Estonia

GYTS Country Report

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I. Introduction

Tobacco use is one of the chief preventable causes of death in the world. WHO attributes some 5.0 million deaths a year to tobacco, a figure expected rise to 10 million deaths a year by 2030. By that time, 70% of those deaths will occur in developing countries. Most people begin using tobacco before age of 18. Recent trends indicate rising smoking prevalence rates among children and adolescents and earlier age if initiation.

In Estonia, 20% of all deaths are caused by smoking, about 700 people in their working age die of diseases caused by smoking, about 1,5 million workdays are lost due to smoking and there are 7000 disabled persons in working age who's disability is caused by smoking (Taal, A. 2000).

Smoking prevalence among daily smokers aged 16 - 64 in the year 2000 was 44% among men and 19% among women. During the last ten years prevalence increased 4,5% until the year 1994, after 1994 smoking prevalence began to decrease, and stabilised in the year 1998 (Kasmel et al, 2001).

Smoking prevalence among students is growing in all age groups. Among 15 years old girls the smoking prevalence increased from 9% to 19% between the years 1994 - 1998. (Kepler et al, 1999). One third of 15 years old Estonian students are regular smokers (Borup et al, 2002) and more than half of children exposed to ETS in their home (Kasmel et al 2001).

Anti-tobacco policy intervention during the last 10 years has proceeded in two main lines – by legislation and national structural changes and intervention. In 1995 the Public Health Act has been adopted which firstly indirectly regulated smoking in public places. The Public Health Act declared: "The person is not allowed to harm the health of another person with his direct actions or through impairing the environment". The Act strongly supported campaigns, which were directed toward the smoke-free environment.

In 1995 the nation-wide heart health campaign, directed to the banning of advertisement of tobacco products were initiated by the Heart Health Project of the Estonian Centre for Health Education and Promotion. Campaign supported the legislation design process of the banning of tobacco advertising, which was initiated by the Ministry of Social Affairs. The Estonian Parliament adopted the Advertising Act, which banned the advertising of tobacco products in 1997. In the same year under the initiative of the Ministry of Social Affairs begun the preparation for the Tobacco Control Act, which was adopted by the Parliament in June 2000 and entered into force on January 2001. This first act on tobacco control banned smoking in public places, in working places, enforced smoking restrictions on cafes, restaurants bars and other indoor entertainment facilities, enforced an age limit for smoking and handling tobacco products, defined the level of tar and nicotine yield in cigarettes

and the text of health warning on tobacco products according to the EU directives. The Tobacco Control Act enforced technical stipulations for smoking areas and special smoking rooms allowed by the Act. This Act includes large scale of smoking restrictions in indoor premises with the requirements of specific ventilation system and norms in separated smoking rooms and areas. The articles in the draft of the Tobacco Control Act concerning smoking restrictions in public places caused most difficult discussions in the Social Commission of the Parliament. As final consensus, smoking was prohibited in health care institutions and their designated territories, educational institutions and children's social welfare institutions and their designated territories, state and local government agencies, cultural establishments and facilities, sport establishments and facilities, tunnels, passenger waiting rooms and public transport vehicles which carry passengers, corridors and stairwells which are in common use in apartment buildings, commercial, manufacturing and service enterprises, except mass caterers and accommodation establishments. In the places mentioned below the owner, possessor or employer shell separate a special marked room or area for smoking where necessary and possible. Act also contains the surveillance and fines for breaking the Act.

From the year 1992 Estonia participate in an antismoking campaign. This campaign agreed to be organised on the third Thursday of November each year. In Estonia this event is still traditionally celebrated as the Smoke-Out Day, which has become an integral part of the annual anti-tobacco national project "Tobacco or Health". The WHO initiated World No Tobacco Day held annually on the 31st of May celebrated in Estonia since 1996 and includes media campaigns and events oriented to the public.

Smoking quit counselling centres have been established mainly in hospitals under trained staff. Currently there are 6 regularly working smoking quitting counselling centres in Estonia and the target is to establish at least one centre in each county (in Estonia there are 15 counties) where the smokers who would like to stop smoking could get professional help.

Estonia participated the WHO Survey of HBSC from 1994 and the ESPAD from 1995. Both projects gave valuable dates of smoking prevalence among adolescents in Estonia. Youth tobacco use prevention oriented intervention has not been regular until the year 2000. Successful implementation of the tobacco control policy in the framework of the national children and youth health program as a twinning project in co-operation with Danish specialists, started in 2001. This project involves 15 schools and prepared good conditions to spread similar as the WHO Health Promoting School movement.

The Global Youth Tobacco Survey (GYTS) is a school based tobacco specific survey on students aged 13-15 years. It makes a capacity to monitor tobacco use among youth, and to guide the implementation and evaluation of tobacco control targeted to students. The information obtained from the survey helps to develop national action plan for tobacco control strategy and achieve the objective:

• Reduce current tobacco use from 30% in 2003 to 25% in 2020 among adults in Estonia

II. <u>Methods</u>

Sampling

The 2002/2003 Estonia GYTS is a school-based survey, which employed a two-stage cluster sample design to produce a nationally representative sample of students in grades 7, 8 and 9. The first-stage sampling frame consisted of all regular schools containing any of grades 7, 8, and 9. Schools were selected with probability proportional to school enrolment size. Seventy schools were selected proportionally from three Estonian regions: in capital (Tallinn), in urban and in rural.

