# Empower Vomen Facing the Challenge of Tobacco Use in Europe

World Health Organization





REGIONAL OFFICE FOR Europe

# Empower Women

Facing the Challenge of Tobacco Use in Europe

# Abstract

Ten years have passed since the adoption of the WHO Framework Convention on Tobacco Control, a landmark in tobacco control. Some of the WHO European Region Member States are global leaders in tobacco control. At the same time, the prevalence of smoking among women in the Region is higher than in any other WHO region and, in some countries, is increasing among young women and girls. The tobacco industry continues to work relentlessly to catch new customers as early as possible in their lives, using well-targeted gender-specific strategies. The report provides examples of effective tobacco-control action taken in Europe and elsewhere that may strengthen the hands of those interested in public health and tobacco control.

Keywords

HEALTH POLICY SMOKING TOBACCO INDUSTRY TOBACCO SMOKE POLLUTION TOBACCO USE CESSATION WOMEN

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# Foreword

Ten years have passed since the adoption of the WHO Framework Convention on Tobacco Control (WHO FCTC), a landmark in tobacco control. In this decade, much hard work has been carried out in the WHO European Region and globally to strengthen tobacco-control policies. Indeed, some of the countries of the Region are global leaders in tobacco control. At the same time, however, the prevalence of smoking among women in the Region is higher than in any other WHO region and, in some countries, is increasing among young women and girls. This is an extremely serious concern. As we see men move out of the tobacco pandemic, we cannot contemplate seeing women moving in. The smoking trends of women and men change over time and across populations as do gender norms and roles. This tendency has been clearly understood by the tobacco industry: it is now time for the health community to systematically intervene on the specific risks faced by women.

Women are as likely as men to develop and die from the many diseases caused by smoking. In addition, they face risks that are unique to their sex. Female smokers are now at as high a risk of dying from lung cancer as male smokers. In some European countries we can see that the death rate for lung cancer in females has now overtaken that for breast cancer, hitherto the greatest killer of women among cancers. Even in countries where the prevalence rates of female smokers are far below those of male smokers, women and children are at great risk of contracting smoking-related diseases, such as asthma and cardiovascular disease, from breathing second-hand smoke.

The Region's ministers of health met in Turkmenistan in 2013 to discuss the global threat of noncommunicable diseases (NCDs) and how to address it. Tobacco is a common cause of the four major NCDs – cancer, cardiovascular disease, chronic respiratory disease and diabetes. The ministers of health agreed to work towards achieving the global voluntary target of a 30% reduction of tobacco use by 2025, and shared the aspiration of a tobacco-free Region. One of the first steps towards these ambitious goals is to ensure that tobacco-control policies are planned taking all the inhabitants of the Region into account. This means that policies must be planned, executed and monitored using a "gender lens", and their likely impact considered equally for girls/women and boys/men. Monitoring and evaluation should target both sexes, and different age and socioeconomic groups.

This report clearly shows that the tobacco industry continues to work relentlessly to catch new customers as early as possible in their lives, using well-targeted gender-specific strategies. The European "women's market" represents a glittering prize for the tobacco industry, and they will not stop trying to capture it unless they are forced to do so. The report provides examples of effective tobacco-control action taken in Europe and elsewhere that may strengthen the hands of those interested in public health and tobacco control. This action comprises the creation of evidence-based policies that take women into account. We know that the WHO FCTC provides us with a legal framework for effective policy-making, and that sustained and comprehensive efforts are needed to prevent the pain, disability and death caused by smoking. Acting together with strong and unremitting resolve, we can help the people of the European Region to live longer, healthier and happier lives. The European policy framework and strategy for the 21st century, Health 2020, recognizes that gender norms and values influence behaviour and health-sector response. Using a gender approach whereby sex- and age-differentiated data are systematically taken into consideration, and the causes of inequality identified, is a prerequisite of any sound evidence-based policy aiming not only at improving the health of the population but also at reducing gender-based inequality.

Zsuzsanna Jakab, WHO Regional Director for Europe

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Professor Emeritus, Karolinska Institute, Stockholm, Sweden; Murat Guner, Marketing Director, Health Institute, Istanbul, Turkey; Mireia Jané, Deputy Director, Catalan Public Health Agency, Barcelona, Spain; Dietmar Jazbinsek, Sociologist/Journalist, Dieter Mennekes-Umweltstiftung, Kirchhundem, Germany; Dorata Kaleta, Public Health Expert, Preventive Medicine Department, MedicalUniversity, Łodz, Poland; Niels Them Kjaer, Project leader, Danish Cancer Society, Copenhagen, Denmark; Dominika Kozlowska, Public Relations Manager, Smoke Free Poland Partnership, Manko Association, Krakow, Poland; Daria Khaltourina, Board Chair, Center for Public Health and Demography, Moscow, Russian Federation; Irina Morozova, Communication Officer, World Lung Foundation, New York, USA; Isabel Nerin, Tobacco Cessation Expert, University School of Medicine, Zaragoza, Spain; Rebecca Perl, Associate Director, World Lung Foundation, New York, USA; Charlotta H. Pisinger, Research Physician, Research Centre for Prevention and Health, Glostrup, Denmark; Ann Post, Manager, Swedish National Quitline, Centre for Epidemiology and Community Medicine, Stockholm, Sweden; Elin Ramfalk, General Secretary, Non Smoking Generation, Stockholm, Sweden; Jamilya Sadykova, National Coalition for a Smokefree Kazakhstan, Almaty, Kazakhstan; Sara Sanchez Bengtsson, Project Leader, Thinktank Tobaksfakta, Stockholm, Sweden; Sean Semple, Senior Lecturer, University of Aberdeen, United Kingdom; Dewi Segaar, Senior Adviser, Alliance Smokefree, The Hague, Netherlands; Elizabeth Tamang, Department of Prevention, Hygiene and Public Health Service, Camposampiero, Italy; Helena Wilson, Senior Adviser, Ministry of Health and Care Services, Oslo, Norway; and Emma Wrafter, Charity Director, The Deborah Hutton Campaign, London, United Kingdom.

# Introduction

In 2010, the WHO Regional Office for Europe published a report - prepared in collaboration with the International Network of Women Against Tobacco (INWAT) Europe - on the aggressive marketing of tobacco to women and young people in the European Region and the steps being taken to combat it (1). The WHO Framework Convention on Tobacco Control (WHO FCTC), the first international tobaccocontrol treaty, is a powerful instrument for use in fighting against the strength and influence of the tobacco industry (2). The Convention strongly underpins gender equality, its preamble reminding us of the increase in tobacco consumption among girls and women worldwide and the need for the participation of women at all levels of policy-making and implementation (2). Some of the strategies it recommends - for example, raising tobacco taxes, providing more extensive protection from second-hand smoke, banning the promotion of tobacco products, removing point-of-sale display of tobacco, and mandating bigger graphic health warnings and plain or standardized tobacco packaging - have been implemented both in Europe and in other parts of the world.

The United Nations system, as a whole, has an influential position in the fight for better health and gender equality for all people of the world. The Convention on the Elimination of All Forms of Discrimination against Women obliges Parties to take the appropriate measures to eliminate discrimination against women in health care (3). The Convention on the Rights of the Child obliges Parties to recognize children's rights to the highest attainable standard of health (4).

In September 2011, the participants of the United Nations High Level Meeting on Non-Communicable Diseases agreed to take unified action to combat the growing epidemic of these diseases (5). Contrary to popular belief, noncommunicable diseases (NCDs) pose a greater threat to low- and middle- income countries (LMICs) than they do to high-income countries. Currently, 80 % of annual deaths from NCDs – equivalent to 29 million people – occur in LMICs and this percentage is projected to increase (6). Tobacco consumption is a risk factor common to the leading NCDs. In the Ashgabat Declaration (7), WHO European Member States confirmed their commitment to accelerating efforts to achieve full implementation of WHO FCTC, to reach the global target for NCDs related to tobacco use (30% relative reduction by 2025), and shared their ambition of working towards a tobacco-free European Region.

In addition to the obvious humanitarian reasons to curb NCDs, the current financial crisis gives a clear economic incentive to do so. The annual economic loss per person as a result of inactivity caused by NCDs is estimated to be US\$ 25 in low-income countries, US\$ 50 in middle-income countries and US\$ 140 in high-income countries. The financial crisis has not affected women and men equally and, therefore, while the impact of population-based and individualbased intervention may reduce overall prevalence, it could also increase the inequity gap if gender assessment across socioeconomic groups is not included in "best buy" initiatives.

It is essential to remember that tobacco is the only consumer product in the world that kills about half of its customers when used as the manufacturers intended. There is still a large imbalance between what can be done by those interested in promoting public health and the power of the tobacco industry and its allies (tobacco growers, advertising and publicrelations bodies, distribution networks, front groups and covertly funded "think tanks", among others) to continue to evade the rules and government efforts to eliminate excessive hazards to health.

# Chapter 1. Describing the problem

Based on the latest data in the WHO report on the global tobacco epidemic, 2013: enforcing bans on tobacco advertising, promotion and sponsorship (8), roughly 28% of adults in the WHO European Region smoke tobacco in contrast to 20% of adults in the Region for the Americas and 15% of adults in the African Region. Currently, the European Region has the highest prevalence of female smokers (19%) of all WHO regions. Much progress has been made since the WHO FCTC came into force in 2005, when 35.3% of adults (44.9% males and 25% females) in the European Region smoked tobacco, and there is great potential to advance much further by fully implementing the WHO FCTC, using a gender approach. The overall pattern of smoking across Europe reflects the spread of the smoking epidemic: men in western and northern European countries took up smoking first and women in these countries followed suit; the same development then occurred in the countries of southern and central Europe (9).

### Prevalence: who in the Region smokes?

The countries can be grouped according to the stage of the smoking epidemic they are at, reflecting local smoking patterns for females and males. In the Nordic and some other western European countries, there is little or no difference between the smoking rates for females and males, for example, in Denmark (2012) with 24% and 24.7%, respectively (10), Ireland (2012) with 20.0% and 22.6%, respectively (11), and the United Kingdom (2012) with 20% and 21%, respectively (12). Although in many countries of central and southern Europe more men than women smoke, in some, the rates for female smokers are high and still increasing. Austria, Bulgaria, the Czech Republic and Greece fall into this group; they also have the highest prevalence rates of smoking in adult females recorded in the Region, namely, 34.7%, 28.2%, 32.3% and 38%, respectively (Fig. 1) (13). Finally, a third group of countries, notably those of the former



#### Fig. 1. Prevalence of tobacco smoking, females >15 years, WHO European Region, 2009

Note. The graphics are based on data originating from Tobacco control country profiles, 2009 (13).

Sources: WHO report on the global tobacco epidemic, 2013: enforcing bans on tobacco advertising, promotion and sponsorship (8); Tobacco control country profiles, 2009 (13); Prevalence of tobacco use among adults and adolescents [website], 2012 (14).

Country	Adults (15+ years) 2011		Adolescents (13-15 years) 2008-2012	
	Men	Women	Boys	Girls
Bulgaria	48	31	24.4	31.6
Croatia	36	30	26.7	27.0
Czech Republic	32	24	28.0	33.1
Finland	27	20	16.9	19.7
Hungary	35	27	21.6	23.9
Italy	31	18	19.4	21.6
Latvia	46	20	29.2	33.8

Table 1. Prevalence of tobacco use among adults (2011) and adolescents (2008-2012), selected countries

Source: Global Youth Tobacco Survey, 2013 (18).

Soviet Union, have high rates of smoking among men and relatively low but increasing rates among women.

There are numerous reasons for the smoking trends observed among European women and girls. Although this report will focus on the tremendous impact of tailored marketing by the tobacco industry through well-funded campaigns, it is important to consider several other factors. In general, smoking among females is highly influenced by socioeconomic status, the most affluent often being both the first to start and the first to guit. The countries where smoking is increasingly associated with low socioeconomic status are also among those with the longest histories of smoking. The highest rates of smoking are found among the unemployed, the self-employed and manual workers (15). Smokers in lower socioeconomic groups commonly start at a younger age than those with higher socioeconomic status, their daily consumption is larger, they are at greater risk of becoming addicted, and they find it much more difficult to quit (16). Finally, girls and young women with lower socioeconomic status are largely unaware of the health risks of smoking and second-hand smoke and, therefore, are vulnerable to the advertising strategies of the tobacco industry. The addictive nature of tobacco consumption is often underestimated (17).

The results of the Global Youth Tobacco Survey (GYTS) carried out in 2013 *(18)* reveal that, in several countries, although the prevalence of smoking in adult men is higher than in adult women, the reverse is seen among adolescents (13–15 years) (Table 1). In other countries, the prevalence gap between boys and girls is very small or on the verge of closing, and the increasing rate of tobacco use in females is of greater concern.

Another prevailing issue is that social and cultural constraints are changing in the majority of the coun-

tries of the Region, and it has become more acceptable for females to use tobacco. Smoking is often portrayed by the tobacco industry as a symbol of empowerment, emancipation and success. Cigarette packs resembling lipstick cases, for example, spread the sense of being associated with glamour and fashion (19). Women's spending power has increased and cigarettes are becoming more affordable for them, especially in countries where tobacco taxes have not been raised. The impact of the tobacco industry's marketing strategy is of indisputable magnitude (20,21).

A side effect of the smoking trends in Europe is the high number of women and children that are exposed to second-hand smoke, especially in the southern and eastern parts of the Region (Fig. 2) (22).

#### Health consequences of smoking in women

#### Overall tobacco-related mortality

A recent study of one million women in the United Kingdom showed that smoking remains the leading preventable cause of death in women. Smokers lose at least ten years of their lives, but if they stop before the age of 30, 97% of the excess mortality caused by continued smoking can be avoided; if they stop well before the age of 40, more than 90% can be avoided (Fig. 3). On the other hand, continuing to smoke after the age of 40 will result in a 10-fold increase in the hazards it causes. Even in the case of women who smoked fewer than ten cigarettes per day (baseline), 12-year mortality was doubled. The risk of contracting 23 of the 30 most common causes of death also increased significantly in smokers: for lung cancer, the rate ratio was 21.4. Among ex-smokers who had stopped permanently at ages 25–34 years or 35–44 years, the respective relative risks were 1.84 and 3.34 for lung-cancer mortality (23).



