

Report on the results of the Global Youth Tobacco  
Survey in Lara State, Venezuela.  
(GYTS Lara State, Venezuela)

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THE GLOBAL YOUTH TOBACCO SURVEY (GYTS)  
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- Venezuelan Cardiology Association Central Western Chapter
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## Introduction

Despite widespread knowledge of the harm caused by smoking, only modest success has been achieved in global tobacco control initiatives. Current estimations of The World Health Organization (WHO) indicates that tobacco consumption causes 3.5 million deaths a year, a figure expected to rise to about 10 million by the year 2030, and, 70% of those deaths will occur in developing countries.

Tobacco use is considered to be one of the chief preventable causes of death in the world. Most people begin using tobacco before the age of 18. Recent studies on trends of tobacco consumption indicate that the smoking prevalence rate among adolescents is rising; and that their age of initiation is lowering. If these patterns continue, tobacco use will result in the deaths of 250 million children and young people alive today, many of them in developing countries. Therefore, adolescents and school-aged children should be a primary focus for intervention strategies. Carefully designed surveys should provide a clear picture of the risk factor behaviors of young and school-aged children which then, can be used to set up more effective and comprehensive tobacco control policies.

In the developing world there is a need for good, scientific sound data about tobacco use patterns. However, in the era of globalization, youth and adolescents are adopting behavior patterns that are comparable from country to country, and regions within a country. Tobacco companies are taking advantage of this situation. They are advertising tobacco products using mass media techniques targeting "the youth of the world".

To counteract the effect of that strategy, there is an urgent need for information that would allow "across" and "within" country comparisons. That would permit the fulfillment of the dual objective of designing preventive strategies targeting "the global youth" while taking into consideration local peculiarities.

The Tobacco Free Initiative (TFI)/WHO was awarded by the United Nations Foundation for International Partnerships (UNFIP) with a grant to initiate a joint project with UNICEF titled "Building alliances and taking action to create a generation of tobacco free children and youth". The aim of the project is to pull together the evidence, technical support, and strategic alliances necessary to positively address the negative impact of tobacco and to encourage and support children and adolescents in leading healthy and active lives free of tobacco. The project focus on developing countries, and will draw upon the combined technical expertise and operational resources of a number of UN agencies, in particular WHO, UNICEF, and the World Bank.

The project consists of three phases. The first phase will focus on harnessing the evidence for action: synthesizing the existing evidence from countries, some of which may participate in subsequent phases; undertaking new areas of research to support actions; and establishing the research-based evidence for developing future actions.

The second phase is the activating phase, where country activating groups, with broad membership, will be formed in each of the participating countries as the coordinating and implementing mechanism at the country level to select and develop the components of a

comprehensive country based approach to addressing tobacco use among children and young people. The third phase will disseminate resources; strength regional capacity to sustain activities; integrating the products and results of the project into ongoing tobacco control work at the national, regional and global levels; transferring technology and experience between countries and regions; and strengthening cooperation and collaboration at all levels.

Seven countries was selected to initially participate in the activating phase (Phase 2) of this project: China, Jordan, Sri Lanka, Fiji, Venezuela, Zimbabwe, and Ukraine. Now more than 40 countries and even more regions within countries, like Lara State (Venezuela), had concluded GYTS.

## **The Global Youth Tobacco Survey (GYTS)**

The GYTS Lara State, Venezuela is a school-based tobacco specific survey which focuses on adolescents grades 6<sup>th</sup> to 9<sup>th</sup>. It assesses students' attitudes, knowledge and behaviors related to tobacco use and exposure to environmental tobacco smoke (ETS), as well as youth exposure to prevention curriculum in school, community programs, and media messages aimed at preventing and reducing youth tobacco use. The GYTS provides information on where tobacco products are obtained and used, and information related to the effectiveness of enforcement measures. School surveys are useful tools in gathering data as they are relatively inexpensive and easy to administer, tend to report reliable results, and refusals are significantly lower than in household surveys.

### **Objectives of the GYTS**

The GYTS is a school-based tobacco specific survey that focuses on students age 13-15 years. The objectives of this survey are:

- 1) To document and monitor prevalence of tobacco use including: cigarette smoking, and current use of smokeless tobacco, cigars or pipes.
- 2) To better understand and assess students' attitudes, knowledge and behaviors related to tobacco use and its health impact, including: cessation, environmental tobacco smoke (ETS), media and advertising, minors access, and school curriculum.

