

CAMBODIA 2010 COUNTRY REPORT GLOBAL YOUTH TOBACCO SURVEY (GYTS)



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Foreword

Preventing smoking and smokeless tobacco use among young people is vital to curbing the epidemic of tobacco use. Nowadays, tobacco use is one of the four major risk factors (unhealthy diet, tobacco use, alcohol consumption, and physical in-activities) of Non-Communicable Disease; it kills more than five million people per year. Tobacco is the only legal consumer products that can harm everyone expose to it. Adolescents and young adults are uniquely susceptible to social and environmental influences to tobacco use, and tobacco companies tremendously invest on tobacco advertising.

The findings of this report provide evidence about tobacco use among students in grades 7 through 10 ages 13 to 15 years and suggest the program intervention to combat the tobacco epidemic among youth in Cambodia. Results from the GYTS are also useful for documenting the changes in different variables of tobacco control measures such as tobacco use prevalence, knowledge and attitudes, exposure to second hand smoke (SHS), media and advertising for monitoring the implementation of different provisions of the tobacco control law and the relevant Articles of the WHO Framework Convention.

Tobacco is the single most preventable cause of death in the world today. A coordinated program intervention including mass media campaigns, price increase, comprehensive ban of tobacco product advertising, promotion and sponsorship, and community-level changes protecting people from second hand smoke and norms are effective in reducing the initiation and prevalence of tobacco use among youth. However, many of these tobacco control programs remain underfunded, and now more than ever, it is imperative that we continue investing in tobacco prevention and control. An increasing in spending on sustained comprehensive tobacco control programs will results in reductions in youth and adult smoking rates and ultimately in health care cost.

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Summary

Introduction: Tobacco use is the leading global cause of preventable death. According to World Health Organization (WHO), tobacco use attributes nearly 6 million deaths a year. According to the report of the surgeon general 2012, more than 80% of adult smokers begin smoking by 18 years of age with 99% of first use by 26 years of age. The Global Youth Tobacco Survey (GYTS) was developed to gather comprehensive tobacco prevention and control information on young people.

Objectives: Describe the prevalence of cigarette and other tobacco use as well as information on five determinants of tobacco use: access/availability and price, environmental tobacco smoke exposure (ETS), cessation, media, and advertising and school curriculum.

Method: The Cambodia GYTS was a school-based survey of students in grades 7 through 12 conducted in 2010. A two-stage cluster sample design was used to produce representative data for all of Cambodia. A total of 4,556 students participated in the Cambodia GYTS, of which 1,637 were ages 13 to 15 years. The overall response rate of all students surveyed was 92.7%.

Results: Current use of any tobacco product was 6.3% (7.9% for boys and 5.0% for girls) and the current smokers were 0.2% (0.4% for boys and 0.0% for girls). Current use of other tobacco product was 6.2% (7.6% for boys and 5.0% for girls). About 6.0% of never smokers are likely to initiate smoking next year. About 11% think boys and 5.8% think girls who smoke have more friends. Likewise, 3.9% think boys and 3.2% think girls who smoke look more attractive. ETS exposure was very high. Three in ten (31.5%) students lived in a home where others smoke in their presence. Over four in ten (43.0%) are exposed to smoke in public places outside their home. Three in ten (30.2%) have one or more parents who smoke. Seven in ten (69.8%) think smoke from others is harmful to them and seven in ten (69.2%) of students thought smoking should be banned from public places.

Many programs to raise awareness in youths have been directly targeted at youths. However, this information has been diffused with other contradicting messages which portray positive images of smoking and using tobacco products. More than four in five (82.3%) students saw anti-smoking media messages in the past 30 days. While three in five (61.2%) saw pro-cigarette advertising on billboards and 44.8% saw pro-cigarette advertising in newspaper or magazines in the past 30 days. About 27% of students have an object with a cigarette brand logo on it and approximately 4.9% of the students were offered free cigarettes by a tobacco company representative. Nearly one in three students had been taught in class, during the past year, about the dangers of smoking and about one in five students had discussed in class, during the past year, reasons why people their age smoke.

