

SLOVAKIA 2016 COUNTRY REPORT
GLOBAL YOUTH TOBACCO SURVEY (GYTS)

CONTENTS

Foreword

Acknowledgements

Executive Summary

1. Introduction

- 1.1 Country Demographics
- 1.2 WHO Framework Convention on Tobacco Control and MPOWER
- 1.3 Purpose and Rationale
- 1.4 Current State of Policy
- 1.5 Other Tobacco Surveys
- 1.6 Country Specific Objectives

2. Methodology

- 2.1 Questionnaire
- 2.2 Sampling Design
- 2.3 Data Collection
- 2.4 Data Analysis

3. Results

- 3.1 Tobacco Use
- 3.2 Cessation
- 3.3 Secondhand Smoke
- 3.4 Access and Availability
- 3.5 Media
- 3.6 Knowledge and Attitudes

4. Discussion

- 4.1 Discussion of Survey Findings
- 4.2 Comparison to Previous Tobacco Surveys
- 4.3 Relevance to FCTC
- 4.4 Relevance to Country

5. Recommendations

References

Appendix A: Questionnaire

TABLES

Table 1: Sample sizes and response rates, by region (unweighted) – GYTS Slovakia, 2016.	13
Table 2: Detailed tobacco use status among students 13-15 years old, by gender – GYTS Slovakia, 2016.	14
Table 3: Cigarettes smoked per day among current cigarette smokers 13-15 years old, by gender – GYTS Slovakia, 2016.	15
Table 4: Age at cigarette smoking initiation among ever cigarette smokers 13-15 years old, by gender – GYTS Slovakia, 2016.	15
Table 6: Smoking tobacco cessation indicators among current smokers 13-15 years old, by gender – GYTS Slovakia, 2016.	16
Table 7: Students 13-15 years old who were exposed to tobacco smoke, by gender – GYTS Slovakia, 2016.	17
Table 8: Source for obtaining cigarettes among cigarette smokers 13-15 years old, by gender – GYTS Slovakia, 2016.	17
Table 9: Current cigarette smokers 13-15 years old who were not prevented from buying cigarettes because of their age, by gender – GYTS Slovakia, 2016.	18
Table 10: Unit of cigarette purchase among current cigarette smokers 13-15 years old, by gender – GYTS Slovakia, 2016.	18
Table 11: Cost of cigarettes among students 13-15 years old, by gender – GYTS Slovakia, 2016.	18
Table 12: Noticing anti-tobacco information among students 13-15 years old, by gender – GYTS Slovakia, 2016.	19
Table 14: Noticing tobacco marketing among students 13-15 years old, by gender – GYTS Slovakia, 2016.	20
Table 15: Ownership and receptivity to tobacco marketing among students 13-15 years old, by gender – GYTS Slovakia, 2016.	21
Table 16: Knowledge and attitudes towards smoking cessation and social smoking among students 13-15 years old, by gender – GYTS Slovakia, 2016.	21
Table 17: Knowledge and attitudes towards secondhand smoke among students 13-15 years old, by gender – GYTS Slovakia, 2016.	22

FOREWORD

Tobacco use, particularly cigarette smoking, ranks among the most frequent preventable causes of premature loss of health and significantly contributes on premature mortality. Studying possibilities how to alleviate its adverse social and health consequences deserves adequate interest not just of public health but the whole community.

The presented report brings findings of Global Youth Tobacco Survey (GYTS) carried out in Slovakia in 2016. Valid epidemiological data are crucial for planning, implementation and evaluation of effective preventive measures. Standard methodology provides comparable and representative data on tobacco use and related factors in population of adolescents. However, these data, as indicators of impact of tobacco control measures, are relevant for the whole community and make possible to evaluate situation both in European and Global context. Repeated surveys (three previous GYTS surveys were carried out in Slovakia in 2003, 2007 and 2011) make possible to estimate trends and anticipate development of the situation. Therefore, the presented GYTS findings and their interpretation significantly contribute to tobacco control efforts.

ACKNOWLEDGEMENTS

Slovakia acknowledges the support of the World Health Organization and the United States Centers for Disease Control and Prevention (CDC) for providing technical and financial support to develop and print this document.

This report has been prepared by Assoc. Prof. Tibor Baška, M.D., PhD., Jessenius Faculty of Medicine in Martin, Comenius University in Bratislava and Jana Kollárová, M.D., Regional Public Health Authority in Košice and is based on the 2016 Global Youth Tobacco Survey findings in Slovakia.

The authors also extend their thanks for the support of the World Health Organization Regional Office for Europe, WHO Country Office in Slovakia, namely its former head Darina Sedláková, M.D., MPH., as for as the Public Health Authority of the Slovak Republic, namely Assoc. Prof. PhDr. Róbert Ochaba, PhD., MPH. for providing technical and financial support to carry out Global Youth Tobacco Survey in Slovakia. The authors are particularly thankful to field administrators from Regional Public Health Authorities as well as schoolmasters of selected schools since without their readiness and understanding the project could not have been realized.

Field administrators: Jana Zbyňovská, M.D., PhDr. Jozef Prokop, Bc. Katarína Cveková, Mgr. Martina Danišková, PhDr. Tomáš Kiss, PhD., Mgr. Ingrid Kiliányová, Mgr. Zlatica Kožinová, Jana Kollárová, M.D., Dana Čechová, M.D., Mgr. Alica Gubániová, Mgr. Miriam Bobrovská, Mgr. Dagmar Erdélyiová, PhDr. Alena Gregušová, PhD., Ingrid Kianeková, Margita Imrišková, M.D., Mgr. Adriana Haľková, Adriana Gálisová, Mgr. Zuzana Bokorová, Mgr. Silvia Lengová, Mária Vlčáková, AHS, RNDr. Mancalová Mária, MPH., Mgr. Edita Podaná, MVDr. Vojtech Lisák, CSc., MPH., Mgr. Andrea Jenčová, Mgr. Veronika Bašová, Mgr. Lucia Nosková, Jana Adamová, M.D., PhDr. Antónia Ivanová PhD., Mgr. Iveta Gondášová, Elena Búryová and PhDr. Dáša Mičundová.

EXECUTIVE SUMMARY

The presented report brings findings of Global Youth Tobacco Survey (GYTS) carried out in Slovakia in 2016. GYTS monitors information on prevalence of tobacco use and its initiation, attitudes, knowledge and behavior related to tobacco use, environmental tobacco smoke (ETS) exposure both in homes and outside homes, minors' access to tobacco products, and role of advertisement and mass media as well as prevention curricula in schools in adolescents.

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. The overall response rate was 81.7%. A total of 3,997 students participated, of which 3,565 were aged 13-15 years. The fieldwork was carried out from March 2016 to June 2016.

49.5% of students ever smoked cigarettes. 23.4% of them reported current use (one or more days within last 30 days) of any tobacco product, while cigarette smoking prevailed above using of other smoked tobacco products (17.1% vs. 10.3%). 8.0% of respondents reported electronic cigarettes use at least once a month. 20.3% of never tobacco users were susceptible to initiate smoking in the future. Among current smokers who bought cigarettes in a store, 68.0% of them were not refused because of their age. 65.8% of respondents reported to be around others smoking in outdoor public places outside their home during the past 7 days. 46.9% of respondents reported seeing antismoking messages in media, while 29.6% of students reported seeing of tobacco brand names on TV. 42.9% of students had been taught in class during the past year about the dangers of smoking.

Tobacco use in Slovakia is widespread and besides cigarette smoking also other tobacco products deserve attention due to their increasing popularity. Moreover, the relatively new phenomenon of electronic cigarettes deserves attention also in this age group. Both boys and girls held almost the same attitudes towards attractiveness of smoking among adolescents. Respondents consider smoking particularly as a social mediator. Although antismoking information seen in the media are rather frequent, its message has been diffused with other contradicting pro-tobacco messages. Despite of obvious decline, the extent of indirect tobacco advertisement is still high, taking into consideration its impact. The GYTS findings still indicate poor compliance with legislation banning sale of tobacco products for minors, so there is a need for better enforcement. A high prevalence of environmental tobacco smoke outside homes indicates insufficient effect of the relevant legislation and a need for its amendment and effective enforcement.

1. INTRODUCTION

Tobacco use is the leading global cause of preventable death. WHO attributes nearly 6 million deaths a year to tobacco. That figure is expected to rise to more than 8 million deaths a year by 2030.¹ Most people begin using tobacco before the age of 18.²

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 present comprehensive tobacco prevention and control information on young people. The GYTS provides a global standard to systematically monitor youth tobacco use and track key tobacco control indicators. GYTS is a nationally representative school-based survey of students 13-15 years of age, using a consistent and standard protocol across countries. It is intended to generate comparable data within and across countries.

1.1 Country Demographics

Slovak Republic (Slovakia), situated in Central Europe, is a Member State of the WHO EURO and is considered as a high income country. The population is more than 5.4 million of people and its area is about 49 thousand square kilometers. Slovakia, as an independent country, has been formed by dividing of former Czechoslovakia since January 1, 1993. It became a member of the European Union on 1st of May 2004.

