

A Study to Assess the Prevalence of Tobacco Consumption and Knowledge of Harmful Effect of Tobacco Consumption and Determinates of Quitting Behaviors among the School going Adolescents in Kamrup Metro

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Abstract: Background: Tobacco is one of the leading preventable deaths in world wide. Annually nearly 1.3 million people die in India from Tobacco related diseases. Tobacco consumption habit is increasingly taken up at early of the age. Various factors are responsible for adolescents' tobacco consumption and also inadequate knowledge and unfavorable attitudes towards tobacco consumption. Aims & Objectives: This Study was conducted to find out the Prevalence of Tobacco Consumption and Knowledge of Health effect and find their quitting behavior on tobacco among the School going Adolescence in Kamrup Metro Assam. Study design: Descriptive research Design has been taken for this present study. Materials and Methods: "Non probability sampling" has been used for selection of sample. Setting of the study was 2 governments co-educational urban schools, located at Dispur area, Gwahati in Kamrup metro. Study sample was 98 and age group of 12 to 19 years and studying in class 6th (VI) to 12th (XII) standard. Result: Among the 98 of samples, 27.4% students ever tried cigarettes and bidi. And 46.9% of students were found who ever tried smokeless form of tobacco. In smokeless form of tobacco it has found that 36.7% of the students were consumed Goikha. Study revealed that 57.1% had consumed tobacco because of their peer pressure, but most of the study sample was aware of the ill effect of tobacco consumption on health. The level of education and health effect of tobacco consumption was significantly associated ($\chi^2=30.673$) and among the study sample 58.2% of the sample were want to quit the tobacco consumption. Conclusions: consumption of tobacco in adolescent period is one of the major social and public health problems. There is need to implement public health intervention by family, teacher, community leader and there is need to develop tobacco quitting strategies by imparting health education.

Keywords: Tobacco, Adolescent, Health effect, Quitting behaviour

1. Introduction

Background of the Study:

Tobacco use in children and adolescents is reaching pandemic levels. Tobacco is the leading cause of death in the world. About 5 million people die every year due to tobacco use and this figure may increase to 10 million tobacco related deaths per year by 2020[1]. The World Bank has reported that nearly 82,000–99,000 children and adolescents all over the world begin smoking every day. The World Health Organization (WHO) has defined 'adolescents' as persons in the 10 to 19 years age group. People in the age group of 10-19 years, comprise 22% of the Indian population [2]. Tobacco smoking and chewing are the main causes of lung cancer and oral cancer are the second major causes of death in the world. The tobacco death toll is expected to double by 2025 from the present 5 million deaths (approximately). At every 6.5th second, a person dies because of a tobacco related disease, globally [3]. In India, tobacco use is estimated to cause 800,000 deaths annually. The World Health Organization predicts that tobacco deaths in India may exceed 1.5 million annually by 2020

Forms of Tobacco consumption prevalent in north eastern region including Assam and other parts of India include Pan [piper betel leaf sliced with areca nut lime catechu and other

spices chewed with or without tobacco], Pan masala or gutkha [chewable gutkha containing areca nut], Mishri/Sadha [A powdered tobacco rubbed on the gums] .

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 girls.[4] Major determinants 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, etc. There is an urgent need to curb tobacco use amongst school children from the early adolescent age because if this habit remains forever at adulthood there will be very bad impact on health as well as nation. Hence this study was conducted to estimate the prevalence of tobacco use amongst school children, and their knowledge on health hazards and to evaluate their attitude on quitting behavior on tobacco consumption. [5,6]

2. Material and Methods

Type of the study: Descriptive research Design has been taken for this present study. And the Study was carried out in one region in two Government co-educational schools.

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Target population: School going adolescents' age group of 12 to 19 years studying in both Government school of Kamrup metro.

Study sample: 100 study samples were taken in two government co-educational school. From each school 49 samples were carried out

Ethical consideration: Permission to carry out the study was sought from departmental ethical committee. In addition to the above Written consent was obtained from the school head master and respective class teachers before the initiation of the study. Verbal consent was sought from every respondents at the beginning of the interview.