The second sampling stage consisted of systematic equal probability sampling (with a random start) of classes from the eligible grades within each chosen school. All students in the selected classes were eligible to participate in the survey.

A weighting factor was applied to each student record to adjust for non-response and for the varying probabilities of selection. For the 2002/2003 Estonia GYTS, 5 344 questionnaires were completed in 67 schools. The school response rate was 95,7 % and the student response rate was 81,7 %. The overall response rate was 78,2 %. SUDAAN and Epi Info, a software package for statistical analysis of correlated data, were used to compute 95% confidence intervals. Differences between prevalence estimates were considered statistically significant if the 95% confidence intervals did not overlap.

Questionnaire Development

The questionnaire contained 90 multiple-choice questions: 75 core questions and 15 additional questions in order to take into account local tobacco- using behavior and the psycho-social, cultural and contextual determinants thereof.

The questionnaire was translated into Estonian and Russian languages. Translated questionnaire were checked by back-translation into English. In order to ensure face validity, the questions were pre-tested. Learners required between 25-40 minutes to answer all questions.

Data Collection

Before data collection could take place, extensive networking occurred with the various stakeholders in the Ministry of Social Affairs and Ministry of Education to support for the project. The project was discussed with the health promotion specialists of 15 Estonian counties to obtain their endorsement.

Letters were sent to all the principals of the 70 selected schools inviting them to participate in the GYTS. After schools had indicated their willingness to participate, a letter was sent to schools listing the classes that were chosen.

Survey procedures were designed to protect the students' privacy by allowing for anonymous and voluntary participation. The students completed the self-administered questionnaire in their classrooms, recording their responses directly on a machine-readable answer sheet.

Training workshops with survey administrators were held between November-December 2002. Each survey administrator was assigned 2-12 schools depending on weather the selected schools was located in their area of responsibility. To the field-staff belonged head of The State Children Program and coordinator of HBSC survey Mai Maser, Coordinator of the Network of Health Promoting Kinder-garden Liana Varava and health promotion specialists from counties.

The fieldwork was done from December 2002 to January 2003. The survey administrators undertook the responsibility of the final editing and package of the answer sheets, header sheets, the classroom-level forms and the school-level forms. The packaged documents were sent to the CDC in the beginning of February 2003, where the data was captured.

III.Results

Prevalence

Table 1A: Percent of students who smoke cigarettes, ESTONIA, GYTS, 2002

Category	Ever Smoked	Age of Initiation <10,	Current Use	Current Cigarette S	mokers who Smoke:
eurogery	Cigarettes, Even One or Two Puffs	Ever Smoked Cigarettes	Cigarettes Total	Hand-rolled cigarettes	Manufactured cigarettes
				eigarettes	ergarettes
Total	78.3 (<u>+</u> 2.7)	37.4 (<u>+</u> 2.3)	32.7 (<u>+</u> 3.1)	9.0 (<u>+</u> 1.7)	93.8 (<u>+</u> 1.3)
Sex					
Boy	82.4 (<u>+</u> 2.6)	47.3 (<u>+</u> 2.8)	33.9 (<u>+</u> 2.9)	10.9 (<u>+</u> 2.4)	94.4 (<u>+</u> 1.6)
Girl	73.8 (<u>+</u> 3.3)	27.5 (<u>+</u> 3.4)	29.8 (<u>+</u> 3.3)	6.7 (<u>+</u> 2.0)	93.8 (<u>+</u> 2.7)
Region					
Tallinn	73.3 (<u>+</u> 3.5)	34.8 (<u>+</u> 3.6)	32.5 (<u>+</u> 3.9)	10.0 (<u>+</u> 2.8)	94.2 (<u>+</u> 1.9)
Other Urban	78.2 (<u>+</u> 5.3)	36.8 (<u>+</u> 4.4)	31.3 (<u>+</u> 6.3)	9.1 (<u>+</u> 3.1)	93.7 (<u>+</u> 2.1)
Rural	83.7 (<u>+</u> 3.3)	40.6 (<u>+</u> 3.4)	35.3 (<u>+</u> 2.6)	8.0 (<u>+</u> 2.2)	93.5 (<u>+</u> 2.6)

For all students, more than three fourths (78,3%) had ever smoked cigarettes and nearly one third (32,7%) were current cigarette smokers (Table 1A). Boys were significantly more likely than girls to ever smoke cigarettes. Students in rural regions (83,7%) were significantly more likely than students in Tallinn to have ever smoked cigarettes. Over one-third (37,4%) of smokers initiated smoking before age 10; with boys significantly more likely than girls to initiate smoking early. Almost one in ten (9,0%) current smokers smoked hand-rolled cigarettes compared to 93,8%, which smoked manufactured cigarettes.