1.2 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 56th 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 surveillance, research, and exchange of information.

To help countries fulfill their WHO FCTC obligations, in 2008 WHO introduced MPOWER,³ 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.⁴

1.3 Purpose and Rationale

GYTS enhances 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 for monitoring the implementation of different provisions of the tobacco control law and the relevant Articles of the WHO Framework Convention.

In Slovakia, four rounds of the GYTS were carried out yet now: the first one in 2003, the second in 2007, the third one in 2011 and the last one in 2016. The rationale for Slovakia's participation in the GYTS includes the following:

In European region one half of all people who regularly smoke die from tobacco-related diseases, half in middle age and half in old age. Situation in Central and Eastern Europe countries is particularly urgent. Middle-aged men here are in two times higher risk of death from tobacco-related disease than men in Western Europe.⁵ Slovakia ranks among countries with relatively high prevalence of tobacco use. According to relevant estimations of the WHO in adult population, males clearly dominate (33.7%) above females (24.4%) in daily tobacco smoking.⁴ Almost half of regular smokers in Slovakia smoke 10 and less cigarettes per day (44% of smokers), 41% of smokers smoke 11-20 cigarettes per day and minority of smokers consume more than 20 cigarettes daily (13%).⁶

Tobacco smoking represents in Slovakia the second most frequent cause of death and premature loss of health contributing in 19.2% of all deaths and 12.2% of DALYs. Life expectancy in smokers in Slovakia is reduced in average by 16 years.^{5,7}

According to the previous GYTS surveys in Slovakia, several aspect of tobacco use in schoolchildren declined after 2007. On the other hand, use of tobacco products other than cigarettes increased within 2007 and 2011, namely among girls. The surveys also found insufficient use of school-based tobacco control programs, even decreased after 2003 and remaining on the similar level between 2007 and 2011. Although prevalence of environmental tobacco smoke in homes showed gradual decrease (from 79.5% in 2003 to 61.8% in 2011^a), exposure outside home remained until 2011 almost unchanged. This indicates insufficient legislation regarding smoke-free environment. Indirect pro-tobacco advertisement and tobacco industry sales promotion activities gradually decreased within the studied period indicating that implemented measures in this field were at least partially effective. On the other hand, prevalence of positive reports on indirect pro-tobacco mass-media advertisement still remained high.⁸

1.4 Current State of Policy

Currently, several legal measures regulate the tobacco use in Slovakia. The most important are:

^a In the first GYTS survey in Slovakia (carried out in 2002) environmental tobacco smoke was defined as any experience of smoking without time specification. We used this definition to identify trends. From 2007, the new definition has been introduced specifying exposure within recent 7 days.

The Act No. 377/2004 Coll. On Protection of Non-smokers as amended^b that lays down rules of sale and distribution of tobacco products and products which are intended for smoking and do not contain tobacco as well as determines smoke free-areas. According to this measure, tobacco products are forbidden to be sold in shop with children's good, buffets and canteens within school facilities, playgrounds, health-care and social facilities; in automatic machines and collected on delivery; Tobacco products are forbidden to be sold for those younger than 18 years. Under the terms of this Act, it is prohibited to smoke in all health-care facilities, any type of schools including universities, governmental and public administration offices, cultural and sport facilities, means of public transportation, railway platforms, stations and stops. The Act also prohibits smoking in catering facilities (restaurants, canteens, buffets etc.) and groceries.

The Act No. 86/2016 Coll. on the manufacture, labelling and sale of tobacco products and related products and on the amendment of certain laws sets out requirements for ingredients and emissions of tobacco products as well as gives ruling on labelling and packaging of tobacco products including pictorial health warnings. This law also prohibits the marketing of tobacco for oral use and sale of tobacco products in a package of less than 10 pieces. Each package of a smoking tobacco product must contain text health warning, corresponding colour picture and phone number "Help line".

From the reason to ensure higher protection of non-smoking workers, the Act No. 124/2006 Coll. on Safety and Protection of Health at the Work as amended^c has been passed in Slovakia. The Act enacts an obligation of any employer to ban tobacco smoking at workplaces, at which also non-smokers work as well as to ensure compliance with this ban.

Legal measures determining pricing of tobacco products and thereby preventing the smoking initiative and tobacco use by minors, belongs to the most effective. Since the membership of the Slovak Republic in the European Union that became in 1st of May 2004 it is obliged to observe directives and regulations according to the European Union Accession Treaty. The Act No. 106/2004 Coll. On Excise Duty of Tobacco Products as amended^d, harmonizes enacted tax of cigarettes and other tobacco products with the European Communities directive.

The Act No. 147/2001 Coll. On Advertising as amended^e prohibits the advertisement of tobacco products in any types of information carriers; through the free distribution of tobacco products samples to the public; and on advertising items, that are not relating to smoking and are distributed to the public, with the exception of advertising things distributing at the selling points. The Amendment 525/2005 Coll extends the prohibition to a sponsoring by tobacco producers and distributors.

^b Act No. 465/2005 Coll., Act No. 538/2005 Coll., Act No 378/2008 Coll., Act No 461/2008 Coll., Act No 87/2009 Coll., Act No 547/2010 Coll., Act No 142/2013 Coll., Act No 241/2015 Coll., Act No 89/2016 Coll.

^c Act No. 309/2007 Coll., Act No. 140/2008 Coll., Act No 132/2010 Coll., Act No 136/2010 Coll., Act No 470/2011 Coll., Act No 154/2013 Coll., Act No 308/2013 Coll., Act No 58/2014 Coll., Act No 204/2014 Coll., Act No 118/2015 Coll., Act No 128/2015 Coll., Act No 378/2015 Coll.

^d Act No 556/2004 Coll., Act No. 631/2004 Coll., Act No. 533/2005 Coll., Act No. 610/2005 Coll. and Act No.547/2007 Coll., Act No. 378/2008 Coll., Act No. 465/2008 Coll., At. No 305/2009 Coll., Act No 477/2009 Coll., Act No. 491/2010 Coll., Act No 546/2011 Coll., Act No. 547/2011 Coll., Act No. 288/2012 Coll., Act No. 381/2013 Coll., Act No. 2018/2014 Coll., Act No. 323/2014 Coll., Act No 54/2015 Coll., Act No. 130/2015 Coll., Act No. 241/2015 Coll.

^e Act No. 23/2002 Coll., Act No. 525/2005 Coll., Act No. 282/2006 Coll., Act No.342/2006 Coll., Act No. 102/2007 Coll. and Act No. 648/2007 Coll., Act No. 402/2009 Coll., Act No 180/2011 Coll., Act No 362/2011 Coll., Act No 313/2012 Coll., Act No. 459/2012 Coll., Act No. 102/2014 Coll., Act No. 199/2014 Coll., Act No 373/2014 Coll., Act No. 412/2015 Coll.

The Act No. 308/2000 Coll. On Transmission and Retransmission as amended^f does not permit any forms of advertisement and teleshopping for tobacco products in all electronic media.

Summarizing, Slovak tobacco control legislation achieved rather high level of legal health protection of children and youth as well as of non-smokers in general. However, the legislation only partially ensures smoke-free environment.

1.5 Other Tobacco Surveys

The GYTS was conducted in Slovakia in 2003, 2007 and 2011. In addition to the GYTS, the following surveys have been running in Slovakia: Global Health Professional Students Survey in 2006 and 2010 and Global School Personnel Survey in 2003.⁸

1.6 Country Specific Objectives

Considering the specific situation in Slovakia in context of the GYTS findings, the following objectives appear as significant:

- To reduce prevalence of environmental tobacco smoke both in inside and outdoor public places from 51.7% and 65.8%, respectively, to a significantly different lower prevalence in the next GYTS round, and to achieve a declining trend in the further GYTS rounds.
- To increase occurrence of positive answers regarding school curricula found in previous rounds to a significantly different higher level in the next GYTS round in all studied indicators.
- To reduce percentage of current smokers who bought their cigarettes in shops and were not refused because of their age from 68.0% in 2016 to a significantly different lower occurrence in the next GYTS round and to achieve a declining trend in the further GYTS rounds.

^f Act No. 147/2001 Coll., Act No. 206/2002 Coll., Act No. 289/2005 Coll., Act No. 95/2006 Coll., Act No. 121/2006 Coll., Act No. 13/2007 Coll., Act No. 220/2007 Coll., Act No. 654/2007 Coll. and Act No. 343/2007 Coll., Act No. 654/2007 Coll., Act No. 167/2008 Coll., Act No. 287/2008 Coll., Act No. 516/2008 Coll., Act No. 77/2009 Coll., Act No. 318/2009 Coll., Act No. 498/2009 Coll., Act No. 532/2010 Coll., Act No. 221/2011 Coll., Act No. 397/2011 Coll., Act No. 547/2011 Coll., Act No. 343/2012 Coll., Act No. 352/2013 Coll., Act No. 373/2013 Coll., Act No. 40/2015 Coll., Act No. 278/2015 Coll., Act No. 91/2016 Coll., Act No. 125/2016 Coll.