Conclusion: The findings indicates that there is no statistically difference of prevalence of any form of tobacco use in year 2003 and 2010, though there has been decreasing of smoking prevalence from 5.5% to 0.2%. This survey provides the comprehensive picture on the situation related to tobacco matters among school students in Cambodia and gives us the opportunity and the main ideas on how to develop the tobacco control program in schools. The immediate action is required to prevent youth exposure to second hand smoke, pro-cigarette advertising messages,

never smokers in initiate smoking in future and to educate students in class the harmful effects of tobacco use.

Introduction

Tobacco use is the leading global cause of preventable death. According to World Health Organization (WHO), tobacco use attributes nearly 6 million deaths a year. That figure is expected to rise to more than 8 million deaths a year by 2030. Most people begin using tobacco before the age of 18.

The Global Youth Tobacco Survey (GYTS) was developed by the Tobacco Free Initiative (TFI), World Health Organization (WHO) and the Office on Smoking and Health (OSH) of the United States Centers for Disease Control and Prevention (CDC) in collaboration with a range of countries representing the six WHO regions to gather comprehensive tobacco prevention and control information on young people. The GYTS is a school-based survey that uses a two-stage cluster sample design to produce representative samples of students in grades associated with the age group 13-15 years. All classes in the selected grades were included in the sampling frame. All students in the selected classes were eligible to participate in the survey.

Country Demographics

Cambodia is a Member State of the Western Pacific Region and is considered to be a low income country. Cambodia composes of 24 provinces and Phnom Penh is the capital city. According to General Population Census of Cambodia, 2008, the total population of Cambodia is 13,395,682 composing 6,516,054 males (48.64%) and 6,879,628 females (51.36%); and of them, 80.5% lives in rural area. Buddhism is the official religious of Cambodia. The total household size is 4.7 and the adult literacy rate aged over 15 is 77.6%.

WHO Framework Convention on Tobacco Control and MPOWER

In response to the globalization of the tobacco epidemic, the 191 Member States of the World Health Organization unanimously adopted the WHO Framework Convention on Tobacco Control (FCTC) at the Fifty-sixth World Health Assembly in May 2003. The FCTC is the world's first public health treaty on tobacco control. It is the driving force behind, and blueprint for the global response to the pandemic of tobacco-induced deaths and diseases. The treaty embodies a coordinated, effective, and urgent action plan to curb tobacco consumption and lays out cost-effective tobacco control strategies for public policies such as banning direct and indirect tobacco advertising, increasing tobacco tax and price, promoting smoke-free public places and workplaces, displaying prominent health messages on tobacco packaging, and tobacco research, surveillance, and exchange of information.

To help countries fulfill their WHO FCTC obligations, in 2008 WHO introduced MPOWER, a technical package of six evidence-based tobacco control measures that are proven to reduce tobacco use and save lives:

- Monitor tobacco use and prevention policies
- Protect people from tobacco smoke
- Offer help to quit tobacco use
- Warn about the dangers of tobacco

- Enforce bans on tobacco advertising, promotion and sponsorship
- Raise taxes on tobacco

The GYTS supports WHO MPOWER by monitoring country-specific data on key tobacco indicators, including prevalence, knowledge, and behavior. The final questionnaire was translated into Khmer Language and back-translated into English to check for accuracy.

Purpose and Rationale

The purpose of participating in the GYTS is to enhance countries' capacity to monitor youth tobacco consumption and tobacco use initiation, guide national tobacco prevention and control programs, and facilitate comparison of tobacco-related data at the national, regional, and global levels. Results from the GYTS are also useful for documenting the changes in different variables of tobacco control measures such as tobacco use prevalence, knowledge and attitudes, exposure to second hand smoke (SHS), media and advertising for monitoring the implementation of different provisions of the tobacco control law and the relevant Articles of the WHO Framework Convention. There have been no studies on the topic of youth tobacco use, and so the prevalence of tobacco use in that group is largely unknown.

