



## ASSESSMENT OF THE KNOWLEDGE AND ATTITUDE ABOUT SMOKING AND SMOKELESS TOBACCO USE AND ITS HEALTH HAZARDS AMONG ADOLESCENT (BOYS & GIRLS) IN SELECTED HIGH SCHOOLS IN OSMANABAD

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### ABSTRACT

Tobacco is a major global contributor to deaths. India is a second largest consumer of tobacco in world, smoking and smokeless tobacco use among children and youth is leading worst health habit worldwide. Tobacco use In India it is quite high compare to other countries. study was conducted to assess the knowledge and attitude about smoking and smokeless tobacco use and its health hazards among adolescent boys and girls. A sample of 100 high students were selected (50 girls and 50 boys) by simple random technique from selected high schools of Osmanabad. The data collected were analyzed and interpreted based on descriptive and inferential statistics. The finding revealed that, 35 (70%) boys and 41 (82%) girls had poor knowledge, 15 (30%) boys and 9 (18%) girls had average knowledge and none of the sample had good knowledge. And only 23 (54%) boys and 11 (22%) girls had positive attitude towards non tobacco use and tobacco control programme and 27 (46%) boys and 39 (78%) girls had negative attitude towards non tobacco use and tobacco control

**Key Words:** Tobacco; Smokeless tobacco; Health hazards; Adolescent; Knowledge; Attitude.

### INTRODUCTION

Tobacco is a major global contributor to deaths from chronic diseases. There are about 1.3 billion smokers in the world and approximately 80% of them live in the developing countries. Globally, there are 5 million deaths per year from tobacco use which are expected to rise to 10 million by the year 2025 [1]. The Global Youth Tobacco Survey (GYTS) conducted in 131 countries, in which 750,000 students of ages 13-15 years were tobacco users, it was found that approximately 9% of students were current smokers while 11% currently used tobacco products other than cigarettes [2]. India is the second largest consumer of tobacco in the world, after China. Even a conservative estimate of tobacco-attributable deaths in India currently ranges between 800 000 and 900 000 per year. Out of 2.2 million cancer patients in India,

the tobacco related cancers account about half the total cancers among men and 20% among women. About 0.7 million tobacco related deaths occur each year in fact, smoking kills more people than AIDS, alcohol, drug abuse, car crashes, murders, suicides and fires combined each year [Centers for Disease Control and Prevention (CDC) [3]. In each year, the cost of the tobacco-attributable burden of just three groups of diseases cancer, heart diseases and lung diseases were estimated to be 308.33 billion [4].

### Need For the Study

In India, nearly 1 in 10 adolescents in the age group 13-15 yr have ever smoked cigarettes (used at least once in life) and almost half of these reports initiating



tobacco use before 10 yr of age. As per the National Sample Survey of India, 29.3% of rural and 20.2% of urban males, 2.3% of rural, and 0.7% of urban females smoked bidis and cigarettes. The prevalence of tobacco consumption in other forms such as snuff, chewing tobacco, burnt tobacco powder, and paste was 19.3 and 9.9% respectively in rural and urban males, 9.3 and 4.3% respectively in rural and urban females. As per WHO estimates, approximately 80% of adult smokers initiate their tobacco use before 18years of age [5].

A study was conducted in Bangalore on Tobacco use and related factors among school and pre-university students. The prevalence of 'ever use' of tobacco was 15.7% of which 5.3% were current users of tobacco. The mean age of initiation of tobacco use was 14.7 years; 78.3% of users were aware that tobacco was harmful [6]. Compared to other developing countries, the most susceptible time for initiating tobacco use in India is adolescence and early adulthood. Approximately 55 500 adolescents start using tobacco every day in India, joining the 7.7 million young people under the age of 15 who already regularly use tobacco.

Compared to other developing countries, the most susceptible time for initiating tobacco use in India is adolescence and early adulthood. Approximately 55 500 adolescents start using tobacco every day in India, joining the 7.7 million young people under the age of 15 who already regularly use tobacco [7].

