HEALTH PROMOTION AND DISEASE PREVENTION **A Handbook for Teachers, Researchers, Health Professionals and Decision Makers**	
Title	**Tobacco Control and Health Promotion Activities**
Module: 5.6	**ECTS: 0.25**
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Key words	Health promotion, tobacco control, WHO, FCTC, youth, pregnant women
Learning objectives	After completing this module students and public health professionals should: • be aware of health risks from tobacco consumption; • recognize the importance of initiation of health promotion programs, especially for youth and pregnant women; • increase knowledge about implementation of health promotion tools among participating students; • identify areas for improvement of health promotion interventions; • become familiar with the WHO tobacco initiatives, programs and activities; • understand the prominent role of doctors and public health professionals in tobacco control activities.

Abstract	The use of tobacco is considered as one of the main risk factors for numerous chronic diseases, such as: lung diseases, cancer, and cardiovascular diseases. 4.9 million deaths per year worldwide are tobacco related, having an increasing trend that will lead to double death toll by 2020. WHO is one of the leading organizations in the world actively involved in the health promotion activities related to tobacco consumption reduction and tobacco control. In this regard WHO prepared the Framework Convention of Tobacco Control (FCTC) in 2003, enforced on February 27, 2005. Based on the FCTC the national tobacco control programs should be comprehensive, aiming to control the use of tobacco through various actions including legislation and pricing measures, prevention through education, communication, informative campaigns in order to raise the awareness on tobacco dangers, to prevent tobacco use initiation, to stimulate smoking cessation and to create smoke free environment. WHO recommends that health promotion program should incorporate activities on smoking cessation, smoke free environment, special activities for vulnerable groups such as youth and pregnant women and activities for prevention of initiation of tobacco use. These programs should be supported by the governments through multisectoral activities emphasizing economics and legislation issues. Tobacco smoking is a widespread and serious problem affecting the health of the population in Macedonia. The National Tobacco Control Strategy in R. Macedonia (2005-2010) incorporates legislative and economic measures, health promotion and education for prevention of initiation and smoking cessation, agricultural and environmental measures.
Teaching methods	Teaching methods will include: lectures, interactive work with students and Power Point presentation. Lectures will include information on tobacco use and health promotion for tobacco cessation and prevention of initiation of tobacco use; interactive work with students will include a) role playing (elaborating problem of tobacco consumption taking a role as decision makers/key-stakeholders) and b) case studies (elaborating problem of tobacco consumption among youth and pregnant women); Power Point presentation made by group of students providing recommendations and suggestions emphasizing health promotion as the leading tool in tobacco use control.
Specific recommendations for the teachers	It is recommended that this module be organized within 0.25 ECTS credit, out of which one third will be under the supervision of a teacher. In order to meet the goals of the course, the following is required: PC, LCD, Internet connection.
Assessment of Students	5 minutes Power Point presentation of individually developed provisional health promotion program for a) youth or b) pregnant women, followed by group discussion.

TOBACCO CONTROL AND HEALTH PROMOTION ACTIVITIES

Mome Spasovski, Doncho Donev, Aleksandar Arnikov, Jaroslav Karadzinski

Use of tobacco and tobacco control

The tobacco leaf as raw material is used for smoking, chewing and snuffing. These leafs contain nicotine, that is highly addictive psychoactive ingredient. The use of tobacco is considered as one of the main risk factors for numerous chronic diseases such as: lung diseases, cancer, and cardiovascular diseases. Nevertheless, tobacco is widely used throughout the world. There are only few countries with a legislation restricting tobacco advertising, regulating who can buy and where tobacco products can be used. (1,2)

4.9 million deaths per year are tobacco related, having an increasing trend that will lead to a double death toll by 2020. It is estimated that the highest percentage of deaths, nearly 70%, will occur in developing countries. Most of the tobacco victims are in reproductive age, and due to their early death their families are deprived. Additionally, the use of tobacco is also responsible for high percentage of direct and indirect costs that are affecting countries' economies (1,2).