Fig. 2. Prevalence of female exposure to second-hand smoke in the WHO European Region, 2010

Source: Global estimate of the burden of disease from second-hand smoke, 2011 (22).





Source: reprinted with permission from Elsevier (The Lancet. 2013; 381(9861):133-41) (23).

#### Diseases caused by smoking

It is well documented that women are just as vulnerable as men to the dangers of tobacco, if not more so. Tobacco smoke is a mixture of about 4800 compounds containing 90 known carcinogens and about 250 toxic substances (24-26). Smoking has a harmful effect on nearly every organ of the body, as well as on general health. It is the cause of many diseases and is a significant risk factor for several severe chronic diseases, such as different types of cancer, cardiovascular and respiratory diseases, and diabetes mellitus (Fig. 4). Female smokers have the same risk of stroke as men, but they also reap similar benefits as men in avoiding cardiovascular diseases if they stop smoking (27). Smoking also harms the eyes, teeth and bone structure and reduces fertility (28). There is also strong evidence of an association between tobacco and tuberculosis: smoking reduces host defence in the lung and increases the risk of infection by a factor of more than two and a half. In



Source: reproduced with permission by the German Cancer Research Center (31).

fact, more than 20% of global tuberculosis incidence is attributable to smoking (29). Smoking may impair immunologic defence in the airways and promote the likelihood of infectious disease; more specifically, it may strengthen the aggressiveness of microbes and their resistance to antibiotic treatment (30).

#### Smoking and lung cancer

Lung cancer is an ever-increasing health problem for European women (32). For example, between 1990 and 2004, the numbers of new cases of lung cancer in female smokers in Germany more than doubled (33). While trends for most cancers may show a levelling off or even a decline throughout Europe, this is not the case for lung cancer in women. It is expected that lung cancer will become the primary cause of cancer death in European women within a few years, overtaking breast cancer (*32*). This is already the case in a number of countries of the Region, for example, Albania, Denmark, Hungary, Ireland, Luxembourg, the Netherlands, Norway, Poland, Sweden, Switzerland and the United Kingdom (*34*). While in Poland, for example, the rates of lung cancer in women have been increasing steadily, in the United Kingdom they increased until the late 1980s and then began to decline, continuing to do so until the early 2000s; however, after the year 2000, they started to increase again. Lung-cancer rates increase with a delay of about ten to twenty years after increased smoking prevalence (*35*).

#### Special case: smoking during pregnancy

Smoking also compromises pregnancy and reproductive health. The prevalence of smoking in pregnant women is strongly related to age and socioeconomic status. In the Nordic countries, the highest rates of smoking during early pregnancy are observed among teenagers (24% in Sweden and 49% in Finland and Norway). Moreover, single pregnant women are 2-3 times more likely to smoke than married pregnant women and those in the lowest socioeconomic groups are 6-7 times more likely to smoke during early pregnancy than those with a higher socioeconomic status (36). Similar trends of smoking in early pregnancy have also been observed in Spain, where the most vulnerable groups are manual workers and women with low levels of education (37).

Babies of women who smoke have a higher risk of being born with low birth weight than do those of non-smokers. Women who smoke during pregnancy have a high risk of severe complications, including miscarriage, stillbirth and serious malformations of the unborn child, such as musculoskeletal defects, limb reduction, missing/extra digits or facial defects (38,39), congenital heart defects (septal defects) and cleft palate, as well as sudden infant death syndrome and childhood obesity (28,40,41).

### Diseases caused by exposure to second-hand smoke

Exposure to second-hand smoke is a big issue for women everywhere, but especially in some of the southern and eastern European countries where many men smoke. Breathing second-hand smoke can have severe health consequences and cause diseases, such as eye irritation and breathing problems due to swelling of the mucosa, which increases the risk of repeated respiratory infection (42). Exposure to second-hand smoke can also damage the circulatory system, raising the risk of acute arteriosclerosis, heart disease and stroke by 25-30% (25,43,44). It is also responsible for increasing the risk of lung and breast cancer, especially in young women (25,45).

Exposure to second-hand smoke among children is a severe problem, especially in the Balkan countries and those of the former Soviet Union. In countries, such as Georgia, Montenegro, Serbia and Ukraine, for example, up to 90% of children are exposed to second-hand smoke indoor and/or outdoors; of those, girls account for 36-89%, depending on the country and the measures being taken to support smoke-free environments (46).

Smoking by either one or both parents harms children by exposing them to second-hand smoke. This increases the risk of sudden infant death syndrome, acute respiratory infections and ear problems, and of causing more severe asthma (25). There is growing evidence that second-hand smoke also leads to the development of fatty plaque, a precursor of coronary heart disease, and may be associated with cognitive impairment in children (47). In fact, prenatal exposure to second-hand smoke can result in decreased neuronal development in young children, and postnatal exposure is highly correlated with poor academic achievement and neurocognitive performance in older children and adolescents (48).

#### Tobacco dependence in women

Nicotine is a stimulant drug, which is almost as addictive as heroin or cocaine. Inhaled with the smoke of a conventional tobacco cigarette, or with the vapour of an electronic cigarette (e-cigarette), it reaches the brain via the bloodstream within a few seconds while the elimination of nicotine from the body takes several hours. It modulates the reward function in the brain, as well as several learning processes, thereby inducing physical and psychological dependence (49). The first symptoms of dependence may develop within several weeks or months after the onset of cigarette smoking, a sensation of relaxation on first exposure being a strong predictor of dependence (50). About a half of all current smokers are addicted to nicotine (51).

Women may be especially prone to nicotine addiction as studies have shown that very acute negative mood situations may increase the craving to smoke to a greater extent in women than in men (52). In contrast to their male counterparts, levels of nicotine found in the bloodstreams of female smokers were less constant (53,54) and showed a faster onset of addiction symptoms (55).

As a stimulant, nicotine has a dual effect: it heightens attention, memory and learning processes on the one hand and, on the other, acts as a depressant by reducing negative mood, anxiety and pain. Different psychosocial barriers (symptoms of depression and negative mood, anxiety about guitting, weight concerns) and biological barriers specific to women (changes in the steroid hormone status, for example, postmenopause and postpartum) make it potentially more difficult for them to quit smoking (9,56-58). Women may also be more sensitive to stress than men, especially in the premenstrual phase, and may show higher levels of negative expectancy during the smoking-cessation process (59,60). There is some evidence that smoking during pregnancy may be an independent risk factor for lifetime nicotine dependence in adult daughters (61).

Female smokers are more afraid than men of gaining weight if they stop smoking (62) and this has been shown to affect quit attempts negatively (63). In fact, women do generally gain more weight than men, often due to increased calorie intake or reduced physical activity (64-66) but, by and large, the amount gained is less pronounced than most women fear: there is a mean gain of 5 kg and only about 13% of women gain more than 13 kg (67, 68). There is also evidence that withdrawal symptoms may be more severe in women than in men (62, 69), and that nicotine replacement therapy, which could reduce these symptoms, is less effective in female than in male smokers (53, 62). Thus, women especially might benefit from therapy and support focusing on mood disturbances and weight concerns (62).

Based on data resulting from studies conducted mainly in clinical settings (70-77), it has been claimed that women are less likely than men to be successful in quitting smoking. However, data from general population surveys carried out recently in Canada, the United Kingdom and the United States allow a more detailed insight into this claim and indicate an agedependent pattern of gender differences in smoking cessation, which is consistent across these countries; across all age groups combined, only insignificant differences between the genders were found in relation to cessation. However, among younger adults, it was clear that women tended to be more likely to quit smoking than their male counterparts. Among older age groups (>50 years), this pattern was reversed. Misleading women into believing that they are less likely to be successful in giving up smoking could discourage them in their intention to quit (78).

# Chapter 2. New challenges for women

While the struggle to encourage people to quit smoking or avoid starting has been going on for decades, new challenges are materializing in the form of nicotine-containing products. It is unclear whether these products will help people quit smoking or give them an added incentive to use nicotine-containing products. We have chosen to examine three examples of alternative nicotine delivery: e- cigarettes, which gained popularity quickly but about which very little is currently known; hookah, a traditional product from the Middle East, which European youths are adopting in the mistaken belief that it is not harmful; and snus, which, although it has been around for many years and is banned in all European Union (EU) countries except Sweden, is being promoted as a safer form of nicotine use.

#### **E-cigarettes**

Using e-cigarettes simulates smoking cigarettes without burning tobacco. They consist of a batterypowered unit, an electronic atomizer and a cartridge containing liquid, which is vaporized and inhaled by sucking at the mouthpiece or operating a switch. The liquid contains four main ingredients: propylene glycol and/or glycerine as a base for producing the vapour, flavours and optional nicotine.

E-cigarettes are not emission-free albeit the levels of most of the substances measured in e-cigarette aerosol are much lower than in conventional cigarette smoke. Volatile organic substances, metal particles and ultrafine liquid particles are present, which may cause adverse health effects not only to users but also to nonusers breathing in second-hand vapour (79-82).

Several carcinogenic and toxic substances have been identified in the liquid and aerosol of e-cigarettes. In addition to a broad variety of pre-mixed cartridges, customers can mix their own liquid cocktail. A lack of knowledge about the contents of the inhaled mixture entails the problem of quality standards. Based on current information, little is known about the impact of e-cigarette use on health (80,83). Thus, short-term and long-term health risks cannot be excluded, especially for individuals with already impaired airways; further studies are needed. Most e-cigarettes contain nicotine that can lead to addiction. Their delivery of nicotine to the blood stream seems to be slower and at a lower level than is the case with conventional cigarettes (84-86). Nevertheless, e-cigarettes – regardless of their nicotine content – can reduce the desire to smoke, albeit to a lesser extent than conventional cigarettes, and relieve withdrawal symptoms in a more satisfying manner than nicotine inhalers (Fig. 5) (84). There is currently little scientific evidence to show that e-cigarettes help achieve sustained smoking cessation. According to the findings of one recent study, e-cigarettes may have the same weak efficacy as nicotine patches (87).

#### Prevalence in Europe

E-cigarettes have soared in popularity in recent years. In 2012, about 2% of EU citizens used or had used ecigarettes regularly or occasionally and 5% had tried them once or twice (*15*). Most users are smokers and surveys conducted in different European countries revealed that up to half of the cigarette smokers had tried e-cigarettes and up to about a quarter of them had become regular users (88-91).

GYTS results show that the prevalence of e-cigarette use is generally higher across the younger age group. According to the survey in Latvia (2011), 9.1% of 13–15 year-olds were using e-cigarettes (10.3% boys and 7.7% girls) (92); in Finland (2012), this proportion was 5.0% (6.7 % boys and 3.2 % girls), while 15.1 % had tried them (19.6% boys and 10.4% girls) (93) (Table 2). However, the use of e-cigarettes is increasing rapidly and these figures probably underestimate the current situation. Moreover, there are fears that the whole picture is changing as e-cigarettes appear to appeal increasingly to teenagers and young adults as well as to non-smokers (94-97).

The different surveys revealed no distinct genderspecific trend in the use of e-cigarettes: experimentation rates in Hungary and Poland tended to be higher among boys and young men (95,97), whereas in France more girls than boys under 17 years of age had experimented with them (23% vs 15%) (94). Up to about one third of the children that had tried e-cigarettes were non-smokers (94,95,97,98). For some young people, e-cigarettes may be a gateway to cigarette smoking (94).

Fig. 5. Suppression of desire to smoke resulting from use of e-cigarettes with/without nicotine, nicotine inhalers, cigarettes



Source: reproduced by permission of the publisher from Bullen et al, 2010 (84).

	Table 2. Prevalence of	e-cigarette use	among youth,	selected	countries,	2010-	2013
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		No. our		F	Prevalence (%)			
Country	Year	veyed	Frequency	Boys (years)	Girls (years)	All youth (years)		
Finland	2012	4 773	Tried Current use <sup>a</sup> Daily use	19.6 6.7 1.2	10.4 3.2 0.1	15.1 (13-15) 5.0 (13-15) 0.7 (13-15)		
France	2012	3 409	Tried	5.3 (12-14) 12 (15-16) 15 (17) 12 (18-19)	6.6 (12-14) 11 (15-16) 23 (17) 5.5 (18-19)	6.4 (12-14) 11.8 (15-16) 19 (17) 9.3 (18-19)		
France	2013	5 632	Tried	19.1	17.5	18.3 (12-19)		
Hungary	2012	2 325	Used in past 30 days	16	11	13 (13-15)		
Latvia	2011	3 130	Current useª	10.3	7.7	9.1 (13-15)		
Poland	2010/2011	11 893	Tried Used in past 30 days	25.1 (15-24) 9.0 (15-24)	18.8 (15-24) 5.8 (15-24)	23.5 (15-19) 8.2 (15-19)		

<sup>a</sup> Smoked electronic cigarettes during the past 30 days.

Sources: Data from Pudle et al, 2011 (92); Ministry of Social Affairs and Health of Finland, 2012 (93); Dautzenberg et al. 2013 (94); Demjén et al. 2013 (95); Goniewicz & Zielinska-Danch, 2012 (97); Office Français de Prévention du Tabagisme, 2013 (98).

#### Regulation of e-cigarettes

Few countries in Europe have attempted to regulate e-cigarettes or other nicotine-containing products. Countries that do have regulations on the sale and use of these devices include Austria, Finland, France, Italy, the Netherlands and the United Kingdom. Several years ago, an expert panel appointed by the Ministry of Health of Turkey to consider an application for an ecigarette device as a smoking-cessation aid concluded that the evidence did not justify a positive decision. Sales of e-cigarettes are forbidden in Turkey, but they are available to the population through the Internet. Ecigarettes will be regulated in the EU as a requirement of the revised Tobacco Products Directive (99).

E-cigarettes will be put on the EU market in two forms: as a medicine and as a consumer product. If companies choose to claim that their e-cigarettes help smokers quit, they will be obliged to seek a product licence for medicine. Otherwise, they can take the consumer route in which case they will be subject to:

- meeting quality and safety standards;
- complying with a pre-market notification system, which includes providing information about the manufacturer, the ingredients used and related emissions, nicotine dose and uptake, product and production processes, and a declaration that the manufacturer takes full responsibility for the quality and safety of the product under normal use;
- adhering to maximum size limits for cartridges and refillable tanks (2 ml), as well as for e-liquid bottles (10 ml);
- adhering to a maximum nicotine strength of 20 mg/ml;
- meeting the requirement that e-cigarettes and e-liquid bottles are child and tamper proof, protected against breakage and leakage, and have a mechanism to ensure leakage-free refilling;
- covering a minimum of 30% of the two largest surfaces of the packs with health warnings related to nicotine addiction; and
- adhering to EU advertising bans similar to those for tobacco.