Smoking is usually initiated during the period when students are in college and school. This is mainly due to the ignorance of students regarding the health hazards caused by the use of tobacco products. Therefore, it should be a public health priority to educate this group regarding the hazards of smoking, so that their behavior can be modified. However, before initiating any awareness programs, it is important to understand the factors contributing to smoking among school students and design effective interventions to prevent it [8]. Hence investigator felt the need to assess the knowledge and attitude of school children regarding tobacco use and its health hazards.

### Objectives

1. To determine the knowledge level of boys and girls school students regarding smoking and smokeless tobacco use and its health hazards using a structured knowledge questionnaire.
2. To assess the attitude of boys and girls school students regarding smoking and smokeless tobacco use and its health hazards using attitude scale
3. To find the association between knowledge score and selected demographic variables.

4. To find the association between attitude score and selected demographic variables

### Hypotheses

**H<sub>1</sub>**:- There will be no significant association between the knowledge scores and selected demographic variables at 0.05 level of significance.

**H<sub>2</sub>**:- There will be no significant association between the attitude scores and selected demographic variables at 0.05 level of significance

**H<sub>3</sub>**:-There will be a significant association between the knowledge scores and selected demographic variables at 0.05 level of significance.

**H<sub>4</sub>**:-There will be a significant association between the attitude scores and selected demographic variables at 0.05 level of significance.

### METHODOLOGY

Research approach: Descriptive Approach was considered most appropriate to achieve the intended objectives.

Research design: This non-experimental descriptive survey approach to assess the knowledge and attitude about Smoking and smokeless tobacco use among school students.

Setting: the study was conducted in selected high school in Osmanabad.

**Population:** The population of the study consists of Boys and girls students who are studying high school in selected high schools in Osmanabad.

**Sample:** - In the study the sample comprised of 100 high school boys and girls students from selected high Schools in Osmanabad.

**Sample Techniques;** - simple random technique was used to select the samples.

### Sampling Criteria:-

- **Inclusion criteria**

1. Students who are studying in 8th, 9th and 10th classes.
2. Students who are willing to participate in the study.
3. Students who can understand English

- **Exclusion criteria**

1. Students who are on leave at the time of data collection.
2. Students who have attended similar programme within 6 months

### RESULT

#### Part-I Consists of Demographic Characteristics of Population



**Part II: Analysis of knowledge and attitude score of boys and girls students regarding smoking and smokeless tobacco use and its health hazards**

**Part III: - Association between knowledge score with selected baseline variables**

H3;-There will be a significant association between the mean knowledge scores and selected demographic variables at 0.05 level.

From the above table IV it was evident that, there was significant association between father and mother education and knowledge score ( $p < 0.05$ ). Therefore the research hypothesis, H3 was accepted for these variables. There was no significant association between age, class, religion, type of family, family income, previous knowledge, parents tobacco use and pre test knowledge score ( $p > 0.05$ ). Therefore H3 was rejected for these

variables.

**Part-IV: Association between attitude score with selected baseline variables**

H4;-There will be a significant association between the mean pretest attitude scores and selected demographic variables at 0.05 level.

From the above table V it was evident that, there was significant association between parents tobacco use and attitude score ( $p < 0.05$ ). Therefore the research hypothesis, H4 was accepted for these variables. There was no significant association between age, class, religion, type of family, family income, education of father and mother, previous knowledge and pre test attitude score ( $p > 0.05$ ). Therefore the research hypothesis H4 was rejected for these variables.

**Table 1. Analysis knowledge score of boys and girls students regarding smoking and smokeless tobacco use and its health hazards**

Level of Knowledge	Boys		Girls	
	N	%	N	%
≤33% (poor)	35	70%	41	82%
34-66% (Average)	15	30%	9	18%
>67% (good)	--	--	--	--

The data presented in table 1 show that 35(70%) boys had poor knowledge, 15(30%) boys had average knowledge and nobody had good knowledge.