Data collection: Data was collected by pre-tested anonymous self administered questionnaires (prepared in Assamese and English language) in the classroom in one day. The questionnaires on Tobacco consumption was broadly classified into different categories: smoking, chewing and more than one form of tobacco use. Tobacco smoking includes cigarettes, beedis. Smokeless tobacco use includes Gutka, Khaini and Zarda. In socio demographic background their class standards, religion, parents education and occupation, reasons for consumption of tobacco etc are added. After giving an overview of the objectives of the study the students were instructed to fill in the questionnaire and drop it into a box circulated in the class room. Half an hours' time was given to students for fill up the questionnaire set.

3. Data analysis and Result

Statistical analysis was done by applying Chi- square test and Fisher's Exact test. The socio demographic profile of the study participants are given in Table 1(A) and total of 98 students participated in the study with a mean age of 14.67 years. Among them 87.8% were boys and 12.2% were girls. Among the study samples, 21.4% of students were from 12 years of age and 18.4% of students were from age group of 15 to 16 years of age. Most of the student's father's educational level was at high school level (41.8%) and Mother's educational level was at middle school level (30.6%) and from the study samples 62.2% were tried tobacco. Maximum number(16.3%) of sample found consumed tobacco at the age of 14 years and among them they consumed Gutkha (36.7%), cigarettes (14.3%), saddha/khaini (6.1%) and Bidi (5.1%) and only 37.8% were never used any types of Tobacco. 24.5% were consumed tobacco regularly. 52.1% were motivated to consumed tobacco from peer pressure.

Table 1 (A): Socio demographic Characteristics, n= 98

Socio demographic Characteristics		Frequencies	Cumulative percentage
Gender:	Boys	86	87.8
	Girls	12	12.2
Religion	Hindu	79	80.6
	Muslim	14	94.9
	others	5	5.1

Age :	12 years	21	21.4
	13 years	7	7.1
	14 years	17	17.3
	15 years	18	18.4
	16 years	18	18.4
	17 years	7	7.1
	18 years	10	10.2
Class	VI(six standard)	30	30.6
	VII(seventh standard)	17	17.3
	VIII(eight standard)	9	9.2
	IX(nine standard)	11	11.2
	X(ten standard)	20	20.4
	XI(eleven standard)	6	6.1
Father's education	XII(twelve standard)	5	5.1
	Primary	8	8.2
	Middle	22	22.4
	High school	41	41.8
	Higher secondary	20	20.4
Mother's Education	Graduate	7	7.1
	Primary	21	21.4
	Middle	30	30.6
	High school	29	29.6
	Higher secondary	15	15.3
Father's occupation	Graduate	3	3.1
	No occupation	3	3.1
	Govt job	11	11.2
	Private job	31	31.6
	Business	47	48.0
Mother's occupation	Farmer	6	6.1
	Govt job	3	3.0
	Private job	14	14.2
	business	15	15.3
Pocket money get from	House wives	66	67.3
	Father	77	78.6
	Mother	18	18.4
Try to experience of consume tobacco	Others family members	3	3.1
	No	37	37.8
	Yes	61	62.2
Age when first try tobacco	Not consume	37	37.8
	11 years	3	3.1
	12years	3	3.1
	13years	10	10.2
	14years	16	16.3
	15years	10	10.2
	16years	11	11.2
	17years	3	3.1
18years	5	5.1	
Types of tobacco used	Not used	37	37.8
	Cigarette	14	14.3
	Sadha	6	6.1
	Gutkha	36	36.7
	Bidi	5	5.1
Family used tobacco	Not consume	23	23.5
	Father	50	51.0
	Mother	4	4.1
	Brother	11	11
	Sister	2	2.0
Friend used tobacco	Relatives	8	8.2
	Not consume	16	16.3
	Some of them	35	35.7
Day of tobacco used	All of them	47	47.9
	Never consume	42	42.9
	Regularly	24	24.5
	Once in a week	14	14.3
	Occasionally	18	18.4
Got motivation of tobacco	Not consume	4	4.1
	Peer pressure	52	53.1