Category	Current Use							
	Other Tobacco Products – Total	Cigars	Chew, snuff, dip	Pipe	Any Current Tobacco Use – Cigarettes + Other			
Total	16.7 (<u>+</u> 2.3)	15.1 (<u>+</u> 2.3)	2.5 (<u>+</u> 0.7)	2.6 (<u>+</u> 0.5)	33.2 (<u>+</u> 2.7)			
Sex								
Boy	18.4 (<u>+</u> 2.3)	15.8 (<u>+</u> 2.4)	3.3 (<u>+</u> 1.0)	3.4 (<u>+</u> 0.7)	34.9 (<u>+</u> 2.7)			
Girl	13.6 (<u>+</u> 2.2)	12.9 (<u>+</u> 2.2)	1.4 (<u>+</u> 0.6)	1.3 (<u>+</u> 0.6)	29.8 (<u>+</u> 2.9)			
Region								
Tallinn	16.0 (<u>+</u> 3.6)	14.3 (<u>+</u> 3.6)	2.3 (<u>+</u> 1.1)	3.5 (± 1.2)	32.9 (<u>+</u> 3.7)			
Other Urban	16.4 (<u>+</u> 4.3)	14.5 (<u>+</u> 4.2)	2.6 (<u>+</u> 1.2)	2.5 (± 0.7)	32.1 (<u>+</u> 5.5)			
Rural	18.0 (<u>+</u> 2.6)	16.8 (<u>+</u> 2.7)	2.5 (± 0.8)	1.9 (<u>+</u> 0.7)	35.4 (<u>+</u> 2.6)			

Table 1B: Percent of students who use other tobacco products, ESTONIA, GYTS, 2002

Almost one in five (16,7%) students had used any tobacco product other than cigarettes, 15,1% had smoked cigars, 2,5% used chew tobacco, and 2,6% had smoked tobacco in a pipe (Table 1B). Boys are significantly more likely girls to chew tobacco and to smoke tobacco in pipes.

Category	Percent of current smokers who always have or feel like having a cigarette first thing in the morning	Percent of never smokers likely to initiate smoking during the next year
Total	18.3 (<u>+</u> 2.3)	35.5 (<u>+</u> 3.4)
Sex		
Boy		
	20.0 (<u>+</u> 3.6)	31.9 (<u>+</u> 5.9)
Girl		
	$16.4 (\pm 2.8)$	37.6 (<u>+</u> 5.8)
Region		
Tallinn	16.6 (<u>+</u> 4.3)	38.6 (<u>+</u> 6.1)
Other Urban	18.2 (<u>+</u> 3.7)	35.2 (<u>+</u> 5.3)

Table 1C: Percent of students reporting smoking dependency and susceptibility, ESTONIA, GYTS, 2002

20.0 (<u>+</u> 3.9)

Rural

Almost one in five (18,3%) of students who currently smoke cigarettes wake up each morning feeling like they need a cigarettes (Table 1C). For never smokers, over one-third (35,5%) are likely to initiate smoking during the next year.

30.7 (<u>+</u> 5.6)

Category	During past school year, percent had class where taught dangers of smoking	During past school year, percent had class where discussed reasons why people their age smoke	During past school year, percent had class where taught about the effects of smoking
Total	58.7 (<u>+</u> 3.2)	44.6 (<u>+</u> 3.2)	47.0 (<u>+</u> 4.3)
Sex			
Воу	57.2 (<u>+</u> 3.6)	42.8 (<u>+</u> 3.9)	46.6 (<u>+</u> 4.3)
Girl	60.1 (<u>+</u> 3.8)	46.9 (<u>+</u> 3.5)	47.6 (<u>+</u> 5.2)
Region			
Tallinn	56.1 (<u>+</u> 7.4)	44.3 (<u>+</u> 6.6)	45.6 (<u>+</u> 6.5)
Other Urban	58.5 (<u>+</u> 4.7)	44.5 (<u>+</u> 5.2)	48.6 (<u>+</u> 8.1)
Rural	61.9 (<u>+</u> 3.8)	45.2 (<u>+</u> 4.6)	45.8 (<u>+</u> 5.8)

Table 2: School Curriculum, ESTONIA, GYTS, 2002

Over- half (58,7%) the students who reported having been taught in school about the dangers of tobacco use (Table 2). Those who reported having been taught the "reasons not to smoke" was (44,6%). Less than one-half (47,0%) of the students reported having been taught about effects of tobacco use.

Cessation

Table 3: Cessation, ESTONIA, GYTS, 2002

Category	Current Smokers					
	Percent desire to stop	Percent tried to stop this year	Received Help/Advice to Stop Smoking			
Total	60.9 (<u>+</u> 5.1)	69.0 (<u>+</u> 2.7)	90.8 (<u>+</u> 2.2)			
Sex						
Воу	61.3 (<u>+</u> 6.4)	66.7 (<u>+</u> 4.0)	91.2 (<u>+</u> 2.3)			
Girl	62.6 (<u>+</u> 5.8)	71.5 (<u>+</u> 3.7)	90.3 (<u>+</u> 3.1)			
Region						
Tallinn	59.3 (<u>+</u> 9.0)	65.5 (<u>+</u> 5.5)	84.0 (<u>+</u> 5.6)			
Other Urban	63.9 (<u>+</u> 9.0)	70.6 (<u>+</u> 3.5)	91.8 (<u>+</u> 3.4)			
Rural	58.3 (<u>+</u> 7.4)	69.8 (<u>+</u> 5.1)	95.7 (<u>+</u> 2.6)			

Overall, six in 10 (60,9%) of the current smokers expressed a desire to stop smoking (Table 3). Almost seven in 10 (69,0%) of current smokers had tried to stop smoking during the past year. More than nine in 10 (90,9%) current smokers had received help to stop smoking. Current smokers from Tallinn were significantly less likely than current smokers in others areas to have received advice to stop smoking.

