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## RESEARCH COMMUNICATION

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# Tobacco Survey Among Youth in South India

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### Abstract

**Background:** Smoking of cigarettes and, particularly, of “bidis” (which consist of about 0.2-0.3 gm of tobacco rolled up in the leaf of another plant (temburni) has been widespread for many decades among men in India. There have, however, been no substantial studies on the prevalence of tobacco use among youth in India. Hence a Global Youth Tobacco Survey was conducted in schools in Tamil Nadu as part of on-going Global Youth Tobacco survey in over 150 countries in the world.

**Methods:** The two-stage cluster sample method was used to select 100 schools with standards 8, 9 and 10 in Tamil Nadu. The survey used self administered questionnaires, which consisted of 88 multiple choice questions.

**Results:** A total of 4820 students participated (a response rate of 90.1%) in the 99 of 100 schools selected for the survey. About 10% of students aged 13-15 in Tamil Nadu had ever used tobacco. Significantly higher percentages of current tobacco users (one in three students) compared to never tobacco users thought smoking or chewing tobacco makes a boy or girl more attractive. About 3 in 4 current smokers expressed a wish to stop smoking and a similar proportion have already tried to quit the habit. About 80% of students considered using tobacco (smoking or chewing tobacco) to be harmful to their health. Only about half of the students reported that they have been taught in school the health effects of tobacco use during the year preceding the survey. Exposure to environmental tobacco smoke and pro-tobacco advertisements is high.

**Conclusions:** The tobacco prevalence among girls is alarming. The results of the survey show the need to increase awareness about health hazards of tobacco use among students. Tobacco control programs focusing on youth are essential in order to reduce the burden of tobacco related diseases in India. Repeat surveys would help in monitoring the tobacco epidemic in the school and to evaluate the efficacy of state level tobacco control programs.

**Key Words:** Tobacco - youth - India - survey

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### Introduction

Tobacco is the single largest cause of premature death. Since the first Surgeon General's Report in 1964 on the health risks of tobacco use, overwhelming evidence regarding increased tobacco-attributable morbidity and mortality has been reported. World wide, tobacco kills 5 million people every year (Ezzati and Lopez, 2003). Peto and Lopez estimate one billion smokers in the world today, and by 2030 another billion young adults will have started to smoke; about 10 million would die due to the habit of tobacco use and 70% of those deaths will occur in developing countries by the year 2030 (Peto and Lopez, 2001).

Studies performed in Tamil Nadu have shown that the prevalence of tobacco smoking among middle aged (35-69 yrs) men is 38% in urban areas and 47% in rural communities

and among women is less than 1% irrespective of their area of residence. A large retrospective study with 27,000 adult males (cases) and 20,000 adult male controls in urban Tamil Nadu showed that 50% of smokers died due to the habit of smoking and one-third of deaths in middle aged men from medical causes would have been avoided if the smokers had had non-smoker death rates. Smoking probably caused about 700,000 deaths in India during the year 2000 and this will double between 2000 and 2025 (Gajalakshmi et al., 2003).

The Global Youth Tobacco Survey (GYTS), focusing on adolescents aged 13-15 years, was here conducted in schools in Tamil Nadu as part of an on-going survey in over 150 countries in the world. The GYTS is a worldwide collaborative surveillance initiative that includes governmental and non-governmental organizations under the leadership of the World Health Organization/Tobacco Free Initiative (WHO/TFI) and the US Centers for Disease

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Control and Prevention/Office on Smoking and Health (CDC/OSH). The GYTS was developed to enhance the capacity of countries to design, implement, and evaluate tobacco control and prevention programmes.

GYTS was carried out in Tamil Nadu to determine the prevalence of tobacco use, (such as smoking cigarette, bidis, cigars, pipes and the use of smokeless tobacco) as well as to get information on 5 determinants of tobacco use: access/availability and price, environmental tobacco smoke exposure (ETS), cessation, media and advertising and, curriculum in school. The information collected in this survey would help to set up more effective and comprehensive tobacco control programs for youth.

