Use Of Tobacco And Related Products In Adolescents Of An English Medium School, Belgaum- A Cross Sectional Questionnaire Based Study

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ABSTRACT

BACKGROUND: Majority of adults are aware of health hazards of tobacco, children and adolescents continue to get exposed to tobacco and many develop cancer in later years.

AIM: To document the smoking and tobacco consumption habits in adolescents in an English Medium school of age group between 17-18 years in the city of Belgaum.

METHODOLOGY: A cross-sectional survey was carried out by self-administered questionnaire to document the smoking and tobacco consumption among representative sample of 40 adolescent students selected by cluster sampling method.

RESULTS: In the School, 10% of students were using tobacco and cigarettes, 90% of students were not using them, 92.5% of students were aware of harmful effects of tobacco, supari and smoking, 92.5% of students saw other children using tobacco.

CONCLUSION: Health education should be given at school level to raise awareness about the use of tobacco, its related products and its consequences.

KEYWORDS: Adolescents, Tobacco use, Self-administered questionnaire

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INTRODUCTION

Tobacco and its related products are prepared entirely from raw tobacco leaf which is used in both, smoke and smokeless forms. They can be smoked, chewed, sucked or inhaled. (1). Tobacco contains nicotine which is a highly psychoactive agent (mood changing agent). (1). Tobacco products pose a risk to our health and lead to many chronic diseases like cancer, lung disease and cardiovascular diseases. (1). According to the Global Adult Tobacco Survey of India 2009-2010 there were 34.6% current tobacco users and 29.1% used tobacco daily. Alarmingly, 52.3% of adults were exposed to second hand smoking (passive smoking) at home and 29% were exposed at a public place despite the ban of tobacco use in public places (2).

Though majority of adults are aware of health hazards of tobacco, children and adolescents continue to get exposed to tobacco. Many young people pick up these habits every year. About 20 million children of ages 10–14 are estimated to be tobacco-addicted according to a survey done by the National Sample Survey Organization of the Indian Government. (3). The study done by Kapoor S. K. et.al found that there was significant association between smoking by adolescent children and their relatives and friends. (4).

Verma et al exhibited that school level health education can be a very effective way of prevention and interception of tobacco use in adolescent. (5). Shilpi Singh et al found that peer pressure was the most influencing factor for the use of tobacco-related products in children. The study also revealed that advertisements on television (58%), in newspapers (26%) and movies (16%) was the source of information for tobacco and its related products. (6).

There is a need to evaluate the prevalence of tobacco consumption by adolescents and find a solution for prevention and interception of habits at an early stage. In order to do so we require an estimate of how many of the adolescents are currently having the habit and are getting exposed to it use. Hence, the present study was carried out to know the usage of tobacco in a group adolescents in Belgavi city and assess knowledge and awareness of adolescents about tobacco consumption and its hazards in the Belgavi city.

METHODOLOGY Design of the survey

This was a questionnaire based, crosssectional, descriptive study conducted at an English medium school in Belgaum.

Sample size and sampling technique

All the students of 11th Standard present on the day of survey were invited to participate. Selecting the sample was done by cluster sampling method. Everyone in the class received and returned the questionnaire.

Ethical consideration

Ethical clearance was obtained from the institutional ethical review board of Maratha Mandal Nathajirao G. Halgekar institute of dental science and research center (Outward no 527, dated 09.07.2016). Written permission was taken from principal of the school. The name of the school is not disclosed herewith to protect identity of the institution for ethical considerations.

Data collection

Data were collected using a self-administered questionnaire which consisted of 13 questions related to tobacco/ Guthaka/ supari/smoking.

Validity

The questionnaire was developed based on our observations that children aged below 18 years were also buying tobacco products from the vendors. When we enquired, the vendors were asserting that they don't sell tobacco to minors whereas our observation showed difference in what they tell and what is actually done. In order to know the actual status of tobacco being used by minors we devised an anonymous questionnaire to be distributed to minors. The questions were simple enough to be understood by school children. Pilot testing of the questionnaire was done in Maratha Mandal's School and college. We found that except the students of the Kannada medium, other students understood the questions properly. Hence, finally we used the questionnaire in the English medium school only.