Environmental Tobacco Use

Table 4A: Environmental Tobacco Smoke, ESTONIA, GYTS, 2002

Category	Exposed to their home	smoke in	Exposed to father in the	smoke from ir home	Exposed to a mother in th	smoke from eir home	Exposed to sister/brothe home	smoke from er in their	Exposed to a best friend i home	smoke from n their	Exposed to others in the	smoke from eir home
	Never Smokers ETSNS_Q41 45 Table 79	Current Smokers ETSCS_Q41 45 Table 80	Never Smokers ETSNS_Q41 Table 81	Current Smokers ETSCS_Q41 Table 82	Never Smokers ETSNS_Q42 Table 83	Current Smokers ETSCS_Q42 Table 84	Never Smokers ETSNS_Q43 Table 85	Current Smokers ETSCS_Q43 Table 86	Never Smokers ETSNS_Q44 Table 87	Current Smokers ETSCS_Q44 Table 88	Never Smokers ETSNS_Q45 Table 89	Current Smokers ETSCS_Q45 Table 90
Total	67.8 (<u>+</u> 3.1)	91.1 (<u>+</u> 1.4)	43.4 (<u>+</u> 4.2)	68.0 (<u>+</u> 2.7)	24.2 (<u>+</u> 3.5)	49.5 (<u>+</u> 2.9)	12.1 (<u>+</u> 3.1)	42.2 (<u>+</u> 3.5)	7.5 (<u>+</u> 2.3)	49.0 (<u>+</u> 2.9)	55.0 (<u>+</u> 3.0)	78.3 (<u>+</u> 2.9)
Sex												
Boy	73.2 (<u>+</u> 5.0)	89.5 (<u>+</u> 2.7)	49.6 (<u>+</u> 5.7)	67.6 (<u>+</u> 4.5)	26.7 (<u>+</u> 7.2)	45.2 (<u>+</u> 5.1)	14.0 (<u>+</u> 4.7)	40.4 (<u>+</u> 4.6)	11.6 (<u>+</u> 3.8)	48.1 (<u>+</u> 4.1)	56.4 (<u>+</u> 5.2)	75.7 (<u>+</u> 4.6)
Girl	64.0 (<u>+</u> 4.2)	92.3 (<u>+</u> 2.0)	39.2 (<u>+</u> 4.4)	67.4 (<u>+</u> 4.4)	23.0 (<u>+</u> 3.3)	50.6 (<u>+</u> 4.0)	11.1 (<u>+</u> 3.8)	42.6 (<u>+</u> 4.7)	5.3 (<u>+</u> 2.1)	49.0 (<u>+</u> 4.3)	54.2 (<u>+</u> 4.4)	80.5 (<u>+</u> 2.8)
Region												
Tallinn	67.5 (<u>+</u> 5.9)	90.8 (<u>+</u> 3.2)	45.8 (<u>+</u> 8.1)	63.9 (<u>+</u> 6.9)	29.4 (<u>+</u> 7.1)	50.7 (<u>+</u> 6.2)	143 (<u>+</u> 4.1)	43.8 (<u>+</u> 7.2)	10.8 (<u>+</u> 4.8)	50.9 (<u>+</u> 7.3)	51.8 (<u>+</u> 3.8)	75.0 (<u>+</u> 5.1)
Other Urban	66.4 (<u>+</u> 3.6)	90.5 (<u>+</u> 1.7)	44.2 (<u>+</u> 5.4)	68.8 (<u>+</u> 3.8)	22.8 (<u>+</u> 4.9)	48.0 (<u>+</u> 5.3)	9.7 (<u>+</u> 5.4)	40.2 (<u>+</u> 4.8)	6.0 (<u>+</u> 3.6)	46.0 (<u>+</u> 4.8)	55.0 (<u>+</u> 5.1)	76.9 (<u>+</u> 5.3)
Rural	71.4 (<u>+</u> 8.0)	92.3 (<u>+</u> 2.7)	38.2 (<u>+</u> 10.1)	70.6 (<u>+</u> 3.7)	18.9 (<u>+</u> 4.7)	50.3 (<u>+</u> 3.3)	14.0 (<u>+</u> 4.9)	43.6 (<u>+</u> 7.0)	5.7 (<u>+</u> 3.1)	51.8 (<u>+</u> 2.8)	60.1 (<u>+</u> 6.7)	83.5 (<u>+</u> 4.0)

Current smokers were significantly more likely than never smokers to be exposed to smoke in their home: from fathers (68.0% us 43,4%); from mothers (49,5% us 24,2%); from sisters/brothers (42,2% us 12,1%); from their best friend (49,0% us 7,5%; and from others (78,3% us 55,0%) (Table 4A). These differences held for gender and region for all comparisons. Among those who never smoked, boys were significantly more likely than girls to be exposed to smoke from their father (49,6% and 39,2%, respectively) and to be exposed to smoke from their best friend (11,6% us 5,3%, respectively).