## Methods

GYTS is a school-based survey of students in Standards 8-10 conducted in the year 2000 in Tamil Nadu. Addresses of both private and public schools in Tamil Nadu with standards 8, 9 and 10 and the total number of students enrolled in the above mentioned standards were collected through District Educational Officers in Tamil Nadu after obtaining permission from the Directors of School Education. A list with unique number for each school with Standards 8-10 in Tamil Nadu and the number of students studying in these Standards were sent to CDC/OSH, Atlanta, USA to employ a 2-stage cluster sample design to produce a representative sample of students in standards 8, 9 and 10 for all of Tamil Nadu. The first stage sampling frame consisted of all schools containing greater than 40 students in standards 8-10 were selected with probability proportional to enrollment size. At the 2<sup>nd</sup> stage, classes were randomly selected using systematic equal probability sampling and all students in selected classes were eligible to participate in the survey. One hundred schools were selected for the survey in Tamil Nadu.

The survey was organized and co-ordinated by an Epidemiologist and the survey was carried out by trained field workers. A one-day training was given to the field workers to conduct the survey in the schools by selecting classes randomly.

### Data Collection:

An appointment was made with the head of the school for conducting survey in the class room. The participation of the school in the survey was voluntary. The survey used self administered questionnaire which was translated to

regional language (Tamil) and pre-tested in Chennai. The questionnaire contained 88 multiple-choice questions with eight response for each question. There are no open ended questions, no skip pattern and no multiple response questions. Students recorded their responses directly on an answer sheet that could be scanned by a computer.

### Statistical Analysis:

A weighing factor was applied to each student record to adjust for non-response at the school, class and student level. Epi info software was used to compute 95% Confidence Intervals (CI) for the estimates. Standard errors were used to calculate the 95%CI. The following variables were used in all the models to get corrected standard errors: sampling weight, sampling unit and stratum that consisted of schools.

### Results:

One hundred schools were selected for the survey. The school response rate was 99% (All except one participated in the survey). A total of 4820 students participated in the 99 schools yielding the student response rate as 90.1% and the overall response rate as 89.2% (99\*90.1).

### Prevalence of Tobacco Use:

One in 10 students (9.8%) in Standards 8-10 in Tamil Nadu ever used tobacco (Table 1). Of the total students participated in the survey, those currently use any tobacco product, any smoked product (cigarette, bidi, cigar, pipe) and smokeless product were 7.1%, 5.3% and 4.1%, respectively. About 2% of students were current cigarette or bidi smokers and 1% were current tobacco chewers (Gutkha/pan masala or betel quid with tobacco) (Current smoking/chewing was defined as having smoked/chewed on one or more days in the 30 days preceding the survey).

### School Curriculum:

Students were asked a series of questions about what they had been taught during the past school year concerning the harmful effects of tobacco. Table 2 shows about 50% of students reported having been taught about dangers of tobacco use and discussed tobacco and health as part of a lesson in class. Three in 10 students (31%) said that they were taught why people of their age smoke or chew tobacco. This finding was significantly higher among male students.

### Environmental Tobacco Smoke (ETS):

Percentages of students exposed to smoke from others

**Table 1. Percentage of Students Who use Tobacco, India-Tamil Nadu GYTS, 2000**

Category	Ever used tobacco, even one or two puffs	Current use						
		Any tobacco product	Any smoked product	Smokeless products	Cigarettes	Bidis	Gutkha/ Pan masala	Betel quid with tobacco
Total	9.8 (±1.6)	7.1 (±1.3)	5.3 (±1.1)	4.1 (±0.8)	1.9 (±0.6)	1.6 (±0.5)	0.9 (±0.3)	0.8 (±0.3)
Sex								
Male	11.5 (±2.3)	8.0 (±1.6)	6.0 (±1.4)	4.5 (±1.0)	2.3 (±0.8)	1.8 (±0.7)	1.0 (±0.4)	0.8 (±0.4)
Female	7.3 (±1.7)	5.3 (±1.5)	3.9 (±1.2)	3.1 (±1.0)	1.0 (±0.4)	1.0 (±0.5)	0.6 (±0.3)	0.8 (±0.4)

