

Prevalence of Tobacco Use and Assessment of Knowledge and Attitude of School Children towards Tobacco Consumption in and Around Kanpur City

Dr.Rohan Sachdev¹, Dr.Kriti Garg², Dr.Shiv Chauhan³, Dr.Garima Singh⁴,
Dr.Vishal Mehrotra⁵

^{1,2,3,5}(Dept Of Oral Medicine & Radiology/Rama Dental College/India)

⁴(Dept Of Pedodontics/Rama Dental College/India)

Corresponding author: Dr.Rohan Sachdev

Abstract: *Aim:* The objective of this study is to assess the knowledge, attitude and prevalence of tobacco consumption among rural and urban school children aged 12-17 years. **Material&Methods:** A descriptive questionnaire cross-sectional study was performed in rural and urban schools from March to June 2018. Total 2790 school children were included in study of both genders. The study was then conducted by enrolling the students, and collected data were analyzed by using appropriate statistical software. **Results:** Of the 2790 students, 740 students were aware that tobacco is hazardous to health and 810 students were aware about passive smoking exposure outside home. 1040 students were aware of anti-tobacco warnings on tobacco packets and 430 students were ready to start consuming tobacco if it is provided free to them. Total number of tobacco non-consumer students was more than those who were consuming tobacco and female students were less in number. Out of 2790 students, aged 15-16 years students were found more in number of tobacco consumption, mainly in rural schools. **Conclusion:** The present study suggests the need for school based educational programs regarding harmful effects of tobacco and make students and their families more aware and motivate them to stop and eradicate the use of tobacco among all age groups.

Keywords: Tobacco, school children, awareness, education, attitude

Date of Submission: 30-07-2018

Date of acceptance: 17-08-2018

I. Introduction

Tobacco surely was designed to poison and destroy mankind. Among the countries undergoing epidemiological transition; chronic diseases caused by tobacco are rapidly overtaking the more traditional causes of mortality.^[1] The tobacco epidemic is one of the biggest public health threats the world has ever faced, killing more than 7 million people a year. More than 6 million of those deaths are the result of direct tobacco use while around 890 000 are the result of non-smokers being exposed to second-hand smoke.^[2,3] Tobacco consumption is one of the leading causes of morbidity and mortality all over the world. This habit is increasingly being taken up at an early age. Various factors have been implicated for the uptake of the habit including inadequate knowledge and unfavorable attitude.^[3,4] Tobacco use in children and adolescents is reaching pandemic levels.^[2] Adolescents are the most vulnerable population to initiate tobacco use. It is now well established that most of the adult users of tobacco start tobacco use in childhood or adolescence. The World Bank has reported that nearly 82,000-99,000 children and adolescents all over the world begin smoking every day. India is the second most populous country in the world and third largest producer and consumer of tobacco in the world.^[4,5] Adolescents and children are the prime targets of the tobacco industry when recruiting new smokers. 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.^[2,4]

Global Youth Tobacco Survey (GTYS) conducted in six regions of India on a national level, found a prevalence of 14.6% among the 13 to 15 year adolescents with boys having 3 times higher prevalence than the girls.^[5,6] Most of the tobacco users start using tobacco earlier at the age of 18 years, while others starts at young age of 10-11 years.^[4,5] It was assess in 1999-2001 that 5500 adolescents started using tobacco every day in India, along with the 4 million young people aged 10-15 years, who are already tobacco consumers.^[7] There are various factors responsible for the initiation of tobacco use among adolescents and children, that may include exposure to parental, sibling or peer smoking; peer pressure; easy access to smoking and non-smoking forms of tobacco; aggressive promotion and advertising; low cost and poor performance in school and studies.^[7] Hence there is a need to assess the presence of these determinants among adolescents and school children we have

conducted this study among school children of rural and urban schools to evaluate the prevalence of tobacco consumers school children of both genders and their knowledge, attitude towards tobacco consumption.

II. Material & Methods

This cross-sectional study was conducted among school children of both genders in rural and urban area in and around, Kanpur city from March to June 2018 after taking ethical clearance from principals of schools. Total of 2790 school children of aged 12-17 years were included in this study after enrolling them. The informed consent was obtained from each student to participate in the study. A descriptive self-structured questionnaire was given to each enrolled student and data were collected on age, gender, current use of tobacco products among students, attitude regarding use of tobacco and tobacco products. The students were instructed to fill in the questionnaire and drop it into a box circulated, 15 minute time was given to each student and no identifiers were used on the questionnaires. The data collected was entered and analyzed using SPSS version 15.0.

III. Results

A total of 2790 school children were selected of aged 12-17 years, from rural and urban schools in and around Kanpur city for the analysis of knowledge, attitude of students towards tobacco consumption and their prevalence of tobacco consumption.