The marketing of e-cigarettes has become widespread in Europe. This topic is addressed in the Chapter 3.

## Hookah (water pipe, shisha, nargile, hubble-bubble)

Tobacco for use in water pipes is mixed with molasses, humectants and different sweet flavours like apple, cherry and other fruit-based mixes, as well as vanilla, liquorice and rose. These flavours make it very appealing to young people in particular (100).

Water-pipe tobacco does not burn like cigarette tobacco but carbonizes at low temperatures of about 100 °C. This may result in high exposure to carbon monoxide (101). Although the smoke passes through water, it still contains several toxicants (such as, tar, formaldehyde, acetaldehyde and acrolein), heavy metals, benzene and benzo(a)pyrene, nitrosamines and polycyclic aromatic hydrocarbons and nicotine (102-105). During a typical water-pipe session lasting about an hour, consumers inhale much more smoke than they would in smoking cigarettes, resulting in a different pattern of exposure to carcinogens (100, 102-104).

The health effects of water-pipe smoking have been studied less intensively than those of smoking conventional tobacco but, on analysing the available data in 2005, WHO concluded that both types of smoking are associated with many of the same adverse health effects, and that water-pipe smoking may involve some unique health risks (100). It increases the risk of lung cancer, respiratory illness and periodontal disease. If pregnant women practise it, they increase the risk of giving birth to babies with low birth-weight (106). Often, several persons use the same mouth-piece, which puts them at risk of contracting infectious diseases, including tuberculosis and hepatitis (100, 107). Frequent water-pipe smoking is likely to lead to nicotine addiction (108, 109).

Originating in Asia and the Middle East in the 16th century, water-pipe smoking has gained popularity in European countries in recent years, especially among young people (110). Among adults, the use of water pipes remains relatively low. An estimated 16% of EU citizens have tried water-pipe smoking: 11% have used it once or twice, 4% use it occasionally and 1% regularly. Men are 20% more likely to have tried water-pipe smoking than women (11%). Water-pipe smoking is most widespread in the Baltic countries (Estonia (37%), Latvia (42%), Lithuania (36%)) and least in Ireland (5%), Malta (8%), Portugal (5%) and Spain (8%) (15). Global Adult Tobacco Surveys (GATS) carried out in Turkey (2012) (111) and Ukraine (2010) (112) revealed, respectively, that 0.8 % of adults (1.1% male and 0.5% female) and 2.0% of adults (3.2% male and 1.1% female) were water-pipe smokers.

The use of hookahs is not a healthy alternative to cigarette smoking (107); on the contrary, the product may prompt the initiation of cigarette smoking, especially in young people (113). Hookahs are for the most part used occasionally and for social events. The GYTS conducted in Latvia in 2011 revealed that 21.5% of adolescents (20.9% boys and 21.9% girls) smoked water pipes (92). The same survey in Finland in 2012 revealed a much lower use at 2.3% (3.6% boys and 1.0% girls), although experimentation (having tried a water pipe) was higher at 11.3% (14.0% boys and 8.7% girls) (93).

#### Snus

Snus is a traditional oral-tobacco product originating early in the 19th century in Sweden where it is produced and regulated almost exclusively as a food product (Fig. 6). It is prohibited in all other EU countries. Snus consists of finely ground tobacco, mixed with flavours, salt, water, humectants and chemical buffering agents. Available loose and portion packed in different varieties, it is placed between the lip and gum, where the mucous membrane can absorb the nicotine.

In 2012, 19% of Swedish men and 4% of women used snus on a regular basis and a further 6% and 3%, respectively, used it occasionally (*114*). Smoking among Swedish women has decreased and their levels of snus use remain low. This leaves an unexploited market and snus manufactures have declared women to be the main marketing target. Nowadays, the development of snus products designed especially for women in attractive flavours and feminine packs, for example, are manifest.

Smoking snus is currently advertised as a less harmful alternative to tobacco smoking. However,

it is known to increase the risk of pancreatic cancer, type-2 diabetes, gingival detraction, and birth defects in children born to women using snus (115). It is used as a substitute where smoking tobacco is not allowed and has been promoted as an aid to smoking cessation. However, as yet, no convincing scientific evidence exists to show that smokeless tobacco products, like snus, aid smoking cessation (115,116). Snus delivers levels of nicotine similar to those of conventional cigarettes and, therefore, causes addiction (117-120). Young consumers consistently report that, as a result of using snus, they experience dependence and withdrawal symptoms similar to those related to cigarette smoking, and have difficulty in stopping (121,122).

Nonetheless, the use of snus is often wrongly cited as being the reason for the low prevalence of smoking in Sweden which, at about 13% in 2012, was among the lowest in the world (15,123). In many other countries, for example, Germany, Italy, the Netherlands and the United Kingdom, smoking prevalence has declined to a similar degree without the use of smokeless tobacco products (15,123): smokers succeeded in quitting without using snus (124,125). The same applies in Australia, where smoking prevalence is comparatively low at around 18% (126). The decline in smoking prevalence in Australia and Sweden is primarily due to an increase in the implementation of efficient tobacco-control measures and in the proportion of people who have never smoked.

Smokeless tobacco products with intense flavours may serve as a gateway to tobacco smoking, especially for the young. It is proven that snus increases total tobacco consumption in the long term (127,128).



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#### Fig. 6. Examples of Swedish snus boxes



# Chapter 3. Marketing by the tobacco and e-cigarette industries

Cigarettes are one of the most widely advertised products in the world. The aim of tobacco marketing is to entice people to start smoking and deter smokers from quitting or switching brands. To this end, the tobacco companies are constantly analysing the market and developing new, customized marketing strategies, which include combinations of effective advertising and promotion. These strategies take gender roles and norms into consideration (129,130). In the United States, women have been targeted in tobacco advertising since the 1920s. Nearly a century later, the most dominant themes continue to be glamour, sophistication and style, luxury, class and quality, romance and sex, sociability, enjoyment and success, health, emancipation and, last but not least, slimness.

"Tobacco advertising" means any form of commercial communication with the aim - or the direct or indirect effect - of promoting a tobacco product. Direct advertising includes all forms of promotion: radio, television, cinema, print media, outdoor advertisements and online advertising.

The use of names, trademarks or symbols of tobacco products is also part of advertising. Indirect advertising includes:

- any form of promotion (packaging, the distribution of free products, contests/competitions, discounts, event marketing, direct marketing, personal communication);
- point-of-sale advertising;
- promotion through ambient media (for example, within hospitality venues);
- advertisements in smoking cabins (booths), for example, at airports, and specialist (flagship) stores;
- brand stretching (for example, boots and clothes with cigarette brand names);

- brand sharing (for example, naming a tobacco product after a non-tobacco brand, usually a luxury item);
- sponsorship of individuals, institutions and events;
- product placement (for example, on TV or in cinema films); and
- so-called corporate social responsibility (CSR) initiatives.

Although some of the activities of the tobacco industry covered in this chapter would appear to be gender neutral, that is, attractive to young people of both sexes, it is worth bearing in mind that the tobacco industry is targeting girls. Many of these activities are widespread and attract large numbers of young women. By aligning their promotional activities with trendy, fashionable events, the tobacco industry is able to influence the social acceptability and attractiveness of tobacco.

#### Mass-media advertising

Today, almost every country of the WHO European Region prohibits or restricts tobacco advertising on television and the radio, in magazines and newspapers, and on the Internet (131). Billboard and other forms of outdoor advertising are still permitted in some countries and limited in others, while still others have no relevant legislation in this connection (131) (Case studies 1–3).

### Case study 1. Campaign targeting young girls (Germany)

In 2011, an international tobacco company launched a mass-media campaign to promote its brand in Germany. At first, instead of the well-known cowboy, only the word "Maybe" appeared on the billboards in large black letters; other slogans, such as, "Don't be a maybe. Be [...]", or "No more maybe", followed. These teasers were subsequently replaced by

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advertisements showing adolescents in age-typical situations, for example, at rock concerts and parties, in the street or in motorbike shops, combined with slogans, such as, "Maybe never fell in love" (132). In striking contrast to the previous cowboy and country campaigns, women were featured.

The new advertisements were also shown in cinema spots and displayed at points of sale. With this campaign, the company wished to dissociate itself from the old brand image built on the famous Wild-West campaign. It planned to pilot it in 40 markets during 2012 (133, 134).

In July 2012, the company suspended the campaign because of pressure from the responsible regulatory authorities as a result of complaints from German nongovernmental organizations (NGOs). According to the national authorities and the Federal Ministry of Consumer Protection, the campaign was in violation of the German Provisional Tobacco Act, which prohibits the advertising of tobacco products motivating young people and adolescents to smoke (*135*). At the end of the year, the campaign posters reappeared but in a modified form with different slogans and older models. In October 2013, the campaign was banned and all forms of advertising (billboards, flyers, cinema spots, etc.) were prohibited nationwide (*136, 137*).

#### Tactics of the tobacco industry

According to the senior vice president of the tobacco company's marketing and sales department: "[...] we developed the new [...] campaign, which has been inspired by our deep understanding of adult smoker insights. [...] one out of two Legal Age (minimum 18) to 39 year old smokers recall seeing the campaign visuals and one out of two talked about it" (134).

However, an independent online survey, carried out by the largest market research institute in Germany, Gesellschaft für Konsumforschung (GfK), showed that teenagers (14-17 years) were also very familiar with the campaign (138). Those surveyed thought that the models pictured on the billboards were much younger than they actually were: 53 % were convinced that they were not more than 20 years old, and 12 % believed them to be their peers.

The survey also showed that the campaign had a greater impact on the girls whose recollection of it was better than that of the boys.

In Germany, there is no agreement among policymakers and officials on the regulation of tobacco advertising. While the Ministry of Consumer Protection advocates a ban on outdoor advertising, the Ministry of Economy is in favour of self restriction of advertising by the tobacco industry. In other countries, such as the United Kingdom, the voluntary approach has been found to obstruct the effective regulation of tobacco advertising needed to prevent an increase in smoking rates among young people.

Further information can be obtained from: Dietmar Jazbinsek Dieter Mennekes-Umweltstiftung, Kirchhundem, Germany Tel. no: +49 30 692 32 40 E-mail: jazbinsek@online.de Website: www.dieter-mennekes-umwelt.de

### Case study 2. Campaign targeting young women and teenage girls (Switzerland)

A campaign has been running in Switzerland to rebuild image of one of the cigarette brands and incorporate modern values. Young women and teenagers are an important part of the target group.

Like Germany, Switzerland does not have comprehensive national legislation on the advertising and promotion of tobacco products. However, the tobacco industry has signed an agreement with the Swiss Commission on Integrity regarding self restriction of marketing (139). This voluntary approach offers the tobacco industry a wide array of promotional opportunities in Switzerland, including point-of-sale advertising, sponsorship of music festivals and cultural events, and advertising in newspapers and magazines, all of which take place on a massive scale.

#### Tactics of the tobacco industry

In May 2012, an international tobacco company launched a campaign in Switzerland to promote the sale of one of its products. By overtly addressing the campaign to youth, the tobacco giant violated the Swiss marketing code by, for example, addressing minors, using models under 25 years of age, and suggesting that smoking conveys an image of success.

In April 2013, the Swiss NGO, OxyRomandie, filed a complaint against the company with the Swiss Commission on Integrity, which, despite its title, is an industry-related self-regulatory body. The company requested a delay in the proceedings on three occasions and, in January 2014, the complaint was still pending; as a result of the company's commercial power, the complaint will probably be refused. Oxy-Romandie's main purpose in filing it was to expose the ineffectiveness of self-restriction in a campaign blatantly targeting young women and girls, which leads to the conclusion that the only valid approach is a comprehensive advertising ban in line with Article 13 of the WHO FCTC (2) and its guidelines on implementation (140). Further information can be obtained from: Pascal Diethelm OxyRomandie, Geneva, Switzerland Tel. No: +41 22 310 62 50 Email: diethelm@oxyromandie.ch Website: www.oxyromandie.ch

#### Case study 3. Outdoor advertising (Bulgaria)

A national representative survey illustrated the growth of smoking prevalence among Bulgarian women from about 17 % in 1986 to nearly 30 % in 2001 *(141)*.

In Bulgaria, there is great interest in slim cigarettes. They currently represent one third of the total tobacco market, many foreign brands having established themselves years ago through the intense marketing permitted at that time.

#### Tactics of the tobacco industry

Today, cigarette producers pitch their products to women, presenting brands as attractive and accessible. In Bulgaria, advertisements include: "[...] is my cigarette brand that gives me daily pleasure and good taste, wrapped in finesse"; "My brand features me and adds to my style"; "[...] make me feel special, elegant and beautiful"<sup>1</sup>.

Hundreds of advertisements flood the capital, Sofia, and other major cities in Bulgaria (Fig. 7) where outdoor advertising is still permitted and tobacco advertisements appear outside hospitals, supermarkets and shopping malls, and on public transportation. The brand in question is promoted at points of sale and at events for journalists where prominent performers and other celebrities are featured guests. As a result, it is widely represented in Bulgaria. The same campaign has been adapted for four other countries: Austria, Georgia, Macedonia and Montenegro.

Further information can be obtained from: Gergana Geshanova Smoke Free Life Coalition, Sofia, Bulgaria Tel. no: +359 2 442 2950 Email: ggeshanova@yahoo.com

#### Marketing of e-cigarettes

As tobacco manufacturers are starting to incorporate e-cigarettes in their product portfolios, the marketing of e-cigarettes will be much more prevalent in the near future. A large United States cigarette manufacturer acquired an e-cigarette company in the United States in 2012 and another in the United Kingdom in 2013 (142-144). In 2012, a subsidiary of the company started testing an e-cigarette in a limited market in

the United States (145). In the same year, an international tobacco company established a stand-alone start-up company in the United States, focusing on the commercialization of new products with reduced health risks (146). At the end of 2012, it also acquired a start-up company in the United Kingdom, specializing in the development of "next-generation products", which launched an e-cigarette brand six months later (147). Yet another international tobacco giant is currently developing its own e-cigarettes and plans to launch the first products by 2017 (148). The large tobacco companies have huge financial resources for conducting mass-media campaigns to advertise, sponsor and lobby for e-cigarettes, and they could well use the same advertising strategies as they do for conventional cigarettes.

