Original Research Article

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Awareness about harmful effects of cigarette smoking among adolescents in Shamirpet mandal, Hyderabad

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ABSTRACT

Background: Tobacco smoking is habit which usually begins in the adolescent age. It is a risk factor for many non-communicable diseases and mortality can be prevented if smoking is quit.

Methods: It is a cross sectional study.2 schools were randomly selected from urban and rural areas in field practice area of Mediciti Institute of Medical Sciences. A GYTS questionnaire is modified to local setting and administered to the students.

Results: A total of 367 students were enrolled. The level of awareness regarding harmful effects of tobacco consumption was good. It was 98.85% in urban areas and 94.84% in rural areas.

Conclusions: As adolescent is the age of habit forming identification of the problem and correcting it at early stage itself will be beneficial for individuals, family and society.

Keywords: Tobacco smoking, Adolescents, Awareness, Mortality

INTRODUCTION

Tobacco smoking is modifiable risk factor for many non-communicable diseases, including lung cancer, chronic respiratory diseases, cardiovascular diseases, diabetes, and hypertension. It is responsible for death in smokers which can be prevented. Estimates show smoking increases the risk for coronary heart disease by 2 to 4 times and stroke by 2 to 4 times Lung diseases caused by smoking include COPD, which includes emphysema and chronic bronchitis. Smoking can cause cancer almost anywhere in the body bladder, blood (acute myeloid leukemia), cervix, colon and rectum, esophagus. Smoking also increases the risk of dying from cancer and other diseases in cancer patients and survivors.¹

In less developed countries the amount of 10% spent on buying cigarettes can be used as domestic expenditure.²

Members of below poverty line smoke cigarettes spend 40% of their earnings at the price of the basic necessities pushing them to further poverty.³ There is inverse relationship observed between tobacco smoke and the income group. Cigarette smoking is mostly observed in the lower socio-economic status group.⁴ Cigarette smoking hampers the socioeconomic development of the country as death in half of cigarette smokers occur in economically productive age group.⁵

India is the 2nd largest producer and consumer of tobacco. There are many forms of tobacco use in India. According to NFHS-4 report, 44.5% of men and 6.8% of women used tobacco in any form. 30.6% men and 29.3% women tried to stop usage during the last 12 months. Apart from the smoked forms that include cigarettes, bidi's and cigars, a plethora of smokeless forms of consumption exist in the country. The prevalence of second hand smoking is inadequately reported.

Every year 3 million people die due to smoking according to WHO estimates. The major health problem is cigarette smoking among children and adolescents. Today an estimated 150 million young people use tobacco. 10 Majority of tobacco users worldwide began when they were adolescents. It is the age of transition of mind and they tend to be experimenting new things. They are vulnerable to changes happening around them. Their minds are very much influenced by the peer pressure, the affect being greater than the influence from members of the house. According to Global Adult Tobacco Survey (GATS) among minors (15-17), 9.6% consumed tobacco in some form and most of them were able to purchase tobacco products. 11

In Andhra Pradesh prevalence of tobacco smokers among 13-15 years adolescents was 3.5 and 1.4 in males and females respectively and smokeless tobacco was 8.4 and 5.2 in males and females respectively. 12

The study was planned in Shmirpet area as there were not many studies of this sought in urban and rural high schools. The reason for selection of only students from 8th to 10th standard onwards is that young students might not understand the questionnaire, which could give rise to false responses and low response rates. Students of this age group are more vulnerable to smoking, alcohol and substance abuse.

The objective is to study the knowledge and attitude among two high school children of rural and urban areas in the field practice area of Mediciti Institute of Medical Sciences.

METHODS

A cross-sectional study was conducted in two randomly selected schools from rural and urban areas of Shamirpet mandal, Rangareddy district, Hyderabad. Two schools, one from rural and one from urban, comprised the total study population. The students were from the high school and included classes from 8th, 9th and 10th. Most of them were in the age group 13-15 years. Approximately 367 students have been given the questionnaire.

Details of the questionnaire

The Global Youth Tobacco Survey (GYTS) questionnaire was modified to local setting to assess knowledge attitude of tobacco smoking. Socio-demographic characteristics like age, gender, locality, were enquired. The knowledge about the harmful effects of smoking, second hand smoking, weight changes in individuals and about incidence of non-communicable diseases was asked. The attitude of students about their family members, friends smoking and opinion on smoking in public places was questioned. The questionnaire has options of "yes" or "no" options and they had the liberation to write their opinion in blank space provided for certain questions. The study period included 2 months from September to

October 2014. The study period included administering the questionnaire, collection of data, analysis, comparison and report writing.

Inclusion criteria

All the students who were willing to participate and present at the time of questionnaire administration were included in the study. All students who were not willing to participate and not present at the time of data collection were excluded from the study.

Consent

Consent was taken from the Ethical review board (Institutional review board) Mediciti Institute of Medical Sciences. Permission was taken from the Headmaster/ Headmistress, class teachers of respective classes. Consent was also taken from students. confidentiality of the respondents is maintained by not using identifiers in the questionnaires or forms. The questions were asked in local language. Data entry was done in Microsoft excel and analysis was done in Epi info.

RESULTS

Table 1: Demographic characteristics of the adolescents.

	Number	Percentages (%)
Age (in years)		
13	136	37.06
14	126	34.33
15	105	28.61
Gender		
Boys	156	42.51
Girls	211	57.49
Location		
Urban	173	47.14
Rural	194	52.85
Total	367	100

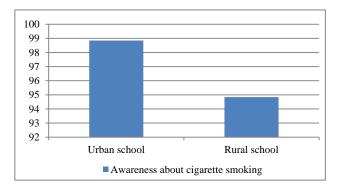


Figure 1: Awareness about cigarette smoking among adolescents.