Regarding knowledge of tobacco consumption among school children, 740 (26%) was aware of hazardous effects of tobacco on health. Among total number of school children 64(2.2%) and 810(29%) having knowledge of passive exposure to tobacco inside and outside the home respectively. 758(30%) school children were aware of anti-tobacco messages and 1040(37%) school children have read the written anti-tobacco messages on tobacco products available.[Table-1]

During the assessment of attitude of school children towards tobacco consumption, majority of children 2635(94.5%) were against the public place tobacco consumption. Out of total children of both genders, 990 (35.4%) children stated that tobacco consumption can led to an increase in their friends number. 430(15.4%) children of both genders were found to be ready to start tobacco use if it is provided free of cost to them.[Table-2]

Assessment of overall prevalence of tobacco consumption among school children of rural and urban areas was found to be 364 (13.15%). 259 (14.7%) male school children were found to tobacco consumers as compare to female school children 105(10.19%). Tobacco consumption was more in 2times more in male school children as compared to females. [Table-3]

Tobacco consumer school children were found more in number in rural schools as compare to urban schools. 335(18.06%) school children from rural schools were tobacco consumers which were slight high in number as compare to urban school children 272(15.4%). School children of rural schools aged 16 years were found to be more involved 355(95%) followed by 15 and 14 years of age in tobacco consumption as compare to other age group school children who were enrolled for the study, 319(65%) and 295(21%) respectively. [Table-4]

In the present study of school children among rural and urban schools out of 2790 school children, male children were found to be more in number around 1760 while female participants were found to be 1030. [Table-5]

IV. Discussion

Tobacco consumption in various forms is common worldwide. Various tobacco is one of the causes of death in the world. India is emerging as one of the leading country for tobacco related deaths. Tobacco consumption is common in all age groups and gender, adolescent age group is more vulnerable for addiction of tobacco.^[8]

Tobacco is hazardous to health was in knowledge of 740 (26%) of total school children. Anti-tobacco message on tobacco packets were in knowledge of 840(30%) of school children while 1040(37%) had read the warning message written on tobacco packets. In the studies Roopa et al^[1] 56.8% and Hirani et al 69.1%^[6] school children were aware of tobacco hazardous effect which was slight higher to present study data. Regarding the attitude of school children maximum number 94.5% were against the use of tobacco in public places which was found similar to the studies done by Hirani et al^[6] 95% and Kaur et al 79%.^[9] 990 school children have accepted that tobacco consumption can increase their number of friends which was similar to the study done by Hirani et al^[6], 1000 school children replied the same.

The total prevalence of tobacco consumer school children came 15.4% while it was 14.7% in males and 10.1% in females which came almost close to Hirani et al^[6] study while study done by Rattan et al^[10] prevalence rate came was 3.2% and 8.2% in study done by Roopa et al.^[1] Overall prevalence came higher in

present study, reason was found easy availability of tobacco products near schools in both rural and urban areas, 1544 school children of present study were aware of products availability.

In the present study more number of tobacco consumers was found in rural schools 335(18.06%) as compare to urban schools. When compared to study done by Hirani et al^[6] municipal school of rural areas were found with similar number of school children that is 222 (13.4%) and Rashmi et al^[11] 18%. School children aged 16 years were found to be more involved 355(95%) followed by 15y years of age in tobacco consumption 319(65%). While study done by Rashmi et al^[11] and Vasudha et al^[12] 12.8%, age group 15-16 years were found to be more involved in tobacco consumption. Among total school children involved in the present study males were found to be more in number 1760 as compare to females and more involved in tobacco consumption 14.7 which was very less when compared to study done by Rashmi et al^[11] 38.5%.

V. Conclusion

Global youth tobacco survey is limited to students especially in the ages 13–15 years and most of the data are available from sporadic surveys is in this age group. The gloomy predictions about the growing magnitude of tobacco threat to India relate to a rise both in the proportion of deaths attributable to tobacco and in the absolute number of persons who consume tobacco. Drawback of this study included small number of school children from small number of schools, no inclusion of families and teachers. Despite these limitations, in the present study we have found some important neglected aspects of school children which should be taken in considerations and proper counseling sessions should be planned for families friends and to motivate them stop using tobacco products and also to conduct tobacco prevention programs in regular intervals to eradicate the consumption of tobacco in all age groups.