Today, e-cigarettes are available in most WHO European Member States (149, 150), the novelty of the product ensuring wide media coverage. They are sold mainly on the Internet, but are also available in tobacco shops, pharmacies and supermarkets. For example, France has special e-cigarette shops and, in the United Kingdom, these products are available through a very large number of commercial outlets, including neighbourhood shops and large pharmacy chains. Some companies invest in sponsoring them and advertising them on television. In the United Kingdom, three TV advertisements were banned in 2013 for not clearly identifying the nature of the product being advertised, or for appealing to children.

Currently, the restrictions on advertising e-cigarettes in the countries of the Region are weak or nonexistent. E-cigarettes are advertised as a way of obtaining nicotine in smoke-free areas, as a less harmful alternative to smoking and, sometimes, as an aid to reducing smoking or quitting completely.

Most vendors advertise their products to women as well as men, but several companies address women and youth specifically, promoting e-cigarettes as healthy-life-style products. Often, female e-cigarette users are depicted as attractive and desirable and they are also shown together with children. Many companies promote their products using the new media, such as Facebook, which is very popular among youth, and they also maintain sites to this end. According to the new EU Tobacco Products Directive (99), e-cigarettes shall be subject to the same EU advertising rules as tobacco cigarettes; therefore, the social media represent a very important avenue for e-cigarette companies.

#### Pack and product design

The first impression of a product comes from its packaging and the trade name, logo, colours and

<sup>&</sup>lt;sup>1</sup> Translated from the original versions in Bulgarian.

#### Fig. 7. Outdoor tobacco advertising in Bulgaria



© Smoke Free Life Coalition, Sofia, Bulgaria/ Gergana Geshanova.

form used to create high recognition value. The packaging shapes consumer expectations and establishes a connection between the producer and the customer. For decades, tobacco companies have carried out extensive marketing research on the types of packaging that attract young people, especially girls and young women (*153-156*). Because of the increasing clamp-down on tobacco advertising in Europe, cigarette packaging has become particularly important (*157*).

The shape, structure and material of a package affect the way in which the product is perceived. For example, embossing suggests higher quality and elegance. To create interest, manufacturers consistently introduce new forms of packaging on the market, such as rounded corners, tactile surface texture and slideopen mechanisms.

Packs appealing uniquely to specific target groups, like young people and women, have been developed over decades, the latest being those resembling perfume or lipstick products. These often contain socalled "slim cigarettes" or "super-slim cigarettes", the diameter of which is far smaller than that of regular cigarettes. The EU-market share for this product increased significantly between 2006 and 2012, from 3.7% to 6% (*158*). In accordance with the new EU Tobacco Product Directive (*99*), the sale of "lipstick" packs will be prohibited in EU countries from 2016, but this will not affect "slim" and "super-slim" cigarettes.

Women – smokers and non-smokers alike – rate femininely designed cigarette packs as attractive,

especially those in pink and other bright colours. They are associated with attributes, such as glamour, attractiveness, popularity and slimness (159, 160) (Fig. 8). In June 2012, the Irish Cancer Society commissioned a focus group to conduct research aimed at gaining an understanding of women's smoking behaviours in general. Women were shown examples of cigarette products designed specifically to appeal to women. Research has revealed that pack design is crucial to female interest. Many are drawn to "elegant" and "feminine" packaging, and slim cigarettes were perceived as being "light" and "better for you" (161).

### Direct marketing to female consumers

Direct contact (personal communication) with the consumer has become extremely important in view of the existing advertising bans. As one international tobacco giant writes on its homepage: "... we invest in one-to-one or permission marketing, where verified adult consumers have specifically requested or consented to brand information, such as through direct mailing or face to face in age-controlled venues" (162).

Tobacco companies send sales-promoting letters over the Internet, creating a direct and lasting connection with the consumer. Once in possession of an email address, they repeatedly email information about product novelties, prize draws, etc. One of the methods they use to obtain the personal details and email addresses of young people is to sponsor musical and social events (Case study 4). Summer music Fig. 8. Cigarette packs targeting women and girls in various European countries, 2013



© German Cancer Research Center.

festivals, in connection with which tobacco companies played a prominent part, have taken place in countries primarily in the eastern part of the Region.

#### Case study 4. Music festivals (various countries)

An advertising company owned by an international tobacco corporation and based in Geneva, Switzerland, sponsors social, musical and artistic events (Fig. 9). It has target markets in many of the countries where the status of women is changing, such as Belarus, Poland, the Russian Federation, Turkey and Ukraine. Its logo originally featured direct reference to a globally best-selling cigarette brand; although the logo was modified recently, it is still unmistakably connected with the same cigarette brand.

#### Tactics of the tobacco industry

The company sponsors musical events and glamorous parties, featuring popular disk jockeys and attracting thousands of people. These events target young women and are heavily associated with the cigarette brand: promotional booths are set up where products are sold and consumer information collected, and, sometimes, free samples of cigarettes are distributed.

The company sponsored the participation of two world-famous disk jockeys in a show held in Istanbul,

Turkey, in July 2011 during which it promoted new cigarette brands. Before misleading descriptions, such as "light" and "mild", were banned in many countries, the tobacco giant in question changed its packaging, using colours instead of words to imply "light" and "mild" and introduced the cigarettes to the public at promotional parties connected with events such as those mentioned above.

Further information can be obtained from: Name: Murat Guner Health Institute, Turkey Tel. No.: +90.532.2134372 E-Mail: mguner@superonline.com

#### **Corporate social responsibility**

Tobacco marketing is not only directed at smokers and potential smokers but also aims to influence key stakeholders, such as retailers, the hospitality industry, special-interest groups and, most importantly, policy-makers. Activities, such as CSR programmes, far from being charitable in their intention, aim to create a favourable image of the tobacco company, win it friends and spread its influence (*163*). Corporate spending on these campaigns has, at times, vastly exceeded the amounts given to charities and good causes (*164*). Using CSR programmes de-

#### Fig. 9. Scenes from a musical event in Turkey, 2011



© Health Institute, Ankara, Turkey/Murat Guner.

signed by the tobacco industry to discourage youth from smoking has been shown to have the opposite effect (165). The tobacco industry also plays a double role when it comes to issues of smuggling, with evidence of complicity in smuggling schemes on the one hand and offers of "training courses" for national customs and excise officers on the other. CSR is a key element of tobacco marketing and should be exposed as such.

Often, the aim of a tobacco-related CSR programme is to win over a key stakeholder and create a favourable image of the company with a target group that includes women and women's organizations. Such programmes also involve events, foundations and awards in the areas of politics, society, science and culture. For example, one prominent tobacco company in Germany has an annual budget of €100 000 for funding projects in Germany aimed at identifying and classifying the consequences of new scientific knowledge and technologies (166). It also supports projects in other European countries, such as Turkey (Case study 5). Other examples of CSR activities in Germany are: an award presented annually to "outstanding foreign correspondents and reporters who have been highly engaged to freedom" (167); two designer awards (€50 000 and €12 000) named after cigarette brands (168); and a foundation, which helps young people achieve their professional qualifications and funds intercultural exchange programmes with the United States (169).

#### Case study 5. Projects of the tobacco industry on empowering women, youth and people with disabilities (Turkey)

In the European Region, a tobacco giant focuses its advertising on creating so-called shared values related to three areas: education; hunger and extreme poverty; and domestic violence. In all three areas, the number of projects and size of disbursements are disproportionally higher in the European Region than in the rest of the world. Some 60% of the education projects, 48% of the hunger-and-extremepoverty projects, and 43% of the domestic-violence projects that received funds from this transnational tobacco company in 2012 were in the European Region.

The company's CSR effort concentrates on domestic violence in Europe and clearly targets women as customers. It declares that, in 2012, it supported 15 domestic-violence projects in ten countries of the European Region (Estonia, France, Germany, Latvia, Lithuania, Portugal, Serbia, Slovakia, Spain and Switzerland) to an amount of almost US\$ 460 000. It is distressing to note that the recipient organizations of these funds were NGOs working with women's and victims' rights and the Swiss Red Cross. While most of these projects were small, two single-intervention projects stand out as receiving nearly half of the company's total annual budget for domestic violence in Europe: one operates a mobile intervention unit for victims of domestic violence in Germany, and the other runs a training programme on the prevention of domestic violence in France.

#### Tactics of the tobacco industry

In 2011 and 2012, almost a guarter of the tobacco company's total global CSR budget went to projects in Turkey. The company has stated that a total of US\$ 16 million was used, through a local partner, on projects related to education and rural living conditions, the descriptions of which overlap perfectly with its social-development grant programme. However, due to a lack of transparency, it is impossible to verify how the funds were used. The October 2013 issue of a booklet published by the Turkish partner every autumn describes 37 projects that it supported in 2012 to empower women, youth, and people with disabilities (170). The partner claims that, through these projects, it was able to reach 70 000 people directly and 300 000 indirectly. A large number of the projects geared to women were about self empowerment through self employment.

The Turkish case demonstrates that the tobacco industry can achieve multiple goals through CSRrelated schemes by transferring large amounts of funds within its own extended business milieu, benefitting close allies, controlling the way in which CSR is realized and propagated, and dictating to thirdparty NGOs what social development is about.

*Further information can be obtained from:* The Health Institute, Istanbul, Turkey Tel. no: +90 216 348 89 06 Email: sedturkey@gmail.com

The above examples show that, despite the efforts of national and local authorities to curb tobacco

consumption, tobacco companies still target their products to women and girls, using a wide variety of marketing tools – from mass-media advertising, through pack and product design, to sophisticated CSR programmes. This emphasises the fact that a comprehensive and enforced ban on the promotion of tobacco is a vital part of an effective tobaccocontrol policy in Europe and a way of protecting women's health.

# Chapter 4. Response of the tobacco-control community

As mentioned in the introduction, the WHO FCTC clearly states concern about the use of tobacco among women and girls and the necessity of involving women at all levels of policy-making related to tobacco-control measures and their implementation, and its guiding principles (Article 4.2) stress the necessity of addressing gender-specific risks in developing tobacco-control strategies (2).

The last report, *Empower women – combating tobacco industry marketing in the WHO European Region (1)* focused on the ways in which countries in the European Region were working together in accordance with the WHO FCTC guidelines for implementation (140), and at different levels (governmental, nongovernmental, professional, academic, institutional, individual), to promote tobacco control towards better health for women and girls.

The information provided in this report shows how the power and wealth of the tobacco industry continues to dwarf the ability of many governments to protect their populations. It also illustrates how the WHO FCTC can be used by actors in different sectors of society to work together to advance tobacco control. Here, we have chosen to examine only specific WHO FCTC articles (2); thus, some key sections of the Convention, such as Article 6 on price and tax measures, are not covered. In contrast to the last report (1), which was restricted to action taken in Europe, this edition includes examples from elsewhere in the world.

# Stopping the interference of the tobacco industry in health policy (WHO FCTC Article 5.3)

The interference of the tobacco industry in attempting to derail progress in tobacco control is one of the key issues underlying the efforts being made to reduce avoidable disease and early death from tobacco in Europe. If this interference is not curtailed, the health of women will suffer. Although WHO FCTC Article 5.3 (2) does not directly mention gender issues, they are fundamental to all aspects of tobacco policy. Article 5.3 of WHO FCTC states:

"In setting and implementing their public health policies with respect to tobacco control, Parties shall act to protect these policies from commercial and other vested interests of the tobacco industry in accordance with national law (2)."

States Parties to the WHO FCTC have agreed the position set out in the guidelines for implementing Article 5.3 (140), namely, that responsibility for enforcing it lies not only with national government but also with all representatives and employees of any national, state, municipal, local or other public or semi-public institution within the jurisdiction of a Party. This means that people at all levels of society are accountable for ensuring that the tobacco industry does not interfere with public health policy.

The guidelines for implementing Article 5.3 recommend that there should be no partnerships on, or participation in, activities of the tobacco industry, even those described as "socially responsible" (140). In the last report (1), we could document examples of collaboration between local/national governments/ NGOs and tobacco companies on projects aimed, for example, at preventing children from buying cigarettes. Sadly, as illustrated earlier in this report, the tobacco industry has not changed its tactics and is still trying to convince political and civil leaders that it is a responsible contributor to society. No Party to the WHO FCTC (2) has implemented Article 5.3 fully and it is acknowledged that the guidelines on doing so (140) are not widely understood. Case study 6 gives an account of a Swedish project to better educate its decision-makers, civil servants and general public about the obligations under Article 5.3.

#### Case study 6. Deadly marketing (Sweden)

Having been one of the leaders in the area of tobacco control for several decades, Sweden has not changed its tobacco policy much since the introduction of smoke-free restaurants and bars in 2005: only a minor adjustment of the law intended to reduce the illegal sale of tobacco products to minors has been made. As a result, Sweden dropped from sixth to ninth and, finally, to eleventh place in the *Tobacco Control Scale 2013*, which ranks national tobaccocontrol policy. It states, "no significant progress to report since 2005" and, "surprisingly, given its distinguished tobacco control history, Sweden is often not in support of strong tobacco control measures at European and international level, such as plain packaging"(*171*). NGOs working in tobacco control realized that action had to be taken to prevent Swedish policy from falling even further behind and to curtail the influence of the tobacco industry on public health policy.

To this end, two active organizations - Health Professionals against Tobacco and Non-smoking Generation - established the independent Swedish association, Tobaksfakta (Think Tank Tobacco Facts) in 2010. Tobaksfakta prioritizes the proper implementation of the WHO FCTC, in particular Articles 5.3, 11 and 13 (2). One of its most important projects so far, Deadly Marketing, was launched in 2012 to gather information about the tobacco industry at both the national and international levels and distribute it to decision-makers, civil servants and the public, and to promote the introduction of new legislation banning the marketing and promotion of tobacco products by the industry.