**Table 2. Analysis attitude score of boys and girls students regards smoking and smokeless tobacco use and its health hazards**

Level of Attitude	Boys		Girls	
	N	%	N	%
Positive attitude towards nontobacco use (31-50)	23	54%	11	22%
Negative attitude towards nontobacco use (10-30)	27	46%	39	78%

The data presented in table 2 shows 23(54%) of boys had positive attitude towards non tobacco use and tobacco control programme, 27(46%) of boys had negative attitude towards non tobacco use and tobacco control program

**Table 3. Association between knowledge score with selected baseline variables**

Base line Variable	Category	Knowledge Of boys And Girls		Df	Chi-Square	Fisher's Exact test	Interference
		<33%	>33%				
Age	<13 years	18	8	2	1.327		>0.05NS
	13-14 years	25	19				
	>14 years	20	10				
Class	8 <sup>th</sup> standard	21	17	2	2.333		>0.05NS
	9 <sup>th</sup> standard	30	12				
	10 <sup>th</sup> standard	12	8				
Religion	Hindu	43	28	2	1.530		>0.05NS
	Christian	1	2				
	Muslim	9	17				



Family type	Nuclear	32	19	2	0.236		>0.05NS
	Joint	26	16				
	Extended	5	2				
Family income	<5000	48	26	1		0.637	>0.05NS
	>5001	15	11				
Father education	No formal education	23	9	2	10.128		<0.05S
	School education	36	17				
	graduate	4	11				
Mother education	No formal education	27	20	2	13.318		<0.05S
	School education	34	9				
	graduate	2	8				
Previous knowledge about topic	Yes	19	16	1		0.200	>0.05NS
	No	44	21				
Parent tobacco use	Yes	26	14	1		0.834	>0.05NS
	No	37	23				

S: Significant

NS: Non Significant

**Table 4. Association between knowledge score with selected baseline date**

Baseline date	Category	Attitude of Boys and Girls		DF	Chi Square	Fisher's Exact Test	Inference
		<50%	>50%				
Age	<13 years	7	19	2	3.183		>0.05NS
	13-14 years	8	36				
	>14years	11	19				
Class	8 <sup>th</sup> standard	7	31	2	1.836		>0.05NS
	9 <sup>th</sup> standard	6	14				
	10 <sup>th</sup> standard	13	7				
Religion	Hindu	16	55	2	1.530		>0.05NS
	Christian	1	2				
	Muslim	9	17				
Family type	Nuclear	14	37	2	0.185		>0.05NS
	Joint	10	32				
	Extended	2	5				
Family income	<5000	21	53	1		0.442	>0.05NS
	>5001	5	21				
Father Education	No formal education	8	24	2	0.443		>0.05NS
	School education	15	38				
	Graduate	3	12				
Mother Education	No formal education	14	33	2	1.685		>0.05NS
	School education	11	32				
	Graduate	1	9				
Previous knowledge about topic	Yes	10	25	1		0.037	>0.05NS
	No	16	49				
Parent tobacco use	Yes	11	29	1		0.020	<0.05S
	No	15	45				

S: Significant

NS: Non Significant



## DISCUSSION

The present study has been conducted in boys and girls high school students, to Assess the knowledge and attitude regarding smoking and smokeless tobacco use and its health hazards between boys and girls school students in selected high schools at Osmanabad , In order to achieve the objectives of the study, a non-experimental descriptive survey design was adopted. The data was collected from 100 high school students (50 boys and 50 girls) by using structured knowledge questionnaire and attitude scale. The findings of the study were discussed under following sections.

