# Global Youth Tobacco Survey (GYTS) Indonesia

Tjandra Y Aditama (1) Julianty Pradono (2) Khalilul Rahman (3) Charles W Warren (4) Nathan R Jones (4) Samira Asma (4) Juliette Lee (4)

- (1) Tjandra Y Aditama [doctjand@indosat.net.id] (2) NIHRD
- (3) SEARO New Delhi
- ( ) Office on Smoking and Health Centers for Disease Control and Prevention
- (1) Department of Pulmonology & Respiratory Medicine Faculty of Medicine University of Indonesia / Persahabatan Hospital Jl. Persahabatan No. 1 – Rawamangun Jakarta 13230

## **ABSTRACT**

Tobacco is an important public health problem in Indonesia since Indonesia is the 5<sup>th</sup> biggest cigarettes consumption in the world (1). Our National Health Survey 2004 data showed that 34.5% of Indonesian are smokers, suggesting there are more than 60 million smokers in Indonesia. The tobacco control program in Indonesia is not comprehensively available to combat the tobacco problem. One important tool for strengthen in the tobacco control in Indonesia as well as law formulating process is the availability of data. The Global Youth Tobacco Survey (GYTS) was developed to provide data on youth tobacco use to countries for their development of youth based tobacco control programs. Data in this report can be used as baseline measures for future evaluation of the tobacco control programs implemented by the Ministry of Health. This 2006 Indonesia GYTS report show that more than 1 in 10 (12.6%) students currently smoke cigarettes with boys (24.5%) significantly higher than girls (2.3%). Among the current smokers students, over 7 in 10 (75.9%) of them report that they desire to stop smoking now. Regarding SHS, over 6 in 10 (64.2%) students reported they were exposed to smoke from others in their home during the week before the survey. In the impact of media, over 9 in 10 (92.9%) students had seen a lot of advertisements for cigarettes on billboards in the past month and over 8 in 10 (82.8%) had seen a lot of advertisements for cigarettes in newspapers or in magazines . Tobacco control in Indonesia will likely not move forward until the government evaluates and strengthens existing laws, considers passing new strong laws, and develops protocols for enforcing all laws. The Indonesian government also should strongly consider accession to the WHO FCTC.

### Introduction

Indonesia consumed about 215 million cigarettes per year, which put Indonesia as the 5<sup>th</sup> biggest cigarettes consumption in the world (1). Our National Health Survey 2004 data showed that 34.5% of Indonesian are smokers, suggesting there are more than 60 million smokers in Indonesia (2).

To combat against the global tobacco epidemic, the World Health Organization (WHO) Framework Convention on Tobacco Control (WHO FCTC) was adopted by the 56th World Health Assembly in May 2003 and became international law on February 27, 2005. The WHO FCTC is the world's first public health treaty on tobacco control. The WHO FCTC provides the driving force and blueprint for the global response to the pandemic of tobacco-induced death and disease. The Convention embodies a coordinated, effective, and urgent action plan to curb tobacco consumption, laying out cost-effective tobacco control strategies for public policies, such as bans on direct and indirect tobacco advertising, tobacco tax and price increases, promoting smoke-free public places and workplaces, and prominent health messages on tobacco packaging. In addition, the Convention encourages countries to address cross-border issues, such as illegal trade and duty-free sales. (3). Even though Indonesia have not signed nor ratified FCTC yet, there are efforts to pursue a National Tobacco Law, either through an initiative of the parliament MOH. In fact, the support documents for this coming tobacco law has already being prepared and disseminated to get inputs from various stakeholders.

On the other hand, there are several regulation are already in place, such as Ministry pf Health's decree on ban of smoking in all health facilities. Actually there is also a kind of regulation by Ministry of Education regarding no smoking policy in the school premises. Starting 2006, the Jakarta Provincial Government just declares a decree on smoke free public area, including total free smoke area in school & hospital premises, religious facilities, public transportation etc. and partial ban on offices and malls / shopping centers. Other local government also try to perform some regulation, such as Bogor city and Cirebon city. But, we realized that this regulation sometimes not implemented properly. People are still smoke in public places, even in some condition we could see people smoke in hospital area. In the school, sometimes teachers also smoke. In public transportation, sometimes even the driver himself is smoking while driving.

