

GYTS COUNTRY REPORT

SLOVENIA

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Introduction

Tobacco products have been in use for a long time but the side effects have been well known since 1960. The first study “British Doctors Study” was set up in 1951 and for the first time the association between smoking and mortality from lung cancer and ischaemic heart disease was found (1).

The burden of disease caused by tobacco use is 4.9 million deaths a year and is still rising, a figure expected to rise to 10 million death a year by 2030, 70% of them in developing countries (2).

For WHO’s Europe Region Peto et al. estimated that each year tobacco use is responsible for more than 1,2 million death and 700 000 of them in the countries of Central and Eastern Europe (3).

The tobacco use is increasing in the developing countries and among children in the developed and in the developing countries.

The prevention of diseases associated with tobacco use is one of the priority health issues of WHO.

Children and Tobacco

One in four of new smokers in the Netherlands were in the youngest age category 15 -19 years (4). Children are a vulnerable group concerning smoking and environmental tobacco smoke (ETS) exposure. Exposure begins early in life if a parent smokes or if the mother is exposed to ETS during pregnancy. Children’s exposure to tobacco smoke may cause growth restriction, many respiratory health problems such as lower respiratory illness, asthma and reduced lung growth and functioning. The adverse effects may start in infancy, childhood and adolescence and may persist throughout life (5).

Tobacco use in Slovenia and tobacco legislation

In Slovenia, according to a Public opinion surveys¹ the number of adult smokers are diminishing from 28,7% to 23,7% (from 34,7 to 22,7% in males and from 28 to 20,1% in females) from the survey in 1994-98 compared to 1999-2001(6).

Tobacco use among the youth according to the ESPAD data² increased from 16% in 1993-96 to 26% in 1997-2001 (in boys 16 to 25% and in girls 17 to 26%) (7).

Modern and restrictive legislation on Tobacco Use has been introduced in Slovenia in 1996: ban on tobacco vending machine, ban on tobacco advertising, ban on sponsorship by tobacco industry, health warnings on packets of tobacco products, prohibition of sale

¹Data for 1994: no definition or age group available Source: Public opinion survey

Data for 2001: definition – daily smokers; age: 25–64 years Source: Zakotnik-Mavcec, J. et al. Public opinion survey

²Data for 1995: definition: lifetime use of cigarettes 40 times and more, age group: 15-16 years Source: The 1995 ESPAD Report Stockholm. The Swedish Council for Information on Alcohol and Other Drugs (CAN), 1997. <http://www.can.se>
Data for 1999: definition: lifetime use of cigarettes 40 times and more, age group: 15-16 years Source: The 1999 ESPAD Report Stockholm. The Swedish Council for Information on Alcohol and Other Drugs (CAN), 2000. <http://www.can.se>

of tobacco products to persons under the age of 15, smoking restriction in public places and workplaces (8)

GYTS- goals and objective

In 1999 the WHO in collaboration with US Centers for Disease Control and Prevention and UNICEF, began a project called the Global Youth Tobacco Survey (GYTS) to enhance tobacco surveillance related to young people in a global level.

The Ministry of Health of Republic Slovenia conducted the GYTS since there were no accurate or representative data on the prevalence of smoking among children and youth. The GYTS provides a mechanism by which countries can monitor tobacco use among young people and guide the implementation and evaluation of tobacco prevention and control programs.

The goals of GYTS, school-based tobacco survey focusing on adolescent age 13-15, are to:

- determine the level of smoking cigarettes and other tobacco products in schoolchildren,
- estimate the age of initiation of cigarette use
- estimate the smoking cessation desire
- estimate schoolchildren exposure to environmental tobacco smoke (ETC),
- estimate knowledge of schoolchildren towards cigarette smoking
- estimate the role of media and advertising,
- estimate access to cigarettes and other tobacco products.

Methods

Sample description and study design

GYTS Slovenia 2003 is a school-based cross sectional survey. Data about schools and number of students by grade were obtained from Ministry of Education, Science and Sport. In Slovenia 448 primary schools containing 7th grade and 8th grade and 150 secondary schools 1st grade that contained 40 or more students were included in the sample frame.

A two-stage cluster sample design was used to produce a representative sample of students.

Schools were grouped in three strata

- 1) Schools in Capital town of Ljubljana
- 2) Schools in West regions of Slovenia (obalno-kraška, severno-primorska, gorenjska, kraško -notranjska and ljubljanska without schools in capitol city of Ljubljana and zasavsko-revirska)
- 3) Schools in East regions of Slovenia (dolenjska, celjska, koroška, mariborska, pomurska and posavska).

In the first stage schools were selected with probability proportional to school enrollment size. In total, 60 school were selected, 20 from each strata.

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

The questionnaire

The questionnaire consisted of the «Core European questionnaire GYTS» and contained 90 multiple-choice questions and was translated to Slovene language.

Questionnaire gathered data on the following topics:

- prevalence of smoking cigarettes and other tobacco products
- environmental tobacco smoke (ETC)
- cessation of cigarette smoking
- access to cigarettes and other tobacco products
- knowledge and attitudes of young people towards cigarette smoking
- tobacco related school curriculum
- role of media and advertising on young people's of cigarettes

Data Collection

A letter of invitation was sent to headmaster of each selected school inviting them to participate in the survey. Children's parents in the selected classes were informed by letter and were asked to allow their child to participate in the survey. Survey procedures were designed to protect the students' privacy by allowing for anonymous and voluntary participation. The trained field staff (1 school doctor, 6 school nurses, one health worker and three students) administrated the questionnaire in the classroom. Students recorded their responses directly on an answer sheet that could be scanned by a computer.

Analysis

A weighting factor was applied to each student record to adjust for non-response and for the varying probabilities of selection. SUDAAN and EpiInfo were used to compute weighted estimates and 95% confidence intervals for the estimates. Statistical differences included in this report were determined by comparing the range of the 95% confidence intervals for the estimates. If the range for the 95% CI did not overlap then the difference was statistically significant.

Ethical Approval

Ethical commission of Ministry of Health of Republic Slovenia approved the GYTS survey in Slovenia.

Results

Response rate

For the GYTS Slovenia 2003, 4727 questionnaires were completed in 57 schools. For schools overall response was 95,0% (57 of the 60 sampled schools participated) and for students 89,1% (4727 of the 5307 sampled students completed usable questionnaires). Overall response rate was 84,6 %.

Prevalence

Almost two-third (66,4%) of students had ever smoked cigarettes, and 26,2% initiated smoke before age 10 (TABLE 1A). Boys significantly more likely initiate to smoke than girls before age of 10.

Almost three in ten students currently smoke cigarettes (28,5%). Over one-fifth (21,2%) of current smokers used hand-rolled cigarettes, with boys significantly more likely than girls smoke hand-rolled cigarettes. Over 90% of current smokers used manufactured cigarettes.