Category	Exposed to smoke from others in public places		Percent think smoking should be banned from public places		Definitely think smoke from others is harmful to them	
	Never Smokers	Current Smokers	Never Smokers	Current Smokers	Never Smokers	Current Smokers
Total	85.5 (<u>+</u> 1.8)	95.1 (<u>+</u> 1.9)	93.1 (<u>+</u> 1.3)	53.5 (<u>+</u> 3.9)	60.4 (<u>+</u> 4.1)	53.7 (<u>+</u> 4.2)
Sex						
Воу	87.2 (<u>+</u> 2.5)	94.8 (<u>+</u> 2.3)	91.6 (<u>+</u> 2.6)	53.9 (<u>+</u> 4.8)	59.2 (<u>+</u> 4.8)	54.4 (<u>+</u> 5.2)
Girl	83.8 (<u>+</u> 2.6)	96.0 (<u>+</u> 1.7)	94.0 (<u>+</u> 1.7)	54.3 (<u>+</u> 4.9)	62.5 (<u>+</u> 4.8)	54.9 (<u>+</u> 4.7)
Region						
Tallinn	85.6 (<u>+</u> 2.7)	96.0 (<u>+</u> 2.8)	92.7 (<u>+</u> 2.1)	54.5 (<u>+</u> 7.8)	53.5 (<u>+</u> 8.9)	49.3 (<u>+</u> 8.1)
Other Urban	86.5 (<u>+</u> 2.6)	95.4 (<u>+</u> 2.0)	92.6 (<u>+</u> 2.4)	48.3 (<u>+</u> 5.7)	61.9 (<u>+</u> 4.6)	51.1 (<u>+</u> 6.5)
Rural	83.4 (<u>+</u> 4.0)	93.7 (<u>+</u> 5.3)	95.1 (<u>+</u> 2.0)	60.3 (<u>+</u> 7.4)	69.2 (<u>+</u> 7.9)	61.7 (<u>+</u> 7.5)

Table 4B: Environmental Tobacco Smoke, ESTONIA, GYTS, 2002

Current smokers (95,1%) were significantly more likely than never smokers (85,5%) to be exposed to smoke in public places; all differences held for general regions (Table 4B). Never smokers (93,1%) were significantly more likely than current smokers (53,5%) to think smoking should be banned in public places; again these differences held for general regions.

Over half of current (60,4%) and never (53,7%) smokers think smoke from others is harmful to them.

Knowledge and Attitudes

Category	Think boys who more friends	o smoke have	Think girls who smoke haveTmore friends1		Think smoking makes boys look more attractive		Think smoking makes girls look more attractive	
	Never Smokers	Current Smokers	Never Smokers	Current Smokers	Never Smokers	Current Smokers	Never Smokers	Current Smokers
Total	28.2 (<u>+</u> 4.1)	24.9 (<u>+</u> 3.5)	18.7 (<u>+</u> 3.3)	16.61 (<u>+</u> 2.8)	3.5 (<u>+</u> 1.0)	9.6 (<u>+</u> 2.0)	1.6 (<u>+</u> 0.8)	5.9 (<u>+</u> 1.4)
Sex								
Boy	27.2 (<u>+</u> 6.7)	24.0 (<u>+</u> 5.1)	19.4 (<u>+</u> 5.2)	15.4 (<u>+</u> 3.8)	5.4 (<u>+</u> 1.2)	9.3 (<u>+</u> 2.7)	2.7 (<u>+</u> 1.6)	6.9 (<u>+</u> 2.2)
Girl	28.5 (<u>+</u> 4.4)	24.8 (<u>+</u> 4.5)	17.6 (<u>+</u> 3.6)	16.4 (<u>+</u> 3.3)	2.3 (<u>+</u> 1.1)	8.9 (<u>+</u> 2.3)	0.8 (<u>+</u> 0.7)	4.6 (<u>+</u> 1.3)
Region								
Tallinn	30.9 (<u>+</u> 9.3)	27.2 (<u>+</u> 7.0)	22.9 (<u>+</u> 7.5)	19.4 (<u>+</u> 6.1)	6.4 (<u>+</u> 1.8)	9.2 (<u>+</u> 3.8)	2.9 (<u>+</u> 1.9)	7.0 (<u>+</u> 3.5)
Other Urban	24.3 (<u>+</u> 4.7)	27.1 (<u>+</u> 4.6)	16.6 (<u>+</u> 3.9)	17.4 (<u>+</u> 4.5)	1.9 (<u>+</u> 1.2)	11.1 (<u>+</u> 3.4)	0.5 (<u>+</u> 0.7)	6.0 (<u>+</u> 1.8)
Rural	32.6 (<u>+</u> 6.0)	19.4 (<u>+</u> 6.9)	16.3 (<u>+</u> 4.3)	12.9 (<u>+</u> 3.9)	1.9 (<u>+</u> 1.6)	7.5 (<u>+</u> 2.4)	2.0 (<u>+</u> 1.7)	4.7 (<u>+</u> 2.4)

Table 5: Knowledge and Attitudes, ESTONIA, GYTS, 2002

More than one fourth (28,2%) of never smokers and current smokers (24,9%) think that boys who smoke have more friends (Table 5). Almost two in ten (18,7%) never smokers and (16,6%) current smokers think that girls who smoke have more friends. Current smokers were significantly more likely than never smokers to think smoking makes boys and girls look more attractive.