2. METHODOLOGY

2.1 Questionnaire

The GYTS questionnaire contained 70 multiple-choice questions. The survey included 43 questions from the GYTS Standard Core Questionnaire, 25 selected optional questions, and 2 country-specific questions. The final questionnaire was translated into Slovak and back-translated into English to check for accuracy. The 2016 Slovakia questionnaire is provided in **Appendix A**.

2.2 Sampling Design

The 2016 Slovakia GYTS is a school-based survey, which employs a two-stage cluster sample design to produce a national representative sample of students in grades 7-9 in elementary schools and 2-4 (secunda, tertia, quarta) in eight years study grammar schools. The sampling frame consisted of all elementary schools and eight years study grammar schools containing above mentioned grades. In the first stage, 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 66 schools and 259 classrooms. 4,839 students participated in the GYTS. The grades that were sampled for the 2016 GYTS were seven (secunda), eight (tertia) and nine (quarta).

2.3 Data Collection

Data collection took place from March 2016 to June 2016, and was supported by 31 field staff.

Survey procedures were designed to protect the students' privacy by allowing for anonymous and voluntary participation. The questionnaire was self-administered in the classroom. Students recorded their responses directly on an answer sheet that could be scanned by a computer.

2.4 Data Analysis

A weighting factor was applied to each student record to adjust for probability of selection, non-response, and post-stratification adjustment to population estimates. 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). Frequency tables were developed for the survey questions that are considered key tobacco control indicators from the GYTS. Indicators are in accordance with the WHO FCTC and MPOWER technical package.

Table 1 provides sample size and response rate information. For the 2016 Slovakia GYTS, 3,997 questionnaires were completed in 66 schools. A total of 3,997 students participated in the GYTS of which 3,565 were aged 13 to 15 years (Male: 1,781, Female: 1,776). The school response rate was 100%, the class response rate was 98.9%, and the student response rate was 82.6%. The overall response rate was 81.7%.

Table 1: Sample sizes and response rates, by region (unweighted) – GYTS Slovakia, 2016.

<i>School Level</i>	
Number of Sampled Schools	66
Number of Participating Schools	66
School Response Rate (%)	100%
<i>Class Level</i>	
Number of Sampled Classes	262
Number of Participating Classes	259
Class Response Rate (%)	98.9%
<i>Student Level</i>	
Number of Sampled Students	4,839
Number of Participating Students	3,997
Student Response Rate (%)	82.6%
Overall Response Rate (%)*	81.7%

*Overall Response Rate = School Response Rate X Class Response Rate X Student Response Rate

3. RESULTS

3.1 Tobacco Use

Table 2: Detailed tobacco use status among students 13-15 years old, by gender – GYTS Slovakia, 2016.

	Overall	Boys	Girls
	<i>Percentage (95% CI)</i>		
Smoked Tobacco			
Current tobacco smokers ¹	21.6 (18.9 - 24.7)	21.0 (17.9 - 24.5)	22.4 (19.2 - 25.8)
Current cigarette smokers ²	17.1 (14.6 - 20.0)	15.5 (12.9 - 18.5)	18.9 (15.9 - 22.2)
Frequent cigarette smokers ³	5.2 (3.9 - 6.9)	5.4 (3.9 - 7.4)	5.1 (3.7 - 7.0)
Current smokers of other tobacco ⁴	10.3 (8.5 - 12.4)	11.4 (9.4 - 13.8)	9.2 (7.1 - 11.8)
Current shisha (water pipe) smokers ⁴	7.4 (6.1 – 9.1)	8.4 (6.8 – 10.3)	6.5 (4.8 – 8.8)
Ever tobacco smokers ⁵	55.0 (51.8 - 58.2)	57.3 (53.2 - 61.4)	52.7 (48.9 - 56.5)
Ever cigarette smokers ⁶	49.5 (46.0 - 53.0)	50.9 (46.6 - 55.2)	48.2 (44.1 - 52.3)
Ever smokers of other tobacco ⁷	32.2 (29.8 - 34.7)	34.1 (31.1 - 37.2)	30.2 (26.9 - 33.7)
Smokeless Tobacco			
Current smokeless tobacco users ⁸	3.7 (2.8 - 4.8)	4.9 (3.5 - 6.8)	2.4 (1.7 - 3.5)
Ever smokeless tobacco users ⁹	10.2 (8.2 - 12.6)	13.1 (10.6 - 16.0)	7.3 (5.5 - 9.7)
Tobacco Use			
Current tobacco users ¹⁰	23.4 (20.7 - 26.3)	23.6 (20.4 - 27.1)	23.1 (20.0 - 26.5)
Ever tobacco users ¹¹	56.4 (53.3 - 59.5)	59.2 (55.2 - 63.1)	53.6 (49.8 - 57.4)
Electronic cigarettes			
Current electronic cigarettes users ⁴	8.0 (6.2 – 10.4)	9.6 (7.3 – 12.6)	6.5 (4.8 – 8.7)
Susceptibility to Tobacco Use			
Never tobacco users susceptible to tobacco use in the future ¹²	20.3 (17.8 - 23.2)	18.8 (16.4 - 21.5)	21.8 (18.3 - 25.7)
Never smokers who thought they might enjoy smoking a cigarette ¹³	4.4 (3.6 - 5.5)	5.0 (3.4 - 7.2)	4.0 (2.6 - 6.1)

¹ Smoked tobacco anytime during the past 30 days. ² Smoked cigarettes anytime during the past 30 days. ³ Smoked cigarettes on 20 or more days of the past 30 days. ⁴ Smoked tobacco other than cigarettes anytime during the past 30 days. ⁵ Ever smoked any tobacco, even one or two puffs. ⁶ Ever smoked cigarettes, even one or two puffs. ⁷ Ever smoked tobacco other than cigarettes, even one or two puffs. ⁸ Used smokeless tobacco anytime during the past 30 days. ⁹ Ever used smokeless tobacco. ¹⁰ Smoked tobacco and/or used smokeless tobacco anytime during the past 30 days. ¹¹ Ever smoked tobacco and/or used smokeless tobacco. ¹² Susceptible to future tobacco use includes those who answered “Definitely yes”, “Probably yes”, or “Probably not” to using tobacco if one of their best friends offered it to them or those who answered “Definitely yes”, “Probably yes”, or “Probably not” to using tobacco during the next 12 months. ¹³ Those who answered “Agree” or “Strongly agree” to the statement: “I think I might enjoy smoking a cigarette”.

Table 2 provides basic information on tobacco use. More than half of all students have ever used tobacco (56.4%), mostly smoking (55.0%). Less than one in four students (23.4%) reports current tobacco use, mostly smoking (21.6%). Among them, current cigarette smokers prevail (17.1%). Within current smokers of forms other than cigarettes (10.3%), shisha smokers dominate (7.4%). Frequent cigarette smokers, i.e. 20 and more days smoking within a month, comprise about one third of current cigarette smokers (5.2%

vs. 17.1% of all respondents). Smokeless tobacco is reported only by a fraction of the students (10.2% of ever and 3.7% of current users). Less than one in ten students (8.0%) report current use of electronic cigarettes. More than one in five never tobacco users (20.3%) shows signs of susceptibility to start using tobacco in a near future.

There are no significant gender differences except current use of smokeless tobacco, where boys dominate over girls (4.9% vs. 2.4%), and the difference reaches borderline of a statistical significance.

Table 3: Cigarettes smoked per day among current cigarette smokers 13-15 years old, by gender – GYTS Slovakia, 2016.

Number of cigarettes usually smoked ¹	Overall	Boys	Girls
		<i>Percentage (95% CI)</i>	
Less than 1 per day	26.5 (22.1 - 31.3)	23.1 (17.8 - 29.4)	29.2 (22.9 - 36.5)
1 per day	27.4 (22.5 - 33.0)	25.3 (17.6 - 34.9)	29.1 (23.1 - 36.0)
2 to 5 per day	27.3 (23.3 - 31.7)	27.2 (20.2 - 35.6)	27.4 (23.1 - 32.2)
6 to 10 per day	10.3 (8.3 - 12.7)	13.4 (9.5 - 18.4)	7.8 (6.1 - 9.9)
11 to 20 per day	5.9 (4.1 - 8.4)	7.6 (4.3 - 12.9)	4.4 (2.5 - 7.7)
More than 20 per day	2.6 (1.6 - 4.2)	3.5 (2.0 - 6.1)	1.9 (0.8 - 4.9)
Total	100	100	100

¹ On the days that current cigarette smokers smoked cigarettes during the past 30 days.

Table 3 shows distribution of number of cigarettes usually smoked among current smokers. Proportion gradually decreases with an intensity of smoking. Majority of current smokers reports smoking 1 cigarette per day or less (53.9%). Only small fraction (2.6%) of them reports more than 20 cigarettes per day. No significant gender differences are shown.