### Part I: Description of demographic characteristics.

In present study 50 boys and 50 girls had participated. Majority of the students (44% boys and 44% girls) were between 13-14 years of age. Majority of the students (40% of boys and 44% of girls) were 9th standard. Majority of the students (74% of boys and 68% of girls) from Hindu family. Majority of the students (46% of boys and 56% of girls) belonging to nuclear family. Majority of the students (70% of boys and 78% of girls) were coming from the family monthly income of less than 5000 rupees. Only 30% of boys and 40% of girls have previous knowledge about the topic. Majority of boys (56%) and girls (64%) said that their parents are not using any form of tobacco products. Majority of the students (42% of boys and 64% of girls) fathers had school education. Majority of boys (54%) mothers not had formal education and (50%) of girls mothers had school education. Majority of the students (38% of boys and 48 % of girls) fathers having non government job, were as 30% of boys and 50% of girl's mother had no government job. 100% of students told that in their school, there was no formal class regarding tobacco products and its health hazards. But still the habit of using any form of tobacco products was not seen among boys and girls.

### Part-II: - Analysis of knowledge and Attitude score of boys and girls students regarding smoking and Smokeless tobacco use and its health hazards.

In Present Study the Knowledge score was 35(70%) boys and 41 (82%) girls had poor knowledge, 15(30%) boys and 9 (18%) girls had average knowledge, and none of the sample had good knowledge regarding smoking and smokeless tobacco use and its health hazards. The attitude score, only 23(54%) boys and 11 (22%) girls had positive attitude towards non tobacco use and tobacco control programme. in 27(46%) boys and 39 (78%) girls had negative attitude towards non tobacco use and tobacco control programme and no girls had negative attitude towards non tobacco use and tobacco control programme.

### Part-III: - Association between knowledge score with selected baseline variables.

Fisher's exact test and chi-square was used to assess the association between pretest knowledge and selected variables such as age, class, religion, type of family, family income, parents education (father and mother), previous knowledge about tobacco products and parents tobacco use in both boys and girls.

H3;-There will be a significant association between the mean knowledge scores and selected demographic variables at 0.05 level of significance. There was significant association between father education, mother education and pre test knowledge score ( $p < 0.05$ ). Therefore the research hypothesis H3 was accepted for these variables. There was no significant association between age, class, religion, type of family, family income, previous knowledge, parent's tobacco use and knowledge score. Therefore the research hypothesis H3 was rejected for these variables.

### Part IV: Association between pre test attitude score with selected demographic variables

H4:-There will be a significant association between the mean attitude scores and selected demographic variables at 0.05 level of significance. There was significant association between parents tobacco use and attitude score ( $p < 0.05$ ). Therefore the research hypothesis H4 was accepted for these variables. There was no significant association between age, class, religion, type of family, family income, education of father and mother, previous knowledge about topic and attitude score. Therefore the research hypothesis H4 was rejected for these variables.

## CONCLUSION

The study was conducted to assess knowledge and attitude regarding smoking and smokeless tobacco use and its health hazards between boys and girls school students. The study found that nobody had good knowledge, 15(30%) boys and 9 (18%) girls had average knowledge and 35(70%) boys and 41 (82%) girls had poor knowledge. And only 23(54%) of boys and 11 (22%) of girls had positive attitude towards non tobacco use and tobacco control programme and 27(46%) of boys and 39 (78%) of girls had negative attitude towards non tobacco use and tobacco control programme. There was significant association between father education, mother education and pre test knowledge score ( $p < 0.05$ ). Therefore the research hypothesis H3 was accepted. There was no significant association between age, class, religion, type of family, family income, previous knowledge, parents tobacco use and pre test knowledge score ( $P > 0.05$ ). Similarly there was significant association



between parents tobacco use and pre test attitude score ( $p < 0.05$ ). Therefore the research hypothesis H4 was accepted. There was no significant association between age, class, religion, type of family, family income,

education of father and mother, previous knowledge and pre test attitude score ( $P > 0.05$ ).

**CONFLICT OF INTEREST:**

The authors declare that they have no conflict of interest.

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