The Non-Communicable Diseases are emerging health issues in Cambodia. According to the National Strategic Plan for the Prevention and Control of Non communicable Diseases 2013, 2020, Non-Communicable Diseases (NCDs), namely cardiovascular disease, cancer, chronic respiratory disease and diabetes, are a large and growing problem in Cambodia. In 2008, these four diseases caused 46% of deaths in Cambodia¹, and this figure is projected to rise. Cardiovascular disease is the most common NCD in Cambodia, causing 21% of all deaths. Cancer causes 7% of deaths, respiratory diseases cause 5% and diabetes directly causes 3% of deaths in Cambodia. The most common type of cancer occurring in Cambodia is cervical cancer, followed by liver, lung, breast and stomach. In terms of deaths, liver and lung cancers cause the largest numbers of cancer deaths each year. Importantly, these NCDs are killing Cambodians in their productive years – over half the men and over a third of women dying from NCDs are younger than 60 years.

According to National Adult Tobacco Survey of Cambodia 2011, currently 2 million Cambodians use tobacco, with 42.5% of adult males smoking cigarettes. Over half the population is exposed to environmental tobacco smoke (ETS) at home or work. Already 1 in 5 Cambodian adults have high cholesterol and 1 in 10 has high blood pressure. With continued economic growth, the environment is increasingly promoting the development of NCD.

Current State of Policy

Currently, in Cambodia, there are some tobacco control policies put in place, the strategic plan on tobacco education and reduction 2011-2015, the sub-decree¹ on health warning 2008, the sub-decree on comprehensive ban of tobacco products advertising, promotion and sponsorship 2011, and the Prakah² of smoke free workplace of the 12 ministries namely (1) ministry of health, (2) ministry of education, youth and sport, (3) ministry of religions and cults, (4) ministry of women affairs, (5) ministry of industry, mines and energy, (6) ministry of environment, (7) ministry of interior, (8) ministry of information, (9) ministry of agriculture, forestry and fisheries, (10) ministry social affairs veteran and youth rehabilitation, (11) ministry of tourism, (12) ministry of commerce, and policy of smoke free in three institutions namely (1) Phnom Penh water supply authority, (2) Cambodia red cross, and (3) the High Command Head Quarter of the Ministry of Defense.

In addition, the draft of a comprehensive law on tobacco control has been submitted to at the Council of Minister for finalizing. The key components of the draft law on tobacco control compose of comprehensive ban of tobacco product advertising, promotion, and sponsorship, tobacco products packaging and labeling, prohibition of smoking in public places, increase tax on tobacco products, and restrict sale tobacco products to minors.

Other Tobacco Surveys

The GYTS has previously been conducted in Cambodia in year 2003. In addition to the GYTS, the following surveys have been run in Cambodia: Adults Tobacco Survey 1 in 2000, Adults Tobacco Survey 2 in 2004, Adults Tobacco Survey 3 in 2005 Tobacco Survey 4 in 2010.

Country Specific Objectives

1. Reduce current tobacco use in Cambodia in students in grades 7 through 12 from 6.3% in 2010 to 5.3 % by 2015.
2. Maintain current cigarette use (0.2%) in Cambodia in students in grades 7 through 12 by year 2015.

¹ Sub-Decree is the legal instrument issued by the Prime Minister

² Prakah is the legal instruments issued by the minister

Methods

Sampling

The year 2010, Cambodia GYTS is a school-based survey, which employed a two-stage cluster sample design to produce a national-level representative sample of students in grades 7 through grade 12. The first-stage sampling frame consisted of all schools containing grades 7 through grades 12. Schools were selected with probability proportional to school enrollment size. The second sampling stage consisted of systematic equal probability sampling (with a random start) of classes from each school selected during the first stage. The GYTS was conducted in 50 schools and 107 classrooms. The grades that were sampled for the 2010 GYTS were grade 7, 8, 9, 10, 11 and 12.

A weighting factor was applied to each student record to adjust for non response and for the varying probabilities of selection. For the 2010 Cambodia GYTS, 4,556 of questionnaire were completed in 50 schools participated. A total of 4,556 students participated in the Cambodia GYTS of which of which 1,637 were ages 13 to 15 years (Male: 723, Female: 887). The school response rate was 100% and the student response rate was 92.7%. The overall response rate was 92.7%. SUDAAN, a software package for statistical analysis of complex survey data, was used to calculate weighted prevalence estimates and standard errors (SE) of the estimates (95% confidence intervals [CI] were calculated from the SEs).