**Table 2. School Curriculum, India-Tamil Nadu GYTS, 2000**

Category	Percent taught dangers of smoking	Percent discussed reasons why people their age smoke or chew	Percent taught the effects of tobacco use in class	Percent discussed tobacco and health as part of a lesson in class
Total	51.2 ( $\pm 3.0$ )	30.8 ( $\pm 2.5$ )	43.7 ( $\pm 3.2$ )	48.8 ( $\pm 3.0$ )
Sex				
Male	52.9 ( $\pm 3.8$ )	35.0 ( $\pm 3.1$ )	46.0 ( $\pm 4.4$ )	47.1 ( $\pm 3.8$ )
Female	50.1 ( $\pm 3.6$ )	25.9 ( $\pm 2.8$ )	41.4 ( $\pm 3.8$ )	49.9 ( $\pm 3.6$ )

at their home and outside their home (public places) during 7 days preceding the survey were, respectively, 33% and 51% among never smokers and, 57% and 71%, among current smokers (Table 3). Significantly higher percentage of current smokers were exposed to environmental smoke compared to never smokers. Among never smokers, percentage of male students exposed to environmental smoke was significantly higher than female students. About 3/4<sup>th</sup> of never smokers (71%-80%) and about half of current smokers think smoking should be banned from public places and the smoke is harmful to them (Table 3).

#### Knowledge and Attitude:

The students were asked a series of questions regarding their knowledge and attitudes towards smoking. Table 4A shows irrespective of whether a student is a tobacco user or not, about one in three students think boys and one in five think girls who smoke or chew have more friends. Significantly higher percentage of current tobacco users (one in three students) compared to never tobacco users think smoking or chewing makes boy or girl more attractive. Table 4B provides that about 80% of students think using tobacco (smoking or chewing tobacco) was harmful to their health.

#### Media and Advertising:

Students were asked about their exposure to pro-cigarette/guthka/pan masala/bidi advertisements during the month preceding the survey on billboards, in news paper/magazines and at sports/other events. Results are given in Tables 5A, 5B and 5C.

#### Media and Advertising-Cigarettes:

Significantly higher percentage (about 4-times higher) of current cigarette smokers (19%) compared to never tobacco users (5%) were offered a free cigarette by a tobacco company representative. Significantly higher percentage of current cigarette smokers (45%) has seen a lot of

advertisement and media messages about cigarettes on TV compared to never tobacco users (24%). However the percentage of never tobacco users who have seen a lot of advertisement and media messages on print media (30% vs 40%), newspapers/magazines (20% vs 27%) and social gathering (27% vs 38%) were not significantly different from the percentages observed among current cigarette smokers (Table 5A).

#### Media and Advertising-guthka/pan Masala:

Table 5B also shows that significantly higher percentage of current tobacco chewer/applier (27%) compared to never tobacco users (6%) were offered a free guthka/pan masala by a tobacco company representative; among never tobacco users, a significantly higher percentage of male students compared to females were offered a free guthka/pan masala by a tobacco company representative. Significantly higher percentage of current tobacco chewer/applier compared to never tobacco users has seen a lot of advertisement and media messages about guthka/pan masala on TV (51% vs 31%) and on newspapers/ magazines (30% vs 20%) and social gathering (38% vs 22%). However the percentage of current tobacco chewers/appliers who has seen a lot of advertisement and media messages on print media (22% vs 21%) was not significantly different from the percentage observed among never tobacco users.

A significantly higher percentage of male never tobacco users compared to female never tobacco users have seen a lot of advertisement and media messages on TV (36% vs 26%), print media (24% vs 18%), newspapers/magazines (23% vs 16%) and social gathering (25% vs 19%).

#### Media and Advertising-Bidis:

Significantly higher percentage (about 7-times higher) of current bidi smokers (34%) compared to never tobacco users (5%) were offered a free bidi by a tobacco company representative. Significantly higher percentage of current

**Table 3. Environmental Tobacco Smoke, India-Tamil Nadu GYTS, 2000**

Category	Exposed to smoke from others in their home in the past 7 days		Exposed to smoke from others outside their home in the past 7 days		Percent who think smoking should be banned from public places		Percent who definitely think smoke from others is harmful to them	
	Never smoker	Current smoker	Never smoker	Current smoker	Never smoker	Current smoker	Never smoker	Current smoker
Total	32.6 ( $\pm 2.7$ )	57.0 ( $\pm 6.2$ )	50.8 ( $\pm 3.3$ )	71.1 ( $\pm 5.9$ )	70.9 ( $\pm 2.8$ )	54.5 ( $\pm 7.9$ )	79.9 ( $\pm 2.0$ )	48.5 ( $\pm 6.5$ )
Sex								
Male	36.3 ( $\pm 3.7$ )	53.8 ( $\pm 7.5$ )	54.8 ( $\pm 4.1$ )	72.5 ( $\pm 8.3$ )	69.6 ( $\pm 3.5$ )	56.6 ( $\pm 10.4$ )	79.2 ( $\pm 2.7$ )	44.2 ( $\pm 8.7$ )
Female	28.4 ( $\pm 3.2$ )	60.2 ( $\pm 12.5$ )	46.7 ( $\pm 3.9$ )	67.6 ( $\pm 11.7$ )	72.5 ( $\pm 3.5$ )	50.1 ( $\pm 10.9$ )	80.9 ( $\pm 2.4$ )	55.3 ( $\pm 12.4$ )

