

**Original Article****A study on awareness of tobacco products use risk among Law College students of mohan lal sukhadia University (MLSU), Udaipur (Rajasthan)**

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**ABSTRACT**

**Introduction:** Tobacco is a major public health problem since decades. Given the current pattern of tobacco use globally it is estimated 250 million who are alive today, would die prematurely because of tobacco and mostly in developing countries, India rank 4<sup>th</sup> in the total tobacco consumption in the world but India's cigarette consumption ranks 11<sup>th</sup> in the world. The world Health Organization has predicted that tobacco deaths in India may exceed 1.5 million annually by 2020.

**Aims & Objective:** To determine the awareness about various risk factor of tobacco uses among college going students.

**Material and Methods:** It is a cross sectional study conducted in four randomly selected sections out of eighteen sections of University College of Law of Mohan Lal Sukhadia University (MLSU). Study population included 200 college students who were present at the time of study. Data was statistical analysed by using Microsoft Excel 2007 and Epi-info 3.5.3.

**Result:** A total of 200 students participated in the study, of which 69.5% were male. Majority of study population (66%) belongs to 18-20 years age group and middle class status. Knowledge of ill effect of tobacco use were mouth cancer – 97.5%, lung cancer – 92.5%, chest disease – 75%, throat cancer – 27.5% etc. Mass media, friends, teacher and relatives (91%) were the major source of information.

**Conclusion:** The results clearly indicate major lacunae not only in current educational system but also in parental upbringing not giving worthy importance to smoking and its health hazards. Knowledge of tobacco prevention legislation is still poor among law college students even since 2003.

**Keywords:** Awareness, Tobacco products, Law students

**INTRODUCTION**

Tobacco is a major public health problem since decades [1]. Given the current pattern of tobacco use globally it is estimated 250 million who are alive today, would die prematurely because of tobacco and mostly in developing countries [2], India rank 4<sup>th</sup> in the total tobacco consumption in the world but India's cigarette consumption ranks 11<sup>th</sup> in the world. Out of the total production, only 19% of the total consumption of Tobacco is in the form of cigarette whereas 81% is in other forms like, chewing, Bidi (Tobacco rolled in Tendu leaf), Snuff, Gutkha paste (Tobacco paste), Jarda, Hookah paste etc. [3]. Globally everyday about 80 thousand to 1 lakh adolescent youth initiate smoking. Most of them are from developing countries [4]. It was estimated that, in year 1999-

2001, 5500 adolescent start tobacco use every day in India joining the 4 million under 15 children who use it regularly [5]. Of 1000 adolescent who smoke today, 500 will eventually die of tobacco related diseases, 250 in their middle age and 250 in their old age [6]. Tobacco causes 5.4 million deaths or an average of one death every six second and accounts for 1 in 10 adult deaths worldwide. The death toll is projected to reach more than 8 million by 2030 if current trends continue [7]. In India, the tobacco related deaths currently range between 8-9 lakh per year [8]. The world Health Organization has predicted that tobacco deaths in India may exceed 1.5 million annually by 2020 [9]. The epidemic of tobacco use is shifting from developed to developing countries, including India, where increased use is expected to result in a large disease burden in the future.<sup>10</sup>

Tobacco use is one of the major preventable causes of death and disability worldwide. WHO estimates that 4.9 million deaths annually are attributable to tobacco [11]. In India, around 10.9% of the population use tobacco in one of the other form. Among the effects of tobacco use, the proportion of cancer in male and female is 56.4% and 44.9% respectively [12]. Nine lakh people die annually due to tobacco among smokers, 82% were suffering from chronic obstructive diseases, the risk of death due to Tuberculosis is 4-5 times more [7]. The risk is 2-3 times more among smokers for coronary heart disease, cardiovascular diseases, stroke, peripheral vascular diseases and diabetes mellitus. Avoiding tobacco adds 20 years to the life of a teenager [7]. Tobacco is the leading preventable cause of death in the world [9]. The practice of tobacco use is usually initiated at adolescent age and then in many children it becomes part of their habit. This habit in long run is very hazardous and very detrimental to health and affects various organs and systems of body to cause chronic morbidities and death.