The GYTS will attempt to address the following issues: determine the level of tobacco use estimate age of initiation of cigarette use estimate levels of susceptibility to become cigarette smokers exposure to tobacco advertising identify key intervening variables, such as attitudes and beliefs on behavioral norms with regard to tobacco use among young people which can be used in prevention programs assess the extent to which major prevention programs are reaching school-based populations and establish the subjective opinions of those populations regarding such interventions.

Venezuela finished with the 1<sup>st</sup> GYTS in 1999 and present the pertaining report on January 2000. Given the fact that GYTS Venezuela data is not valid for any particular region within Venezuela, some states decide to undertake GYTS at state level. Here we report on the results from the Lara State (Venezuela) GYTS 2000.

## Methods

The 2000 Lara State (Venezuela) GYTS is a cross sectional school-based survey which employed a two-stage cluster sample design to produce a nationally representative sample of students in grades six to nine. Data about school's were obtained from the Venezuelan Ministry of Education's SISE project. This is an electronic database with national data on every register school in Venezuela.

### Sample description

The first-stage sampling frame consisted of all schools containing any of grades six to nine. Schools were selected with probability proportional to school enrollment size. One hundred and three schools were selected. All schools containing Grades 6, 7, 8, or 9 were included in the sampling frame except for those schools in the rural area who had a total enrollment of less than 40 students. The sampling frame was split into four areas based on school type and urban/rural geographic location. The four areas were: Urban/Public, Urban/Private, Urban/Marginal and Rural. For each area, a two-stage cluster sample design was used to produce a representative sample of students in these schools. Within each area, the first-stage sampling frame consisted of all schools containing any of Grades 6, 7, 8, or 9. Schools were selected with probability proportional to school enrollment size. Sixty schools were selected in the Urban/Public area, twenty three in the Urban/Private area, seven in the Urban/Marginal area, and thirteen schools in the Rural area which sums to a total of 63.

The second sampling stage consisted of systematic equal probability sampling (with a random start) of classes from each school that participated in the survey. All classes in the selected schools were included in the sampling frame. All students in the selected classes were eligible to participate in the survey.

### The questionnaire

A group of experts on tobacco addiction from the first group of countries selected to undertake GYTS, and staff members of WHO/TFI and UNICEF, wrote the 57 questions of the "core" part of GYTS. In addition, each participant country were allowed to include questions dealing with local tobacco used issues. The Venezuelan "local" part of GYTS consisted of 12 questions, they were put together by a team of researchers from ASCARDIO, an NGO selected to assume GYTS in Venezuela, and from OPS/WHO Venezuelan office. The Venezuelan "local" GYTS includes items about chimó, a mixture of tobacco and other ingredients to be applied orally.

The core part was translated into Spanish by staff members of ASCARDIO. EMTAJOVEN (Encuesta Mundial Sobre Tabaquismo en Jóvenes), that is the name of GYTS in Spanish, was pilot tested in the city of Barquisimeto, Venezuela in a group of youth. The pilot test was followed by focus groups to discuss each question and their answers. To assess comparability between GYTS and its Spanish version, EMTAJOVEN were translated back into English by an independent translator not related to ASCARDIO.

## Data Collection

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. A group of organizations and independent researchers were called upon to undertake EMTAJOVEN (GYTS) in Lara State Venezuela under the co-ordination of Magda Sánchez BEdu. of ASCARDIO, a community based non for profit organization devoted to the control and prevention of cardiovascular diseases. These group was conformed by people and organizations from the public and the private sector, NGO's, civil and the military.

## Analysis

For the analysis, a weighting factor was applied to each student record to adjust for non response and for the varying probabilities of selection. The programs SUDAAN and Epi-Info were used to compute rates and 95% confidence intervals for the estimates. A weight has been associated with each questionnaire to reflect the likelihood of sampling each student and to reduce bias by compensating for differing patterns of non-response. The weight used for estimation is given by:  $W=W1*W2*f1*f2*f3*f4$ .

W1 = the inverse of the probability of selecting the school.

W2 = the inverse of the probability of selecting the classroom within the school.

F1 = a school-level non-response adjustment factor calculated by school size category (small, medium, large).

F2 = a class-level non-response adjustment factor calculated for each school.

f3= a student-level non-response adjustment factor calculated by class.

f4 = a post stratification adjustment factor calculated by grade.

## Results

### Who participated in GYTS Lara State (Venezuela)?

GYTS Lara 2000 include 54 out of 63 selected schools (85.7%) There were 1834 valid questionnaires (93%), the global participation index was 80%. There were 980 females and 814 male responders.