#### How it works

Work carried out by Tobaksfakta includes:

- publication of the report, Deadly influence a story about the tobacco industry's last battle (172), which analyses the activities of the tobacco industry and incorporates guidance for decision-makers on how to implement WHO FCTC Article 5.3 (2) (Fig. 10);
- surveys conducted among decision-makers, civil servants and the public to determine their perception of the tobacco industry and the legislation controlling it, including that relevant to the marketing and promotion of tobacco products, and transparency in relation to meetings between decision-makers and civil servants on the one hand, and between decision-makers and the tobacco industry on the other;
- distribution of information about exhibitions and seminars to be held in the Swedish Parliament and the European Parliament, as well as at local political events;
- distribution of information about media events at the national, regional and local levels;
- participation in primetime interviews on an investigative television programme on the influence

of the tobacco industry on the Swedish Government; and

 development of a closed network of people representing partners that monitor and systematically collect examples of tobacco-industry activity in Sweden and facilitate their exchange through a restricted Facebook page.

### Fig. 10. Cover of Deadly influence – a story about the tobacco industry's last battle



– a Story about the
 Tobacco Industry's Last Battle

#### © Tobaksfakta.

Source: Deadly influence – a story about the tobacco industry's last battle (172).

#### Lessons learnt

Decision-makers, civil servants, and public health workers in Sweden believe that the tobacco industry influences the development of public health policy. These groups need to be informed about the industry's working methods. Decision-makers should also be familiar with Article 5.3 of the WHO FCTC (2) and the guidelines for implementing it (140). The Swedish public is aware of the need to keep the activities of the tobacco industry under control and endorses the need for transparency about dealings between the authorities and the industry. It also supports the introduction of more stringent tobacco-control measures, such as a display ban and a requirement for plain packaging on tobacco products. During its lifespan, Tobaksfakta has provided decision-makers and civil servants with accurate information about the activities of the tobacco industry, and reference to these in the Swedish media has become timelier.

Further information can be obtained from: Margaretha Haglund or Sara Sanchez Bengtsson Tobaksfakta, Sweden Email: margaretha.haglund@tobaksfakta.se; sara@ ymtkansli.org Website: www.tobaksfakta.se

#### Protection from exposure to tobacco smoke (WHO FCTC Article 8)

The serious health problems caused by second-hand smoke are outlined in Chapter 1 of this report. It is estimated that, globally, second-hand smoke causes about 600 000 premature deaths a year among non-smokers, of whom about 47% are women, 28% children and 26% men (173). A review carried out in 2007 by the Board of Science of the British Medical Association concluded that there is no safe level of exposure to second-hand smoke and that adverse effects in children can be found even at low levels (174). It is, therefore, essential to provide protection from exposure to second-hand smoke. For this reason, Article 8 of the WHO FCTC requires that effective measures be taken to ensure a 100% smoke-free environment.

Europe's record for protecting people from exposure to tobacco smoke is mixed. The first country in the world to implement comprehensive smoke-free legislation was Ireland, and the four countries of the United Kingdom have enacted what are widely recognized as effective and comprehensive rules for protection from second-hand smoke. The legislative success in these countries has resulted in significant declines in hospital admissions for myocardial infarction (heart attack) and asthma in children (175, 176). In total, ten countries of the Region have smoke-free legislation<sup>2</sup>, but compliance varies. On the whole, the European Region is lagging behind the other WHO regions in this regard. Only about 20% of its 53 Member States guarantee smoke-free public places, including work places (16).

Because women frequently do not have the power to negotiate a smoke-free environment in the home and the workplace, many - especially those involved in the hospitality industry - are exposed to secondhand smoke in both areas. It is, therefore, crucial that women are aware not only that they are at risk, but also that there are national employment laws that can help them protect themselves.

In some countries, like Ireland and the United Kingdom, smoke-free legislation has been in place for several years with high compliance. These countries are looking forward to including areas, such as cars and some outdoor areas, in their smoke-free legislation. Polish law does allow local government to declare certain outdoor areas smoke-free and this characteristic of national legislation has been used by public health activists in Gdansk (Case study 7).

#### Case study 7. Smoke-free beaches in Gdansk (Poland)

Although the city of Gdansk is best known to foreigners for its famous shipyards and as the birthplace of the Solidarity movement in the 1980s, it is well known to Poles for its wide, white, Baltic beaches. When smoke-free legislation was being discussed in the Polish Parliament, local public health activists used the opportunity to stimulate public discussion about second-hand smoke and the advantages of smokefree places (Fig. 11).

#### Fig. 11. A poster advertising smoke-free Gdansk beaches



© Polish Society for Health Programs.

The number of smoke-free beaches around the world is growing: they are found in Australia, Canada, Italy, New Zealand, the United Kingdom and the United States. In the last-mentioned alone, there are over 100 (177). In Poland, local government is able to extend smoke-free public places to areas that are not

<sup>&</sup>lt;sup>2</sup> Albania (2006), Bulgaria (2012), Greece (2010), Hungary (2011), Ireland (2004), Malta (2010), Spain (2011), Turkey (2008 and 2009), Turkmenistan (2000) and the United Kingdom (England: 2007; Scotland: 2006)).

covered by national legislation, so it was within the competence of the local city government to take steps to make the beaches in Gdansk smoke free.

#### How it works

The first step in the project was to write a brief pointing out the positive implications of smoke-free places for children, young people and the environment, and the projected savings to the city economy these would bring about in the form of reduced cleaning costs. The brief also cited a number of cities worldwide that had passed legislation for clean, smoke-free beaches with success.

The next step was to find allies who would promote the idea. A member of the City Council's Commission for Social Issues and Health Care, who also happened to be a doctor of pharmacology, recognized the importance of the proposal and agreed to lead the legislative process. The idea was presented at a meeting between representatives of the Polish Society for Health Programs **and** the aforementioned Commission and, subsequently, to other commissions of the City Council, all of which were interested.

Journalists from the local media had seen the proposal on the Council's agenda and attended the meeting. The story they told attracted the attention of the national media and it was featured on television in the main news programme.

After a two-hour debate, the City Council passed the ordinance. It was announced at a press conference on World No-Tobacco Day and, over the following weeks, articles and interviews appeared in the local newspapers. Radio interviews were conducted in the streets where the extent of public support was apparent. Young mothers expressed relief that their children would not be picking up cigarette butts while playing on the beach. Even those who were in favour of the ordinance were surprised by the extent of public support it gained. The agency responsible for cleaning the beaches also publicly supported it; cleaning up cigarette butts, matches, etc., in the sand is a difficult task.

#### Lessons learnt

It is important not to politicize public health issues, even if there is support among the politicians. Every party should be approached respectfully and on an equal basis.

Drawing the attention of the national media to a local issue can sometimes be helpful in galvanizing local public opinion.

*Further details can be obtained from:* Lukasz Balwicki Polish Society for Health Programs, Medical University of Gdansk, Poland Email: balwicki@gumed.edu.pl

Legislation on smoke-free private places

None of the countries in the Region has legislation on smoking in the home environment yet. Although it is necessary to protect children from tobacco smoke, to legislate in this area has been seen as encroaching on the private domain. There is no effective legislation on smoking in cars carrying children either, though regulations do exist in Cyprus and proposals to this end have been made in Ireland and the United Kingdom (England and Scotland) (Case study 8). In addition, there have been discussions on this type of legislation in Finland and the Netherlands. Several countries are encouraging parents to ban smoking in their homes voluntarily.

It is important to note that comprehensive policies on smoke-free public places can cause a shift in beliefs and personal choices about smoking in private places and reduce exposure to second-hand tobacco smoke in private homes and cars. For example, the 2008 GATS in Turkey (178) found that, overall, after the implementation of the first phase of smoke-free legislation, 41.1% of adults were exposed to tobacco smoke at home. According to the repeat GATS in 2012 (111), 38.3% of adults were exposed to tobacco smoke at home and 26.4% were exposed to tobacco smoke in privately owned cars. This fall in numbers resulted from the implementation of a comprehensive set of tobacco-control policies and illustrates how a complete ban on smoking can alter perceptions about, and tolerance of, smoking in private homes.

# Case study 8. The REFRESH project: reducing families' exposure to second-hand smoke in the home (United Kingdom (Scotland))

The exposure of children to second-hand smoke has been declining in Scotland in general, particularly since the introduction of comprehensive smokefree legislation in 2006. However, many children are still exposed to second-hand smoke at home and in cars, particularly those in disadvantaged families where parents are more likely to be smokers and there are fewer restrictions on smoking in the home. There is a lack of evidence from effective interventions to help parents reduce the exposure of their children to second-hand smoke in the home.

Some premises, such as hotel bedrooms and personal space in long-stay health-care facilities and prisons, are regarded legally as proxies for the home. The authorities are now turning their attention to these premises in an effort to ensure that they are healthier for the non-smoking residents and staff.

#### How it works

The REFRESH project is funded by the Big Lottery and managed and led by Action on Smoking & Health (ASH) Scotland in partnership with the Universities of Aberdeen and Edinburgh. One of its activities involved mothers living in Aberdeen City and Aberdeenshire who were smokers and had at least one child below 6 years of age. The quality of the air (PM2.5 levels) in their living rooms was measured over a 24-hour period, using a small machine, and they were informed of the outcome. Efforts were made through conversations with the mothers to strengthen their motivation for change (motivational interviews). The same homes were visited four weeks later to re-measure the air quality and see whether any changes had been made in smoking behaviour.

#### Lessons learnt

Providing the mothers with personalized feedback about the quality of the air in their homes, and talking with them to motivate change, significantly reduced the levels of second-hand smoke in their homes. The mothers understood the importance of the information provided, which they considered valuable for protecting their children's health. Many were shocked by the values measured as they thought they were already doing enough to protect their children from exposure to second-hand smoke. However, the knowledge they gained motivated them to do better. The resulting changes in smoking behaviour in the homes tended to be incremental, relating to personal circumstances and the nature of the barriers and challenges to be overcome. Nevertheless, the mothers valued them and intended to make further changes. The confidence of the mothers in enforcing smoking restrictions in their homes was strongly associated with the exposure of their children to second-hand smoke.

#### Next steps

With its new tobacco-control strategy, Creating a tobacco-free generation (179), the Scottish Government has committed to supporting and promoting interventions, such as REFRESH, to help families make their homes smoke-free. A "how to" guide based on learning from the experience of project has been produced to help health-care and other relevant professionals support parents in their efforts to reduce the exposure of children to second-hand smoke (180). Over 2700 copies of the guide have been distributed and it can be downloaded from the REFRESH website. The REFRESH team is developing and evaluating new ways of offering personalized feedback on the quality of air in homes, as well as support through diverse community-based organizations and groups.

Further information can be obtained from: Sean Semple University of Aberdeen, Scotland Tel. no: +44 1224 438473 Email: sean.semple@abdn.ac.uk Website: www.refreshproject.org.uk

### Product regulation (WHO FCTC Articles 9 and 10)

The purpose of Articles 9 and 10 of the WHO FCTC is to support the effective regulation of tobacco products and, thus, decrease tobacco-attributable disease and early death. This should be achievable by reducing the attractiveness, addictiveness and toxicity of tobacco products. Flavouring tobacco to alter its harsh, irritating flavour, and making it easier to inhale, increases its attractiveness, especially to young people ("starters") and women. GATS conducted in Poland in 2010 found that female smokers were more than twice as likely (26%) to use flavoured cigarettes as men (10.5%) *(181)*.

The most prominent flavour additive in tobacco products is menthol, but fruit, candy flavours, sweeteners and perfumes are also used. Menthol has a cooling, anaesthetic effect, which enables the smoker to inhale more deeply and for a longer time, and it reduces irritation from nicotine. These properties not only make it easier for young women to start smoking but they can also prevent smoking cessation (182).

Novel tobacco products are known to appeal particularly to young adults and, to this end, menthol crushcapsule cigarettes have been marketed in Europe in recent years. This technology embeds a flavour capsule in the cigarette filter, which the smoker can crush at any time for a flavour boost. Although these capsules are as yet only available with the menthol flavour, tobacco-industry patents indicate that they can be filled with various flavours *(183)*.

In Europe, only Germany so far has banned the crush capsule, but the revised EU Tobacco Products Directive (99) prohibits the use of flavourings with distinguishable, characteristic flavours in cigarettes and roll-your-own tobaccos. There will be a transition period (to 2020) to remove menthol and other flavours that have an EU-market share of over 3%. The experience of Canada, the country that pioneered the restriction of flavourings in tobacco products, is interesting to Europeans (Case study 9).

#### Case study 9. A ban on tobacco flavours (Canada)

Expert panels, such as the Scientific Committee on Emerging and Newly Identified Health Risks and the Tobacco Products Scientific Advisory Committee of the United States Food and Drug Administration, have confirmed the relevance of the enhancing effect of tobacco additives and flavours in attracting smokers. In its 2007 report, the WHO Study Group on Tobacco Product Regulation pointed out that the regulation of content and design influencing product appeal to consumers is of fundamental importance.

#### How it works

In 2010, Bill C-32 of the Canadian Tobacco Act banned the use of flavours (with the exception of menthol) in little cigars, cigarettes and blunt wraps<sup>3</sup>, as well as the sale of little cigars and blunt wraps packaged in fewer than 20 units. Before the enforcement of Bill C-32, flavours were seldom added to cigarettes but little cigars were heavily flavoured. As these products were very popular among Canadian youth, one of the main aims of Bill C-32 was to reduce their attractiveness to young people by removing the flavours and making the product more difficult to obtain.

Between 2003 and 2008, the percentage of youth (15-19 years) who had tried little cigars and cigarillos increased from 25% to 35%. Young people's interest in little cigars declined markedly in 2010-2012 (after the enforcement of Bill C-32) (184) (Fig. 12).

Independent of the interest of young Canadians in little cigars, the prevalence of smoking among them declined between 1999 and 2012. Among girls, the reduction was 50%, which was greater than among boys (Fig. 13).

#### Lessons learnt

Flavours make tobacco products more attractive to youth and, by reducing the harshness of tobacco, make it easier for them to start smoking. Banning flavour additives reduces the attractiveness of tobacco products and, thus, contributes to a reduction in the prevalence of smoking among young men and women.