Though the prevalence of smoking is reported as high, there is desire among smokers to stop smoking cigarettes and high school students reported at least one cessation attempt. In this line, interventions should be created and targeted according to the needs and circumstances within each target group. (3,4)

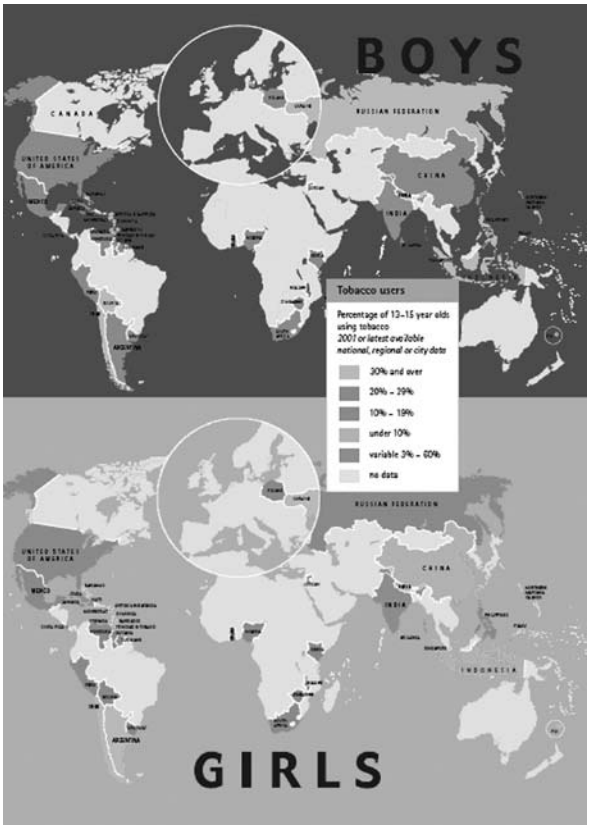
Wide range of measures and activities are implemented in many countries worldwide in order to prevent tobacco consumption and protect people from its effects and effects from second-hand tobacco smoke.

Among those at risk are especially vulnerable groups including youth and women (pregnant women):

The World Tobacco Atlas (5) states that:

1. „There are minimal gender differences between boys and girls (in 30% of the countries boys use other forms of tobacco more often than girls).
2. According to the Global Youth Tobacco Survey (GYTS), one quarter of young people smoke their first cigarette before age of ten.
3. The uptake of smoking among young people increases with tobacco industry promotion (easy access, low prices, peer pressure, their peers, parents using tobacco and misperception that smoking enhances social popularity)".

Figure 1. Percentage of 13-15 years olds using tobacco

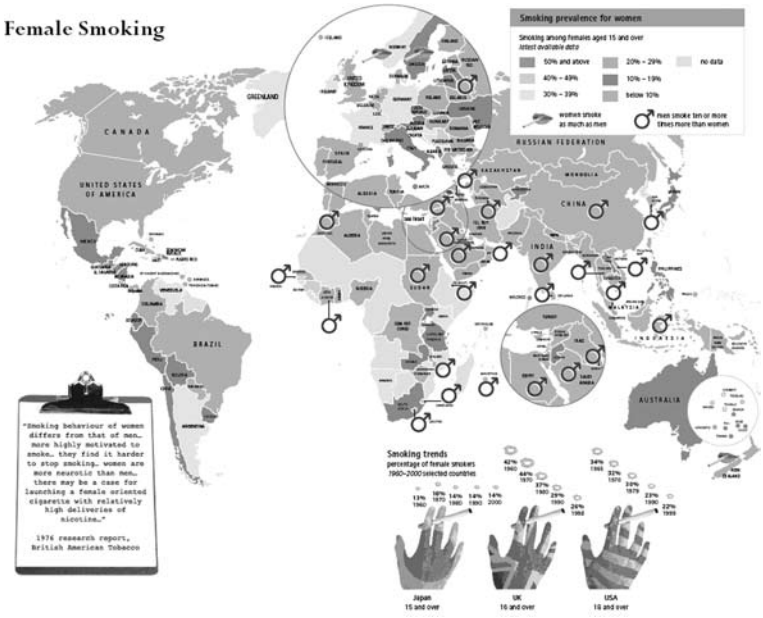


Source: The World Tobacco Atlas

Regarding tobacco consumption in women the same source states that:

