ORIGINAL ARTICLE



# **Tobacco Addiction Amongst Adolescents in Rural Areas of District Wardha**

Surekha Kishore, B. S. Garg , Khursheed Muzammil

#### Abstract

The present study was conducted in order to find out the use of tobacco amongst adolescents in a village of Wardha district. From the total 2200 population covered, 474 (21.54%) were adolescents {boys 216 (45.57%) and girls 258 (54.43%)}. Majority of the adolescent boys and girls were from unitary family. About 152 boys (70.37%) were using tobacco and remaining boys were non-user of tobacco. About 70 girls were using tobacco and 188 were non-users. Majority of the boys were engaged in tobacco chewing and smoking (69.74% & 17.1% respectively), whereas majority of the girls were found to be practicing other methods of tobacco use (Nas / Mishri, etc.). The exposure of the habit of tobacco use in adolescent was influenced by various factors like peer pressure, friends, elders, boys trying to follow hero images, feel great and powerful when smoking and for fun.

Key W ords

Gutkha, Smokeless tobacco, Tobacco smoking, Peer pressure

#### Introduction

Tobacco is the biggest enemy of the public health today and the distributors are one of the richest business groups. Tobacco smoking and chewing is the main cause of lung cancer and oral cancer. Tobacco use usually begins in adolescents; the time of their observation, understanding, struggling, facing challenges and psychological development. Prevalence of tobacco use in India is continuously increasing but there are considerable changes in the methods of its use. According to WHO estimates, about 194 million men and 45 million women use tobacco in smoked or smokeless form in India(1). Information on prevalence of tobacco use is available from several studies, which shows a great deal of variation by region, social customs, gender and form of tobacco consumption(2,3). Tobacco is the second major cause of death in the world. WHO sources emphasizes the rate of tobacco consumption especially in developing countries as an epidemic. Tobacco death toll is expected to double by 2025 from the present 5 million deaths (approx). At every 6.5 seconds, one dies because of tobacco related disease globally. This is occurring mostly in developing countries, adding significantly to their burden of disease, poverty and economy(4).

The Global Youth Tobacco Survey (GYTS) is the largest programme globally, pioneered by center for disease control and prevention (CDC) of USA and WHO. This initiative is designed to find out the extent of the prevalence of tobacco use among school going children their knowledge, attitude and perception on tobacco use(5,6).

This study was undertaken to look into the extent of tobacco use among adolescents in the rural areas of District Wardha, Maharashtra. Source of the habit, literacy level, type and duration of tobacco use were encountered during the period of study.

Material and Methods

The study was carried out in the four villages of district Wardha, Maharashtra; covering a total population of 2200. A door-to-door survey was

From the Department of Community medicine, M G I M S, Sewagram, Maharashtra Correspondence to : Dr. Surekha Kishore, Professor, Deptt. of Community Medicine, HIMS, Swami Rama Nagar, Dehradun (Uttaranchal)



conducted by the specially trained investigators who were given adequate training for carrying out the study. Target groups were adolescent boys and girls (10-20 years of age), and were interviewed face to face in the absence of other family members on Sundays, other holidays, after school hours and as per the availability of the respondents. The information was collected from the target groups and filled up by investigators on the pre-structured pre-tested proforma consisting of questions related with the identification data and tobacco use by adolescents.

The information was collected from a total of 474 respondents out of which 216 were boys (45.57%) and 258 were girls (54.43%). After a gap of two weeks, a team of survey supervisors comprising of one male and one female were sent to all the four villages to check 20 randomly selected houses in each village.

The criteria and definition of tobacco use were based on WHO guidelines. Tobacco habit was broadly classified into five categories- smoked tobacco, smokeless tobacco, mixed tobacco, others and non users(7).

The data thus obtained was analyzed and the same is presented here.

## Results

Relevant information related to tobacco use on 474 rural adolescents was obtained from 2200 population of the four villages, (response rate was 100%). About 54% of all the adolescents were from nuclear family. Among 474 adolescent who were interviewed, 222 (46.83%) were found to be tobacco users, whereas remaining 252 (53.16%) were non- users (Table-1). Adolescent boys have high rate of tobacco use, 152 (70.37%) as compared to adolescent girls, 70 (27.13%) from a total of 222 (46.83%) adolescent tobacco users. More than half of the adolescents 252, (53.16%) were non-users of tobacco from total of 474 subjects (adolescents interviewed). About 72.87% of adolescent girls were found to be non-users of tobacco as compared to boys 29.63%. The difference between tobacco user and non-user among adolescent boys and girls was found to be statistically highly significant (p < 0.005), [Table - 1].