References

- [1]. Hanspal R,Singh J,Choudhary SK,Bhanderi D,Singh J.TobaccoConsumption Practices among the School Students.
- [2]. <http://www.who.int/news-room/fact-sheets/detail/tobacco>
- [3]. Ballal K, Kulkarni M,Agrawal A,Kamath A,Kumar M. Knowledge and attitude regarding tobacco and its use among adolescent students. *Ntl JCommunity Med* 2016; 7(6):519-523.
- [4]. Chadda RK, Sengupta SN. Tobacco use by Indian adolescents. *Tobacco Induced Diseases* 2002; 1(2): 111–119.
- [5]. Basakhetre U, Jaiswal A, Deolia A, Sen S, Dawngliani M, Jaiswal A. Prevalance of Tobacco Use among School Children Reporting to Dental Hospital for Treatment. *J Datta Meghe Inst Med Sci Univ* 2017;12:242-45.
- [6]. Hirani DR, Balaramanamma DV. A study on prevalence of tobacco consumption among school students studying from fifth to eighth standards and assessment of their risk behavior by studying their knowledge, attitude, and practices regarding tobacco consumption in Ahmedabad city, Gujarat, India. *India. Int J Med Sci Public Health* 2016;5:191-197.
- [7]. Pater DR.Smoking and children.*Indian J P ediatr* 1999;66:817-24.
- [8]. Patel AS, Damor RD. A cross section study on tobacco consumption practice in school going adolescent male of Jamnagar city, Gujarat, India. *International Journal of Community Medicine and Public Health* 2018;5(3):933-938.
- [9]. Kaur J,Kishore J,Kumar M. Effect of anti-tobacco audiovisual messages on knowledge and attitude towards tobacco use in North India.*Indian J Community Med* 2012;37(4):227-231.
- [10]. Rattan V,Mohanty U,Goyal A. Tobacco habits among the 8to15 years school children of rural Haryana. *J Postgrad Med Edu Res* 2014;48(4):183-185.
- [11]. Metgud R et al. Prevalence, knowledge, and attitude of gutkha chewing among school children of Arsikere, India. *India. J Can Res Ther* 2018;14:368-71.
- [12]. Sharma V, Hiremath SS, Puranik M,Somasundara S. Prevalence of tobacco use among 15-20 years old college students in Bengaluru city. *Journal of Indian Association Of Public Health Dentistry* 2015;13(1):24-29.

Table -1 Children knowledge about various aspects of tobacco consumption

S.NO	Questions based on knowledge	Male Children (n=1760)		Female Children (n=1030)		Total	
		Frequency	%	Frequency	%	Frequency	%
1.	Tobacco consumption is hazardous to health	360	20	380	36	740	26
2.	They are exposed to passive smoking inside house	40	2.27	24	2.3	64	2.2
3.	They are exposed passive smoking outside house	470	26	340	33	810	29
4.	Tobacco products are available near their school/house	950	54	59	57	1544	55
5.	Awareness about anti-tobacco message	470	26	370	35	840	30
6.	Have read anti-tobacco warning written on tobacco packet	660	37	380	36	1040	37

Table-2 Children attitude towards tobacco consumption

S.NO	Attitude	Male Children		Female Children		Total	
		Frequency	%	Frequency	%	Frequency	%
1.	Tobacco consumption should not be done in public place						
	Can be consumed	85	4.8	10	0.96	95	3.4
	Should not be consumed	1640	93.3	995	96.6	2635	94.5
	Do not know	35	1.90	25	2.4	60	2.15
	Total	1760	100	1030	100	2790	
2.	Does tobacco consumption affects the number of friends of user						
	Friend no increases	660	37.5	330	32.03	990	35.48
	Friend no decreases	925	53.5	545	52.91	1470	52.68
	No change	175	9.9	155	15.04	330	11.82
	Total	1760	100	1030	100	2790	100
3.	Will students consume tobacco if offered at free of cost						
	Yes	370	21.02	60	5.82	430	15.41
	May be	90	5.11	70	6.79	160	5.74
	No	1300	73.86	900	87.37	2200	78.85
	Total	1760	100	1030	100	2790	100

Table-3 Prevalence of current tobacco consumer children

S.NO	Tobacco	Male Children		Female Children		Total	
		Frequency	%	Frequency	%	Frequency	%
1.	Consumers	259	14.72	105	10.19	364	13.15
2.	Non consumers	1501	85.28	925	89.81	2426	86.85
	Total	1760	100	1030	100	2790	100

Table-4 Age-wise distribution of tobacco users among urban/rural schools

Age (years)	Urban school Children			Rural school Children			Total		
	Total	Users	%	Total	Users	%	Total	Users	%
12	156	14	8.9	165	14	8.48	321	28	8.7
13	155	20	12.9	175	19	10.85	330	39	11.8
14	395	55	16.9	295	21	7.11	690	76	11.01
15	219	75	34.2	319	65	20.37	528	140	26.02
16	250	56	22.4	355	95	26.76	605	151	24.95
17	585	52	8.8	545	121	22.01	1130	173	15.30
Total	1760	272	15.45	1854	335	18.06	3614	607	16.79

Table-5 Gender and age distribution of total number of Children

Age (years)	Male Children	Female Children	Total
12	195	156	351
13	275	144	419
14	309	275	584
15	345	250	595
16	311	105	416
17	325	100	425
Total	1760	1030	2790

Dr.Rohan Sachdev | IOSR: Journal Of Dental And Medical Sciences(IOSR-JDMS)Prevalence Of Tobacco Use And Assessment Of Knowledge And Attitude Of School Children Towards Tobacco Consumption In And Around Kanpur City."IOSR Journal of Dental and Medical Sciences (IOSR-JDMS), vol. 17, no. 8, 2018, pp 03-06