**Table 4A. Knowledge and Attitudes, India-Tamil Nadu GYTS, 2000**

Category	Think boys who smoke or chew have more friends			Think girls who smoke or chew have more friends			Think smoking or chewing makes boys look more attractive			Think smoking or chewing makes girls look more attractive		
	Never user of tobacco	Current smoker	Current smokeless	Never user of tobacco	Current smoker	Current smokeless	Never user of tobacco	Current smoker	Current smokeless	Never user of tobacco	Current smoker	Current smokeless
Total	29.5(±2.5)	31.5(±6.8)	34.9(±7.4)	17.4(±1.9)	19.3(±5.5)	23.1(±6.4)	16.7(±2.0)	31.0(±7.2)	29.0(±7.8)	15.9(±2.1)	25.4(±5.2)	28.9(±6.9)
Sex												
Male	26.5(±2.5)	32.3(±8.4)	32.3(±9.0)	18.8(±2.2)	16.8(±6.4)	24.0(±8.4)	18.1(±3.0)	32.4(±9.5)	35.1(±10.8)	17.2(±2.9)	26.1(±7.5)	35.5(±11.0)
Female	32.2(±3.9)	31.2(±12.6)	37.6(±12.6)	16.0(±2.7)	21.1(±9.8)	20.6(±10.3)	14.8(±2.4)	26.9(±10.8)	19.7(±8.6)	14.1(±2.2)	20.4(±8.9)	18.5(±8.7)

bidi smokers (41%) has seen a lot of advertisement and media messages about bidis in social events compared to never tobacco users (23%). However significantly higher percentage of male never tobacco users have seen a lot of advertisement and media messages on print media (31% vs 23%) and social gathering (25% vs 20%) compared to female never tobacco users (Table 5C).

**Access and Availability:**

Students were asked questions regarding their access to cigarette/bidi and the availability of cigarette/bidi to them. There is no significant difference between male and female regarding access to or availability of smoking and smokeless tobacco. Table 6 shows about one in five current

**Table 4B. Knowledge and Attitudes, India-Tamil Nadu GYTS, 2000**

Category	Percent who think smoking is definitely harmful to their health	Percent who think that chewing/applying is definitely harmful to their health
Total	81.1 (±1.9)	79.9 (±1.8)
Sex		
Male	80.2 (±2.4)	80.5 (±2.4)
Female	82.6 (±2.3)	80.3 (±2.3)

smokers and one in three current smokeless tobacco users, smoke and chew/apply tobacco, respectively, at home. Among current tobacco users 54% purchase tobacco products

**Table 5A. Media and Advertising Cigarettes India-Tamil Nadu GYTS, 2000**

Category	Percent offered a free cigarette by a tobacco company		Seen a lot of advertisements and media messages about cigarette on:							
			TV		Print Media		Newspapers/Magazines		Social gatherings	
	Never tobacco user	Current cigarette smoker	Never tobacco user	Current cigarette smoker	Never tobacco user	Current cigarette smoker	Never tobacco user	Current cigarette smoker	Never tobacco user	Current cigarette smoker
Total	5.1 (±1.0)	18.8 (±9.4)	24.4 (±2.3)	45.1 (±13.8)	29.6 (±2.1)	39.7 (±13.9)	20.3 (±2.4)	27.1 (±8.6)	26.6 (±2.2)	38.3 (±14.5)
Sex										
Male	5.8 (±1.2)	19.9 (±10.4)	28.0 (±3.6)	50.9 (±16.0)	33.6 (±3.4)	45.2 (±14.0)	23.9 (±3.6)	27.3 (±14.6)	30.6 (±2.8)	35.8 (±14.0)
Female	3.9 (±1.2)	14.5 (±16.0)	21.1 (±2.8)	43.5 (±24.2)	25.7 (±2.7)	21.3 (±17.8)	16.1 (±2.7)	31.1 (±21.4)	22.1 (±2.6)	39.8 (±26.3)