## MATERIAL AND METHODS

### Study Design:

Cross sectional study.

### Study area:

Four randomly selected section out of 18 sections of University College of Law College of Mohan Lal Sukhadia University (MLSU) were selected for study.

### Study Population:

College students.

**Sample size:** 200 students. Prior permission was obtained from college authorities, student who were present on the day of interview were included in the study. Students were informed about the purpose of the study and assurance was given about the confidentiality.

### Inclusion criteria:

All students of selected sections who were present at the time of study.

### Exclusion criteria:

Students who were refused, not willing to participate, non-cooperative and those who were absent.

### Statistical Analysis:

Microsoft Excel 2007 and Epi-info 3.5.3.

## RESULTS

Table-1 shows demographic details of the study population. 69 (34.5%) students were in the age group of 19-20 years, 63 (31.5%) students were in the age group of 18-19 years, 38 (19%) were in the age group of 17-18 years and 30 (15%) were in the age group of 20-21 years. Majority of the students (66%) were belongs to 18-20 years of age. In this present study 139 (69.5%) were male and 61 (30.5%) were female students and male to female ratio was 2.28:1.

**Table1: Demographic details of the study population**

Variable	No. (percentage)
<b>Sex</b>	
Male	139 (69.50)
Female	61 (30.50)
<b>Age (Yrs)</b>	
17-18	38 (19.00)
18-19	63 (31.50)
19-20	69 (34.50)
20-21	30 (15.00)
<b>Socioeconomic status*</b>	
Upper Class	10 (05.00)
Upper Middle	74 (37.00)
Middle Class	101 (50.50)
Lower Middle Class	10 (05.00)
Lower Class	05 (02.50)

Using modified Kuppu swami (2012) socioeconomic status scale, maximum students 101 (50.5%) were belong to middle class, 74 (37%) students belongs to upper middle class, 10 (5%) were belongs to upper class and only 10 (5%) were belongs to lower middle class. 5 (2.5%) students in study population was belongs to lower class.

**Table 2: use of tobacco products by study population, their relative and friends**

	Number (%) (n=200)	P value
<b>Law students</b>	36(18.00)	0.0003
<b>Friends</b>	42(21.00)	
<b>Father</b>	76(38.00)	
<b>Passive smoking</b>	46(23.00)	

Table-2 shows that father of 76 (38%) students consume tobacco products in any forms, mostly outside the home, friends of 42 (21%) students use tobacco products and 36 (18%) students of the study population utilize tobacco product in any

forms. Out of 200 students 46 (23%) students were passive smokers.

**Table 3: Knowledge on ill effects of tobacco use**

Condition of Ill health	Number (%) (n=200)	P value
Mouth cancer	195 (97.50)	0.0003
Lung cancer	185 (92.50)	
Chest diseases	150 (75.00)	
Throat cancer	55 (27.50)	
Leukoplekia	33 (16.50)	
Heart diseases	29 (15.00)	
Gums diseases	25 (12.50)	

Table-3 depicts that all students of our study were aware about deleterious effects of tobacco. 195 (97.5%) students knows that tobacco can cause mouth cancer, 185 (92.5%) students knows that long standing use of tobacco in form of cigarette or bidi can cause lung cancer and 150 (75%) study population also have idea that using tobacco product have bed effect in chest and can cause various chest diseases. 55 (27.5%), 33 (16.5%), 29 (15%), 25 (12.5%) students knows that smoking is culprit for leukoplekia, heart diseases and gum diseases respectively.