### ¿Cuál tipo de tabaco usan nuestros estudiantes, cuánto usan?

El consumo de chimó es más acentuado en varones (13.5%) que en hembras (0.4%) y del 6<sup>to</sup> al 8<sup>vo</sup> sobrepasa el uso de cigarrillo, ejemplo de esta situación es la siguiente: en 6<sup>to</sup>, 1 de cada diez estudiantes consume chimó mientras que 1 de cada 15 fuma cigarrillo. La Tabla 2 presenta el uso del tabaco por género y grado.

#### What type and how much of tobacco products does our students use?

At least 2 out of every 10 male a 1 out of every 10 female students reported the use of any type of tobacco product in the pervious 30 days. 2 out of 10 students have had at least a cigarette in their life, the difference between male an female was very small. The prevalence of students who never smoked cigarettes decreases with grade. 85% in 6<sup>th</sup> t 62% in 9<sup>th</sup>, while 11.5% in grade 9<sup>th</sup> reporting having at least a cigarrete in the last month. Chimó use in common in males (13.5%) and from grade 6<sup>to</sup> al 8<sup>th</sup> outpass cigarette use, in grade 6<sup>th</sup>, 1 out every 10 sts use Chimó while 1 in every 15 smoke cigarretes. Table 2 present tobacco use by gender and grade.

Table 3 presents prevalence of selected activities related to access to tobacco products among Venezuelan students. An estimated 5 in 10 students purchase their cigarettes from stores, shops or from street vendor. The prevalence of this characteristic increases with the students grade. Over three-fourths of students were not refused the sale of cigarettes because of their age. For 5 in 10 students it is possible to buy cigarettes by the unit in their area of residency. Students who currently smoke were more likely to be given free cigarettes from a sales representative than never smokers. About 5 in 10 chimó consumers purchased the product in stores, shops or from street vendors.

Table 4 presents the students preference for a place to smoke among Venezuelan students. An estimated 3 in 10 female students who currently smoke, smoke at home, with male students who currently smoke significantly less likely than female students to choose the home. Friend's home are the second most common place to smoke followed by public places, social events and the least preferred place was the school.

Table 5 presents the prevalence of attitudes concerning tobacco addition and cessation among Venezuelan students who are current smokers. Approximately 7% of students who currently smoke need to have a cigarette first thing in the morning, with male students who currently smoke significantly more likely than female students to have a cigarette first thing in the morning (8% versus 4%). Students who currently smoke in rural areas are more likely to have cigarettes first thing in the morning, and not to think that smoking is harmful to health. Almost every student who currently smokes thinks that they could quit smoking if they wanted, but 1 in 3 students who currently smoke affirm that quitting smoking is difficult.

Seven out of every 10 female students who currently smoke had tried to quit smoking in the past year, which is slightly higher than for male students (6 in 10).

Table 6 presents the prevalence of knowledge and attitudes concerning the health effect of tobacco among Venezuelan students. About 7 out of 10 current smokers and 8 in 10 never smokers believe smoking is harmful to your health. This belief clearly increases with grade for never smokers, however, this characteristic is also observed among current smokers. More 9<sup>th</sup> grade students never smoked (9 in 10) think that smoking is harmful to your health than current smokers (76.7%). Among students at urban private schools, more never smokers (9 in 10) think that smoking is harmful to your health than current smokers (77%). Over all, 5 in 10 students definitely think that it is OK to smoke for only 1 or 2 years as long as you quit after that. An estimated 6 in 10 students definitely think that smoke from other people's cigarettes is harmful to you.

Table 7 presents the prevalence of selected issues concerning mass media and advertising about tobacco among Venezuelan students. An estimated 5 in 100 students have never seen an actor smoking on TV, videos or movies, a characteristic that decreases as grade increases. More students who currently smoke have something with a cigarette brand logo on it (3 in 10) than never smokers (1 in 10). About 20% of the students had not seen cigarette advertisements in news papers and magazines during the past 30 days. Only two in 10 students have never seen cigarette advertisements at sporting events, fairs, etc.

Table 8 presents the prevalence of issues related to social influences (family, friendship, love) and tobacco use among Venezuelan students. More students who currently smoke (6 in 10 students) have parents who smoke than never smokers (4 in 10 students). Seventeen percent of students who currently smoke accept cigarettes from friends. Students who currently smoke are more likely to have close friends who smoke than never smokers.