Administration of the questionnaire

A total of 40 children from 11th standard were given the questionnaire in the class room. The purpose of the questionnaire study was explained with detailed explanation of each question to the students. We also disclosed that the students name will not be mentioned anywhere and the survey is anonymous and hence they can give frank and honest answers. The questionnaire was then distributed and 20 minutes were given for students to fill the questionnaire. Students were also asked to clarify any doubts regarding the questions. The completed questionnaire was collected after 20 minutes. Response rate was 100%, however, some students returned the form partly filled, with few questions un-answered.

QUESTIONNAIRE

The question asked were, do you have any habit of chewing tobacco or supari and smoking, if yes then, How many packets or units consumed per day, number of time consumed in a day, duration of consuming these products. At what age the habit was started, reason of starting the habit and with whom the habit was started was asked. Adolescents were also asked about the feeling when they started the habit, about quitting the habit, and whether anyone has advised them to quit the habit. The knowledge based question like whether the nonsmokers in the smoking zone will get affected by

the cigarette or beedi smoke, the harmful effects of tobacco/Guthaka/smoking/supari was also asked. Also question like whether they have seen any children getting involved in such habits, whether getting involved in such habits is a matter of concern. For further communication, for education about problems associated with tobacco, help and counseling for quitting the habit, contact number or email id was asked. All the 40 children returned the completed questionnaire.

DATA ANALYSIS

The data obtained from the questionnaire was entered in excel sheet. We calculated the scores of survey questionnaire of each student and represented the results in the form of tabular column and graphs.

RESULTS

Survey in school children aged 17-18 years was done. The aims and objec-

tives of our survey were to study the habits like tobacco chewing and smoking in adolescents of age groups 17-18 years of age. Also, to make them understand the ill effects of tobacco and smoking and to provide guidelines to quit the habits (Table 1, Figure 1)

DISCUSSION

Survey conducted by Department Of Preventive And Community Dentistry in year 2006 by Ragas Dental College Chennai about Tobacco use among school children in Chennai city by Madan et al (7). 1255 students participated in this survey. Among them tobacco use was reported by 37.6% of the students. Current users of tobacco were reported by 41.1% of students. The age group of those students was 15-17 years which was similar to our own study of 17-18 years age. However, in our study we found 10% agreed that they were using tobacco or supari.

Our results are in sharp contrast to the study mentioned about the Chennai city. The differences may have occurred due to the following reasons. Firstly, our study was conducted in a sophisticated school where the students would come from educated families and would also be more closely monitored in the school. Further, we noticed that many participants were shy and may not have liked to disclose the habits to us, though the survey was anonymous. Also, the Chennai study had both government and private schools whereas our study was in an elite, prestigious institution. The difference may have also been due to the social and economic contrasts between the two groups.

However, we also compared our study with another study done about tobacco use among high school children in Bangalore city in the year 2015, Shilpi sing et.al.in 2015 (6). 1288 students of both Government and private schools of Bangalore participated. The age group was similar to our study. Among them 99.5%Bangalore school children had heard about tobacco and 90.2%students knew the harmful effects of the tobacco. Similarly, even in our survey 92.5% of students were aware of the harmful effects of tobacco. Only 2.2% of the Bangalore school children had used the tobacco products, whereas about 10% of the children surveyed in our study used "Tobacco/ Supari/ Gutka".