Data Collection

Data collection held in December 2010 using 20 staff from the National Center for Health Promotion and Provincial Education Department from 19 provinces to accomplish this task.

Survey procedures were designed to protect the students' privacy by allowing for anonymous and voluntary participation. The self-administered questionnaire was administered in the classroom. Students recorded their responses directly on an answer sheet that could be scanned by a computer. The questionnaire contained 70 multiple-choice questions. The survey included 58 questions from the core questions and 12 questions from the optional questions available.

Data Analysis

Frequency tables for each survey question are developed which show the number of cases, percentage, and the 95% confidence interval. Preferred tables are also developed highlighting the questions that are considered key tobacco control indicators from the GYTS. Indicators are in accordance with the WHO FCTC and MPOWER technical package.

Results

Prevalence – Article 20 of WHO FCTC: Research, Surveillance and Exchange of Information

Table 1: Percent of students who use tobacco, Cambodia, 2010

Category	Ever smoked cigarettes % (95% CI)	Current Any Tobacco Users % (95% CI)	Current Cigarette Smokers % (95% CI)	Current Other Tobacco Users % (95% CI)	Never Smokers Susceptible to Start Smoking in the Next Year % (95% CI)
Total	1.6% (0.9 - 2.9) (n=1,613)	6.3% (4.5 - 8.8) (n=1,636)	0.2% (0.1 - 0.5) (n=1,567)	6.2% (4.4 - 8.6) (n=1,635)	6.1 (4.1 - 9) (n=1,577)
Male	3% (1.5 - 5.8) (n=723)	7.9 % (5.6 - 11.1) (n=736)	0.4 % (0.1 - 1.2) n=708	7.6 % (5.3 - 10.7) (n=735)	8.9 (6.2 - 12.7) n=698
Female	0.6% (0.2 - 1.8) (n=887)	5% (3.3 - 7.6) (n=897)	0 % (. - .) (n=856)	5% (3.3 - 7.6) (n=897)	4 (2.4 - 6.7) n=876

In Cambodia, 1.6% ever smoked cigarettes. Overall, 6.3% of students reported current any tobacco users, and 0.2% reported currently smoking cigarettes at least one in the last 30 days. About 6.0% reported using tobacco other than cigarettes within the previous 30 days (current other tobacco users). In addition, 6.1% of never smokers indicated that they were susceptible to start smoking in the next past year. (Table 1)

Knowledge and Attitudes – Article 12 of WHO FCTC: Education, Communication, Training and Public Awareness

Table 2: attitudes toward smoking

Category	Percent who think boys who smoke have more friends (95% CI)	Percent who think girls who smoke have more friends (95% CI)	Percent who think boys who smoke are more attractive (95% CI)	Percent who think girls who smoke are more attractive (95% CI)
Total	11.4% (8.5 - 15.1) (n=1,630)	5.8% (4.1 - 8.1) (n=1,626)	3.9 % (2.4 - 6.1) (n=1,632)	3.2 % (2.1 - 4.9) (n=1,631)
Male	13.5 % (10.8 - 16.8) (n=730)	7.1 % (5.6 - 9) (n=730)	4.6 % (2.8 - 7.3) (n=734)	3.1% (2.1 - 4.6) (n=733)
Female	9.9% (6.1 - 15.6) (n=897)	4.8% (2.8 - 8.2) (n=893)	3.3% (1.9 - 5.8) (n=895)	3.3% (1.8 - 5.9) (n=896)

About 11% of students reported that they think that boys who smoke have more friends and 5.8% of students think girls who smoke have more friends. Nearly 4% think boys who smoke are more attractive and 3.2% think girls who smoke are more attractive. (Table 2)