Table 4: Age at cigarette smoking initiation among ever cigarette smokers 13-15 years old, by gender – GYTS Slovakia, 2016.

Age when first trying a cigarette ¹	Overall	Boys	Girls
		<i>Percentage (95% CI)</i>	
7 years old or younger	5.6 (4.4 - 7.1)	6.4 (4.8 - 8.6)	4.8 (3.4 - 6.6)
8 or 9 years old	9.9 (8.4 - 11.6)	13.3 (10.6 - 16.6)	6.4 (4.8 - 8.7)
10 or 11 years old	20.9 (18.8 - 23.3)	23.8 (21.0 - 26.9)	17.8 (15.0 - 21.0)
12 or 13 years old	44.1 (41.1 - 47.1)	39.3 (35.9 - 42.8)	49.1 (45.3 - 52.9)
14 or 15 years old	19.4 (16.9 - 22.2)	17.2 (14.3 - 20.5)	21.9 (18.4 - 25.8)
Total	100	100	100

¹ Among those that have ever tried a cigarette.

As **Table 4** shows, about 4 in 5 ever smokers initiated cigarette smoking at age 13 and less (80.6%). Results indicate higher initiation rate among 8-11 years old boys.

Table 5: Current smokers 13-15 years old who are showing signs of smoking dependence, by gender – GYTS Slovakia, 2016.

	Overall	Boys	Girls
	<i>Percentage (95% CI)</i>		
Signs of smoking dependence ¹	55.9 (49.6 - 62.1)	56.7 (48.0 - 65.1)	55.3 (48.3 - 62.0)

¹ Those who answered: 1) they sometimes or always smoke tobacco or feel like smoking tobacco first thing in the morning, or they start to feel a strong desire to smoke again within one full day after smoking.

About one-half of current smokers (55.9%) shows signs of smoking dependence holding no significant gender difference (**Table 5**).

3.2 Cessation

Table 6: Smoking tobacco cessation indicators among current smokers 13-15 years old, by gender – GYTS Slovakia, 2016.

	Overall	Boys	Girls
	<i>Percentage (95% CI)</i>		
<i>Current smokers who...</i>			
Tried to stop smoking in the past 12 months	63.6 (58.4 - 68.5)	58.4 (50.2 - 66.2)	67.9 (61.2 - 73.9)
Want to stop smoking now	58.5 (50.3 - 66.3)	60.7 (50.9 - 69.7)	56.5 (48.4 - 64.2)
Thought they would be able to stop smoking if they wanted to	84.6 (77.9 - 89.6)	81.4 (69.8 - 89.2)	87.5 (81.2 - 91.9)
Have ever received help/advice from a program or professional to stop smoking	11.3 (8.8 - 14.5)	11.6 (8.0 - 16.5)	11.1 (7.7 - 15.6)

Table 6 provides the most important cessation indicators among current smokers. Most of them (63.6%) tried to stop in the past 12 months and want to quit now (58.5%). More than 4 in 5 (84.6) think they would be able to stop if they want and only about one tenth of them (11.3%) reports to receive a professional help or advice to stop smoking. There are no statistical gender differences holding for all analyzed indicators.

3.3 Secondhand Smoke

Table 7: Students 13-15 years old who were exposed to tobacco smoke, by gender – GYTS Slovakia, 2016.

	Overall	Boys	Girls
	<i>Percentage (95% CI)</i>		
Exposed to tobacco smoke at home in the past 7 days	38.3 (35.0 - 41.7)	35.2 (31.5 - 39.0)	41.4 (37.4 - 45.4)
Exposed to tobacco smoke inside any enclosed public place in the past 7 days	51.7 (49.0 - 54.4)	49.3 (45.7 - 52.8)	54.1 (50.9 - 57.3)
Exposed to tobacco smoke at any outdoor public place in the past 7 days in	65.8 (63.9 - 67.7)	62.2 (59.9 - 64.5)	69.5 (66.5 - 72.3)
Saw anyone smoking inside the school building or outside on school property in the past 30 days	38.5 (34.2 - 43.0)	40.6 (36.2 - 45.1)	36.3 (31.4 - 41.4)

Table 7 provides basic indicators of exposure to an environmental tobacco smoke. More than one third of students reports exposure in homes (38.3%) and one half of them (51.7%) inside enclosed public places within the last week. Majority (65.8%) of them reports exposure at outdoor public places while girls dominate over boys (69.5% vs. 62.2%). Almost four in ten students (38.5%) report seeing smokers inside the building or outside on school property within the past 30 days.

3.4 Access and Availability

Table 8: Source for obtaining cigarettes among cigarette smokers 13-15 years old, by gender – GYTS Slovakia, 2016.

Source ¹	Overall	Boys	Girls
	<i>Percentage (95% CI)</i>		
Purchased from a store or shop	19.7 (15.6 - 24.5)	26.0 (20.4 - 32.5)	15.1 (10.4 - 21.4)
Purchased from a street vendor	4.2 (2.2 - 7.9)	6.9 (3.2 - 14.5)	2.2 (1.0 - 5.0)
Purchased at the tobacconist's in the street	17.0 (12.3 – 23.0)	15.7 (11.2 – 21.5)	17.9 (12.1 – 25.7)
Given money to someone else to buy them	18.2 (13.8 – 23.7)	17.6 (10.6 – 27.7)	18.7 (14.3 – 24.1)
Obtained them from someone else	30.3 (25.1 - 36.1)	20.7 (14.9 – 28.0)	37.3 (30.6 – 44.6)
Stolen them	3.4 (1.6 – 7.0)	3.1 (1.4 – 6.9)	3.6 (1.2 – 10.6)
Obtained them some other way	7.1 (4.5 – 11.2)	10.0 (5.0 – 18.9)	5.1 (3.0 – 8.6)

¹ How cigarette smokers obtained the cigarette they last smoked during the past 30 days.

As **Table 8** demonstrates, current cigarette smokers obtain most commonly their cigarettes from someone else (20.7% of boys and 37.3% of girls) or from a store/shop (19.7%).

Table 9: Current cigarette smokers 13-15 years old who were not prevented from buying cigarettes because of their age, by gender – GYTS Slovakia, 2016.

	Overall	Boys	Girls
	<i>Percentage (95% CI)</i>		
Current cigarette smokers who were not prevented from buying cigarettes because of their age ¹	68.0 (57.9 - 76.6)	58.7 (44.9 - 71.2)	76.7 (65.5 - 85.1)

¹ Among those who tried to buy cigarettes during the past 30 days.

Almost 7 in 10 current cigarette smokers (68.0%) report not to be refused from buying cigarettes because of their age (**Table 9**).

Table 10: Unit of cigarette purchase among current cigarette smokers 13-15 years old, by gender – GYTS Slovakia, 2016.

Unit of purchase ¹	Overall	Boys	Girls
	<i>Percentage (95% CI)</i>		
Individual sticks	16.5 (12.1 - 22.0)	14.0 (8.0 - 23.5)	18.5 (14.0 - 24.1)
Pack	77.5 (71.1 - 82.8)	76.7 (65.4 - 85.2)	78.1 (71.0 - 83.9)
Carton	2.6 (1.2 - 5.3)	4.4 (1.7 - 11.0)	1.1 (0.2 - 4.4)
Loose tobacco for hand-rolled cigarettes	3.5 (1.9 - 6.1)	4.8 (2.3 - 9.9)	2.3 (0.9 - 6.0)
Total	100	100	100

¹ Based on the last purchase, among those who bought cigarettes during the past 30 days.

As presented in **Table 10**, about three quarters of current smokers buy their cigarettes as packs. As much as 16.5% of them report to purchase individual sticks. No significant gender differences have been found in any of analyzed indicators.

Table 11: Cost of cigarettes among students 13-15 years old, by gender – GYTS Slovakia, 2016.

Cost of a pack (20 cigarettes) ¹	Overall	Boys	Girls
	<i>Percentage (95% CI)</i>		
2 EUR and less	3.8 (2.8 - 5.2)	4.9 (3.4 - 6.9)	2.7 (1.7 - 4.3)
2.01 EUR to 2.5 EUR	7.1 (6.3 - 8.1)	8.4 (6.8 - 10.3)	5.9 (4.9 - 7.2)
2.51 EUR to 3 EUR	38.1 (35.8 - 40.4)	38.9 (36.2 - 41.7)	37.2 (34.3 - 40.2)
3.01 EUR to 3.5 EUR	39.6 (37.2 - 42.2)	37.9 (34.7 - 41.1)	41.5 (38.5 - 44.5)
More than 3.5 EUR	11.3 (10.1 - 12.7)	9.9 (8.2 - 12.0)	12.7 (11.0 - 14.6)
Total	100	100	100

Table 11 provides views of students regarding average price of cigarettes. Most of them (77.7%) think that pack of cigarettes costs from 2.51 to 3.5 EUR. The views hold similar structure for both boys and girls.