## Comments

GYTS (EMTAJOVEN), is the first nationwide survey in Venezuela concerning issues about tobacco use in school age children and adolescents. With a 92.9% overall response rate, GYTS (EMTAJOVEN) results are representative of adolescents in Venezuela age 13-15 who attend public and private schools. GYTS (EMTAJOVEN) also explored for the first time the behavior and the personal perspective of this age group not only on cigarette smoking, but the consumption of other tobacco products like chimó. Surprisingly, for a segment of this population, chimó consumption is as prevalent as cigarettes. Additionally, GYTS (EMTAJOVEN) results allow for the comparison of students who currently smoke vs. students who have never smoked in terms of the motivations and determinates smoking. This information is vital for the development of scientifically sound interventions.

GYTS (EMTAJOVEN) data will need to be explored extensively. In this report present only basic results, more detailed analysis and reporting will follow.

An important objective achieved in Venezuela is the strategic alliance built to allow GYTS (EMTAJOVEN) implementation. A true partnership of the civilian, the military, the public and the private sector. A coalition that makes it possible to do the GYTS (EMTAJOVEN) in a record period of time. This coalition could be better understood as a movement prepared to produce not only GYTS (EMTAJOVEN), but our final objective: "Building alliances and taking action to create a generation of tobacco free children and youth".

Table 1				
Demographics, number of participants by school type, grade and gender. GYTS Lara State, Venezuela				
Total	814		980	
Grade	n	%	N	%
Grade 6	256	31,9	296	30,6
Grade 7	179	22,3	190	19,6
Grade 8	216	26,9	254	26,3
Grade 9	152	18,9	227	23,5
Age				
11 or younger	184	22,6	249	25,4
12 years	154	18,9	179	18,3
13 years	204	25,1	246	25,1
14 years	171	21,0	198	20,2
15 years	67	8,2	81	8,3
16 years	26	3,2	25	2,6
17 or older	8	1,0	2	0,2

Table 2							
Prevalence (%) of tobacco use among students. GYTS Lara State, Venezuela 2000							
	Total	Male	Female	Grade 6	Grade 7	Grade 8	Grade 9
Never smokers	77.2	74.8	80.6	85.2	80.4	75.8	61.8
Prevalence of students that smoke on 1 or more days in the past 30 days	8.4	8.9	7.0	6.8	8.1	6.9	11.5
Prevalence of current smokers that smoke in more than 20 days in the past 30 days	0.8	1.1	0.6	0.6	0.5	1.4	1.1
Prevalence of tobacco users, other than cigarettes, in the past 30 days	10.6	14.2	7.1	9.2	10.5	13.1	9.5
Prevalence of any tobacco product, in the past 30 days	16.8	19.6	13.2	14.4	16.1	17.1	18.3
Prevalence of chimó (a paste based on tobacco) consumers in the past 30 days	8.7	13.5	0.4	9.8	8.1	7.4	5.8

Table 3							
Prevalence (%) students involved in activities related to access to tobacco products among students.							
GYTS Lara State, Venezuela 2000							
	Total	Male	Female	Grade 6	Grade 7	Grade 8	Grade 9
Smokers that bought cigarettes in store, shop or street vendor in the past 30 days.	43.9	42.9	43.6	29.8	42.1	40.5	58.7
Smokers whom were not refused the sale of cigarettes because of their age, in the past 30 days.	92.4	89.0	94.3	80.8	100	88.1	95.5
Students that indicated that it is possible to buy cigarettes by the unit in their area.	46.6	45.0	47.9	35.7	42.4	51.4	68.6
Never smokers who offered a free cigarette from a sales representative.	8.6	10.4	7.1	7.4	8.8	8.4	11.0
Current smokers who offered a free cigarette from a sales representative.	10.3	7.2	12.8	21.1	11.8	2.9	1.9

Table 4							
Preference for a place to smoke among students. GYTS Lara State, Venezuela 2000							
Prevalence (%) of current smokers who usually smoke at:	Total	Male	Female	Grade 6	Grade 7	Grade 8	Grade 9
school	23.5	20.9	23.4	46.3	10.4	23.8	17.2
home	7.2	6.9	8.9	5.5	5.0	0.0	15.5
friend's house	26.6	24.4	31.7	23.2	36.1	24.8	19.6
social events	3.4	4.5	2.7	0	3.8	4.4	2.8
Public places such as parks, shopping mall and street corners	20.3	20.0	16.9	10.1	25.5	26.8	18.5