Media and Advertising

Category	Percent Saw Anti- Smoking Media Messages on Television	Percent Heard Anti- Smoking Media Messages on Radio	Percent Saw Anti- Smoking Media Messages on Billboards	Percent Saw Anti- Smoking Media Messages on Posters	Percent Saw Anti- Smoking Media Messages in Newspapers or Magazines	Percent Saw Anti- Smoking Media Messages at the Cinema	Percent Saw Anti- Smoking Media Messages at Sports Events, Fairs, Concerts or Community Events
Total	52.6 (<u>+</u> 2.9)	31.0 (<u>+</u> 3.1)	41.0 (<u>+</u> 1.6)	41.4 (<u>+</u> 1.7)	39.7 (<u>+</u> 1.9)	55.3 (<u>+</u> 3.9)	56.3 (<u>+</u> 2.6)
Sex							
Boy	55.6 (<u>+</u> 3.7)	34.1 (<u>+</u> 3.5)	40.9 (<u>+</u> 2.1)	42.3 (<u>+</u> 2.7)	38.6 (<u>+</u> 2.2)	53.8 (<u>+</u> 4.1)	56.6 (<u>+</u> 3.6)
Girl	49.2 (<u>+</u> 3.0)	27.3 (<u>+</u> 3.2)	40.4 (<u>+</u> 1.9)	39.9 (<u>+</u> 2.6)	40.1 (<u>+</u> 2.7)	56.4 (<u>+</u> 5.0)	55.9 (<u>+</u> 2.8)
Region							
Tallinn	55.9 (<u>+</u> 5.1)	31.1 (± 5.6)	44.0 (<u>+</u> 1.6)	41.5 (<u>+</u> 3.7)	44.3 (<u>+</u> 3.8)	41.4 (<u>+</u> 6.8)	59.9 (<u>+</u> 3.4)
Other Urban	52.8 (<u>+</u> 5.3)	31.6 (± 5.6)	40.1 (<u>+</u> 2.7)	41.4 (<u>+</u> 2.1)	37.3 (<u>+</u> 3.0)	57.1 (<u>+</u> 7.3)	54.8 (<u>+</u> 4.7)
Rural	49.1 (<u>+</u> 3.5)	29.9 (<u>+</u> 3.3)	39.5 (<u>+</u> 3.5)	41.4 (<u>+</u> 3.7)	39.1 (<u>+</u> 3.6)	66.7 (<u>+</u> 5.6)	55.1 (<u>+</u> 3.8)

Table 6A: Media and Advertising, ESTONIA, GYTS, 2002

More than one half of students saw anti-tobacco media messages on television (52,6%), cinema (55,3%), and sport events (56,3%); one-third (31,0%) had heard on radio; nearly half (41%) had seen on billboards; on posters (41,4%); and in newspapers/magazines (39,7%) (Table 6A). Boys are significantly more (34,1%) likely than girls to have heard anti-smoking media messages on radio. Students had seen anti-smoking messages at the cinema significantly less in Tallinn than in the other regions.

Category	Percent Saw Pro- Tobacco Messages on Television	Percent Saw Pro- Tobacco Messages on Billboards	Percent Saw Pro- Tobacco Messages on Newspapers/Magazine	Percent Saw Pro- Tobacco Messages at Sporting Events	Percent Saw Pro- Tobacco Messages at Cinema	Percent Saw Pro- Tobacco Messages at Community Events/Social Gatherings
Total	76.7 (<u>+</u> 2.6)	60.9 (<u>+</u> 2.5)	60.9 (<u>+</u> 1.7)	52.1 (<u>+</u> 2.7)	45.4 (<u>+</u> 2.5)	55.7 (<u>+</u> 2.1)
Sex						
Boy	80.7 (<u>+</u> 2.8)	62.5 (<u>+</u> 3.1)	61.3 (<u>+</u> 2.8)	53.9 (<u>+</u> 3.3)	46.2 (<u>+</u> 3.1)	55.7 (<u>+</u> 2.6)
Girl	73.1 (<u>+</u> 3.2)	59.7 (<u>+</u> 2.9)	60.1 (<u>+</u> 2.3)	49.3 (<u>+</u> 3.2)	43.6 (<u>+</u> 2.9)	55.2 (<u>+</u> 2.5)
Region						
Tallinn	72.1 (<u>+</u> 4.3)	68.9 (<u>+</u> 3.9)	63.0 (<u>+</u> 3.4)	50.5 (<u>+</u> 4.4)	44.3 (<u>+</u> 3.2)	57.0 (<u>+</u> 5.1)
Other Urban	76.4 (<u>+</u> 4.8)	61.0 (<u>+</u> 4.6)	60.7 (<u>+</u> 2.2)	51.5 (<u>+</u> 4.7)	45.0 (<u>+</u> 4.8)	55.4 (<u>+</u> 2.6)
Rural	82.0 (<u>+</u> 2.2)	52.4 (<u>+</u> 3.6)	59.2 (<u>+</u> 3.6)	55.0 (<u>+</u> 3.9)	47.4 (<u>+</u> 3.1)	54.7 (<u>+</u> 3.6)

Table 6B: Media and Advertising, ESTONIA, GYTS, 2002

Over three-fourths (76, 7%) of students saw pro-tobacco messages on television; over six in ten (60,9%) students saw pro-tobacco messages (60,9%) on billboards and newspapers/magazines (60,9%); more than one half of students (52,1%) saw pro-tobacco massages at sport events; less than half of students (45,4%) saw pro-tobacco messages at cinema (Table 6B). More than half of students (55,7%) saw advertisements promoting cigarettes at public events. Boys were significantly more likely than girls to see advertisements promoting cigarettes on TV. Students from rural regions had seen more pro-tobacco messages on TV than students in the other regions.