Table-1: Sex-wise distribution	of Adolescents -	Tobacco	Users
--------------------------------	------------------	---------	-------

Tobacco	Adolescent Boys	Adolescent Girls	Total	
	No (%)	No (%)	No (%)	
User	152(70.37)	70(27.13)	222(46.83)	
Non-User	64(29.63)	188(72.87)	252(53.16)	
Total	216(100)	258(100)	474(100)	

#### (p <0.005, highly significant)

Table -2 depicts that about 252 (53%) from total of 474 adolescent were non users in the present study and 26 (5.48%) were smoker (which may include smokeless tobacco user), 196 (41.35) were smokeless tobacco user. Among smokeless tobacco users, chewing constituted 106 (54.08) adolescents and other forms (Nas / Mishri) of tobacco practice constitute 90(45.91%). Among the chewing group, Gutkha users were the highest 83(78.3%). It was found after the analysis that, no adolescent girl was engaged in tobacco smoking, tobacco chewing and 188 (72.87%) girls were non user which is very high as compared to boys 64 (29.63%). The only form of tobacco use by adolescent girls was found to be Nas / Mishri (smokeless) 70(77.77%), which is very high as compared to adolescent boys 20 (22.22%). Adolescent boys were using all types of tobacco products among which Gutkha consumption was highest.

Table-2: Sex -wise distribution of different types of tobacco practices/habits among adolescents.

SI. No.	Tobacco Use	Adolescent Boys	Adolescent Girls	Total
		No (%)	No (%)	No (%)
1.	Non- User	64(29.6)	188(72.8)	252(53.1)
2.	Smoker*	26(100)	0(0)	26(5.4)
(a)	Bidi	11(42.3)	0(0)	11(42.3)
(b)	Cigarette	15(57.7)	0(0)	15(57.7)
3.	Smokeless	126(64.2)	70(35.7)	196(41.3)
(a)	Chewing :	106(100)	0(0)	106(54)
-	Gutkha	83(78.3)	0(0)	83(78.3)
-	Pan with tobacco & lime	07(6.6)	0(0)	07(6.6)
-	Quids(tobacco with lime)	16(15)	0(0)	16(15)
(b)	Others-Nas / Mishri :	20(22.2)	70(77.7)	90(45.9)
	TOTAL	16(45.5)	258(54.4)	474(100)

#### (\* may include smokeless tobacco user)

In the present study it was found that majority of the adolescents either tobacco user or non user had middle level education 241 (50.8%) followed by high school level education 163 (3.8%). All the adolescent boys were literate



and only 10 (3.8%) girls were illiterate. So it is evident that all the adolescent boys using tobacco in any form were literate. Illiteracy has a very little role in consumption of tobacco in the present study, and approximately all the tobacco users are literate (Table - 3).

Educational Level	Adolescent Boys Adolescent Girls		Total	
	No (%)	No (%)	No (%)	
Illiterate	0 (0)	10 (3.8)	10 (2.1)	
Primary	2 (0.92)	10 (3.8)	12 (2.5)	
Middle	122 (56.48)	119 (46.1)	241 (50.8)	
High School	80 (37.04)	83 (32.2)	163 (34.3)	
AndAbove	12 (5.56)	36 (13.9)	48 (10.1)	
Total	216 (100)	258 (100)	474 (100)	

 Table-3: Sex-wise distribution and educational level of adolescents.

In the present study it was noticed that among the total 222 tobacco users, about 128 (57.65%) were in this habit for less than 5 years, 81(36.48%) for up to 10 years and only 13 (5.85%) for more than 10 years of duration. The duration and consumption rate of Gutkha and Nas / Mishri was found to be higher (Table - 4).

Table-4: Duration of use of different types of tobacco products.

Товассо Туре	Duration in years			Total
	<5 yrs No (%)	~10yrs No (%)	>10yrs No (%)	No (%)
Bidi	06(54.5)	5(45.4)	0	11(4.9)
Cigarette	07(46.6)	08(53.3)	0	15(6.7)
Gutkha	48(57.8)	32(37.5)	3(3.6)	83(37.3)
Pan with tobacco & lime	07(100)	0	0	07(3.1)
Quids (tobacco with lime)	08(50)	08(50)	0	16(7.2)
Nas / Mishri	52(57.7)	28(31.1)	10(11.1)	90(40.5)
TOTAL No (%)	128 (57.6)	81 (36.4)	13 (5.8)	222 (100)

# Discussion

The citizens of our nation have different religion, cast, creed and colour and have wide cultural diversities in different corner of the country. Cultural beliefs and social norms have strong association with the use of tobacco and their significant variations in different societies for tobacco consumption.

Global Youth Tobacco Survey (GYTS) & Global School Personnel Survey (GSPS) are playing important role in getting relevant data from different parts of the country related with knowledge, attitude and perception of tobacco use in school going children (13-15 years) and school personnel (5,8,9).

Oral cancers are mainly attributed to tobacco chewing. In developing countries like India, use of tobacco by men is 40-60 % where as in women it is 2-10%. This habit of tobacco use starts during adolescent period as revealed in many studies(10).