One important tool for strengthen in the tobacco control in Indonesia as well as law formulating process is the availability of data. So far we performed 3 yearly National Health Surveys starting 2001 (2).

To be able to get reliable and comparable international data on tobacco, WHO, the U.S. Centers for Disease Control and Prevention (CDC), and the Canadian Public Health Association (CPHA) developed the Global Tobacco Surveillance System (GTSS) to assist all 192 WHO Member States in establishing continuous tobacco control surveillance and monitoring. The GTSS provides a flexible system that includes common data items but allows countries to include important unique information, at their discretion. It also uses a common survey methodology, similar field procedures for data collection, and similar data management and processing techniques. The GTSS includes collection of data through three surveys: the Global Youth Tobacco Survey (GYTS) for youth, and the Global School Personnel Survey (GSPS) and the Global Health

Professional Survey (GHPS) for adults. In 1999, 11 countries (Barbados, China, Fiji, Jordan, Poland, Russian Federation, South Africa, Sri Lanka, Ukraine, Venezuela, and Zimbabwe) pilot-tested the first GYTS. All 11 countries completed successful surveys during 1999. After this initial success, many countries asked WHO and CDC for assistance in participating in GYTS (4).

Indonesia joined GTSS by performing GYTS and Global Health Personnel Survey . GYTS was started in 2000 in Jakarta city and then followed by the cities of Bekasi, Surakarta and Medan. National GHPS study was performed in 2006. In 2006 we also performed national GYTS, which will be reported in this paper.

### Methods

The GYTS is a school-based survey of defined geographic sites which can be countries, provinces, cities, or any other sampling frame including sub national areas, non-Member States, or territories.

The GYTS uses a standardized methodology for constructing sampling frames, selecting schools and classes, preparing questionnaires, carrying out field procedures, and processing data. The GYTS includes data on prevalence of cigarette and other tobacco use, perceptions and attitudes about tobacco, access to and availability of tobacco products, exposure to secondhand smoke, school curricula, media and advertising, and smoking cessation.

The GYTS questionnaire is self-administered in classrooms, and school, class, and student anonymity is maintained throughout the GYTS process. Country-specific questionnaires consist of a core set of questions that all countries ask as well as unique country-specific questions. Indonesia GYTS use the core questionnaire without adding any other questions. The final country questionnaires were translated in-country into Indonesian language.

As a sample for the whole Indonesia, we include all the school in Java and Sumatera as a representative for the whole country, since these 2 islands represents more than 70% of the population. The GYTS uses a two-stage cluster sample design that produces representative samples of students in grades associated with ages 13–15. The sampling frame includes all schools in Java and Sumatera containing any of the identified grades. At the first stage, the probability of schools being selected is proportional to the number of students enrolled in the specified grades. At the second sampling stage, classes within the selected schools are randomly selected. All students in selected classes attending school the day the survey is administered are eligible to participate. Student participation is voluntary and anonymous using self-administered data-collection procedures. The GYTS sample design produces representative, independent, cross-sectional estimates for each site. For cross-site comparisons, data in this paper are limited to students aged 13–15 years old.

The following data are presented in this report: lifetime cigarette use; initiation of smoking before age 10; likely initiation of smoking during the next year among never smokers (i.e., susceptibility); current cigarette smoking, current use of tobacco products other than cigarettes; dependency on cigarettes among current smokers; exposure to secondhand smoke (SHS) at home; exposure to SHS in public places; desire for a ban on

smoking in public places; students who were taught in school about the dangers of smoking, the reasons why young people smoke, or were taught about the effects of smoking on their health; students who saw advertisements for cigarettes on billboards or newspapers or magazines; students who have an object with a cigarette brand logo on it; smokers who want to stop, have tried to stop, and received help to stop smoking; and access and availability to cigarettes among smokers

The 2006 GYTS Indonesia data has a 100% school response rate with a 94.28% students response rate, so the total response rate was 94.28%.