Secondhand Smoke

Table 4 - Article 8 of WHO FCTC: Protection from Exposure to Tobacco Smoke

Category	Percent who live in homes where others smoke (95% CI)	Percent who are around others who smoke in places outside their home (95% CI)	Percent who think smoking should be banned from public places (95% CI)
Total	31.5% (25.1 - 38.6) (n=1,635)	43 % (31.4 - 55.5) n=1,635	69.2 % (63.8 - 74.1) n=1,628
Male	31.5% (24.1 - 40) n=735	41.4 % (34.9 - 48.2) n=736	69 % (63.7 - 73.8) n=730
Female	31.4 % (23.8 - 40.1) n=897	44.4% (26.5 - 64) n=896	69.4 % (61.4 - 76.4) n=895

Table 5 – Article 12 of WHO FCTC: Education, Communication, Training and Public Awareness

Category	Percent who think smoke from others is harmful to them (95% CI)	Percent who have one or more parents who smoke (95% CI)	Percent who have most or all friends who smoke (95% CI)
Total	69.8 (62.1 - 76.6) n=1,629	30.2 (23.8 - 37.5) n=1,631	1.2 (0.6 - 2.2) n=1,632
Male	72.6 (64.8 - 79.3) n=729	35.1 (29.4 - 41.3) n=733	1.2 (0.6 - 2.3) n=733
Female	67.8 (58.6 - 75.8) n=897	26.5 (17.8 - 37.5) n=895	1.3 (0.6 - 2.5) n=896

Of the students that participated in the survey, 31.5% live in homes where others smoke and 43% are around others who smoke in places outside their home. Regarding environmental tobacco smoke, 69.2% think smoking should be banned from public places, and 69.8% think smoke from others is harmful to them. Nearly one third of the students reported that they have one or more parents who smoke and 1.2% have or all friends who smoke cigarettes. (Table 4 and 5)

Media and Advertising – Article 13 of WHO FCTC: Tobacco Advertising, Promotion and Sponsorship

Table 7: exposure to pro and anti-smoking messages

Category	Percent who saw anti-cigarettes media messages in the past 30 days (95% CI)	Percent who saw pro-cigarette ads on billboards in the past 30 days (95% CI)	Percent who have seen pro-cigarette ads in newspapers or magazines in the past 30 days (95% CI)
Total	82.3 (74 - 88.3) n=1,625	61.2 (56.2 - 66) n=1,629	44.8 (35 - 54.9) n=1,626
Male	82.8 (77.8 - 86.9) n=730	63.3 (57.7 - 68.6) n=732	50.9 (44.5 - 57.2) n=732
Female	81.8 (67.6 - 90.7) n=893	59.7 (54.1 - 65.1) n=895	40.1 (26.6 - 55.4) n=892

Table 8: own an object with cigarette brand logo and offered free cigarettes

Category	Percent who have an object with a cigarette brand logo (95% CI)	Percent who were offered free cigarettes by a tobacco company representative (95% CI)
Total	27.1 (21.2 - 33.9) n=1,617	4.9 (3.5 - 6.8) n=1,620
Male	34 (28.7 - 39.8) n=729	5.1 (3.4 - 7.7) n=730
Female	21.8 (14.5 - 31.5) n=885	4.7 (3 - 7.4) n=888

In the past 30 days, 82.3% of students reported that they saw anti-smoking media messages and 61.2% saw pro-cigarettes advertising on billboards and 44.8% saw pro-cigarette advertising on newspapers or magazines. Up to 27.1% have an object with cigarette brand logo and 4.9% were offered free cigarettes by a tobacco country representative. (Table 7 and 8)

School Curriculum – Article 12 of WHO FCTC: Education, communication, training and public awareness

Table 9: taught in class about danger of smoking

Category	Percent who had been taught in class during the past year about the dangers of smoking (95% CI)	Percent who had discussed in class during the past year reasons why people their age smoke (95% CI)	Percent who had been taught in class during the past year the effects of smoking (95% CI)
Total	30.4 (23.6 - 38.1) n=1,623	19 (14.6 - 24.4) n=1,630	45.2 (41.1 - 49.4) n=1,633
Male	33.2 (28.8 - 37.9) n=730	19.8 (16.5 - 23.5) n=733	43.6 (38.8 - 48.5) n=735
Female	28.3 (18.5 - 40.5) n=890	18.5 (12.1 - 27.4) n=895	46.5 (41.8 - 51.3) n=895