- „About 250 million women in the world are daily smokers: 22% of women in developed countries, and 9% of women in developing countries.
- "Women who smoke like men die like men who smoke", Josef Califano, US secretary of Health, Education and Welfare, 1977-79.
- Cigarette smoking among women is declining in many developed countries (Australia, Canada, UK and USA), but this trend is not found in all developed countries (in several southern, central and eastern European countries is either still increasing among women or has not shown any decline).
- Tobacco industry promotes cigarettes for women which are long, slim, low-tar, light-colored, or mentholated.“

Figure 2: Female smoking in the world



Role of the WHO

"The WHO FCTC negotiations have already unleashed a process that has resulted in visible differences at country level. The success of the WHO FCTC as a tool for public health will depend on the energy and political commitment that we devote to implementing it in countries in the coming years. A successful result will be global public health gains for all." (6).

- Dr LEE Jong-wook. Director-General, World Health Organization

WHO is one of the leading organizations in the world that is actively involved in the health promotion activities related to tobacco consumption and tobacco control. In this regard WHO prepared the Framework Convention of Tobacco Control (FCTC) (6) in 2003 that deals with:

1. Illicit trade
2. Regional economic integration organization
3. Tobacco advertising and promotion
4. Tobacco control
5. Tobacco industry
6. Tobacco products, and
7. Tobacco sponsorship

At the Conference of Parties, which is the governing body of the WHO first international Treaty, held in Bangkok (July 2007) the 146 parties to the WHO FCTC decided unanimously on adapting guidelines that stipulate 100% smoke free public places and workplaces as well as beginning a negotiation for a protocol on illicit trade on tobacco products. "This Treaty enables countries to combat the complex threats tobacco poses to human health, such as illicit trade of tobacco products, through international law, including through negotiation of

a special protocol like the one launched during this session" said Dr Haik Nikogosian – head of the Convention Secretariat (7).

Among other decisions, the Conference decided to initiate a development of guidelines related to packaging and labeling of tobacco products and tobacco advertising, promotion and sponsorship.

WHO is playing a leadership role through its Tobacco Free Initiative in strengthening tobacco control systems by working to ensure that interventions on country level will be effective and efficient. WHO is named as one of the five partners to implement the initiative of mayor Bloomberg's $125 million to promote freedom from smoking. Also, WHO will help the governments around the world to develop National Tobacco Control Plans pass and enforce key Laws and implementation of effective policies and measures for tobacco control as set out in the WHO FCTC (8).

WHO is conducting many surveillance projects which currently include:

1. WHO/CDC Global Youth Tobacco Survey (GYTS) (9)
2. WHO/CDC Global Health Professional Survey (GHPS) (10)
3. Global Information System on tobacco control (11)
4. Tobacco Free Initiative (TFI) collaborators are promoting research on various aspects of tobacco production and consumption its influence and impact on economics and health.
5. TFI collaborators with other WHO departments are working on facilitating the integration of tobacco control into other health programs (Global Network)
6. WHO collaborating centers are network expanded by TFI of National Institutions designed by WHO to carry out activities in support of TFI's international health work.

As a result of all its activities the WHO is giving the following recommendations on (12):

1. Smoking cessation
2. Second-hand tobacco smoke
3. Youth and tobacco
4. Gender and tobacco
5. Economics
6. Legislation

Health Promotion activities

The mission of health promotion is to improve the health in the community through increasing capacities of the population to use health promotion strategies addressing the broad determinants of health and assisting communities in gaining control over the integrated actions.