## Results

#### Prevalence

Over one-third (37.3%) of the students reported that they ever smoked cigarettes (Table 1). Boys (61.3%) were significantly more likely than girls (15.5%) to have ever smoked cigarettes. Three in 10 students (30.9%) smoked their first cigarette before age 10.

Table 1: Percent of students who had ever smoked cigarettes, percent of students who ever smoked that first tried a cigarette before age 10, Indonesia GYTS, 2006.

	Ever smoked cigarettes, even one or two puffs	Ever smokers who smoked their first cigarette before age 10
Total	37.3 (32.3 - 42.5)	30.9 (26.8 - 35.4)
Boy	61.3 (52.8 - 69.2)	28.5 (25.0 - 32.3)
Girl	15.5 (12.0 - 19.8)	40.8 (28.7 - 54.3)

More than 1 in 10 (12.6%) students currently smoke cigarettes with boys (24.5%) significantly higher than girls (2.3%) (Table 2). Among students who currently smoke cigarettes, 3.2% are addicted (i.e., feel like having a cigarette first thing in the morning).

Table 2: Percent of students who were current cigarette smokers and percent of current smokers who were dependent on cigarettes, Indonesia GYTS, 2006.

	Current cigarette smoker	Percent of current cigarette smokers who feel like having a cigarette first thing in the morning
Total	12.6 (10.0 - 15.7)	3.2 (1.5 - 6.4)
Boy	24.5 (19.0 - 31.0)	3.5 (1.6 - 7.3)
Girl	2.3 (1.7 - 3.3)	1.6 (0.2 - 11.8)

Exposure to Second Hand Smoke

Over 6 in 10 (64.2%) students reported they were exposed to smoke from others in their home during the week before the survey (Table 3). Over 8 in 10 (81.0%) students were exposed to smoke from others in public places. Almost 9 in 10 (88.0%) students think smoking should be banned in public places.

Table 3: Percent of students exposed to smoke at home, exposed to smoke in public, and supported banning smoking in public places, Indonesia GYTS, 2006.

	Percent exposed to smoke from others at home	Percent exposed to smoke from others in public places	Percent who think smoking should be banned in public places
Total	64.2 (59.8 - 68.3)	81.0 (77.7 - 84.0)	88.0 (85.6 - 90.1)
Boy	65.9 (60.8 - 70.7)	83.7 (79.6 - 87.1)	84.3 (81.6 - 86.7)
Girl	62.7 (57.8 - 67.3)	78.7 (75.0 - 81.9)	91.8 (89.0 - 93.9)

### School Curricula

Almost 7 in 10 students were taught in school during the past year about the dangers of tobacco; almost half discussed reasons why young people their age smoke; and over 6 in 10 were taught about the effects of tobacco on their health (Table 4).

Table 4: Percent of students who were taught dangers of smoking, discussed reasons why people their age use tobacco, taught effects of using tobacco, GYTS Indonesia, 2006.

	Percent taught dangers of smoking/chewing tobacco	Percent discussed reasons why people their age smoke/chew tobacco	Percent taught about the effects of smoking/chewing tobacco
Total	68.5 (61.4 - 74.8)	49.1 (42.5 - 55.9)	61.0 (53.6 - 67.9)
Boy	68.1 (61.4 - 74.1)	48.0 (41.5 - 54.7)	60.2 (53.1 - 66.9)
Girl	68.7 (60.4 - 75.9)	50.0 (42.4 - 57.6)	61.7 (53.4 - 69.4)

## Media and Advertising

Over 9 in 10 (92.9%) students had seen a lot of advertisements for cigarettes on billboards in the past month and over 8 in 10 (82.8%) had seen a lot of advertisements for cigarettes in newspapers or in magazines (Table 5). One in 10 (10.8%) students reported having an object (i.e., t-shirt, cap, book bag etc) with a cigarette or tobacco company logo on it, with boys (14.3%) significantly higher than girls (7.3%).