3.5 Media

3.5.1 Anti-Tobacco

Table 12: Noticing anti-tobacco information among students 13-15 years old, by gender – GYTS Slovakia, 2016.

	Overall	Boys	Girls
	<i>Percentage (95% CI)</i>		
Noticed anti-tobacco messages in the media ¹ in the past 30 days ²	46.9 (45.2 - 48.7)	48.9 (46.3 - 51.5)	45.0 (42.2 - 47.8)
<i>Noticed anti-tobacco messages at sporting or community events</i>			
Among all students in the past 30 days	16.6 (15.0 - 18.2)	20.5 (18.1 - 23.2)	12.8 (11.1 - 14.7)
Among those who attended sporting or community events in the past 30 days	29.4 (27.0 - 31.9)	34.0 (30.8 - 37.4)	24.2 (20.9 - 27.8)
Taught in school about the dangers of tobacco use in the past 12 months ²	42.9 (39.1 - 46.7)	40.9 (37.0 - 44.8)	44.8 (40.5 - 49.1)

¹ For example, television, radio, internet, billboards, posters, newspapers, magazines, movies.

² Among all students aged 13-15 years old.

Table 12 shows occurrence of anti-tobacco information reported by students. Almost half of them (46.9%) noticed such messages in the media in the past month. Only minority of students noticed anti-tobacco messages at sporting or community events while boys clearly dominated over girls.

Table 13: Noticing of health warnings on cigarette packages among current and never smokers 13-15 years old, by gender – GYTS Slovakia, 2016.

	Overall	Boys	Girls
	<i>Percentage (95% CI)</i>		
Current smokers who noticed health warnings on cigarette packages [†]	85.5 (82.3 - 88.2)	83.3 (78.4 - 87.2)	87.6 (83.3 - 90.9)
<i>Thought about quitting smoking because of health warnings on cigarette packages[†]</i>			
Among current smokers	27.3 (23.7 - 31.3)	30.5 (25.4 - 36.1)	24.4 (20.2 - 29.2)
Among current smokers who noticed health warnings	32.0 (27.9 - 36.3)	36.6 (30.5 - 43.2)	27.9 (23.0 - 33.4)
Never smokers who thought about not starting smoking because of health warnings on cigarette packages ^{†,1}	45.0 (42.3 - 47.7)	46.2 (41.9 - 50.7)	43.7 (39.5 - 48.0)

[†] During the past 30 days.

¹ Among never smokers who noticed health warnings on cigarette packages in the past 30 days.

As seen in **Table 13**, overwhelming majority of students (85.5%) is aware of health warnings on cigarette packs. Almost one third of current smokers think about quitting because of these warnings. Less than a half of never smokers (45.0%) are discouraged to initiate because of them.

3.5.2 Tobacco Marketing

Table 14: Noticing tobacco marketing among students 13-15 years old, by gender – GYTS Slovakia, 2016.

	Overall	Boys	Girls
	<i>Percentage (95% CI)</i>		
<i>Noticed tobacco advertisements or promotions at points of sale</i>			
Among all students in the past 30 days	36.7 (34.6 - 38.9)	39.6 (36.5 - 42.9)	34.0 (31.5 - 36.5)
Among those who visited a point of sale in the past 30 days	45.2 (42.5 - 47.9)	48.5 (45.0 - 52.1)	42.0 (38.8 - 45.2)
<i>Noticed anyone using tobacco on television, videos, or movies</i>			
Among all students in the past 30 days	56.6 (54.0 - 59.2)	54.8 (51.7 - 57.8)	58.5 (55.5 - 61.5)
Among those who watched television, videos, or movies in the past 30 days	64.6 (61.8 - 67.4)	62.8 (59.2 - 66.3)	66.5 (63.7 - 69.3)
Ever offered a free tobacco product from a tobacco company representative	5.2 (4.5 - 5.9)	6.6 (5.5 - 7.9)	3.7 (2.9 - 4.7)

Table 14 provides information how tobacco-marketing activities are noticed among students. More than one third of all students (36.7%) reports to notice tobacco advertisement at points of sale. If we take into consideration only those visiting these points of sales, the proportion reaches almost half of them (45.2%). Majority of students reports to notice tobacco use on television, videos or movies within last month. More boys (6.6%) than girls (3.7%) have been ever offered a free tobacco product from a tobacco company representative.

Table 15: Ownership and receptivity to tobacco marketing among students 13-15 years old, by gender – GYTS Slovakia, 2016.

	Overall	Boys	Girls
	<i>Percentage (95% CI)</i>		
Students who owned something with a tobacco brand logo on it ¹	15.4 (14.1 - 16.8)	17.1 (15.0 - 19.4)	13.8 (11.9 - 15.9)
Never tobacco users who owned something with a tobacco brand logo on it or might in the future ^{2,3}	31.8 (28.6 - 35.2)	36.7 (31.7 - 41.9)	27.7 (24.7 - 30.9)

¹ For example, a t-shirt, pen, backpack.

² Those who might use or wear something that has a tobacco company or product name or picture on it.

³ Considered highly receptive to tobacco marketing (at risk for future tobacco use).

As **Table 15** shows, as much as 15.4% of students own some item with a tobacco brand logo on it. One third of never smokers (31.8%) reports to own something with a tobacco brand logo on it or to own in the future, while boys dominate above girls (36.7% vs 27.7%).

3.6 Knowledge and Attitudes

Table 16: Knowledge and attitudes towards smoking cessation and social smoking among students 13-15 years old, by gender – GYTS Slovakia, 2016.

	Overall	Boys	Girls
	<i>Percentage (95% CI)</i>		
Students who...			
Definitely thought it is difficult to quit once someone starts smoking tobacco	31.3 (29.5 - 33.1)	31.0 (28.8 - 33.3)	31.6 (28.9 - 34.5)
Thought smoking tobacco helps people feel more comfortable at celebrations, parties, and social gatherings	47.4 (44.5 - 50.4)	46.7 (43.0 - 50.5)	48.0 (44.7 - 51.4)

Table 16 shows knowledge and attitudes towards smoking cessation and social smoking among students. Almost one third of them (31.3%) are aware of difficultness of quitting of tobacco smoking. On the other

hand, almost half of them (47.4%) consider tobacco smoking to help people feel more comfortable at celebrations, parties, and social gatherings.

Table 17: Knowledge and attitudes towards secondhand smoke among students 13-15 years old, by gender – GYTS Slovakia, 2016.

	Overall	Boys	Girls
	<i>Percentage (95% CI)</i>		
Students who...			
Definitely thought other people's tobacco smoking is harmful to them	63.3 (60.3 - 66.2)	64.2 (61.1 - 67.2)	62.5 (58.7 - 66.3)
Favored banning smoking inside enclosed public places	83.0 (81.1 - 84.7)	81.8 (79.5 - 83.9)	84.2 (81.7 - 86.4)
Favored banning smoking at outdoor public places	45.6 (42.7 - 48.4)	47.9 (44.3 - 51.5)	43.2 (40.3 - 46.1)

Table 17 shows knowledge and attitudes towards secondhand smoking among students. Majority of them (63.3%) consider secondhand smoking as harmful to them. While more than 4 in 5 students (83.0%) look with favor to ban smoking inside enclosed public places, less than half (45.6%) share this attitude regarding outdoor public places.

4. DISCUSSION

4.1 Discussion of Survey Findings

Tobacco Use

- Tobacco still presents in Slovakia a widespread used psychoactive substance, familiar among youngsters, and thus having a significant public health importance.
- The most common way of tobacco use is smoking. Besides traditionally used cigarettes, other forms of smoked tobacco have come into play and now their smokers comprise almost half of all tobacco users. It applies particularly for shisha, presenting the most common form of smoked tobacco other than cigarette.
- Electronic cigarettes, as a relatively new phenomenon, become rather popular and deserves adequate attention.
- Among never tobacco users, about one fifth of them are susceptible for tobacco use in the future and thus representing a crucial target group for primary preventive measures.
- Gender differences, still present in adult population in Slovakia,⁴ have almost disappeared in adolescents. This indicates changing pattern of an epidemiological situation in Slovakia in the near future.
- Although most of current smokers smoke only occasionally (not on daily base), about half of them show signs for nicotine dependence. Such dependence usually results in long-term use continuing into adulthood leading to health consequences. So, even occasional smokers should not be underestimated as the target group for prevention.
- An overwhelming proportion of current smokers initiate tobacco use in age 13 and less. As known, early initiation is one of the crucial factors increasing risk of nicotine dependence and long-term tobacco use.²

Cessation

- Relatively high proportion of current smokers trying or wanting to stop should be positively considered. This finding says for potentially significant effect of cessation promoting intervention. On the other hand, it contrasts with a small fraction of those ever received professional assistance to quit.
- Majority of those thinking being able to stop indicates underestimation of the role of nicotine addiction even among those showing signs of dependence. Role of nicotine dependence, as a principal barrier to quit, should be emphasized and described in intervention educational activities.