In the past year, 30.4% of students reported that they had been taught in class during the past year about dangers of smoking, and 19% had discussed in class during the past year reasons why people their age smoke. Nearly half of the students indicated that they have been taught in class about the effects of smoking. (Table 9)

Discussion

Tobacco use

Global Tobacco Surveillance System 2009 showed that the smoking prevalence in Western Pacific Region among boys aged 13 to 15 years was 19% and among girls aged 13 to 15 years was 8%, and this indicated that the smoking prevalence among boys (0.4%) and girls (0.0%) aged 13 to 15 years in Cambodia is lower than other countries in the region. Boys were significantly more likely than girls to currently smoke cigarettes. This finding is consistent to the findings of the Global Tobacco Surveillance System 2009 which indicated that girls are much less likely smoke cigarettes than boy in the region of Africa, Eastern Mediterranean, South-East Asia, and Western Pacific. While girls were significantly more likely than boys to use any form of tobacco (chewing) in the past 30 days.

Harmful Effects of Smoking

The harmful effects of smoking are well known and well documented. The tobacco epidemic kills 5.4 million people a year from lung cancer, heart disease, and other illnesses¹. The younger children are when they first try smoking, the more likely they are to become regular smokers and the less likely they are to quit^{2,3,4,5}. And while evidence is strong, in many cases, young people are still unaware of the harmful effects. Schools are integral to educating youths about the dangers of tobacco use but in Cambodia, only 30.4% of students had been taught in class during the past year about the dangers of smoking. Strengthening education is a focus of the FCTC. Educators are specifically mentioned as important sources of information about the dangers of tobacco use for their students.

Public Awareness and Dangers of Smoking

In Cambodia, as of today, there were 679 courses conducted to raise awareness of dangers of tobacco smoking to a wide range of stakeholders. Of these, 138 courses made to raise awareness in youths have been directly targeted at youths. However, this information has been diffused with other contradicting messages which portray positive images of smoking and using tobacco products, for example pro-cigarette ads in newspapers and magazines, or on billboards. In Cambodia, although 82.3% of youth reported that seeing anti-smoking media messages in the 30 previous days, 61.2% reported seeing pro-smoking media on billboards, 44.8% reported seeing pro-smoking media newspapers or magazines, and 27.1% reported owning an item with cigarette brand logo, and 4.9% reported that being offered a free cigarette by tobacco representative. (Table 10)

Table 10: Number of training on awareness of dangers of tobacco smoking

N	Name of Institutions	Number of course
1	National Hospital	03
2	Technical School for Medical Care, University of Health Sciences	04
3	Provincial Health Department	14
4	Referral Hospital	38
5	Operational District	22
6	Health Center	263
7	Regional Training Center ³	02

³ In Cambodia, there are four regional training centers to provide pre and in-services training to nurses and midwives in provinces

N	Name of Institutions	Number of course
8	National Stadium	01
9	Provincial Education Department	05
10	School of Pedagogy in Phnom Penh	07
11	Regional School of Pedagogy	07
12	Junior and Senior High School	124
13	Ministry of Religions and Cults (in Phnom Penh and provinces)	43
14	Ministry Social Affairs, Veteran and Youth Rehabilitation (in Phnom Penh and provinces)	25
15	Ministry of tourism (in Phnom Penh and provinces)	25
16	Provincial governor office	5
17	District governor office	26
18	Other places	70
	Total	679

Source: Tobacco or Health Unit, National Center for Health Promotion, 2012

Table 12 shows that as of year 2012, there were 1,118 participants got training on counseling on quit smoking and 630 participants on establishing smoke free workplaces.

Table 12: Training of Trainers Courses

N	Type of training	Number of Course	Number of participant
1	Counseling on quit smoking	43	1,118
2	Establish smoke free workplace	18	630

Source: Tobacco or Health Unit, National Center for Health Promotion, 2012

Regulations in Country to Control Tobacco Use in Youths

Secondhand Smoke

In Cambodia, there is no law on the smoke free public places put in place, but there were Prakah issued by 12 ministries and three institutions to ban smoking in those workplaces facilities. As the results, this survey showed that 69.8% think smoke from others is harmful to them, and 69.2 % believed that smoking should be banned from public places. It is important to educate youths on the dangers of tobacco use, and in particular the risks associated with secondhand smoke.