consumed	Imitation from others	15	15.3
	Television	19	19.4
	Advertisement	8	8.2

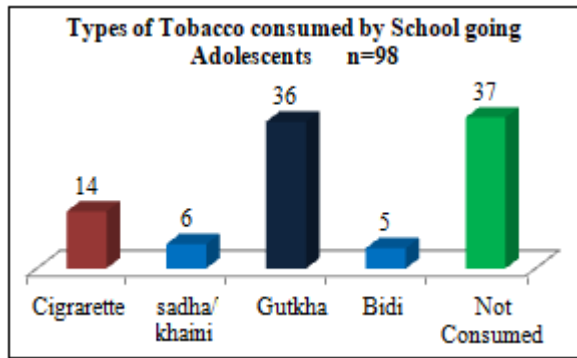


Figure 1: Types of Tobacco Consumption

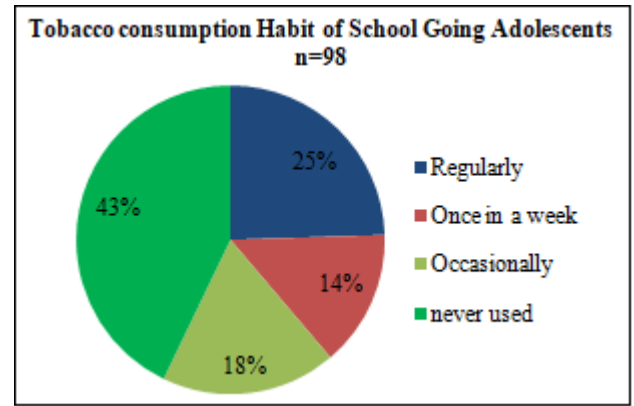


Figure 2: Tobacco Consumption habit

Table 2: Motivational factors of Tobacco initiations, n=98

Motivational factors for tobacco initiation	Count / %	High	Average/ Moderate	Low	Total	Pearson Chi-Square
0	Count: 4 %: 9.3%	4	0	0	4	X ² = 23.300 df = 8 P = .003*
Peer pressure	Count: 24 %: 55.8%	24	26	2	52	
Imitation	Count: 1 %: 2.3%	1	9	5	15	Fisher's Exact Test=20.309 P=.003*
Television	Count: 10 %: 23.3%	10	7	2	19	
Advertisement	Count: 4 %: 9.3%	4	4	0	8	
Total	Count: 43 %: 100.0%	43	46	9	98	

Significant level is at P<0.01 (1%) level

Table 2: Education and knowledge of health effect of tobacco consumption, n=98

Education	Count / %	High	Average/ Moderate	Low	Total	Pearson Chi-Square
VI	Count: 5 %: 22.7%	5	10	15	30	X ² = 30.673 df = 12 P = .002
VII	Count: 6 %: 27.3%	6	7	4	17	
VIII	Count: 0 %: .0%	0	4	5	9	Fisher's Exact Test=24.141 P = .009
IX	Count: 3 %: 13.6%	3	3	5	11	
X	Count: 2 %: 9.1%	2	12	6	20	
XI	Count: 1 %: 4.5%	1	1	4	6	
XII	Count: 5 %: 22.7%	5	0	0	5	
+ Total	Count: 22 %: 100.0%	22	37	39	98	

Significant level is at P<0.01 (1%) level

Table 3: Knowledge of dangerous of consumption of tobacco, n=98

Knowledge on dangerous of tobacco consumption	Count / %	High	Average/ Moderate	Low	Total	Pearson Chi-Square
Yes	Count: 38 %: 88.4%	38	42	7	87	X ² = 1.395 df = 2 P = .498
No	Count: 5 %: 11.6%	5	4	2	11	
Total	Count: 43 %: 100.0%	43	46	9	98	Fisher's Exact Test=1.707 P=.400