Category	Percent Who Had Object V Logo On It	With a Cigarette Brand	Percent Offered a Free Cigarettes by a Tobacco Company		
	Never Smokers	Current Smokers	Never Smokers	Current Smokers	
Total	16.2 (<u>+</u> 3.1)	34.9 (<u>+</u> 2.8)	9.1 (<u>+</u> 1.8)	20.5 (± 2.9)	
Sex					
Воу	19.9 (<u>+</u> 4.8)	36.7 (<u>+</u> 4.0)	9.5 (<u>+</u> 3.1)	21.2 (<u>+</u> 3.2)	
Girl	14.6 (<u>+</u> 3.5)	32.5 (<u>+</u> 3.4)	8.9 (<u>±</u> 2.3)	20.3 (<u>+</u> 4.4)	
Region					
Tallinn	16.2 (<u>+</u> 4.8)	29.6 (<u>+</u> 4.9)	7.2 (± 1.8)	18.8 (<u>+</u> 5.2)	
Other Urban	17.4 (<u>+</u> 5.7)	32.9 (<u>+</u> 4.0)	9.8 (± 3.3)	20.3 (± 5.4)	
Rural	13.6 (<u>+</u> 3.2)	42.7 (<u>+</u> 5.5)	10.7 (<u>+</u> 4.7)	22.3 (<u>+</u> 4.1)	

Table 6C: Media and Advertising, ESTONIA, GYTS, 2002

Almost two in ten (16,2%) never smokers and more than one third (34,9%) of current smokers owned an object with a cigarette brand logo. Less than one in ten (9,1%) never smokers and more than two in ten (20,5%) current smokers reported that they had been offered free cigarettes by a representative of a tobacco company (Table 6C). Current smokers on rural areas were significantly more likely than current smokers in the other areas to have items with cigarette logos on them. Current smokers were significantly more likely than never smokers to have an object with a cigarette logo on it (34,9% and 16,2%, respectively) and to have been offered a free cigarette by a tobacco company representative (20,5% and 9,1%, respectively) (Table 6C).

Minor's Access

Category	Percent Current Smokers who Usually Smoke at Home	Percent Current Smokers who Purchased Cigarettes in a Store	Percent Current Smokers Who Bought Cigarettes in a Store Who Were Not Refused Because of Their Age
Total	10.0 (<u>+</u> 1.9)	45.8 (<u>+</u> 4.6)	66.1 (<u>+</u> 5.2)
Sex			
Boy	10.3 (<u>+</u> 2.6)	50.8 (<u>+</u> 4.9)	63.0 (<u>+</u> 6.7)
Girl	9.5 (<u>+</u> 3.4)	41.3 (<u>+</u> 5.8)	71.5 (<u>+</u> 7.5)
Region			
Tallinn	11.2 (<u>+</u> 2.6)	60.1 (<u>+</u> 6.6)	65.7 (<u>+</u> 6.9)
Other Urban	8.3 (<u>+</u> 2.8)	46.0 (<u>+</u> 8.1)	64.7 (<u>+</u> 8.8)
Rural	11.4 (<u>+</u> 4.3)	31.4 (<u>+</u> 6.7)	70.1 (<u>+</u> 11.2)

Table7: Access and Availability, ESTONIA, GYTS, 2002

One in ten (10,0%) current smokers smoke at home (Table 7). Almost half (45,8%) of current smokers purchased cigarettes in a store, and almost two-third (66,1%) of them buy their cigarettes in a store were not refused their purchase because they were under age. Current smokers from Tallinn were significantly more likely than current smokers in the other areas have purchased their cigarettes from stores.

IV. Discussion, Conclusions, and Recommendations

The results of the Global Youth Tobacco Survey show that the risk behaviours, as well as the access to information on tobacco among youth from cities and rural settings from the three regions surveyed are quite similar.

The report has shown that smoking experience is widely spread among adolescents in Estonia, more than one third of both boys and girls being current smokers. The gravity of these findings is strengthened by the fact that more than half of the current smokers students are already addicted to tobacco. Moreover, one third of never smokers are likely to initiate smoking next year. This calls for determined action for preventing smoking cigarettes by adopting and implementing measures that have proven their efficiency (like increasing taxes and prices for tobacco products, adopting comprehensive ban on smoking in public places, implementing the existing laws that ban tobacco advertising, etc), but also for promoting cessation amongst the current smokers.

There is no statistical difference between boys and girls in current smoking prevalence in Estonia. Still, there are some differences in other patterns of tobacco use, as more boys than girls tried to smoke and started to smoke before the age of 10.

Another observation showed a new smoking pattern in Estonia among students. Smoking cigarettes is not the only type of use of tobacco products for Estonian youngsters, they have also started to use cigars, chew, snuff, dip or pipe. It is interesting to notice that the users other types of tobacco products are the same youngsters who smoke regularly cigarettes, so the young people do not use only other types of tobacco products, separately. The results of the current survey showed the out of the 32.7% current smokers 16.3% reported using other types of tobacco products like chewing and snuff tobacco or smoking pipe. Even if youngsters were asked in previous surveys (1-HBSC) about the use of chewing or snuff tobacco and the results were similar to the ones outlined by the GYTS, it is the first time that the prevalence in cigars is noted to be so high, half of the current smoking prevalence. We should also mention that while there is no difference between boys and girls in smoking cigars, there is a slight difference in the use of the other types of tobacco. Considering the novelty of this information, it is a good moment for decision makers to take appropriate measures to prevent the phenomena of spreading of the use of other types of tobacco products. Estonia should follow in this regard the best practice of Nordic countries with long-term experience in this field of tobacco control.