**Table 5B. Media and Advertising Guthka / Pan masala India-Tamil Nadu GYTS, 2000**

Category	Percent offered free guthka/ pan masala by a tobacco company		Seen a lot of advertisements and media messages about guthka / pan masala on:							
			TV		Print Media		Newspapers/Magazines		Social gatherings	
	Never tobacco user	Current chewer/ applier	Never tobacco user	Current chewer/ applier	Never tobacco user	Current chewer/ applier	Never tobacco user	Current chewer/ applier	Never tobacco user	Current chewer/ applier
Total	6.2 (±1.1)	27.2 (±6.8)	30.9 (±2.3)	51.3 (±7.6)	21.3 (±2.2)	21.8 (±6.8)	19.7 (±2.2)	30.4 (±6.9)	22.0 (±2.0)	38.3 (±6.9)
Sex										
Male	7.1 (±1.2)	28.4 (±7.9)	35.6 (±3.2)	56.0 (±9.5)	24.2 (±3.3)	23.5 (±8.9)	23.4 (±3.4)	35.6 (±7.5)	25.0 (±2.9)	40.9 (±10.0)
Female	4.8 (±1.4)	22.6 (±9.7)	26.4 (±3.1)	43.6 (±14.5)	18.1 (±2.6)	15.8 (±9.9)	15.9 (±2.4)	23.6 (±13.0)	19.0 (±2.5)	34.0 (±12.9)

**Table 5C. Media and Advertising Bidis India-Tamil Nadu GYTS, 2000**

Category	Percent offered a free bidi by a tobacco company		Seen a lot of advertisement and media messages about bidis on:			
			Print Media		Social Events	
	Never Tobacco User	Current Bidi Smoker	Never Tobacco User	Current Bidi Smoker	Never Tobacco User	Current Bidi Smoker
Total	5.3 (±1.0)	34.3 (±13.0)	26.7 (±2.2)	39.0 (±12.3)	22.6 (±2.0)	40.9 (±12.5)
Sex						
Male	5.9 (±1.2)	36.6 (±15.7)	30.5 (±3.1)	40.0 (±13.5)	25.2 (±2.9)	38.1 (±16.6)
Female	4.2 (±1.3)	24.7 (±25.0)	22.9 (±3.0)	23.6 (±15.9)	19.5 (±2.6)	54.7 (±17.4)

**Table 6. Access and Availability, India-Tamil Nadu GYTS, 2000**

Category	Percent of current smokers who usually smoke at home	Percent of current smokeless tobacco users who chew/apply tobacco at home	Percent of current tobacco users who purchased tobacco products in a store	Percent of current tobacco users who bought tobacco in a store who were not refused purchase because of their age
Total	21.6 ( $\pm 8.7$ )	33.6 ( $\pm 9.4$ )	53.9 ( $\pm 6.3$ )	52.5 ( $\pm 13.4$ )
Sex				
Male	16.9 ( $\pm 8.4$ )	23.8 ( $\pm 13.1$ )	51.5 ( $\pm 8.7$ )	53.8 ( $\pm 16.9$ )
Female	28.3 ( $\pm 18.2$ )	45.2 ( $\pm 16.6$ )	62.9 ( $\pm 10.2$ )	50.3 ( $\pm 17.8$ )

in a store and similar percentage bought tobacco in a store where they were NOT refused purchase because of their age.

#### Cessation:

Students were asked if they wanted to stop smoking now and if they had tried to stop in the year preceding the survey. Among current smokers, almost 8 in 10 (77%) desired to stop smoking and 73% had tried unsuccessfully to stop smoking over the past year (Table 7).

#### Discussion:

The National Sample Survey conducted in 1993-94 showed the prevalences of smoking cigarettes or bidis, among persons aged 10 years and older, were 29.3% in rural males, 20.2% in urban males, 2.3 % in rural females and 0.7% in urban females in India. Whereas in Tamilnadu (urban+rural), among persons aged 10 years and older, 19 % of males and <1% of females smoked (Sudarshan and Mishra, 1999; National Sample Survey Organisation (NSS), 1998). The present survey is the first comprehensive study conducted in Tamil Nadu among school going children aged 13-15. This survey shows that 10% of school going students aged 13-15 in Tamil Nadu ever used tobacco; 6% of male and 4% of female students are current smokers. The prevalence of smoking among girls between 13-15 yrs is alarming since it is much higher than the prevalence noted among females in the National survey and in Tamil Nadu studies (Gajalakshmi et al., 2003; Sudarshan and Mishra, 1999; National Sample Survey Organisation (NSS), 1998).