Tobacco use is one of the major preventable causes of death and disability worldwide. Unfortunately in India, more than 8 lac people die and 123 million become ill as a result of tobacco use every year. It is estimated that 5500 adolescents start using tobacco every day in India and become part of the 4 million young people using tobacco under the age of 15 years(11).

Tobacco use in India is unique because of the variety of the tobacco products available including- bidi, cigarette, hukkah (Hubble bubble), cigars, Nas / Mishri and chewing tobacco like Gutkha, khaini, (tobacco with lime) and applying tobacco like gul, tobacco containing tooth powder and tooth paste etc (2,12).

In India almost everywhere, male smoking has become a social norm and smoking by girl is socially unacceptable but in this study, use of Gutkha by the adolescent boys is found to be significant and use of Nas / Mishri by girls are very high, (Table - 2). This is a very important finding of the present study as Gutkha has much more deleterious effect on health than plain tobacco and is one of the most highly advertised tobacco products in all the media.

This study emphasizes the strong need to augment efforts to control the tobacco epidemic. Our study has shown that 46.83% of adolescents were tobacco user, which is very high as compared to that reported by Parwal *etal* (9) from Gujarat. (24.9%)

The present study has also found out the difference between boys and girls. Percentage of boys and girls using tobacco was 70.37% and 27.13%, which is much more as compared to tobacco user boys (18.5%) and girls (15%) reported by Sinha *et al* from Bihar.

Various studies revealed that school teachers can play a vital role in enabling the students to understand the



hazards of tobacco and this corner of health education should be given a space in the syllabus at the national level. Parents should keep a vigil over whatever pocket money is being given to their children. GYTS will be a very important helping tool for India to formulate, implement, monitor and evaluate their own tobacco control and prevention programmes.

No nation can stand proud by undermining the health status of every citizen and we cannot claim to be living in a healthy society without giving a massive break in the rising trend of tobacco consumption especially in adolescents. Since tobacco use behaviour and pattern in India is mainly determined by cultural and social context, the best way to reduce its prevalence is the integrated multi-sectoral initiatives with active community participations, but this will be worthless without honest political commitment both at national and international level.

# Conclusion

Prevalence of tobacco smoking is seen in adolescent boys only. Smoking by girls in the society is considered as taboo. The habit of tobacco abuse is developed mainly from peer pressure, friends, and elders for fun. High prevalence of smokeless tobacco use is seen in adolescents in the present study. Tobacco control and cessation programmes therefore need much more importance from public health point of view and interventional measures need to be strengthened further. Much more community participation and definite government commitment both at national and international level are the urgent requirement to crush down the current trends of tobacco consumption towards the zero (lower) level.

#### References

- 1 World Health Organization, Report of the regional consultation in tobacco and alcohol. *Sri Lanka*, November 1997 (http://w3.whosea.org/tfi/issue\_situation.htm)
- 2 Bhonsle RB, Murti PR, Gupta. Tobacco habits in India .In Gupta PC, Hammer JE, Murti PR (eds), Control of tobaccorelated cancers and other diseases, proceedings of an international symposium, 1990, Oxford University press, Bombay, 1992.
- 3 India 2002, Population Division, Ministry of Information and Broadcasting, Government of India.
- 4 Abdullah AS, Husten CG. Promotion of smoking cessation in developing countries: a framework for urgent public health interventions.*Thorax* 2004; 59(7):623-30.
- 5 Warren CW, Riley L, Asma S, *et al*. Tobacco use by youth: a surveillance report from the GYTS project. *Bull WHO* 2000; 78:868-74.
- 6 The Global Youth Tobacco Survey Collaborative Group: Tobacco use among youth: a cross-country comparison, *Tobacco Control* 2002; 11:252-70.
- 7 Sinha DN, Gupta PC, Pandekar MS. Tobacco use in a rural area of Bihar, India. *IJCM*, 2003; 28(4) 167-68.
- 8 Global School Personnel Survey. Atlanta Office on Smoking and Health, Center for Disease Control and Prevention; Available at: http://www.cdc.gov/tobacco/global/ GSPS.htm
- 9 Sinha D.N., Gupta P.C., Warren C.W., Asma S. School Policy and Tobacco Used By Students in Bihar, India. *IJPH*, 2004; 48(3)-118.
- 10 Parwal AB, Mukherjee S Gutkha and Tobacco Consumption &Awareness of their Health Hazards among School & College Students in Gujrat. *IJCM*, 2004; 29(3): 138.
- 11 Sinha DN, Gupta PC, Pednekar M. Tobacco Use among Students in Bihar. *IJPH*, 2004; 48(3): 111.
- 12 Sinha DN, Gupta PC, Pednekar MS, Jones JT, Warren CW; Tobacco use among school personnel in Bihar, *India: Tobacco Control* 2002; 11:82-83.

# Editorial Board proudly shares that *JK Science*, *Journal of Medical Education & Research* is now also under Indexing Coverage with MedLine LocatorPlus, IndexCopernicus International, Directory of Open Access Journals (DOAJ) and OpenMed@NIC