**Table 4: Source of information regarding ill health of tobacco use**

Source of information	Number (%) (n=200)	P value
Mass media only	140 (70.00)	0.0001
Mass media & friends	165 (82.50)	
Mass media & teachers	152 (76.00)	
Mass media, friends, teachers & relatives	172 (86.00)	
Mass media, friends & teachers	182 (91.00)	
Friends only	25 (12.50)	
Relatives only	15 (07.50)	
<b>Type of mass media (n=140)</b>		
Television, News paper, Internet, Cinema	130 (92.85)	0.0001
Hordings	10 (07.50)	

Table 4 shows that mass media is a important media for furnishing information about ill health effect of tobacco and 140 (70%) students were educated by this media alone. Adding friends, relatives and teachers knowledge about bed effect of tobacco use to mass media increases the

number and percentages of students who had knowledge about danger of tobacco products. Among all, combined effect of mass media, friends, teachers and relatives is very important and 182 (91%) students of the study population get awareness about bed effect of tobacco. Friends, relative and teacher alone educate about bed effect of tobacco in 25(12.5%), 15(7.5%), 13(6%) students respectively. Combined effect of TV, news paper, internet and cinema is very useful mode for spreading the knowledge among the students. 92.85% (130/140) students get education by combined use of mass media, hoarding on smoking's bed effects educate only 5% (10/140) students in our study.

**Table 5: Knowledge of tobacco prevention legislation (n=200)**

Legislation	Percentage of students	P value
Prohibition of Sale of tobacco products below 18 years	25	0.001
Prohibition of sale of tobacco products around 100 Mtrs radius of school/college	12	
Knowledge about COPTA	06	
Ban of tobacco products by govt.	90	

Table 5 regarding knowledge of tobacco prevention legislation shows that 25% of study population knows that sale of tobacco product below 18 years are prohibited, 12 % knows that sailing of tobacco products are prohibited around 100 meters radius of school or college and only 6% were knows about COTPA. Maximum students (90%) of study population wants that tobacco products should banned by government.

## DISCUSSION

In this study 36 (18%) of the students use tobacco products in any form and all were male. Current use of any form of tobacco among school going students by Madan et al [13] and Jayakrishna et al [14] was 11% and 8% respectively in their study. M. Shreedhar et al [12] study on school children only 9% male use tobacco in all form. The discordant with above study may be because of selection of college going students for the study purpose. In our study 76 (38%) of the student's father were used tobacco in any form. According to Devendra Gupta et al [13] a substantial proportion (71%) of the student reported that at least one of their family member use tobacco products. In the Kelker DS et al [15] study among the students with tobacco use habit, around 50% of their fathers

were tobacco users. According to Rekha P. Shenoy et al [16] prevalence of tobacco use by parents was 34.4%. Naresh et al [17] reported prevalence of tobacco use by parents of study subjects and it was 11.03%. In our study the students did not disclose the use of tobacco products in any form by the teachers where as Neresh et al [17] found 20.30% prevalence of smoking among teachers. Rekha P Shenoy et al [16] found prevalence of smoking among teachers in 67%. That passive smoking was also injurious to health, was known by 46 (23%) students in our study. M. Shreedhar et al [12] reported study population's knowledge on passive smoking and it was only 26% of where only 21% population knows about ill effect of passive smoking. Muttappallymyalil et al [18] in their study found that the knowledge of passive smoking and its ill effects were seen in 66.2% and 68.3% study subjects respectively. In Mahalakshmi T. Study [19] 53% boys and 47% girls were aware about deleterious effect of passive smoking. Percentage of the students who know the bad effects of passive smoking tobacco were almost equal to the Shreedhar et al [12] but lower than that of Muttappallymyalil et al [18], although, the age of study population were higher in our study in comparison to above studies. It means that there is need to aware the students about the ill effects of passive use tobacco. Students were asked if they were aware of the harmful effect of tobacco use. In this study 97.5 %, 92.5% and 75% students interviewed that they know that tobacco is a culprit for mouth cancer, lung cancer and chest diseases respectively. Shreedhar et al [12] conducted a study about awareness of tobacco uses risk among high school Children in Hyderabad and found that 35%, 30% and 25% of study population were knew the ill effect of tobacco in causation of lung cancer, oral cancer and lung diseases respectively which was quite lower than our study. A study conducted by Madan Kumar et al [13] found it to be 65.3%, 75.8% and 82% respectively. In our study students also knows that tobacco is responsible in causation of leukoplekia, heart diseases and gum diseases and founds in 33 (16.5%), 29 (15%) and 25 (12.5%) population respectively. These are the effects of smoking which may be dangerous in causation of CAD, Stroke or may convert into Cancer. We did not found such information in study population in similar Indian studies available in literature. The discordance of the data with above studies may be because of age of study population we selected and may be because of education by mass media which is more highlighted now these days. High level of awareness (90.76%) about the adverse effect of tobacco consumption was present in study conducted by Janki Bartwal et al