According to WHO recommendations, the health promotion program should incorporate activities on smoking cessation, smoke free environment and special activities for vulnerable groups such as youth and females i.e. pregnant women, activities for prevention of initiation of tobacco use.

These programs should be supported by the Government through multisectoral activities emphasizing economics and legislation issues that will lead to improved health status of the population, due to the reduction in tobacco consumption (13).

The leading role in promotion of smoking cessation should be taken by health care providers, though evidence shows that these interventions should take greater advantage of opportunities to provide such advice to smokers (14,15).

The following table shows the different approaches and interventions implemented in terms of promotion of smoking cessation and other tobacco related interventions.

Table 1. Summary of principal interventions

Intervention	Efficacy: effects on prevalence and consumption	Cost-effectiveness in US$ (from a health sector perspective)	Reach (i.e. extent to which intervention can reach large number of smokers quickly)	Comments
A. Prevention: Interventions aimed primarily at youth				
1. School health education	Can delay recruitment for several years, but not indefinitely	Minimal costs; effectiveness under real life conditions is uncertain	Limited: effective programs are difficult to implement	Delay is useful, but overall impact is limited
2. Restrictions on smoking in schools	Uncertain	Minimal costs	Can be difficult to implement effectively	Desirable in order to set an example
3. Clubs for non-smoking teenagers ("Smoke Busters Club")	Possible delaying effect but evidence is weak	Poor in terms of direct affects on smoking	Can recruit large number in particular localities	Not recommended except for publicity generation
4. Cessation programs for teenagers	Poor	Poor	Low	Not recommended
5. Mass campaigns	40% fall in prevalence in Vermont trial; no effect in Minnesota or England	Low: in range $233-1135 per delayed smoker (Vermont)	Very high	Unlikely to be as cost-effective as other options
6. Restrictions on sales to teenagers	Vigorous activity can reduce sales locally; possible delaying effect	Minimal cost to health sector	Low in UK to date	Can be useful source of publicity
B. Interventions aimed at adults				
7. Smokers' advice clinics	10-25% quit rate	Low relative to other interventions	Very low	Only justified in special circumstances
8. Telephone "quit" lines	19% quit rate at six months in Scotland with mass campaign	$150 per quitter in Scotland	High if well advertised and calls are free	Potentially high impact if part of mass campaign
9. Brief advice from a GP	Up to 5% quit rate	Highly cost-effective; in range $18-150 per year of life saved (YLS)	Relatively low in UK to date	Highly cost-effective but underused. More elaborate GP interventions are less cost-effective

10. Nicotine replacement therapy (NRT)	Significantly enhances effectiveness of GP advice	Cost of GP advice to smoker to purchase patch in range $36-300 per YLS	Price may deter some smokers	Not as cost-effective as brief advice, but may be desirable with highly dependent smokers
11. Restrictions of smoking in the workplace	Probably reduces consumption; effects on prevalence uncertain	Minimal costs to health sector	Has spread rapidly among larger UK companies	Necessary to protect non-smokers; possible long term effect on prevalence
12. Paid mass media advertising campaigns	Quit rate in range 0-5%	In range $10-20 per YSL (at 2.5% quit rate)	Potentially high impact, but efficacy is controversial	High impact, potentially highly effective
C. General interventions aimed at all age groups				
13. Fiscal policy	Price elasticity about -0.5 for consumption. Also associated with substantial falls in prevalence	No direct cost to health sector	High reach, limited only by smuggling	The single most effective measure of all: drawbacks include regressive effects on deprived groups
14. Health warnings on cigarette packages	Possibly some influence on adolescents	No direct cost	High reach	Necessary for ethical reasons
15. Product modification	Possible long term reduction in disease	Minimal costs	High reach	Desirable; ultimately limited by smokers' tastes
16. Bans on all forms of advertising	Probable effects on adults consumption and teenage prevalence	No direct costs	High reach	Desirable for many reasons, but a one-off intervention only
17. Media advocacy and creation of unpaid publicity	Elasticity of -0.5 for consumption; linked with major declines in prevalence. Major effects is on public opinion	Cheaper than paid advertising but requires substantial resources. No Smoking Day costs $8-36 per YSL	High reach	Strongly recommended for its direct effects alone. Influence on climate of public opinion provides the essential foundation for the entire campaign