Secondhand Smoke

- Secondhand smoking remains a significant public health issue since majority of students report to be exposed to tobacco smoke. This finding indicates need for amendment of the smoke free legislation in Slovakia to be more comprehensive and effective.

- Moreover, the existing legislation should be better enforced as more than one third of respondents saw smokers within school property.
- Percentage of those reporting exposure to smoke in their homes roughly corresponds with prevalence of adult smokers in Slovakia.⁷ It indicates that smokers still smoke inside their homes without regard to their family members, including children.

Access and Availability

- The findings indicate relative easy access to tobacco in minors. It says for a poor compliance with a valid legislation in Slovakia banning sale of tobacco to children and adolescents up to 18 years as well as sale of individual sticks. Respective measures should be focused both on decrease of social tolerance toward minors' smoking and on effective enforcement of the legislation.

Exposure to Anti-Tobacco Information

- In Slovakia, potential effect of programs to raise awareness on the dangers of tobacco smoking has not been fully implemented since only about half of students noticed anti-tobacco messages in media or sport events and gatherings. The indirect advertisement represents a particular problem. Although most of students reported seeing anti-smoking media messages in TV in the previous 30 days (Table 14), about the same percentage of them reported seeing cigarette brand names on TV as well as pro-tobacco messages in newspapers or magazines.
- Health warnings on the cigarette packs are widely perceived by adolescents and may significantly contribute to social denormalization of tobacco use in Slovakia.
- Results indicate that these health warnings can significantly contribute to motivation to quit not only among adults but also in adolescents.
- Moreover, according to reports of never smokers, the health warning can play role not only in cessation support, but also in decrease of susceptibility to initiate smoking.

Awareness and Receptivity to Tobacco Marketing

- The indirect advertisement represents a particular problem. Despite of decline comparing previous GYTS surveys in Slovakia, smoking still commonly appears in media and breeds pro-tobacco message.
- Although television, videos and movies play an important role in the indirect advertisement having potential to address most of the adolescents, importance of other sale promotion activities cannot be underestimated. It is namely a case of items with a tobacco brand logo to potentially address almost one third of never tobacco user.

Knowledge and Attitudes

- The results indicate that students in Slovakia underestimate the role of addiction as a barrier to quit smoking. In educational activities, importance of addiction, as a main factor leading to long-term tobacco use, should be emphasized.
- The results indicate an importance of social factors in development of tobacco use as almost half of all student considers smoking as a mediator helping to feel comfortable in social events.

- Most of students are aware of danger of passive smoking and look in favor to smoke-free environment.

4.2 Comparison to Previous Tobacco Surveys

The first round of GYTS was carried out in Slovakia in 2003. Until now, results of four rounds of surveys using standard methodology are available⁸ making possible to track development of tobacco use epidemiology in adolescents within last 13 years:

- Cigarette use shows declining trend. Moreover, the new phenomenon of electronic cigarettes can further change the situation.
- Prevalence of susceptibility to initiate tobacco use among never tobacco users has slightly been varying across time and remains similar to those found in 2003.
- Secondhand smoking shows decreasing trend in Slovakia. Although the exposure to tobacco smoke in homes declined slightly after 2011, the remarkable drop of the exposure in enclosed public places is shown in 2007 and later.
- Percentage of current smokers reporting not refused to buy cigarettes because of their age almost has not been changed and remains very high (68.0%).
- Indicators of indirect tobacco advertisement in mass media (noticing anyone using tobacco in TV, videos or movies) considerably decreased after 2007 (from 93.2% to 64.6%).
- Moreover, reports on anti-tobacco messages seeing in the media, sporting or community events also remarkably declined after 2007.
- The results indicate gradual decrease of the activity of school-based curricular preventive interventions throughout the studied time.
- The results indicate gradual increase of proportion of students being in favor to ban smoking inside enclosed public places.

4.3 Relevance to FCTC

The results of this GYTS are critical for gauging progress toward WHO FCTC and MPOWER implementation and uptake.-

Participation of Slovakia in GYTS addresses the first element of MPOWER (Monitor tobacco use and prevention policies). And GYTS asks students a range of questions that spans many of the remaining elements of MPOWER. The GYTS results in Slovakia are critical for gauging progress toward fully implementing the elements of MPOWER among adolescents:

a. Protect people from tobacco smoke

The GYTS data show that majority of students is exposed to tobacco smoke both in enclosed and outdoor public places in the past week (51.7% and 65.8%, respectively) and 38.3% of them live in homes where others smoke in their presence. Despite improvement of the situation and decline, the findings indicate that the issue remains topical and underline the importance of comprehensive legislation to ensure smoke-free environment.

b. Offer help to quit tobacco use

Results from GYTS show that students who currently smoke are interested in quitting. Among students who currently smoke:

58.5% of them want to stop smoking.

63.6% of them tried to stop smoking in the past year.

11.3% of them have ever received help to stop smoking.

The findings demonstrate contrast between commonly reported efforts to quit among current smokers and availability of professional assistance indicating significant deficit of cessation support services tailored specifically for adolescents.

c. Warn about the dangers of tobacco

During the past year, 42.9 % of students had been taught in class about the dangers of smoking. The percentage declined against previous GYTS surveys in Slovakia. This indicates insufficient employment of possible potential of school programs and underestimation of their importance by respective decision makers.

d. Enforce bans on tobacco advertising, promotion, and sponsorship

The GYTS data show that 46.9% of students saw anti-smoking media messages in the past 30 days.-But, in the past 30 days, 56.6% of them noticed anyone using tobacco on TV, videos or movies and 36.7% of them noticed tobacco advertisements or promotion at points of sale. Further, 15.4% of students have an object with a cigarette brand logo and 5.2% of them were offered free cigarettes by a tobacco company representative. The findings indicate importance of measures to eliminate indirect tobacco advertisement as well as more effective enforcement of legislation banning some forms of tobacco products sale promotion.

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.

4.4 Relevance to Country

Among GYTS findings in Slovakia the following ones have a special relevance considering social and health impact of tobacco use:

- Tobacco use is widespread in Slovakia. However, beside traditional manufactured cigarettes, also other tobacco products have become rather common among adolescents.
- Beside tobacco products, electronic cigarettes should be taken into consideration

- School programs are not adequately used. There is a significant gap between possibilities and actual situation. Education in schools, together with other community and nationwide campaigns and programs could effectively decrease prevalence of current smokers, nonsmokers susceptible to smoke as well as increase proportion of smokers willing to quit.
- The data indicate a poor compliance with legislation banning sale of tobacco products for minors and some forms of sale promotion (namely offering free tobacco products and giving of objects with a brand logo for minors)
- Although the situation regarding pro-tobacco messages in mass media has been improved, indirect tobacco advertisement is still widespread. Tobacco control activities should continue in this area and flexibly react to efforts of tobacco industry to penetrate media and thus eliminate its influence of minors.

5. RECOMMENDATIONS

Based on the most pressing GYTS findings, the following recommendations can be formulated:

Besides traditional cigarette smoking, interventions should include also other forms of tobacco use as well as electronic cigarettes.

Considering inadequate employment of the school-based interventions, measures to include these into regular framework of curricular activities are needed. One of the preconditions of effective interventions includes adequate education and skills of teachers and other school-workers involved in pedagogic process. Distribution of guidelines and reviews of good practice can help to deal with the issue.

Although situation regarding passive smoking has been improved, it is still far from ideal situation. The Act on Non-smokers Protection still does not ensure fully smoke-free environment in Slovakia. Moreover, more effective enforcement of existing measures is needed, together with activities to decrease social tolerance toward passive smoking, particularly regarding children.

Considering a very high percentage of current smokers reporting being not refused because of their age when buying cigarettes, reevaluation of ways of enforcement of the current legislation is needed.

REFERENCES

1. WHO report on the global tobacco epidemic, 2011: Warning about the dangers of tobacco. Geneva, World Health Organization, 2011 (http://www.who.int/tobacco/global_report/2011/en/index.html).
2. Preventing tobacco use among youth and young adults: a report of the Surgeon General. Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention, 2012 (<http://www.surgeongeneral.gov/library/reports/preventing-youth-tobacco-use/index.html>).
3. World Health Organization. MPOWER: A policy package to reverse the tobacco epidemic. Geneva: World Health Organization; 2008
4. WHO report on the global tobacco epidemic, 2017: monitoring tobacco use and prevention policies. Geneva: World Health Organization; 2017
5. The European health report 2005. Public health action for healthier children and population. WHO Regional Office for Europe: Copenhagen; 2005
6. Prevalence of use of addictive drugs in Slovakia and opinions of citizens regarding problems related to drug addiction (in Slovak) [Rozšírenosť užívania drog na Slovensku a názory občanov na problémy spojené s drogovou závislosťou]. Bratislava: Statistical Office of the Slovak Republic; 2006
7. Peto R, Lopez AD, Boreham J, Thun M. Mortality from smoking in developed countries 1950-2000. 2nd Edition, revised June 2006. available at: <http://www.deathsfromsmoking.net/publications.html>
8. Comenius University in Bratislava. Jessenius Faculty of Medicine in Martin. Projects of the Department of Public Health. Available at: <https://www.jfmed.uniba.sk/en/pracoviska/scientific-and-teaching-workplaces/pre-clinical-departments/uvzd/projects/>

Global Youth Tobacco Survey (GYTS)

Slovakia

2016

Dear respondent,

The World Health Organization has been monitoring globally tobacco use and associated factors in school youngsters since 1999. Now, your school was selected to participate in the survey by random sampling. Therefore, let me ask you to cooperate. Any information obtained from the questionnaire will be used entirely for research and monitoring purposes and neither advantages nor disadvantages follow from the results for participating respondents. **Filling out of the questionnaire is voluntary and you are free to refuse to answer any of the questions in this questionnaire. The information you provide is strictly confidential and will not be disclosed to anyone at the school.** No part of the results will be presented in a way making possible reverse identification of the respondents.