Table 5: Percent of students who saw ads on billboards, saw ads in newspapers, and had an object with a tobacco company logo on it, Indonesia GYTS, 2006.

		Percent who saw a	
	Percent who saw a	lot of ads for	
	lot of ads for	cigarettes in	Percent who have an
	cigarettes on	newspapers or	object with a
	billboards in the	magazines in the	cigarette or tobacco
	past month	past month	logo on it
Total	92.9 (91.5 - 94.1)	82.8 (79.8 - 85.4)	10.8 (9.2 - 12.7)
Boy	91.3 (89.4 - 92.9)	82.6 (79.1 - 85.6)	14.3 (12.3 - 16.6)
Girl	94.2 (92.5 - 95.6)	82.9 (79.3 - 86.0)	7.3 (5.4 - 9.7)

### Cessation

Over 7 in 10 (75.9%) current smokers report that they desire to stop smoking now (Table 6). Over 8 in 10 (85.5%) current smokers tried to stop smoking during the past year but failed and 8 in 10 (82.4%) current smokers received help to stop smoking.

Table 6: Percent of current smokers who want to quit, current smokers who tried to quit, and current smokers who received help to quit, Indonesia GYTS, 2006.

	Percent of current cigarette smokers who desire to stop smoking	Percent of current cigarette smokers who tried to stop smoking during the past year	Percent of current smokers who received help to stop smoking
Total	75.9 (69.6 - 81.2)	85.5 (76.9 - 91.2)	82.4 (77.6 - 86.4)
Boy	77.1 (69.8 - 83.1)	86.9 (77.6 - 92.7)	84.0 (78.8 - 88.2)
Girl	55.9 (36.0 - 74.1)	*	70.3 (53.7 - 82.9)

<sup>\* &</sup>lt; 35 cases in the denominator

## Access and Availability

Six in 10 (59.7%) students who currently smoke usually buy their cigarettes in a store and 7 in 10 (73.2%) were not refused purchase because of their age (Table 7). Over 1 in 10 (14.4%) students reported that they had ever been offered "free" cigarettes by a tobacco company representative, with boys (21.6%) significantly higher than girls (7.4%).

Table 7: Percent of current smokers who usually buy tobacco in a store, percent of current smokers who buy tobacco in a store and were not refused purchase because of their age, and percent of all students who have been offered free cigarettes by a tobacco company representative, Indonesia GYTS, 2006.

		Percent current	
		smokers who buy	
		their tobacco in a	Percent who have
	Percent current	store and were not	been offered "free"
	smokers who	refused cigarette	cigarettes by a
	usually buy their	purchase because	tobacco company
	tobacco in a store	of their age	representative
Total	59.7 (54.9 - 64.3)	73.2 (64.2 - 80.6)	14.4 (12.5 - 16.5)
Boy	61.1 (55.4 - 66.5)	72.1 (62.5 - 80.0)	21.6 (18.2 - 25.4)
Girl	48.8 (35.5 - 62.2)	*	7.4 (5.8 - 9.3)