One in three students among current users of any tobacco product and one in five students among never users of tobacco felt that the students who are smoking or chewing tobacco look more attractive. This type of attitude is mainly due to ignorance about the hazards of tobacco use. The results of the Tamil Nadu GYTS shows only 50% of students reported having been taught about dangers of tobacco use

**Table 7. Cessation, India-Tamil Nadu GYTS, 2000**

Category	Current Smokers	
	Percent desire to stop	Percent tried to stop this year
Total	76.9 ( $\pm 8.1$ )	72.7 ( $\pm 9.9$ )
Sex		
Male	81.1 ( $\pm 12.6$ )	80.5 ( $\pm 10.5$ )
Female	77.0 ( $\pm 14.5$ )	52.0 ( $\pm 19.1$ )

in the class and a similar percentage of current tobacco users freely purchase tobacco product in a store. Hence conducting regular class on the hazards of tobacco in all schools, with special programs targeting girls specifically, by including it in the syllabus is desirable. This may help in preventing the initiation and continuation of the tobacco habit that was done due to ignorance about the hazards of tobacco use and there by reduce morbidity and mortality related to tobacco use. Unless enforcing a law to prohibit the sale of tobacco product to those below the age of eighteen, the prevalence of tobacco use among school children will rise.

The percentage of students who received a free tobacco product from a tobacco company representative or vendor was high among tobacco users compared to never users of tobacco because free supply of tobacco product tempted the students to initiate the habit and continue it once initiated. In this survey, tobacco users reported watching more pro-tobacco advertisements compared to never users. Studies have shown media advertisements and sports sponsor by tobacco companies influence the children's perception of tobacco use and help initiate tobacco use (Vaidya et al., 1996).

The data shows among current smokers 77% want to quit the habit. This strongly suggests the need to offer effective youth cessation programmes. A ban on tobacco smoking in the public places was supported by majority of smoking and non-smoking children. A few studies have shown restrictions on smoking in public places lowers the prevalence of smoking (Wakefield et al., 2000). The Supreme Court of India has imposed ban on smoking in public places effective from Nov. 2001 (Sharma, 2001). However, the effective enforcement of legislation on banning smoking in public places is necessary to lower the prevalence of smoking in India.

Tobacco control programs must be comprehensive and target both smoking and smokeless tobacco use. Non Governmental Organisations may be involved in giving awareness, health education in the local language and to evolve interventions that address individual attitudes with respect to tobacco in the community and in the schools to prevent initiation and stop continuation of the use of tobacco product. A few studies have shown mass media interventions are cost effective in preventing cigarette smoking among adolescents (Flynn et al., 1992; Sacker-Walker et al., 1997). Massive public health education campaigns are necessary to educate adults on ETS to avoid children /family members

being exposed from ETS. Stopping all forms of tobacco promotion, such as sponsoring sports and cultural events, and limiting advertisements on tobacco products are needed to reduce the prevalence of tobacco use. India has banned smoking in public places, direct and indirect advertising of cigarette and other tobacco products, and their sale to minors from May 1, 2004 under the Anti-smoking Act. There is a provision of Rs. 200 fine or punishment for people who violate the rules and smoke in public places. The ban is being implemented as part of the Cigarettes and other Tobacco products (Prohibition of advertisements and Regulation of Trade and Commerce, Production, Supply and Distribution) Act, 2003 which was passed by Parliament in April 2003 and notified in May 2003. The India is the seventh country in the world which has signed and ratified the International Framework Convention on Tobacco Control that was adopted unanimously by the World Health Assembly four years ago. This is a good step forward to reduce the prevalence of tobacco product use in the community.

The GYTS data that is collected now can be used as baseline data to assess any tobacco control activities among adolescents in Tamil Nadu. In order to monitor the tobacco prevalence among adolescents, the survey needs to be repeated at least once in 5 years.

#### What is new?

The prevalence of smoking among those aged 10 years and older in Tamil Nadu are 19 % in males and <1% in females. The present survey conducted in Tamil Nadu among school going children aged 13-15 shows that the prevalence of smoking among school going students aged 13-15 are 6% in boys and 4% in girls. The prevalence of smoking among girls is alarming and is much higher than among females in Tamil Nadu. This indicates the need for special programs targeting girls to lower the prevalence of smoking among them.

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