The Table 1 shows age group comprised 13-15 years from both urban and rural areas. The level of awareness regarding harmful effects of tobacco consumption was good. In the present study the awareness about cigarette smoking was 98.85% in urban areas and 94.84% in rural areas.

Table 2: Knowledge about cigarette smoking among adolescents.

	Number	Percentages (%)
Knowledge	•	
Harmful use of tobacco	355	96.73
Second hand smoke	358	97.54
Weight changes		
Weight loss	155	42.23
Weight gain	6	1.63
Do not know	208	56.67
Adverse effects		
Lung cancer	341	92.91
CVS, stroke, HTN	7	1.9

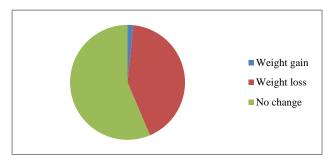


Figure 2: Awareness about weight changes due to cigarette smoking.

From the Table 2 we can infer that most of them were aware of lung cancer as attribute to smoking but they were unaware of complications such as lung disease. heart disease, hypertension and diabetes mellitus due to smoking. A total of 367 students were present, out of which 194 were from rural school and 173 were from urban school.

Table 3: Attitudes towards cigarette smoking among adolescents.

Attitude	Number	Percentages (%)
Family members discussing issue at home	92	25.04
Family member is a smoker	88	23.98
Friend is a smoker	129	35.15
Opinion on ban of cigarette smoking at public places.	363	99

Table 3 shows that only one –fourth of the students had family members discussing the issue of smoking at home. A family member or friend being a smoker puts the adolescent into higher chances of being a smoker. Majority of them are for ban of cigarette smoking at public places. In rural 91.23% see actors smoking in movies and 99.42% in urban areas.

DISCUSSION

In the present study the awareness about cigarette smoking was 98.85% in urban areas and 94.84% in rural areas. Dr. Dechenla, conducted a study on substance use among adolescent high school students in India 2010.¹³ 416 students were enrolled in both urban and rural areas. Knowledge regarding harmful use of tobacco was found to be 84.6% in urban and 61.5% in rural areas. A study by Tubachi showed that 94% of adolescets were aware hazardous effects of tobacco.¹⁴ When the knowledge of students was assessed for tobacco consumption, it was found that majority were aware of its harmful effects to self and others. 15 Majority of the study population [94.4% (472/500)] believed that smoking is definitely harmful to health.¹⁶ Knowledge of and attitude regarding the bad effects of smoking was generally satisfactory in both groups regarding, its consequences on health. 15

Smoking has many adverse effects especially in terms of non-communicable diseases. The habit of smoking is implied in the web of causation of hypertension, coronary occlusion including myocardial infarction. Not only can the involvement of arterial walls, smoking can lead to various cancers. Apart from changes in the physiology to pathology some students opined on observing weight changes. In the current study 155 students (42.23%) of them felt weight loss occurs due to cigarette smoking. Only 6 students (1.63%) felt that weight gain changes might occur. However 208 students (56.67%) were not aware of changes in weight due to cigarette smoking. A study by Raina has found out that about 46.4% of the study subjects thought that smoking does not help in gaining or losing weight.16

In the present study father was a smoker in 35.7% cases, and TV was best source of information on smoking as viewed by 58.7%. In rural 91.23% see actors smoking in movies and 99.42% in urban areas see actors smoking in movies. Although there is ban on advertisement of tobacco on television and radio adolescents are influenced by the clipping of movies showing actors smoking tobacco. A study done by Koura in Saudi Arabia showed that a strong relation existed between fathers who smoked and the daughters who smoked.¹⁷ Muttappallymyalil studied prevalence of tobacco use among adolescents in North Kerala 2012, 2580 participated from ten randomly selected schools, in the age group 14-18 yrs. Father was a smoker in 40% and friends are smokers in 4.3%.18

Singh et al studied urban rural differentials in factors associated with exposure to second hand smoke in India 2013, in the age group 15-65 years.¹⁹ Knowledge that second hand smoke is harmful was observed in 27.2% of rural population and 24% of urban population. The academic pressure was more amongst private school students whereas peer pressure was more amongst government school students.²⁰ A study by Vanphanom, showed that most of the students supported tobacco control measures. 21 88% thought that smoking should be banned in public areas.²² In a study by Ali, 88% viewed that smoking has to be banned in public areas.²⁰ In the current study majority of students (99%) are for the ban of tobacco smoking in public places. Banning of tobacco smoke in public places would to an extent reduce the adolescent smoker who started it new and would also reduce the second hand smoking.

The limitations of the study were that practice of cigarette smoking was not enquired. It would have given a picture of cigarette smoking among adolescents in that area. However the adolescent would not have given a true picture. The data collected was only from schools in urban and rural areas and the picture of knowledge and attitude cannot be generalized to a larger population.

CONCLUSION

Knowledge regarding harmful effects of smoking is adequate among adolescents. The diseases can be controlled to an extent by educating the adolescents at an early age itself. The adolescent age is the time habits are formed be it good or bad. Life skills have to be taught at home or schools so that the adolescents adopt healthy behavior and coping up skills. Parents and teachers play an important role in identification of the problem and find solution to it.

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Ethical approval: The study was approved by the

Institutional Ethics Committee

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