To complete it, you was given this questionnaire, answer sheet and pencil. Put your answers into the answer sheet, not directly into the questionnaire. Be careful, the questionnaire has only 70 questions, so answers 71 to 99 will remain unfilled. After completion, return answer sheet, questionnaire and pencil according to given instructions.

Thank you very much in advance for your willingness and confidence. If you have any queries about this survey you may contact:

Assoc. Prof. Tibor Baška, M.D., PhD., research coordinator of the GYTS in Slovakia
Department of Public Health, JFM CU, Malá Hora 11149/4B, 036 01 Martin
phone.: 043 2633609, e-mail: baska@jfmed.uniba.sk

Instructions

- Please read each question carefully before answering it.
- Choose the answer that best describes what you believe and feel to be correct.
- Choose only **one** answer for each question.
- On the answer sheet, locate the circle that corresponds to your answer and fill it in completely with the pencil that was provided to you.
- Correctly fill in the bubbles like this: ●
- If you have to change your answer, don't worry, just erase it completely, without leaving marks.

Example:

Questionnaire:	
24. Do you believe that fish live in water? a. Definitely yes b. Probably yes c. Probably not d. Definitely not	24. ● (B) (C) (D) (E) (F) (G) (H)

Introduction

Thank you for participating in this survey. Before you start, please read the following information that will help you to answer the questions.

- Some of the questions will ask about smoking **cigarettes**.
- Other questions may ask about **smoking tobacco** in general that includes cigarettes and other types of smoked tobacco products.
- Other questions may ask about using **smokeless tobacco**, which is tobacco that is not smoked, but is sniffed through the nose, held in the mouth, or chewed.
- Finally, other questions may ask about any **tobacco use** or any **tobacco products** – this includes smoking cigarettes, smoking tobacco other than cigarettes, and using smokeless tobacco.
- Here is a chart that provides examples of various tobacco products:

Any Tobacco Use	
Smoking Tobacco includes:	Smokeless Tobacco includes:
Cigarettes — Manufactured cigarettes — Hand-rolled cigarettes Other types of smoked tobacco: — Pipes — Cigars, mini cigars/cigarillos — Waterpipes/hookah/shisha/narguileh/	— Snuff — Chewing tobacco

The first few questions ask for some background information about yourself.

- 1. How old are you?**
 - a. 11 years old or younger
 - b. 12 years old
 - c. 13 years old
 - d. 14 years old
 - e. 15 years old
 - f. 16 years old
 - g. 17 years old or older

- 2. What is your sex?**
 - a. Male
 - b. Female

- 3. In what grade/form are you?**
 - a. 7th form/secunda
 - b. 8th form/tertia
 - c. 9th form/quarta

- 4. During an average week, how much money do you have that you can spend on yourself, however you want?**
 - a. I usually don't have any spending money
 - b. Less than 3 EUR
 - c. 3 to 6 EUR
 - d. 6.01 to 9 EUR
 - e. 9.01 to 12 EUR
 - f. 12.01 to 15 EUR
 - g. More than 15 EUR

The next questions ask about your use of tobacco.

- 5. Have you ever tried or experimented with cigarette smoking, even one or two puffs?**
 - a. Yes
 - b. No

- 6. How old were you when you first tried a cigarette?**
 - a. I have never tried smoking a cigarette
 - b. 7 years old or younger
 - c. 8 or 9 years old
 - d. 10 or 11 years old
 - e. 12 or 13 years old
 - f. 14 or 15 years old
 - g. 16 years old or older

7. **During the past 30 days, on how many days did you smoke cigarettes?**
- a. 0 days
 - b. 1 or 2 days
 - c. 3 to 5 days
 - d. 6 to 9 days
 - e. 10 to 19 days
 - f. 20 to 29 days
 - g. All 30 days
8. **Please think about the days you smoked cigarettes during the past 30 days. How many cigarettes did you usually smoke per day?**
- a. I did not smoke cigarettes during the past 30 days
 - b. Less than 1 cigarette per day
 - c. 1 cigarette per day
 - d. 2 to 5 cigarettes per day
 - e. 6 to 10 cigarettes per day
 - f. 11 to 20 cigarettes per day
 - g. More than 20 cigarettes per day
9. **Have you ever tried or experimented with any form of smoked tobacco products other than cigarettes (such as water pipe, cigars, etc.)?**
- a. Yes
 - b. No
10. **During the past 30 days, did you use any form of smoked tobacco products other than cigarettes (such as water pipe, cigars, etc.)?**
- a. Yes
 - b. No

The next questions ask about your use of electronic cigarettes.

Electronic cigarettes, or e-cigarettes, are electronic devices that usually contain a nicotine-based liquid that is vaporized and inhaled. Some look like cigarettes and others look like pens or small pipes. These are battery-powered devices that produce vapor instead of smoke

11. **During past 30 days, on how many days did you use electronic cigarettes?**
- a. 0 days
 - b. 1 or 2 days
 - c. 3 to 5 days
 - d. 6 to 9 days
 - e. 10 or 19 days
 - f. 20 to 29 days
 - g. All 30 days
12. **Have you ever tried or experimented with shisha smoking, even one or two puffs?**
- a. Yes
 - b. No

- 13. During the past 30 days, on how many days did you smoke shisha?**
- a. 0 days
 - b. 1 or 2 days
 - c. 3 to 5 days
 - d. 6 to 9 days
 - e. 10 to 19 days
 - f. 20 to 29 days
 - g. All 30 days
- 14. During the past 30 days, how often did you smoke cigars/mini cigars/cigarillos?**
- a. I did not smoke cigars/mini cigars/cigarillos during the past 30 days
 - b. Less than once a week
 - c. At least once a week but not every day
 - d. Every day
- 15. Where do you usually smoke?
(SELECT ONLY ONE RESPONSE)**
- a. I do not smoke
 - b. At home
 - c. In school compounds during the lectures
 - d. Outside the school compounds during the lectures
 - e. At my friend's house
 - f. At social events
 - g. At public places (e.g. in streets, restaurants, in a park, in shopping centers)
 - h. In other places
- 16. Do you ever smoke tobacco or feel like smoking tobacco first thing in the morning?**
- a. I don't smoke tobacco
 - b. No, I don't smoke tobacco or feel like smoking tobacco first thing in the morning
 - c. Yes, I sometimes smoke tobacco or feel like smoking tobacco first thing in the morning
 - d. Yes, I always smoke tobacco or feel like smoking tobacco first thing in the morning
- 17. How soon after you smoke tobacco do you start to feel a strong desire to smoke again that is hard to ignore?**
- a. I don't smoke tobacco
 - b. I never feel a strong desire to smoke again after smoking tobacco
 - c. Within 60 minutes
 - d. 1 to 2 hours
 - e. More than 2 hours to 4 hours
 - f. More than 4 hours but less than one full day
 - g. 1 to 3 days
 - h. 4 days or more
- 18. Have you ever tried or experimented with any form of smokeless tobacco products (such as sniff of chewing tobacco)?**
- a. Yes
 - b. No
- 19. During the past 30 days, did you use any form of smokeless tobacco products (such as sniff of chewing tobacco)?**
- a. Yes
 - b. No

The next questions ask about your feelings toward stopping smoking.

20. Do you want to stop smoking now?

- a. I have never smoked
- b. I don't smoke now
- c. Yes
- d. No

21. During the past 12 months, did you ever try to stop smoking?

- a. I have never smoked
- b. I did not smoke during the past 12 months
- c. Yes
- d. No

22. Do you think you would be able to stop smoking if you wanted to?

- a. I have never smoked
- b. I don't smoke now
- c. Yes
- d. No

**23. Have you ever received help or advice to help you stop smoking?
(SELECT ONLY ONE RESPONSE)**

- a. I have never smoked
- b. Yes, from a program or professional
- c. Yes, from a friend
- d. Yes, from a family member
- e. Yes, from both programs or professionals and from friends or family members
- f. No

The next questions ask about your exposure to other people's smoking.