Table 5							
Prevalence (%) of attitudes concerning tobacco addition and cessation among students who are current smokers. GYTS Lara State, Venezuela 2000							
	Total	Male	Female	Grade 6	Grade 7	Grade 8	Grade 9
Current smokers who always have or feel like having a cigarette first thing in the morning	8.6	8.1	8.2	8.1	7.3	10.9	11.3
Current smokers who say that they will definitely smoke cigarettes 5 years from now	8.1	8.4	9.1	8.8	8.1	9.9	5.7
Current smokers who definitely think that cigarette smoking is harmful to your health	69.6	67.2	72.5	82.6	67.0	77.2	84.7
Current smokers who say they could stop smoking if they wanted to.	77.9	84.4	68.4	89.4	77.5	82.8	84.7
Current smokers that definitely think that once someone starts smoking it is difficult to quit.	26.0	28.6	26.4	8.7	29.3	38.0	30.0
Current smokers who say they have tried to quit smoking in the past year.	63.1	65.0	59.1	44.5	79.8	79.6	52.5

Table 6							
Prevalence of knowledge and attitudes concerning health effect of tobacco among students.							
GYTS Lara State, Venezuela 2000							
	Total	Male	Female	Grade 6	Grade 7	Grade 8	Grade 9
current smokers who definitely think that cigarette smoking is harmful to your health	69.6	67.2	72.5	52.6	67.0	77.2	84.7
never smokers who definitely think that cigarette smoking is harmful to your health	78.8	75.6	82.0	75.0	74.9	84.7	87.7
current smokers who definitely think that it is OK to smoke for only 1 or 2 years as long as you quit after that.	39.3	46.1	32.1	39.2	42.8	42.7	39.2
never smokers who definitely think that it is OK to smoke for only 1 or 2 years as long as you quit after that	57.3	56.3	58.5	60.1	54.2	58.0	58.0
current smokers who definitely think that smoking cigarettes makes boys more attractive.	15.7	17.0	13.9	15.2	26.7	6..2	11.1
never smokers who definitely think that smoking cigarettes makes boys more attractive.	5.4	6.9	4.1	6.9	5.7	4.4	1.7
current smokers who definitely think that smoke from other people's cigarettes is harmful to you.	58.8	55.7	48.9	41.2	47.8	49.9	69.6
never smokers who definitely think that smoke from other people's cigarettes is harmful to you.	62.7	60.3	65.0	64.0	95.3	60.1	71.9

	Total	Male	Female	Grade 6	Grade 7	Grade 8	Grade 9
Prevalence of students who have not seen any anti-smoking media messages during the past 30 days	20.4	22.3	18.6	18.8	19.2	19.4	26.2
Prevalence of students who have not seen an actor smoking on TV, videos or movies.	5.8	5.6	5.9	8.0	7.9	3.4	1.9
Prevalence of never smokers who have something with a cigarette brand logo on it.	13.2	16.4	10.1	11.6	14.4	12.2	13.4
Prevalence of current smokers who have something with a cigarette brand logo on it.	24.8	27.9	18.6	37.5	11.5	27.5	25.7
Prevalence of never smokers who have not seen cigarette advertisements in news papers and magazines during the past 30 days.	25.2	26.4	24.3	26.9	25.7	25.3	18.1
Prevalence of current smokers who have not seen cigarette advertisements in news papers and magazines during the past 30 days.	21.0	23.9	18.3	20.9	15.1	30.6	21.2
Prevalence of never smokers who have never seen cigarette advertisements at sporting events, fairs, etc.	33.1	30.2	36.0	34.4	38.2	28.7	27.7
Prevalence of current smokers who have never seen cigarette advertisements at sporting events, fairs, etc.	22.4	24.8	19.9	7.3	27.0	22.6	29.7



Table 8							
Prevalence of issues related to social influences (family, friendship, love) and tobacco use among Venezuelan students. GYTS Lara State, Venezuela 2000							
	Total	Male	Female	Grade 6	Grade 7	Grade 8	Grade 9
Prevalence of never smokers whose parents do not smoke.	59	60.2	58.4	60.4	59.3	54.9	59.8
Prevalence of smokers whose parents do not smoke.	41.1	44.5	38.8	36.6	33.8	52.7	39.4
Prevalence of never smoker that would smoke a cigarette if offered by their best friend.	0.2	0.1	0.2	0.2	0.0	0.3	0.0
Prevalence of smokers that would smoke a cigarette if offered by their best friend	12.3	11.2	15.9	5.7	15.9	9.2	12.4
Prevalence of never smokers that say that all of his/her closest friends smoke	0.9	0.9	0.8	1.1	1.1	0.5	0.4
Prevalence of current smokers that say that all of his/her closest friends smoke	6.3	6.0	5.6	8.9	3.6	12.0	4.3