[20], by Khan et al [21] in Bareilly (89.53%) and Sharma et al [22] in Dehradun (91.8%). In these study the subjects belongs to medical profession. The result of our study is accordance with these studies although the subjects were not belongs to medical profession. It means the media are playing a great role in furnishing the information about tobacco related ill effects. Combined effect of mass media, friends, teachers and relative was the main source of information from which 182 (91%) study population get education about ill health of tobacco. Television, news paper, internet and cinema were the main mass media for educating the study population about the hazards of smoking and responsible in 130 (92.85%) study population. Hoardings were very less effective means in educating the study population and responsible in 10 (5%) students. Source of information regarding ill effects of tobacco use according to Shreedhar et al [12] were mainly television (22%), teachers (22%), friends (18%), parents (15%), news paper (15%) and hoardings (12%). Source of information about bad effects of tobacco were television (43.3%), teachers (43.3%), friends (43%), parents (32.7%), news paper (35%) and hoardings (33.7%) in study conducted by U.M. Bhojani [25]. Hoardings were less effective in our and Shreedhar et al [12] study whereas it is quite effective in U.M. Bhojani [23]. This discordance is may be because enormous use of television, internet and other social media sites or may be because the hoardings were hanged mainly near the hospitals or circles, near the hospital and administrative blocks. To make it more effective means for education it should be hanged near the Colleges, University and School premises. In present study mass media was the sole method to provide information about bad effects of tobacco. Father, friends and teachers of the students of this study were not educating about detrimental effects of tobacco. To increase the level of awareness since adulthood parents and teachers must talk to their son and students about tobacco hazards before it, they should not consume or quit tobacco products. In the present study 12% of the study population were aware of the ban on smoking in public place which is not comparable to the study by D. Imtiaz et al [24] and Jayakrishnan et al [14] where higher awareness level (43.7%) and (55.9%) was found among the adolescents respectively. In our study, 25% of the adolescents were aware of the ban on selling tobacco products to minor which is quite higher reported by Rao et al [28] (18.9%) and D. Imtiaz et al [26] (14.2%). Jayakrishnan et al [14] reported that 87%of the study subjects were unaware of the law prohibiting selling of tobacco products to minor. In this part of Rajasthan there has been extensive publicity surrounding the ban

on smoking in public places by different communication media. In this study 6% students know about COTA (cigarette and other tobacco product act 2003). Knowledge about COTPA was higher among Indian authors. Analysis of the study conducted Kalaivani et al [25] shows that 96.2% were aware of the COTPA. In both foresaid studies the selections of the study population were above 18 years of age. When students asked about complete banning of tobacco products by Government, 90% study objects were agreed. Reasons for agreeing on banning were its dangerous effects on body and expenditure of the Government on health issues in the community pertaining to bad effects of tobacco more than the earning in taxes form which was highlighted in a newspaper in this part of Rajasthan.

### LIMITATIONS

This study has its own limitations. The study was interview based and was conducted on campus; those absent on the day of interview might not have an opportunity to participate or share the knowledge of ill effects of tobacco with interviewer. As this study base the students could be unable to recall their knowledge on tobacco hazards on. Area of the study is limited so it can not be the representative of the community.

### CONCLUSION

The results clearly indicate major lacunae not only in current educational system but also in parental upbringing not giving worthy importance to smoking and its health hazards. Knowledge of tobacco prevention legislation is still poor among law college students even since 2003.

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