Further information can be obtained from: WHO Collaborating Centre for Tobacco Control German Cancer Research Center, Heidelberg, Germany Tel. no: +49 6221 42 30 07

Email: who-cc@dkfz.de Website: www.dkfz.de/de/tabakkontrolle

#### Labelling (WHO FCTC Article 11)

One of the guiding principles of the WHO FCTC is that everyone should be informed of the mortal consequences of tobacco smoke to health and of its addictive nature. Numerous research studies have shown that the use of large, visible and regularly changing pictorial and text health warnings is both an effective and cost-effective way of informing consumers of these dangers. In countries where funds for media and educational campaigns are scarce, pack warnings may be the only consistent communications' channel available for informing and warning the public about the risks of tobacco. The guiding principles of the WHO FCTC (2) also make it clear that warning messages should reflect the effects and patterns of tobacco uptake and cessation from the perspectives of sex and gender.

The WHO FCTC (2) also prohibits the use of misleading descriptors, such as "light", "mild" and "low tar" that specifically target women and lure many into the mistaken belief that they are using safer tobacco products. So-called "healthier" tobacco products are more likely to be adopted by women. Taking these provisions into account simultaneously could play a significant role in ensuring that female non-smokers in Europe do not start using tobacco products.

The Tobacco Products Directive (2001) required EU countries to place health warnings on cigarette packs and, in 2005, the European Commission created a library of pictorial health warnings for use by EU countries. They are also being used by non-EU countries (Norway, Switzerland, Turkey and Ukraine). INWAT Europe criticized these pictures as being rather weak and lacking gender balance. Those depicting women warn about smoking in pregnancy or the cosmetic consequences of tobacco consumption. New warnings are expected to be released in 2014.

Altogether 20 countries of the Region (37 %) use pictorial health warnings (16). While Ukraine uses the EU images, Kazakhstan and the Russian Federation use the pictorial warnings they adopted when they passed tobacco-control legislation (10) in 2013 and 2008 (with entry into force in 2013), respectively. Some of these were provided by Thailand while others were developed in the countries themselves on the basis of strong international evidence and practice. The Thai images have been evaluated as being highly effective (185).

#### Case study 10. Mass-media campaigns to reinforce the use of pictorial health warnings on packs (Russian Federation and Ukraine)

It is often said that "a picture is worth a thousand words". Thus, pictorial warnings represent an effective tool for communicating health information without cost to the health system. They educate and remind smokers – each time they pull a pack out of their pockets - about the harms of smoking not

<sup>&</sup>lt;sup>3</sup> A sheet or tube made of tobacco used to roll cigarette tobacco.



Fig. 12. Percentage of Canadian youth having tried little cigars, 2003-2012

Source: reproduced by permission of the publisher from Tobacco use in Canada: patterns and trends, 2014 edition (184).



Fig. 13. Prevalence of smoking in youth, Canada, 1999-2012

Source: reproduced by permission of the publisher from Tobacco use in Canada: patterns and trends, 2014 edition (184).

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only to themselves but also to those around them. In countries that lack funds for media and educational campaigns, pack warnings may be the only consistent channel of communication available to inform the public about the risks of tobacco. Interestingly, mass-media campaigns and graphic pack warnings with reinforcing messages can have a complementary effect when implemented simultaneously.

#### How it works

Based on a very successful Australian undertaking that combined the introduction of pictorial health warnings with mass-media campaigns in 2006, two countries of the Region – the Russian Federation and Ukraine – decided in 2012 to launch mass-media campaigns in support of their own pictorial pack warnings. In the six years between the Australian and European campaigns, additional evidence had come to light that, if the specific health information included in pack warnings were presented by a medical expert in the related field, it would be more readily accepted and the campaign would be more effective (*186*).

In the Russian Federation, prominent doctors and their patients were featured in three public-service television announcements addressing the horrendous damage to the lungs, the heart and newborns' health caused by tobacco use. The announcements also included graphic images in much the same way as was done in Australia.

In Ukraine, well-known, respected medical professionals, including a former health minister, agreed to speak in TV public-service announcements on the risks connected with smoking. This was particularly important since the budget for mass-media campaigns was limited and employing actors would have incurred significant costs.

#### Lessons learnt

Media campaigns contribute to the impact of graphic health warnings by adding depth, meaning and relevance to the images. Working synergistically, they spread knowledge about the effects of tobacco and related attitudes and behaviour, and create an understanding of and support for tobacco-control policies and laws.

Further information can be obtained from: Irina Morozova World Lung Foundation, USA Email: IMorozova@worldlungfoundation.org Website: www.worldlungfoundation.org

Some countries of the Region are considering a further measure to control tobacco use, namely, a requirement for plain or standard packaging. In Australia, plain packs have been in use since December 2012 and other countries – Canada, Finland, France, Ireland, Israel, New Zealand and the United Kingdom (England and Scotland) – are seriously discussing the introduction of this measure. Interest in it stems from evidence that plain packs are less likely to attract young people, about two thirds of whom start smoking before the legal age for purchasing tobacco (187). Of those who start, only about half will manage to quit before they die (188). Novel packaging is clearly aimed at young smokers, as adults rarely change cigarette brands.

In Australia, a standard colour (dull green) and shape is required for plain packs, which may not include any other branding than the name (in a standard colour and font size): no trademarks, logos or other graphics associated with branding. The packs do have large graphic health warnings with qualitative rather than confusingly quantitative information about the constituents or emissions of the product, a tax stamp and a quitline number. As a result of research carried out to find out which colour consumers considered least attractive, the Australian Government mandated the dull green colour for all cigarette packs.

Despite claims by the tobacco industry that no research on this topic had been carried out in Australia, a systematic review of 37 high-quality studies was published in 2012; this was updated in 2013 with a review of another 17 studies (*189*). These reviews revealed that both adults and children rated plain packs less attractive than equivalent branded packs; they also found that plain packaging enhanced the health warnings on the packs. The warnings were seen to have a deterrent effect on smoking, the younger respondents being more likely to believe that they would put people off starting and encourage smokers to quit or reduce consumption.

Evaluations after the introduction of plain packaging in Australia seemed to confirm the findings of earlier experimental studies. According to one of these, Australian smokers of plain-pack cigarettes judged them to be of a lower standard and less satisfying than they had been the previous year (before the introduction of plain packaging) (190). Another found that plain packs with larger health warnings were associated with a less positive brand image and lower levels of intention to purchase among the most socioeconomically disadvantaged smokers (191). Finally, there was some indication that plain packs might be more effective in prompting smokers to guit. The volume of calls on the quitline was used as an indicator of change in interest in guitting after the introduction of plain packaging in Australia: the number of calls increased by 78%, which was similar to the increase seen when graphic health warnings were introduced in 2006 (84%). However, the impact of plain packaging continued for a longer period than in the case of the graphic health warnings (192).

Another indication of how effective plain packs might be as a tobacco-control measure is the vehemence with which the tobacco industry is opposed to them. Prior to approval of the legislation, the Australian Government was the object of heavy lobbying by international tobacco companies, their front organizations and, finally, a public-relations firm. Once the legislation was approved, one tobacco company immediately challenged the Government in the Australian High Court and another filed a notice of arbitration alleging a breach of the Bilateral Investment Treaty with Hong Kong (193). The Australian High Court dismissed the legal challenge but various allegations of breaches of treaties continue to be made. The Australian Government confirmed its belief that it has the legal and moral right to take measures to improve public health.

#### Health education, communication, training and public awareness (WHO FCTC Article 12)

Communicating information about the serious health consequences of tobacco use and the benefits of stopping or never starting is a key element of any comprehensive tobacco-control programme. Sometimes governments and other commissioning bodies neglect public-education campaigns because they can be costly, particularly if the use of television is involved. In stark contrast to other regions of WHO, the proportion of countries in the European Region that conduct national campaigns as part of a comprehensive tobacco-control programme, including television and/or radio spots, decreased by 11 % between 2000 and 2012 (16). However, cutting funding to these public-education projects is false economy because a comprehensive, well-planned campaign encourages the other elements of a tobacco-control campaign.

The previous section highlighted a campaign aimed at enhancing a policy objective. Other publiceducation campaigns focus on the prevention of smoking and exposure to second-hand smoke, and on smoking cessation. Prevention- and cessationrelated messages should be gender sensitive since women's and men's reasons for smoking differ, and girls and boys have different motives for starting to smoke. Girls especially appear to be affected by a positive image of smoking, the desire to control their weight and the perception that smoking controls negative mood (194). In publicity about avoiding the exposure of others, especially children, to secondhand smoke, care should be taken not to increase guilt in mothers.

Though programmes addressing women smokers who are not pregnant are still rare in Europe, there have been some campaigns targeting women and girls, such as that to reach secondary-school girls and boys living in lower-income areas in the United Kingdom (Case study 11).

### Case study 11. The Cut Films project of the Deborah Hutton Campaign (United Kingdom)

Deborah Hutton was 12 when she smoked her first cigarette, 15 when she began to smoke regularly and 24 when she finally quit. In 2005, aged just 49, she died from stage-4 lung cancer.

As Health Editor of Vogue magazine, Deborah believed passionately that more should be done to educate young people, particularly girls, about the long-term effects of teenage smoking. After her death, with over 200 000 young people in the United Kingdom taking up smoking each year, Deborah's husband, a commercial film director, set up the Deborah Hutton Campaign to continue her work.

Cut Films is an anti-tobacco and anti-smoking project aimed at helping young people to learn about the consequences of smoking in a creative way, and to develop valuable, transferable skills.

#### How it works

The Cut Films national film competition, piloted in 2009, encourages young people to produce their own 2-minute short films or mini adverts to educate each other about smoking. The competition is flexible and girls can, and do, develop films that are relevant to their own concerns. Through a film competition such as this, with a website for voting, peer-to-peer tobacco education can be innovative, creative, and cost efficient.

Thousands of girls and boys enter the competition each year. They upload their films to the Cut Films website and have three weeks to share them with friends, family and the community, and campaign for votes. The films are also judged by a national team of film directors, tobacco-control academics and young people, and the winners are awarded prizes at a prestigious award ceremony.

The project provides a series of free, downloadable resources to teachers and youth workers who can deliver a work programme in schools and youth clubs, encouraging young people to work in a purposeful way. Working with local commissioners, like Lewisham Public Health and Hackney Public Health in London, a Cut Films youth worker delivers a local competition and a package of flexible workshops.

These include material for tobacco-related education, the film-production process and local campaigning (Fig. 14).

The sessions are interactive and target areas and schools where the children involved have often been excluded from mainstream schooling, and where there are higher levels of health inequalities. They include topical activities, which engage young girls in particular, such as using the pop singer, Rihanna, as a debate character. Resources include a film on plain packaging that illustrates how tobacco companies market to young girls.

Young people are actively involved in their local competition from designing promotional materials, joining a youth panel, meeting members of Parliament, and orchestrating public-relations events to coordinating a local awards ceremony, which can lead to a national arts award. Cut Films' local programmes are evaluated by an independent researcher.

#### Lessons learnt

Film-making puts young people on a level playing field. The new media provide a means of reaching them and shifting social norms. Young people want to have a say about the health services that affect them and this makes them powerful advocates at the local level.

#### *Further information can be obtained from:* Emma Wrafter

Deborah Hatton Campaign, United Kingdom Email: emma@cutfilms.org

#### Advertising, promotion and sponsorship (WHO FCTC Article 13)

The methods that have been used by the tobacco industry since the 1920s to market their products to the female population are described in Chapter 3. Article 13 of the WHO FCTC (2) and the guidelines on implementing it (140) call for a complete ban on all tobacco advertising, promotion and sponsorship. Enforcing such a ban, as a gender-neutral policy, would not only reduce smoking in most groups but would also play a vital role in hindering the promotion of tobacco to women as part of a gender-sensitive tobacco-control policy in Europe. Progress has been made on this front in the Region.

Countries of the Region have done well in restricting above-the-line advertising but have not tackled the below-the-line promotion of tobacco comprehensively, particularly with respect to advertising through point of sale, brand stretching, brand sharing,

Fig. 14. A student in Hackney, England, taking part in the Cut Films film-making process



© Cut Films.

product placement on television and in films, and the advertising of CSR programmes (16). Cigarette packaging is called the "silent salesman" for good reason: it has become one of the tobacco industry's leading promotional tools. In recent years, packs have been used primarily in two ways: as eyecatching individual items and in groups to create a large visual impact in shops. There is now substantial evidence to indicate that the latter-mentioned point-of-sale displays are very evident to children and contribute to normalizing tobacco as part of everyday life (195).

One of the most striking developments in tobacco marketing has been the expansion of brand families by creating new forms of the same brand. For example, in the United Kingdom, brand families have grown more than 50% since 1998. The most popular of them originally comprised four varieties; by 2012 this number had increased to 23. Several European countries, including Iceland, Ireland, Norway and the United Kingdom, have passed legislation to remove point-of-sale displays from sight. It was introduced in Ireland in 2005 and comprehensively evaluated a year later when compliance with and support of the ban, which had been high, were found to have decreased among adults and even more so among young people (13-25 years). In addition, the proportion of teenagers who believed that more than 20% of their peers were smokers had decreased from 62% to 46% (196). The tobacco industry's claims of substantial revenue losses and the closure of small retailers as a direct result of the legislation were not borne out by the data; according to the investigators, the effect of declining tobacco sales would likely span over a much longer period of time (197).

With the continuing curtailment of opportunities for promoting tobacco, the industry will persist in fighting for the means they have developed. In the United Kingdom (Scotland), a tobacco company challenged the legislation, claiming that the Scottish Parliament did not have the legal competence to ban displays and that to do so was a breach of the European free-trade rules. The case was taken all the way to the United Kingdom Supreme Court, but dismissed with the observation that equivalent measures had been adopted by Parliament for England and Wales. Case study 12 is about a similar case in Norway.

### Case study 12. The Norwegian ban on tobacco displays

In January 2010, Norway introduced a strict ban on tobacco displays at points of sale, rendering the 35-yearold advertising ban even more comprehensive. The rationale behind the ban was to reduce the exposure of young people to tobacco products and, consequently, to reduce their use of tobacco. This is especially important in view of the novelty shapes and colours of cigarette packs clearly aimed at attracting girls to smoking. As the explosion of this type of pack plays an important part in encouraging impulse purchases among women and girls, it was argued that eliminating them from sight could help to reduce this and, thereby, prevent relapses among former smokers. The ban was also regarded as a tool for denormalizing tobacco use.

