohol consumption is harmful for

health (100.0%) the practice rate was very high among them (76.0%) participants had the habit of smoking. Only (14.0%) of the participants never consumed either tobacco or alcohol. Those participants experienced tobacco and alcohol, among them, the rate of cigarette smoking was (92.5%) and beer consumption was (96.6%). The findings were similar to the study conducted by Singh Avi et al. (2017). Family history of alcohol was found to be very high among the participants (90.0%). Very less number of participants tried to quit tobacco and alcohol consumption. Only (2.0%) participants succeeded to quit tobacco and alcohol intake. There was no significant association found between age and frequency of consumption either alcohol or tobacco. Those participants who started consuming tobacco and alcohol at very young age were in the habit of consuming continuously. Mere knowledge regarding the ill effects of tobacco and alcohol consumption is not important, in spite of adequate knowledge they were indulging themselves into tobacco and alcohol intake.

The present study shows that alcohol and tobacco are major substances used by the adolescents, in spite of universal knowledge that they are major source of non-communicable disease. Preventive approaches include spreading awareness about the actual hazards of tobacco and alcohol in the community especially among the adolescents. There is an urgent need to take effective steps, especially on launching community awareness programs for the school children and public to educate them about the consequences of tobacco and alcohol use. Early education, banning media advertisements which promote tobacco and alcohol, community development and strict law enforcement are basic measure through which we can prevent the consumption of tobacco and alcohol among adolescents. The overall study reveals that male adolescents are at major risk of health. Further, research in this area needs to be done to assess the existing situation among various subgroup of population regarding tobacco and alcohol consumption among adolescents.

5. Limitations

1. Sample size was small due to time constrain.
2. Only male population was targeted.
3. Study cannot be generalized due to small sample size.

6. Source of Funding

None.

7. Conflict of Interest

None.

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