Youngsters seem to have easy access to tobacco products, almost half of the current smokers declared they were able to purchase cigarettes in stores and almost two-thirds of the ones who bought were not refused because they were underage. In Tallinn the availability is significantly

higher than in other areas of the country. This is in spite of the fact that the selling of tobacco products to minors (under 18 years old) is prohibited by law, offering thus to adolescents good possibilities to smoke despite their age. Again, there is a need to appropriate enforce the law and to find mechanisms to monitor this enforcements.

In Estonia a large proportion of current smokers students (two thirds of them) expressed their desire to quit smoking and tried to stop during the year of the survey. Most of them (more than 90%) received help or advice to stop smoking, but they are experiencing difficulties also because, as mentioned earlier, almost half of them are already addicted. The explanation could be that in Estonia does not exist professional quit-help system for youngsters. For example, in Tallinn there is only one clinic for adults where they can get the professional help. In 2001-2002 it was for the first time that health professionals were trained in cessation programs addressed to youngsters. There is a clear necessity of expanding regular professional cessation programmes for children and youth covered by medical insurance that should benefit from the political support of the decision makers.

In most of the places frequented by the youths interviewed in the survey the smoking is banned by law. Still, more than 90% of youngsters (both never smokers and current smokers) are exposed to ETS in public places. This is a proof that the legislation adopted in the country is not implemented and therefore youngsters heavily exposed to the dangers of passive smoking. The enforcement of the law is supported by more than 70% of youngsters who think that smoking should be banned from public places.

It should be mentioned that even if more than 50% of current smokers and never smokers think almost equally that the smoke from others is harmful for their health, still a significantly smaller proportion of current smokers than never smokers are in favour of banning smoking in public places (53.5 versus 93.1). These findings reinforce the need for complement Estonian Tobacco Control Act with a constant and committed monitoring of the implementation of the law.

Almost 80% of the young people are exposed to ETS in their homes. The fact that current smokers are significantly more exposed than never smokers to ETS at home by family members, friends and other persons shows the strong and critical impact of the exposure of ETS at home on youngsters becoming current smokers. It is worthwhile mentioning that there is no difference between boys and girls, neither in exposure to ETS, or in current smoking prevalence, that proved to be strictly correlated. This change in the patterns of smoking is even more important considering that in adults the gap between males (44%) and females (18%)in current smoking prevalence is significant. This gap is reflected in the difference between father and mother in exposing of both current smokers and never smokers. In the same time, never smokers are significantly less exposed to smoking from their peers, more than three times less by their brothers and almost seven times less by their friends.

This data that shows the positive impact of smoke free environment on youngsters, and supports the necessity of developing and expending the programs targeting both the parents and the young people's peers that address the problem of passive smoking amongst youngsters at home. In this sense, peer education could play an important role.

In Estonian school curriculum tobacco topic runs from different grades in special health subject, but the current survey showed that content of curriculum and teaching styles need to be improved. Only around 50% of students had classes where they were taught about the effects and dangers of smoking and discussed reasons why people their age smoke. This is in spite of the fact that such classes are included in the school curricula and are compulsory for all students. Therefore, teachers should be encouraged and supported (by trainings and incentives) to tackle more tobacco consumption within the health education process. In Estonia there are more than 50 schools making part of the Health Promoting School Network and there are also 15 smoke free schools. The example set by these schools could be beneficial for the other schools as well and could have a positive effect on the quality of teachings.

More than one forth of students think in almost equal proportion that boys who smoke have more friends and one fifth of them think that girls who smoke have more friends. Substantially fewer students (around 5%) consider that smoking makes youngsters more attractive. This shows that youngsters do not become smokers because they think they will have more friends or they will be seen as more attractive. This information could be widely speculated in cessation programs, knowing that at this age having friends and being attractive a very important for young people.

Adolescents in all categories, smokers and non-smokers felt advertisement pressure to start smoking. Despite the total ban on pro-tobacco advertising, almost 60% of students saw pro-tobacco messages everywhere (on TV, billboards, in newspapers and magazines, at cinema at sport events and community gatherings). Images created by advertising and role models encourage children to smoke. In the same time, only 45% of them saw anti-tobacco advertising. We are also confronted here, of course, with cross country advertising, that cannot be controlled at national level, but that could be coordinated through international treaties like the Framework Convention on Tobacco Control. Regarding the anti-tobacco advertising, there is a need to increase the quantity but even more important the quality of these advertising. The results of GYTS call for a more in-depth analysis of the impact of the anti-tobacco advertising promoted until now.

Youngsters are also exposed to indirect advertising. Double as many current smokers than never smokers had an object with a cigarette logo on it and were offered free cigarettes by a tobacco company representative. None of these forms of advertising are banned by law.

Summary of recommendations

From this survey, the increased use of cigarettes and other tobacco products by young people has been shown and many recommendations especially specific intervention programmes can be drawn. The GYTS should become an integral part of the surveillance system to monitor tobacco-use and to evaluate the effectiveness of the WHO Framework Convention for Tobacco Control. The following recommendations can be found useful within the Estonia context:

- Monitoring the implementation of the law
- Educating consumers about health risks of tobacco
- Restrict smoking in public places
- Improve the professional quality of cessation counselling
- Increase young smokers` access to cessation programmes

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