24. Do your parents smoke tobacco?

- a. None
- b. Both
- c. Father only
- d. Mother only
- e. Don't know

25. Do any of your closest friends smoke tobacco?

- a. None of them
- b. Some of them
- c. Most of them
- d. All of them

26. During the past 7 days, on how many days has anyone smoked inside your home, in your presence?

- a. 0 days
- b. 1 to 2 days
- c. 3 to 4 days
- d. 5 to 6 days
- e. 7 days

- 27. How often do you see your father (stepfather or mother's partner) smoking in your home?**
- Don't have/He doesn't live with us
 - About every day
 - Sometimes
 - Never
- 28. How often do you see your mother (stepmother or father's partner) smoking in your home?**
- Don't have/She doesn't live with us
 - About every day
 - Sometimes
 - Never
- 29. How often do you see your brother/sister smoking in your home?**
- Don't have /He/She doesn't live with us
 - About every day
 - Sometimes
 - Never
- 30. How often do you see other people smoking in your home?**
- Don't have/ They don't visit us
 - About every day
 - Sometimes
 - Never
- 31. During the past 7 days, on how many days has anyone smoked in your presence, inside any enclosed public place, other than your home (such as coffeehouses, entrance halls, shopping malls etc.)?**
- 0 days
 - 1 to 2 days
 - 3 to 4 days
 - 5 to 6 days
 - 7 days
- 32. During the past 7 days, on how many days has anyone smoked in your presence, at any outdoor public place (such as sidewalks, entrances to buildings, parks, lidos etc.)?**
- 0 days
 - 1 to 2 days
 - 3 to 4 days
 - 5 to 6 days
 - 7 days
- 33. During the past 30 days, did you see anyone smoke inside the school building or outside on school property?**
- Yes
 - No
- 34. Do you think the smoke from other people's tobacco smoking is harmful to you?**
- Definitely not
 - Probably not
 - Probably yes
 - Definitely yes

35. **Are you in favor of banning smoking inside enclosed public places (such as restaurants, pubs, bars, coffeehouses, shopping, malls etc.)?**
- Yes
 - No
36. **Are you in favor of banning smoking at outdoor public places (such as playgrounds, sidewalks, entrances to buildings, parks, bus stops etc.)?**
- Yes
 - No

The next questions ask about getting cigarettes.

37. **The last time you smoked cigarettes during the past 30 days, how did you get them? (SELECT ONLY ONE RESPONSE)**
- I did not smoke any cigarettes during the past 30 days
 - I bought them in a store or shop
 - I bought them from a street vendor
 - I bought them at the tobacconist's in the street
 - I gave money someone else to buy them for me
 - I got them from someone else
 - I stole them
 - I got them some other way
38. **During the past 30 days, did anyone refuse to sell you cigarettes because of your age?**
- I did not try to buy cigarettes during the past 30 days
 - Yes, someone refused to sell me cigarettes because of my age
 - No, my age did not keep me from buying cigarettes
39. **On the whole, do you find it easy or difficult to buy cigarettes from a shop?**
- I do not usually buy cigarettes from a shop
 - Very difficult
 - Fairly difficult
 - Fairly easy
 - Very easy
40. **The last time you bought cigarettes during the past 30 days, how did you buy them?**
- I did not buy cigarettes during the past 30 days
 - I bought them in a pack
 - I bought individual sticks (singles)
 - I bought them in a carton
 - I bought tobacco and rolled my own
41. **On average, how much do you think a pack of 20 cigarettes costs?**
- 2 € and less
 - 2.01 € to 2.5 €
 - 2.51 € to 3 €
 - 3.01 € to 3.5 €
 - More than 3.5 €
 - I don't know

The next questions ask about messages that are against using tobacco (might include cigarettes, other smoked tobacco, and smokeless tobacco).

42. During the past 30 days, did you see or hear any anti-tobacco media messages on television, radio, internet, billboards, posters, newspapers, magazines, or movies?
- Yes
 - No
43. During the past 30 days, how many anti-smoking media messages have you seen on television?
- A lot
 - A few
 - None
 - I never watch television
44. During the past 30 days, how many anti-smoking messages have you seen in newspapers or magazines?
- A lot
 - A few
 - None
45. During the past 30 days, did you see or hear any anti-tobacco messages at sports events, fairs, concerts, or community events, or social gatherings?
- I did not go to sports events, fairs, concerts, or community events, or social gatherings in the past 30 days
 - Yes
 - No
46. During the past 30 days, did you see any health warnings on cigarette packages?
- Yes, but I didn't think much of them
 - Yes, and they led me to think about quitting smoking or not starting smoking
 - No
47. During the past 12 months, were you taught in any of your classes about the dangers of tobacco use?
- Yes
 - No
 - I don't know

The next questions ask about advertisements or promotions for tobacco (might include cigarettes, other smoked tobacco, and smokeless tobacco).

48. During the past 30 days, did you see any people using tobacco on TV, in videos, or in movies?
- I did not watch TV, videos, or movies in the past 30 days
 - Yes
 - No

- 49. During the past 30 days, did you see any tobacco product brand names when you watched sports events or any other programs on TV?**
- a. I did not watch TV in the past 30 days
 - b. Yes
 - c. No
- 50. During the past 30 days, did you see any advertisements or promotions for tobacco products at points of sale (such as stores, shops, kiosks, etc.)?**
- a. I did not visit any points of sale in the past 30 days
 - b. Yes
 - c. No
- 51. Would you ever use or wear something that has a tobacco company or tobacco product name or picture on it such as a lighter, t-shirt, hat, or sunglasses?**
- a. Yes
 - b. Maybe
 - c. No
- 52. Do you have something (for example, t-shirt, pen, backpack) with a tobacco product brand logo on it?**
- a. Yes
 - b. No
- 53. Has a person working for a tobacco company ever offered you a free tobacco product?**
- a. Yes
 - b. No
- 54. How often have you seen the advertisement leaflets of the contest organized by cigarette companies?**
- a. Often
 - b. Sometimes
 - c. Never

The next questions ask about your attitudes and beliefs about using tobacco.

- 55. One of your best friends offered you a tobacco product, would you use it?**
- a. Definitely not
 - b. Probably not
 - c. Probably yes
 - d. Definitely yes
- 56. At anytime during the next 12 months do you think you will use any form of tobacco?**
- a. Definitely not
 - b. Probably not
 - c. Probably yes
 - d. Definitely yes

- 57. Once someone has started smoking tobacco, do you think it would be difficult for them to quit?**
- a. Definitely not
 - b. Probably not
 - c. Probably yes
 - d. Definitely yes
- 58. Do you think smoking tobacco helps people feel more comfortable or less comfortable at celebrations, parties, or in other social gatherings?**
- a. More comfortable
 - b. Less comfortable
 - c. No difference whether smoking or not
- 59. Do you think young people who smoke tobacco have more or less friends?**
- a. More friends
 - b. Less friends
 - c. No difference from non-smokers
- 60. Do you think smoking tobacco makes young people look more or less attractive?**
- a. More attractive
 - b. Less attractive
 - c. No difference from non-smokers
- 61. During the past 30 days, did you smoke tobacco to help you lose weight or keep from gaining weight?**
- a. I did not smoke tobacco in the past 30 days
 - b. Yes
 - c. No
- 62. Do you think it is safe to smoke tobacco for only a year or two as long as you quit after that?**
- a. Definitely not
 - b. Probably not
 - c. Probably yes
 - d. Definitely yes
- 63. Do you agree or disagree with the following: "I think I might enjoy smoking a cigarette."**
- a. I currently smoke cigarettes
 - b. Strongly agree
 - c. Agree
 - d. Disagree
 - e. Strongly disagree

The next questions ask about the knowledge on tobacco you acquired at school

- 64. During this school year, did you taught in any of your classes about the health effects of tobacco?**
- a. Yes
 - b. No
 - c. Not sure

- 65. During this school year, did you discuss in any of your classes the reasons why people your age use tobacco?**
- a. Yes
 - b. No
 - c. Not sure
- 66. During this school year, did you discuss in any of your classes how to decline an offered cigarette?**
- a. Yes
 - b. No
 - c. Not sure
- 67. Do your parents work?**
- a. Father (stepfather or mother's partner) only
 - b. Mother (stepmother or father's partner) only
 - c. Both parents are employed
 - d. Neither parent is employed
 - e. I do not know
- 68. What level of education did your father (stepfather or mother's partner) complete?**
- a. Elementary education
 - b. Secondary school without final examination
 - c. Secondary school with final examination
 - d. College/University
 - e. I do not know
- 69. What level of education did your mother (stepmother or father's partner) complete?**
- a. Elementary education
 - b. Secondary school without final examination
 - c. Secondary school with final examination
 - d. College/University
 - e. I do not know
- 70. What do you think you will be doing when you finish high school?**
- a. College/University
 - b. Technical school
 - c. Apprentice school
 - d. I will go straight to the job
 - e. I do not know

Thank you for participating in the survey!