Source: British Medical Bulletin. Tobacco and Health

Case study in Macedonia

Tobacco growing and production of tobacco products in Macedonia is an old and existing tradition in Macedonia having an increasing trend over time. Additionally, the problem of availability of tobacco products is reaching higher proportions due to their immense import (13).

The National Tobacco control strategy for provision and promotion of health protection of population in the Republic of Macedonia (2005-2010) states that 25% of all deaths related to cardiovascular diseases, that are a leading cause of death in Macedonia, are associated with smoking (13).

The Law for protection from smoking was endorsed in 1995 and it contains legal basis that envisages (16):

1. Protection from harm effects from smoking
2. Protection of healthy living environment
3. Prohibition of smoking in certain public venues (especially important is the Article 2 from the Law that prohibits smoking in the venues where education is conducted and venues where children, scholars and students reside and learn)
4. Prohibition for advertising cigarettes (Articles 4, 5 and 6 from the Law prohibit advertisement of cigarettes, sale of cigarettes to persons younger than 16 years, as well as the responsibility of the manufacturer to print a warning for harm effects from smoking)

The Law was changed and amended in 2003 (17), than 2004 (18) and 2005 (19) and it represents an important tool for the combat for healthy living environment and promotion of smoking cessation.

Macedonia in 2002 was part of GYTS, supported by CDC Atlanta and WHO Regional Office for Europe that showed that "smoking is particularly extended among youth aged 13-15 years, i.e. 8.2% of the interviewees confirmed smoking cigarettes. One out of ten boys or girls is a smoker, and almost all current students-smokers are already tobacco addicts. 20% started to smoke at age of 10."

Survey conducted among medical doctors has shown that their smoking habits are as follows (13):

1. more than 1/3 of the interviewed reported smoking on a daily basis (39% men and 30% women);
2. 61% of the interviewed reported smoking of 5-20 cigarettes per day and 35% reported smoking of more than 20 cigarettes per day;
3. 37% of men and 52% of women included in the survey reported that never smoked;
4. 43% of men and 28% of women that reported smoking on a daily basis were 46-55 years old;
5. 12% reported that quit smoking (62.5% men and 37.5% women);
6. initiation age of smoking among those who quit smoking was on average 20 years of age and reported smoking cessation at the age of 37;
7. average smoking period among men is 16.38 years while in women is 14.37 years;
8. high prevalence rate of smoking is reported among medical doctors

In the year 2006 in Macedonia a GHPS (Global Health Professional Survey) (10) was conducted among students enrolled in the last three years at the medical disciplines faculties at the University in Skopje. This survey included 309 students of which more than 40% were smokers. The results from this study showed that:

1. 77% of students tried to smoke in some period of their life;
2. 44,5% started smoking at the age of 18-19;
3. 25,8% started to smoke at the age of 11-15 while 24,2% started to smoke at the age of 16-17;
4. 77.3% student -smokers and 83.1% student- nonsmokers think that the health professionals should be a model for their patients and the entire population, and should advise patients how to stop smoking;
5 54,4% from the older age group of the students, considered themselves educated for that task. (20).

Situation analysis in the Republic of Macedonia

The tobacco control strategy for provision and promotion of health protection of the population in the Republic of Macedonia (13) from 2004 indicated the following: "The most frequent causes of death in the Republic of Macedonia are cardiovascular diseases, hypertension, ischemic heart disease, cerebrovascular diseases and atherosclerosis, as well as non-specific diseases (chronic bronchitis, asthma, chronic obstructive respiratory diseases etc.) and malignant neoplasms.