Comparison to Previous Tobacco Surveys

Prevalence – Article 20 of WHO FCTC: Research, Surveillance and Exchange of Information

Table 10: Percent of students who use tobacco, Cambodia 2003 versus 2010

Category	Current Any Tobacco Users, 2003 % (95% CI)	Current Any Tobacco Users, 2010 % (95% CI)	Current Cigarette Smokers, 2003 % (95% CI)	Current Cigarette Smokers, 2010 % (95% CI)
Total	8.8 % (7.0-10.6)	6.3% (4.5 - 8.8)	5.5 (3.8-7.2)*	0.2% (0.1 - 0.5)
Male	11.4 (8.5-14.3)	7.9 % (5.6 - 11.1)	7.9 (5.2-10.6)*	0.4 % (0.1 - 1.2)
Female	3.2 (2.2-4.2)	5% (3.3 - 7.6)	1.0 (0.4-1.6)*	0 % (. - .)

*significant difference

Table 10 indicates that there is no difference of prevalence of tobacco use in year 2003 and 2010, but the smoking prevalence is statistically more likely to decrease from 5.5% in year 2003 to 0.2% in year 2010.

Table 11: Percent of students who use of tobacco products other than cigarettes and Never Smokers Susceptible to Start Smoking in the Next Year in year 2003 versus 2010

Category	Current Other Tobacco Users, 2003 % (95% CI)	Current Other Tobacco Users, 2010 % (95% CI)	Never Smokers Susceptible to Start Smoking in the Next Year, 2003 % (95% CI)	Never Smokers Susceptible to Start Smoking in the Next Year, 2010 % (95% CI)
Total	4.2 (3.2-5.2)	6.2% (4.4 - 8.6)	12.0 (9.7-14.3)*	6.1 (4.1 – 9.0)
Male	4.8 (3.4-6.2)	7.6 % (5.3 - 10.7)	16.7 (13.2-20.2)*	8.9 (6.2 - 12.7)
Female	2.5 (1.3-3.7)	5% (3.3 - 7.6)	4.7 (2.8-6.6)	4 (2.4 - 6.7)

*significant difference

Table 11 shows that there is no significant difference of current other tobacco users (chewing) in year 2003 versus 2010. About 6% of never smokers indicates that they were susceptible to start smoking in the next past year. Though, it is likely to decrease susceptible to start smoking among never smokers in next year in the year 2010 versus year 2003, there is a need for program intervention to prevent non-smokers to initiate smoking, and also the needs to establish tobacco use surveillance system to effects of the program intervention.

Relevance to Country and summary of results

GYTS methodology provides an excellent framework for monitoring and guiding the implementation of school tobacco control programs while making it compliant with the requirements of FCTC.

The results of this survey will be disseminated broadly and, ideally, used to adopt and implement effective legislative measures for preventing and reducing tobacco consumption, nicotine addiction, and exposure to tobacco smoke.

Prevalence

The current tobacco use is not decrease over nearly 10 years period, though there currently smoke cigarettes has been a little bit goes down from 5.5 (3.8-7.2) in year 2003 to 0.2% (0.1 - 0.5) in year 2010 and about 6% of never smokers are likely to initiate smoking in next year.

Knowledge and Attitudes

Many boys and girls value the positive image of smoking. 11.4% think boys and 5.8% think girls who smoke have more friends and 3.9% think boys and 3.2% think girls who smoke look more attractive.

Exposure to Secondhand Smoke (SHS)

Exposure to second hand smoke is alarming high and should be a public health priority in Cambodia. Nearly one third (31.5%) live in homes where others smoke in their presence and

43.0% are around others who smoke in places outside their home. Nearly one in every three (30.2%) have one or more parents who smoke and 1.2% have most or all friends who smoke. Nevertheless, the findings indicated that students favor a ban smoking in public place. Nearly 70% (69.2%) think smoking should be banned from public places and 69.8% think smoke from others is harmful to them.