A review carried out for the Norwegian Government in 2008, before the ban on tobacco displays was adopted, showed that the tobacco industry had invested considerable resources in developing pack designs communicating messages to consumers. It concluded that there was reason to assume that tobacco displays influence purchase on a par with advertising *(198)*.

In 2010, an international tobacco company filed a suit against the Government claiming that the tobacco-display ban constituted an unlawful restriction of the Agreement on the European Economic Area (EEA) (199) and, as a measure for protecting public health, was neither suitable nor necessary. The Oslo District Court disagreed: in 2012, it ruled that the display ban was not a trade restriction but a selling arrangement, equally affecting the marketing of domestic products and products from other EEA states. The Court further concluded that the ban was both suitable and necessary for protecting public health, and referred to WHO FCTC Article 13 (2) and its guidelines for implementation (140), which recommend a ban on tobacco displays. The tobacco company did not appeal.

#### How it works

No tobacco products, smoking accessories, tobacco imitations or surrogates may be visible to customers at retail outlets. The display ban covers all tobacco products and all retail outlets with the exception of tobacconist shops (Fig. 15).

According to an evaluation report, there was 97% compliance with the display ban immediately after its introduction (200). The report also indicated that, as a result of the ban, young people were more likely to find it difficult to choose a brand. The removal of to-bacco displays was perceived as a barrier to young people's access to tobacco products, affecting their attachment to cigarette brands and contributing to the denormalization of tobacco.

Fig. 15. A typical storage cupboard in a Norwegian tobacco retail store



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#### Lesson learnt

Research shows that there is a correlation between early exposure to the tobacco industry's advertising and the future smoking habits of youngsters. The prominent placement of tobacco products alongside everyday goods in stores contributes to the perception among children that tobacco use is commonplace and not dangerous. The indications in Norway, as in other countries, are that the removal of tobacco displays will contribute in the long term to a reduction in the use of tobacco among young people and the adult population alike *(201)*.

#### *Further information can be obtained from:* Helena Wilson Ministry of Health and Care Services, Norway

Email: helena.wilson@hod.dep.no

### Tobacco-cessation services and support (WHO FCTC Article 14)

Particular attention should be paid to the unique barriers women face in attempting to stop smoking, including fear of weight gain, the effects of hormonal and menstrual cycles, the risk of depression and the need for social support. Women also report using cigarettes more frequently when together with other women, implying that that group dynamics and a desire for socialization may hinder them in quitting. These factors demonstrate the need for gender-specific cessation programmes that target the quitting hurdles unique to women. Unless treatment and cessation services take these issues into consideration, women will be less likely to succeed in their efforts to quit tobacco.

There is also an urgent need to target services for disadvantaged women. In 2013, a review of studies on smoking-cessation services in Europe revealed that, in general, they increase inequality in smoking *(202)*. The exception is the United Kingdom's stop-smoking services, which target disadvantaged smokers. The reach of these services to groups with low socioeconomic status more than compensates for their relatively low success rates.

Telephone lines (quitlines), through which smokers can receive advice on quitting, represent an effective and cost-effective way of supporting cessation efforts. Although a call-back counselling service enhances the usefulness of a quitline, those without are also very effective (203). There is consistent evidence that women are over-represented in the numbers of quitline calls made (Case study 13) and that callers are likely to be young and heavily addicted (204). Recent research shows that only 13% of countries in the Region have quitlines (16), and that some of those in function are not sufficiently funded to provide adequate support to smokers wishing to quit.

In Romania, the quitline was the subject of a media campaign aimed at increasing public awareness of the service and targeting women. In 2007, the Eurobarometer Special Survey showed that, compared to smokers in EU25, smokers in Romania who had tried and failed to stop were less likely to say they went back to smoking because they "liked" it, but because they could not cope with the cravings caused by stopping. A 5-month indoor and outdoor media campaign in 2008-2009 encouraged women wishing to stop smoking to seek help through the quitline. Calls to the quitline more than doubled in the first month of the campaign and, falling only slightly in the following month, they remained high throughout the campaign period.

### Case study 13. Swedish national tobacco quitline: women's alternative (Sweden)

The Swedish national tobacco quitline (Sluta-rökalinjen) (Fig. 16) *(205)* is an integral part of the National Health Services. Established in 1998, it is run by the Stockholm County Council and financed mainly by the Swedish Government. The aim is to reach women in the low-income bracket and to develop a special programme for pregnant women. Between 70% and 80% of those registering for support are women.

#### How it works

The quitline service is available on weekdays for at least 50 hours a week. All incoming calls are registered for clinical and research purposes in a computer-based client registry. If someone calls when the service is closed, the caller is invited to send an email upon receipt of which a counsellor will call back. At 12-month follow-up, approximately 35–40% of callers report abstinence. The service has also been found to be a potentially effective complement to and resource for tobacco-cessation work in general practices and dental clinics.

#### Lessons learnt

Swedish women are more willing than men to seek and accept support for smoking cessation. They are also more likely than men to use medication to treat nicotine dependency.

#### *Further information can be obtained from:* Ann Post

Centre for Epidemiology and Community Medicine, Stockholm County Council, Sweden E-mail: ann.post@sll.se

Fig. 16. Swedish national tobacco quitline logo

### Stop-smoking services especially for women

Women can benefit from access to services especially geared to them, which provide information, for example, about healthy weight and how tobacco smoke affects their children, such as the stop-smoking services in Spain (Case study 14).

### Case study 14. Helping Catalonian women stop smoking (Spain)

The overall prevalence of female smokers in Spain is low and smoking is concentrated in certain population groups. Estimates indicate that, as in other European countries, lung cancer is increasing among women in Spain and that mortality from the disease will exceed that from breast cancer by 2015 *(32)*. Recent studies show that only 41% of Spanish women quit smoking when they become pregnant and that the prevalence of pregnant smokers at delivery is 18% *(206)*. Efforts have been made in the northern province of Catalonia to address the unique needs of female smokers and help them quit.

#### How it works

The Smoke Free Pregnancy Programme was implemented in Catalonia in 2006 (207). A structured intervention, it is delivered by professionals working in the area of maternal and child health and includes material to support both the professionals and the pregnant women. In 2013, an evaluation of the programme was carried out on a cohort of 493 pregnant smokers attending 18 sexual and reproductive health centres at conception for diagnosis, during the third trimester, and six and twelve months after the birth. The information collected included the following details about the patient: socio-demographic status; tobacco consumption; partner's tobacco consumption, passive smoking; and intention to guit. Some 14.8% of the pregnant smokers guit at the first visit and 39.5% in the third trimester; 29% were abstinent at six and twelve months after giving birth. Women who smoked an average of 14 cigarettes a day at the time of the first visit had reduced their consumption to four by the third trimester, but were back to eight at six and twelve months after giving birth.



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These results make it clear that being pregnant triggers the desire to quit smoking. A follow-up evaluation involving women nine months after they had given birth showed that the programme was effective in helping women quit smoking during pregnancy: one in four women were still abstinent a year after giving birth. However, there is still a need to reinforce interventions at the neonatal and paediatric stages.

#### Lessons learnt

It is necessary to develop prevention and treatment programmes with a gender perspective to curb the consequences of tobacco use on the health of women. These programmes must focus on the entire life situation of women and not just on pregnancy.

#### *Further information can be obtained from:* Mireia Jané

Catalan Public Health Agency, Generalitat de Catalunya, Spain Email: mireia.jane@gencat.cat Isabel Nerin Department of Medicine, Psychiatry and Dermatology

School of Medicine, Zaragoza University, Spain E-Mail: isabelne@unizar.es

#### Brief, opportunistic advice

Although the advice given by health professionals on ways to stop smoking has been discussed for over 30 years, the emphasis is currently on giving very brief advice (VBA). Health-care workers frequently cite the excessive time they need to counsel patients. VBA involves asking patients about their smoking habits and recording their smoking status at every visit, whether it is related to a tobacco-induced condition or not. According to the method developed by the National Centre for Smoking Cessation and Training in the United Kingdom, patients should be asked about their current smoking habits, advised that help to quit is available (free of charge since it is covered by the National Health Service), and provided options for immediate or later use as they wish (208). This is especially relevant for women who are more likely than men to visit health-care workers. The following example from Italy shows how the subject of smoking can be brought up during a cancer-screening programme (Case study 15).

# Case study 15. Counselling on smoking cessation delivered during screening for cervical cancer (Italy)

Counselling on smoking cessation delivered by midwives to female smokers during Pap-smear screening is an effective approach and should be recommended. This is the main conclusion of the Systolic Blood Pressure Intervention Trial (SPRINT), a randomized controlled study designed to evaluate counselling interventions on smoking cessation and physical activity for women attending screening programmes for cervical cancer in three Italian cities: Florence, Mantua and Turin *(209,210)*. This type of screening programme makes it possible to contact large numbers of young female smokers who, being generally healthy, have little need to contact general practitioners or other health personnel.

#### How it works

In a pilot of 5657 women undergoing the Pap-smear examination, 1100 (55% of which were smokers) were randomized into three study arms for: (1) smoking intervention (363); (2) smoking and physical activity intervention (366); and (3) control without counselling (371). There were no differences between the arms as regards characteristics (demographics, physical activity and tobacco use). The participants in the study were older and less educated than the nonparticipating women; they were also heavier smokers, more motivated to quit and more likely to have already made one or more quit attempts.

The participants that were randomized in the two intervention arms had more than doubled their likelihood of quitting at the 6-month follow-up. It would, therefore, appear that Pap-smear screening is an opportune occasion for midwives to counsel smokers about quitting. These results were consistent with those recorded in the meta-analysis on nurse-mediated smoking-cessation interventions in smokers who were not hospitalized (2013) (211).

#### Lessons learnt

Even though the proportion of women likely to become long-term quitters as a result of a midwife-mediated intervention during cervical-cancer screening is likely to be small (8%), the effect could be important in countries or areas where participation in cervicalcancer-screening programmes is high. In Italy, for example, the annual participation of smokers in such programmes has been 300 000 in recent years (*212*).

Further information can be obtained from: Elisabetta Chellini Institute for Study and Prevention of Cancer, Florence, Italy Email: e.chellini@ispo.toscana.it

Women are known to be more likely than men to seek help and support in their efforts to stop smoking. Smoking cessation is also the area in connection with which we found most examples of programmes or services in Europe targeted at women. Though pregnancy and the early years of children's lives are periods when it is extremely important for women not to smoke, such support should also be available to women at other stages of their lives.

# Conclusions

The threat of tobacco to the health of girls and women in Europe is grave. The prevalence of female smoking in the European Region is higher than in any of the other WHO regions and, in some countries, it is increasing. WHO data reveal that adolescent smoking is also alarmingly high, principally in central and eastern Europe, and that girls smoke more than boys. There are new nicotine products on the European market – including water pipes and e-cigarettes – that show signs of appealing to the young. These products are relatively unregulated and many fear that they will be used by the tobacco companies to undercut what little regulation there is on the most dangerous consumer product ever devised – the cigarette.

That the marketing methods used by tobacco companies are cynical in the extreme has been known for many years; the information in this report indicates that, despite the rhetoric, nothing has been done to change that. When targeting women, tobacco companies seek opportunities to associate their products with empowerment, glamour and success whereas, in truth, they deliver the opposite.

To make any progress towards, and reach, the global voluntary target of 30% reduction in tobacco use by 2025, countries and WHO should act resolutely to integrate the gender perspective into all tobacco-control policy-making and implementation. WHO FCTC (2) is an excellent tool for preventing the increase of and reducing current tobacco use among women and girls in Europe. It gives us the opportunity to work together to lower NCD rates globally. The highlevel delegations participating in the WHO European Ministerial Conference on the Prevention and Control of Noncommunicable Diseases in the Context of Health 2020 held in Ashgabat, Turkmenistan, in 2013, clearly recognized the discrepancy between the high level of WHO FCTC ratifications and the low level of implementation. The European Member States should renew their efforts to implement the policies endorsed in the WHO FCTC (2) and its guidelines for implementation (140) to the highest degree. This can only be achieved through the:

- active participation and leadership of women in tobacco-control policy-making and implementation at the national and subnational levels;
- incorporation of a gender perspective in all tobacco-control policies and action to implement them;

 gender-responsive planning and the monitoring and evaluation of sex-, gender- and socioeconomic-specific information on tobacco use and the effects of tobacco-control policy measures.

Possible ways of incorporating the gender perspective in all tobacco-control policy-making and of fulfilling WHO FCTC obligations could be to:

- enact and enforce legislation requiring that all indoor workplaces and public places, including public transport, be classified as 100% smokefree environments;
- empower everyone to claim protection from second-hand smoke through gender-specific education;
- ensure that, in non-EU countries, cigarettes and other tobacco products are not attractive to women, for example, by banning flavouring agents;
- make it a requirement that tobacco companies, including importers, disclose any novel design features, such as menthol crush capsules, to governmental authorities;
- implement large, visible, regularly changed, gender-specific, pictorial health warnings and messages about the risks of tobacco, that address not only pregnant women but also women and men in general;
- protect young people, especially girls, from tobacco advertising as a vital step towards implementing a comprehensive ban on all direct and indirect tobacco advertising, promotion and sponsoring (including cross-border);
- introduce a ban on advertising at points of sale and eliminate the "silent salesman" effect of packaging by making plain packaging a requirement;
- introduce an education and communication approach to increasing public awareness and support, and enforce effective tobacco-control policies with a gender-specific approach;
- ensure the availability of, and access to, treatment services for tobacco dependence, and train

professionals in these services to take sex and gender issues into account;

- take local needs into consideration in targeting services, for example, to low-income smokers.
- focus not only on the health of the fetus in tobacco-control messages related to pregnancy, but also on that of the mother.