Significant level is at P<0.01 (1%) level

4. Discussion

Adolescent age group is more vulnerable for addiction of tobacco. Present study reflects that 87.8% boys and 12.2% of girls consumed tobacco. In the present study, the mean age of initiation of tobacco use was 14.67 Yrs, SD=1.93 Yrs, Range 12-18 Year. Similar findings regarding age of initiation was 12 years as per the study done by J Muttappallymyalil et.al [7] in Kerala and Preeti Soni et.al in Delhi. As per the recent GYTS survey in India, the age of initiation of tobacco was before 10 years of age among middle age adolescents In the current study, smokeless form of tobacco is more prevalent than smoked form of tobacco i.e.36.7% and 14.2% were involved in smoked form of tobacco. The study also observed and supported the similar findings the study conducted in Gujarat by Makwana et. al [8] observed that the prevalence of tobacco chewing increases with age, that among the users, 66.2% had the habit of only tobacco chewing, 14.6% had the habit of only smoking, and 19.2% had the habit of both smoking and tobacco. In the current study, family members majority 51.0% of fathers and 11.2% of brother were consumed any forms of tobacco. In this study it was found that motivational factors of tobacco consumption was peer pressure chi-square =23.3 df=8 significant at 0.01(1%) level. kirubakaran S.Dongre et al [9].found that the major reasons of initiating tobacco usage were peer pressure (97.2%).Nearly (91.3%) of adolescent students were having moderate Knowledge on danger of tobacco consumption and 97% of adolescents were wanted to quit the tobacco consumption habit.

5. Conclusion

After conducting this study, it is clear that tobacco consumption among adolescents is on rising trends. Smokeless form of tobacco is more prevalent among adolescents. The common factors found responsible for tobacco consumption was peer pressure, use by family members. It need urgent public intervention like school based educational programs to discourage the uptake of tobacco among the adolescents, parental counseling is also very important. Various Health education programs should be provided to raise the level of awareness of the danger of tobacco consumption.

References

- [1] World Health Organization (WHO). Tobacco Free Initiative. Available at: <http://www.who.int/tobacco/en/>. Accessed on 8 December 2009.
- [2] "WHO; Adolescent Development". Who.int. N.p., 2017. Available at: http://www.who.int/maternal_child_adolescent/topics/adolescence/dev/en/. Accessed on 8 March 2017.
- [3] Abdullah AS, Husten CG. Promotion of smoking cessation in developing countries: A framework for urgent public health interventions. Thorax. 2004; 59: 623-630. 4. Country profile India. Journal of Indian.
- [4] Global Youth Tobacco Survey: India 2009 Fact Sheet. Available at: <http://www.who.int/fctc/reporting/>

- Annexoneindia.pdf [Accessed on December 25, 2015]
Narain R, Sardana S, Gupta S, Sehgal A. Age
- [5] Ministry of Health and Family Welfare, Government of India. Global Adult Tobacco Survey: India Report 2009-10. New Delhi, India, 2010. Available from: http://whoindia.org/EN/Section_20/Section_25_1861.htm. [Last Accessed on 2011 Sep.
 - [6] Singh V, Pal HR, Mehta M, Kapil U. Tobacco consumption and awareness of their health hazards amongst lower income group school children in National Capital Territory of Delhi. Indian Pediatr. 2007 Apr;44(4):293-5. PubMed PMID: 17468526.[PubMed]
 - [7] J Muttappallymyalil1, J Sreedharan, B Divakaran :Smokeless tobacco consumption among children :Indian Journal of Cancer: publication of year : 2010 | Volume : 47 | Issue : 5 | Page : 19-23.
 - [8] Makwana Naresh R. , Shah Viral R. ,Yadav Sudha: A Study on Prevalence of Smoking and Tobacco Chewing among Adolescents in rural areas of Jamnagar District, Gujarat State :Journal of Medical Sciences Research (JMSR) September 30, 2007.
 - [9] Kirubakaran S, Dongre AR. Prevalence and Determinants of Tobacco Usage Among Youth (Age Group 15-24) in Peri-Urban area of Villupuram, Tamilnadu. Online J Health Allied Scs. 2014;13(3):3. Available at URL
 - [10] Chadda R K &Sengupta S N :Tobacco use by Indian adolescents: TobInduc Dis. 2003; 1(2): 111–119. Published online 2002 Jun 15. doi:10.1186/1617-9625-1-2-111availableat <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2671647/3/12>.
 - [11] Park K. Park's textbook of Preventive and Social Medicine. 21st ed. Jabalpur: M/S Banarsidas Bhanot Publishers; 2011. p.633, 774,77
 - [12] Medhi GK, Hazarika NC, Mahanta J. Tobacco and alcohol use among the youth of the agricultural tea industry in Assam, India. Southeast Asian J Trop Med Public Health 2006; 37(3): 581-6.