Media and Advertising

There are extensive marketing by the tobacco industry in Cambodia in the year 2010. In the past 30 days, majority (82.3%) of the students saw anti-smoking media messages and 61.2% saw pro-cigarette ads on billboards. Nearly half (44.8%) saw pro-cigarette ads in newspapers or magazines, in the past 30 days, 27.1% have an object with a cigarette brand logo and 4.9% were offered free cigarettes by a tobacco company representative

School

There is a limitation of education in class on harmful effects of tobacco use. This study showed that 30.4% had been taught in class, during the past year, about the dangers of smoking, and 19.0% had discussed in class, during the past year, reasons why people their age smoke. Nearly half (45.2%) had been taught in class, during the past year, the effects of tobacco use.

Proposed Interventions/Further Studies

Based on the findings and discussions above, below are the proposed actions to enhance the tobacco control measure among youths, in particular in schools.

- Further study to understand why female students prefer to use other form of tobacco (chewing) rather than smoking.
- Due to the fact that children are likely to start smoking if they grow up in an environment where tobacco advertising is prolific, where smoking rates are high among adults (including those that serve as role models for young people), where tobacco products are cheap and easily accessible, and where smoking is unrestricted in public places, the tobacco control policies need to take this into consideration. Besides reinforcing the implementation of on health warning 2008, the sub-decree on comprehensive ban of tobacco products advertising, promotion and sponsorship 2011, and the Prakah of smoke free workplace, the acceleration of ratification of draft law should be strongly considered.
- Awareness campaigns on the dangers of cigarette smoking & tobacco products need to be intensified. There is need for regular education on the dangers of tobacco and World-No-Tobacco Day in all schools. Also, anti-smoking campaigns should not just target people with access to television and radio, but should also be targeted for those without access. The use of other tobacco products among female students, information on the dangers of these should be provided, through means accessible to the rural people, who are the majority, constituting 80.5% of the population in the country.
- Educational programs and health promotion campaigns can serve a useful role in tobacco control, particularly in areas where the harms of tobacco use are not widely known. However, unless they are backed up by strong public policies, which help young people refrain from using tobacco, educational programs have only modest results. Such education programs and health promotion campaigns should be placed in the overall context of strong and coherent tobacco control policies.

Conclusions and Recommendations

The findings indicates that there is no statistically difference of prevalence of any form of tobacco use in year 2003 and 2010, though there has been decreasing of smoking prevalence from 5.5% to 0.2%, and provide evidence about tobacco use among students in grades 7 through 10 ages 13 to 15 years and suggest the program intervention to combat the tobacco epidemic among youth in Cambodia. Results from the GYTS are also useful for documenting the changes in different variables of tobacco control measures such as tobacco use prevalence, knowledge and attitudes, exposure to second hand smoke (SHS), media and advertising for monitoring the implementation of different provisions of the tobacco control law and the relevant Articles of the WHO Framework Convention. Recommendation 1: A significant number of students were exposed to tobacco smoke at home and public places and 69.2 % of students believe smoking in public places should be banned. There is a need to effectively reinforce the existing Prakah and policy on smoke free workplaces and pass law that ban tobacco smoking in public places.

1. Recommendation 2: Many youth were exposed to pro-cigarette advertising and were provided free cigarettes by tobacco company representatives. There is an urgent need to police more strictly the sub-decree on comprehensive ban of tobacco products advertising, promotion and sponsorship 2011 in Cambodia.
2. Recommendation 3: To maintain a current understanding of tobacco use and other key indicators among youth and to gauge trends in WHO FCTC and MPOWER uptake and implementation, this survey should be completed at least every four years, and qualitative study to understand the socio-cultural determinants associated with tobacco use behaviour of the female students shall be carried out. This would help to develop suitable program intervention to prevent female students and general youth to initiate using tobacco in the future.
3. Recommendation 4: A comprehensive health promotion strategy and effective and comprehensive tobacco cessation programs need to be formulated to prevent tobacco use and assist school personnel and the general community in quitting.
4. Recommendation 5: School rules and policies should be framed for the prevention and control of tobacco use

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