With reference to cardiovascular diseases - hypertension, ischemic heart disease, cerebrovascular diseases and atherosclerosis, smoking is associated with 25% of deaths. Mortality from cardiovascular diseases is increasing:

- 6365 persons died in 1985 or 44.2%;
- In 1992, this number increased to 8113 persons or 51.2%;
- In 2000, 9670 cases were registered, or 56%;
- In 2002, 10326 persons were registered, with the highest rate of 57% of all deaths.

Increase in mortality from malignant neoplasm is also alarming and accounts for:

- 1980 deaths in 1985, or 13.7% of total mortality
- In 1992 this number increased to 2225 deaths or 13.8% of all deaths
- In 2000, 3051 cases were registered with 17.2% of all deaths and
- In 2002, the highest number of deaths were registered - 3129, accounting for 17.4% of total mortality

In other words, on average, 155 persons per 100.000 die every year from cancer."

Due to these alarming figures in order to provide comprehensiveness to this problem, the same source (13) has included intersectorial cooperation and multidisciplinary approach. This approach is implemented according to the WHO recommendations and regulations. Ministries taking the responsibilities for implementation of research projects for tobacco control are (4):

1. Ministry of Finance – setting an optimal level of prices and taxes of tobacco products;
2. Ministry of Interior – illicit tobacco and tobacco products trade;
3. Ministry of Economy – explore influence of international trade agreements for tobacco and tobacco products trade;
4. Ministry of Health and Republic Institute for Health Protection – regulations for prevention from smoking;
5. Republic Institute for Health Protection and Institute of Occupational Medicine in partnership with Agency for Sport and Youth – development of new approaches for prevention of smoking in children, adolescents and female population i.e. pregnant women as well as professional hazards from tobacco growth and production process;
6. Ministry of Agriculture – alternative of tobacco production;
7. Ministry of Environment – association between tobacco production and destruction of eco system;
8. Ministry of Health along with NGOs – smoking in different population groups particularly vulnerable groups.

The above mentioned approach will contribute to coordinated response to prevention of tobacco consumption and tobacco control through:

1. development of comprehensive and intersectoral plan of activities;
2. development of stronger coordination among all involved parties;
3. development of supportive environment for smoking cessation;
4. development of programs for training of health workers on tobacco control.

Exercise:

Task 1:

Role playing (elaborating problem of tobacco consumption having a role of decision makers/key-stakeholders)

Considering the widespread problem of tobacco consumption, its scope and range, and also effects from tobacco consumption, students will be required to take part of the exercise and will be asked to make decision about defining a way of dealing with tobacco consumption on national/international level.

While implementing this exercise, following issues need to be considered:

"STRENGTHS:

- introduces problem situation dramatically
- provides opportunity for people to assume roles of others and thus appreciate another point of view
- allows for exploration of solutions
- provides opportunity to practice skills

LIMITATIONS:

- people may be too self-conscious
- not appropriate for large groups
- people may feel threatened

PREPARATION:

- trainer has to define problem situation and roles clearly
- trainer must give very clear instructions"

Task 2:

Case studies (elaborating problem of tobacco consumption among youth and pregnant women)

The second task will be to define key problems and solutions/recommendations regarding tobacco use/consumption among young people and pregnant women. The approach for this problem will be performed through elaboration of case studies prepared by students using clear instructions given by the teacher. This exercise will provide opportunity for students to live the situation as it was real and draw conclusions and recommendations based upon this experience.

While implementing this exercise, following issues need to be considered:

"STRENGTHS:

- develops analytic and problem solving skills;
- allows for exploration of solutions for complex issues;
- allows students to apply new knowledge and skills;

LIMITATIONS:

- people may not see relevance to own situation;
- insufficient information can lead to inappropriate results;

PREPARATION:

- case must be clearly defined in some cases;
- case study must be prepared"(21).

Recommended readings

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2. Tobacco Control Strategy for provision and promotion of health protection of population in the Republic of Macedonia 2005-2010
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