Since supari chewing is a very common habit, many of the chewers in

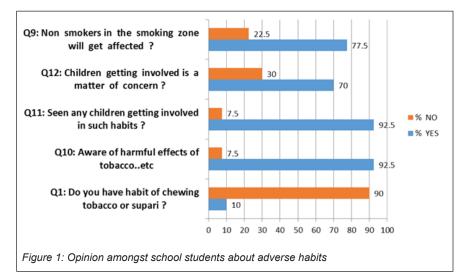


Table 1: Survey Conducted In English Medium School, Belgavi		
Student response to questions	YES (Number and percentage)	NO (Number and percentage)
Q: Do you have any habit of chewing tobacco or supari & smoking?	4 (10%)	36 (90%)
Q: Are you aware of harmful effects of tobacco/Guthaka/smoking/supari?	37 (92.5%)	3 (7.5%)
Q: Have you seen any children getting involved in such habits?	37 (92.5%)	3 (7.5%)
Q: Do you think children getting involved in such habits is a matter of concern?	28 (70%)	12 (30 %)
Q: Do you know that the non - smokers in the smoking zone will get affected by the cigarette or beedi smoke?	31 (77.5%)	9 (22.5%)

our study may have used supari only without tobacco. We have a limitation in our study that we did not ask separately about Tobacco and Supari. This was done purposefully as we thought we might have better disclosure if we combined the "Supari" with "Tobacco" which is more difficult for a student to disclose for the fear of being caught or being told to the parents. To avoid this fear we combined Supari with tobacco to improve disclosure. However, this is a limitation in our study as we can't fully ascertain how many were using the more harmful 'tobacco' compared to the lesser harmful "Supari".

Comparing to the above articles the current use of tobacco in students is high in Chennai city than in Belgaum and Bangalore. However, a very alarming finding was that 92.5% of our students "Saw other students using tobacco/cigarette". This is a significant finding as school children are continuing to get exposed to other 'peers' use the product. This can be a risk factor for more students to get exposed to the habits as the habit is usually initiated by the other students due to "peer pressure" as reported by Vaidya SG (8). Also, a learning institution becoming a factor in introduction of a bad habit is very alarming. This also calls for a thorough assessment of the school policies to recognize and counsel the students getting exposed to habits. Also, as the matter can be very sensitive and student with the habit may be victimized, a support group which is trained to delicately handle such cases should be in-charge of dealing with such cases. The student exposed to the habit should be treated like a "Victim" and not as an "Offender" and the counseling should ensure that such students come out of the habit without adversely affecting their emotional and academic aspects. This also calls for parent support groups and comprehensive school policy to fight with the menace of early introduction of bad habits in students.

The survey was followed by a brief health talk related to tobacco/supari hazards. The correct answers of the questions asked in the questionnaire were discussed amongst the students and appropriate information was given. The students and the staff were very cooperative. The students were very keen about the survey and were actively participating in the survey. The age group and the sample size could have been increased.

CONCLUSION

It was found that 10% of the students were using tobacco/cigarettes/suparies. Though majority of students were aware of harmful effects still many of the students saw other children using tobacco/cigarettes/suparies. This finding is of concern as children tend

to learn bad habits from each other. Health education should be given at school level to raise awareness about the use of tobacco, its related products and its consequences. Government should make new policies and rules to prevent adolescent smoking and also reduce the availability of tobacco products to young people.

REFERENCES

- WHO, Tobacco Fact Sheet, Accessed from: http://www.who.int/mediacentre/ factsheets/fs339/en/
- International Institute of Population sciences, Global adult tobacco survey, Accessed from: http://mohfw.nic.in/WriteReadData/ I892s/1455618937GATS%20India.pdf
- Chadda R, Sengupta S. Tobacco use by Indian adolescents. *TobInduc Dis* 2002; 15;1(2):111-19.
- Kapoor SK, Anand K, Kumar G. Prevalence of tobacco Use among School and college going adolescents of Haryana. *Indian Journal of Pediatrics* 1995;62:461-66.
- Verma A, Muddaiah P, Krishna Murthy A, Sanga R. Exploring an effective tobacco prevention programme for Indian adolescents. *Public Health* 2015; 129(1):23-28.
- Singh S, Vijayakumar N, Priyadarshini HR, Jain M. Tobacco use among high school children in Bangalore, India: A study of knowledge, attitude and practice. *Indian J Cancer* 2015;11(52):690-93.
- Madan Kumar PD, Poorni S, Ramachandran S. Tobacco use among school children in Chennai city, India. Indian J Cancer 2006:43(3):127-31.
- 8. Vaidya SG Young tobacco users. World Health 1995;48:30.