<sup>\* &</sup>lt; 35 cases in the denominator

### **Discussion**

Current cigarette smoking in the 2006 Indonesia GYTS (12.6%) can be compared to GYTS data from other ASEAN countries. The prevalence in Indonesia is similar to that of Thailand (11.7%), Philippines (11.4%) and Singapore (9.1%); whereas the rates in Timor Leste (32.4%) and Malaysia (16.7%) are higher and Cambodia is lower (2.5%) (5). The goal in Indonesia is to have 0% smoking. While this might not be realistic in the short run one objective Indonesia could have is to reach 2.5% current smoking rate as in Cambodia by 2020. A comprehensive national tobacco control policy should be in place and implemented thoroughly. Also, GYTS data can be compared to adult (age 15+) national smoking rates from the 2004 Indonesian National Social Economic Survey. In the national survey, 65.2% of males and 4.5% of fe males currently smoke (6). In the 2006 GYTS, 24.5% of boys and 2.3% of girls currently smoke cigarettes; thus the rate for boys is approximately one-third that of the general population and the rate for girls is half that of adult females. This suggests the rate for girls may be increasing which is consistent with the 165% national increase for females from 1.7% in 2003 to 4.5% in 2004 (5). These findings show that Indonesia needs a comprehensive tobacco control program to address the high rate of smoking among adolescents, especially the potential increasing rate for young girls.

Exposure to pro-cigarette advertising was very high with over 9 in 10 (92.9%) students having seen a lot of advertisements for cigarettes on billboards in the past month and over 8 in 10 (82.8%) having seen a lot of advertisements for cigarettes in newspapers or in magazines. In 2003, Indonesia passed a regulation which partially limits cigarette advertising (7).(REF). ADD CONTENT OF WHAT IS REGULATED>>>>. The GYTS finding also showed that 10.8% students reported having an object (i.e., t-shirt, cap, book bag, etc) with a cigarette or tobacco company logo on it, with boys (14.3%) significantly higher than girls (7.3%). Consequently, controls over both direct and indirect procigarette advertising are very limited in Indonesia. The MOH needs to work with parliament to pass stronger laws and regulations and design ways to enforce the legislation.

Secondhand smoke (SHS) is a combination of smoke from a burning cigarette and exhaled smoke from smokers. This substance is an involuntarily inhaled mix of compound that causes or contributes to a wide range of adverse health effects. In the GYTS, Indonesia's students report very high exposure to SHS at home (64.2%). SHS exposure at home can be compared across ASEAN countries. This comparison shows the rate in Indonesia (64.2%) is similar to that in Timor Leste 63.2%, Malaysia 59%, and the Philippines 56.4 %; but greater than the rate in Thailand 49 %, Cambodia 47 %, and Singapore 35.1% (5). On the other hand, the Indonesia GYTS found that 81% of Indonesian students were exposed to SHS in public places, which is higher than other ASEAN countries (Malaysia 75.7 %, Timor Leste 69.8%, Thailand 65.2 %, Singapore 65.1%, Philippines 58.6 %, and Cambodia 58.5 %)(5). In all ASEAN countries, including Indonesia, the majority of students strongly support having a ban on smoking in public places. From this finding, the MOH and parliament needs to pass strong laws and regulations banning smoking in public places and setup procedures for enforcing the rules. Priority could be given to four places that should be smoke free areas: school premises, health facilities, religious area (mosques, church, etc.) and public transportation.

Among students who currently smoke cigarettes, 75.9% want to stop smoking now which shows the need for the development, testing and implementation of an evidence-based youth cessation program. Up to now there is only a limited number of smoking cessation clinics in Indonesia, and NRT (Nicotine Replacement Therapy) and other drugs which could be used for smoking cessation are not available in Indonesia. A program to provide smoking cessation activities should be encouraged in Indonesia as an integral part of National Tobacco Control Program.

As of 2006, Indonesia has not participated in WHO FCTC signing nor ratification. There are several laws and regulations which are directly or indirectly related to tobacco control, such as National Law No 23 on Health, Governmental decree No 81 about smoking and health as well as some local regulations such as in Jakarta and Bogor cities. But, these regulations have two important limitations. First, they are not strong enough and do not cover all aspects of a comprehensive tobacco control program, and secondly those regulations have not been fully implemented or enforced. Tobacco control in Indonesia will likely not move forward until the government evaluates and strengthens existing laws, considers passing new strong laws, and develops protocols for enforcing all laws. Once these goals have been agreed to Indonesia will have moved toward development of a strong tobacco control program and should consider accession to the WHO FCTC.

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