# References

- Empower women. Combating tobacco industry marketing in the WHO Europeran Region. Copenhagen: World Health Organization; 2010 (http://www.euro.who.int/\_\_data/assets/ pdf\_file/0014/128120/e93852.pdf, accessed 17 September 2014).
- WHO Framework Convention on Tobacco Control. Geneva: World Health Organization; 2003 (http://www.who.int/fctc/text\_download/en/, accessed 17 August 2014).
- Convention on the Elimination of All Forms of Discrimination against Women. New York: United Nations; 1979 (http://www.un.org/womenwatch/daw/cedaw/, accessed 17 August 2014).
- Convention on the Rights of the Child. New York: United Nations; 1989 (http://www.ohchr. org/en/professionalinterest/pages/crc.aspx, accessed 17 August 2014).
- Political declaration of the High-level Meeting of the UN General Assembly on the Prevention and Control of Non-communicable Diseases. New York: United Nations; 2011 (http://www. growyourwellness.com/tools/advocacy-resources/political-declaration-high-level-meeting-ungeneral-assembly-prevention-and, accessed 17 August 2014).
- Global status report on noncommunicable diseases 2010. Geneva: World Health Organization; 2011 (http://www.who.int/nmh/publications/ncd\_report2010/en/, accessed 17 August 2014).
- Ashgabat Declaration on the Prevention and Control of Noncommunicable Diseases in the Context of 2020. Copenhagen: WHO regional Office for Europe; 2013 (http://www.euro.who. int/\_\_data/assets/pdf\_file/0010/236188/Ashgabat-Declaration-4-December-2013-Eng.pdf, accessed 24 August 2014).
- WHO report on the global tobacco epidemic, 2013: enforcing bans on tobacco advertising, promotion and sponsorship. Geneva: World Health Organization, 2013 (http://www.who.int/ tobacco/global\_report/2013/en/index.html, accessed 17 August 2014).

- 9. Graham H. When life's a drag women, smoking and disadvantage. London: Department of Health; 1993.
- WHO report on the global tobacco epidemic, 2013. Country profile, Denmark. Geneva: World Health Organization; 2013 http://www.who.int/ tobacco/surveillance/policy/country\_profile/dnk. pdf?ua=1, accessed 24 August 2014).
- WHO report on the global tobacco epidemic, 2013. Country profile, Ireland. Geneva: World Health Organization; 2013 (http://www.who.int/ tobacco/surveillance/policy/country\_profile/irl. pdf?ua=1, accessed 18 August 2014).
- WHO Report on the Global Tobacco Epidemic, 2013. Country profile, United Kingdom of Great Britain and Northern Ireland. Geneva: World Health Organization; 2013 (http://www.who.int/ tobacco/surveillance/policy/country\_profile/gbr. pdf?ua=1, accessed 18 August 2014).
- Tobacco control country profiles [website]. Geneva: World Health Organization; 2013 (http://www.who.int/tobacco/surveillance/policy/country\_profile/en/, accessed 18 August 2014).
- 14. Prevalence of tobacco use among adults and adolescents [website]. Geneva: World Health Organization; 2012 http://gamapserver.who.int/gho/interactive\_charts/tobacco/use/atlas.html, accessed 18 August
- TNS Opinion & Social. Attitudes of Europeans towards tobacco. Special report. Eurobarometer 385, Wave EB77.1. Brussels: European Commission; 2012 (http://ec.europa.eu/public\_opinion/archives/ebs/ebs\_385\_en.pdf, accessed 18 August 2014).
- European tobacco control status report 2013. Copenhagen: WHO Regional Office for Europe, 2013 (http://www.euro.who.int/en/health-topics/ disease-prevention/tobacco/publications/2013/ european-tobacco-control-status-report-2013, accessed 18 August 2014).
- 17. Gender, women, and the tobacco epidemic. Geneva: World Health Organization, 2010 (http://www.who.int/tobacco/publications/gen-

der/women\_tob\_epidemic/en/, accessed 18 August 2014).

- Global youth tobacco survey (GYTS) [website]. Geneva: World Health Organization; 2013. http://www.who.int/tobacco/surveillance/gyts/ en/, accessed 18 August 2014).
- Kills when used as prescribed tobacco industry successfully targets girls with new marketing tactics. 30 May 2012. Copenhagen: WHO Regional Office for Europe; 2012 (http:// www.euro.who.int/en/media-centre/sections/ press-releases/2012/05/kills-when-used-asprescribed-tobacco-industry-successfully-targets-girls-with-new-marketing-tactics,accessed 18 August 2014).
- Gilmore A. Tobacco and transition: background paper on smoking patterns and industry conduct in the former Soviet Union. London: London School of Hygiene and Tropical Medicine; 2007 (http://www.promocjazdrowia.pl/images/ stories/TICI/materialy/Anna%20Gilmore%20full. pdf, accessed 18 August 2014).
- Gilmore A et al. Prevalence of smoking in 8 countries of the former Soviet Union: results from the living conditions, lifestyles and health study. 2004. American Journal of Public Health;94:2177-2187 (http://www.ncbi.nlm.nih. gov/pmc/articles/PMC1448609/, accessed 18 August 2014).
- Global estimate of the burden of disease from second-hand smoke. Geneva: World Health Organization; 2011 (http://www.who.int/tobacco/ publications/second\_hand/global\_estimate\_burden\_disease/en/, accessed 18 August 2014).
- Pirie K et al. The 21st century hazards of smoking and benefits of stopping: a prospective study of one million women in the UK.
   Lancet. 2013; 381(9861):133-41 (http://www. thelancet.com/journals/lancet/article/PIIS0140-6736(12)61720-6/fulltext, accessed 20 September 2014).
- Smith CJ et al. Percutaneous penetration enhancers in cigarette mainstream smoke. Food Chemical Toxicology. 2004;42:9-15 (http:// www.sciencedirect.com/science/article/pii/ S0278691503002333, accessed 18 August 2014).
- 25. The health consequences of involuntary exposure to tobacco smoke: a report of the Surgeon General. Atlanta, GA; US Department of

Health and Human Services; 2006 (http://www. surgeongeneral.gov/library/reports/secondhandsmoke/index.html, accessed 18 August 2014).

- WHO report on the global tobacco epidemic, 2009: implementing smoke-free environments. Geneva: World Health Organization; 2009 (http://www.who.int/tobacco/mpower/2009/ en/, accessed 18 August 2014).
- 27. Peters SA, Huxley RR, Woodward M. Smoking as a risk factor for stroke in women compared with men: A systematic review and meta-analysis of 81 cohorts, Including 3 980 359 Individuals and 42 401 strokes. Stroke. 2013;44: 2821-28 (http://stroke.ahajournals. org/content/44/10/2821.long, accessed 18 August 2014).
- 28. US Department of Health and Human Services. The health consequences of smoking: a report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services; 2004 (http://www.surgeongeneral.gov/library/reports/ smokingconsequences/index.html, access3ed 18 August 2014).
- 29. World Health Organization, International Union Against Tuberculosis and Lung Disease. A WHO/The Union monograph on TB and tobacco control: joining efforts to control two related global epidemics. Geneva: World Health Organization; 2007 (http://whqlibdoc.who.int/ publications/2007/9789241596220\_eng.pdf, accessed 18 August 2014).
- Feldman C, Anderson R. Cigarette smoking and mechanisms of susceptibility to infections of the respiratory tract and other organ systems. Journal of Infection. 2013;67:169-184 (http://www.journalofinfection.com/article/ S0163-4453(13)00129-1/abstract, accessed 18 August 2014).
- German Cancer Research Center (DKFZ). Tabakatlas Deutschland 2009 [Tobacco Atlas Germany 2009]. Heidelberg: Steinkopff Verlag; 2009 (http://www.dkfz.de/de/tabakkontrolle/ download/Publikationen/sonstVeroeffentlichungen/Tabakatlas\_2009.pdf, accessed 18 August 2014).
- Malvezzi M et al. European cancer mortality predictions for the year 2013. Annals of Oncology. 2013;24:92-800 (http://annonc.oxfordjournals. org/content/early/2013/02/11/annonc.mdt010. full.pdf+html, accessed 18 August 2014).

- Verbreitung von Krebserkrankungen in Deutschland. Entwicklung der Prävalenzen zwischen 1990 und 2010. Beiträge zur Gesundheitsberichterstattung des Bundes [Prevalence development between 1990 and 2010: contributions to the Federal Health Monitoring System]. Berlin: Robert Koch-Institut; 2010 (http://www.rki.de/Krebs/SharedDocs/Downloads/Krebspraevalenz.pdf;jsessionid=373196C AC41CC8D222A20841AFEF955A.2\_cid298?\_\_ blob=publicationFile, accessed 18 August 2014).
- Ferlay J et al. Cancer incidence and mortality patterns in Europe: estimates for 40 countries in 2012. European Journal of Cancer. 2013;49:1374-1403 (http://www.ncbi.nlm.nih. gov/pubmed/23485231, accessed 18 August 2014).
- Bosetti C, Malvezzi M, Rosso T, Bertuccio P, Gallus S, Chatenoud L, et al. Lung cancer mortality in European women: trends and predictions. Lung Cancer. 2004;78:171-78.
- Ekblad M et al. Trends and risk groups for smoking during pregnancy in Finland and other Nordic countries. European Journal of Public Health. 2014;24(4):544-51.
- 37. Villalbi JR et al. Maternal smoking, social class and outcomes of pregnancy. Paediatric Perinatal Epidemiology. 2007;21(5):441-47 (http:// onlinelibrary.wiley.com/doi/10.1111/j.1365-3016.2007.00845.x/abstract;jsessionid=9C5A 8F0D369154601D21689C99CB654F.f01t04, accessed 18 August 2014).
- Hackshaw A, Rodeck C, Boniface S. Maternal smoking in pregnancy and birth defects: a systematic review based on 173 687 malformed cases and 11.7 million controls. Human Reproduction Update. 2011;17:589-604 (http://humupd.oxfordjournals.org/content/early/2011/07/09/humupd.dmr022.full, accessed 18 August 2014).
- Iniguez C et al. Maternal smoking during pregnancy and fetal biometry: the INMA mother and child cohort study. American Journal of Epidemiology. 2013;178:1067-75
- 40. Lee LJ, Lupo PJ. Maternal smoking during pregnancy and the risk of congenital heart defects in offspring: a systematic review and metaanalysis. Pediatric Cardiology. 2013;34:398-407.

- 41. Rogers JM. Tobacco and pregnancy. Reproductive Toxicology. 2009;28:152-60.
- 42. Schick SF et al. Thirty minute-exposure to aged cigarette smoke increases nasal congestion in nonsmokers. Journal of Toxicology and Environmental Health. 2013;76:601-613.
- 43. World Health Organization, International Agency for Research on Cancer. IARC Monographs on the evaluation of the carcinogenic risks to humans. Vol. 83: Tobacco smoke and involuntary smoking. Lyon: International Agency for Research on Cancer; 2004 (http://monographs. iarc.fr/ENG/Monographs/vol83/index.php, accessed 18 August 2014).
- Raupach T et al. Secondhand smoke as an acute threat for the cardiovascular system: a change in paradigm. European Heart Journal. 2006;27:386-392 (http://eurheartj.oxfordjournals.org/content/27/4/386.long, accessed 18 August 2014).
- 45. Miller MD et al. The association between exposure to environmental tobacco smoke and breast cancer: a review by the California Environmental Protection Agency. Preventive Medicine. 2007;44(2):93-106.
- Exposure of children to second-hand tobacco smoke. Fact Sheet 3.4, Code: RPG3\_Air\_Ex2. Copenhagen: WHO Regional Office for Europe; 2009 (http://www.euro.who.int/\_\_data/assets/ pdf\_file/0020/97004/3.4-Exposure-of-childrento-second-hand-smoke-EDITED\_layouted.pdf, accessed 18 August 2014).
- Yolton K et al. Exposure to environmental tobacco smoke and cognitive abilities among U.S. children and adolescents. Environmental Health Perspectives. 2005;113:98-103 (http://www. ncbi.nlm.nih.gov/pmc/articles/PMC1253717/, accessed 18 August 2014).
- Chen R et al. Is exposure to secondhand smoke associated with cognitive parameters of children and adolescents? A systematic literature review. Annals of Epidemiology. 2013;23:652-61 (http:// www.annalsofepidemiology.org/article/S1047-2797(13)00271-8/fulltext, accessed 18 August 2014).
- 49. Benowitz NL. Pharmacology of nicotine: addiction, smoking-induced disease, and therapeutics. Annual Review of Pharmacology and Toxicology. 2009;49:57-71 (http:// www.annualreviews.org/doi/abs/10.1146/

annurev.pharmtox.48.113006.094742?url\_ ver=Z39.88-2003&rfr\_dat=cr\_ pub%3Dpubmed&rfr\_id=ori%3Arid%3Acrossref. org&journalCode=pharmtox, accessed 18 August 2014).

- 50. Heredia Pi I, Wirtz VJ. Background paper 6.17 - Tobacco use. In: Kaplan W, Wirtz VJ, Mantel-Teeuwisse A, Stolk P, Duthey B, Laing R. Priority medicines for Europe and the world: "A public health approach to innovation". Geneva: World Health Organization; 2013 (http://www.who. int/medicines/areas/priority\_medicines/MasterDocJune28\_FINAL\_Web.pdf, accessed 24 November 2014).
- 51. Hughes JR, Helzer JE, Lindberg SA. Prevalence of DSM/ICD-defined nicotine dependence. Drug and Alcohol Dependence. 2006;85:91-102.
- 52. Perkins KA et al. Negative mood effects on craving to smoke in women versus men. Addictive Behaviors. 2013;38:1527-31.
- 53. Benowitz NL & Hatsukami D (1998) Gender differences in the pharmacology of nicotine addiction. Addiction Biology. 3:383-404.
- 54. Pauly JR. Gender differences in tobacco smoking dynamics and the neuropharmacological actions of nicotine. Frontiers in Bioscience. 2008;13:505-16 (http://www.bioscience. org/2008/v13/af/2696/fulltext.htm, accessed 18 August 2014).
- 55. DiFranza JR et al. Development of symptoms of tobacco dependence in youths: 30 month follow up data from the DANDY study. Tobacco Control. 2002;11(3):228-35 (http://tobaccocontrol.bmj.com/content/11/3/228.long, accessed 18 August 2014).
- Bostock Y. Searching for the solution women, smoking and inequalities in Europe. International Network of Women against Tobacco – Europe. London: Health Development Agency; 2003 (http://personales.unican.es/ayestaf/esh/Women,%20smoking%20and%20inequalities%20 in%20Europe.pdf, accessed 19 September 2014).
- 57. DiFranza JR et al. Susceptibility to nicotine dependence: the Development and Assessment of Nicotine Dependence in Youth 2 study. Pediatrics. 2007;120(4):e974-83.
- 58. Kandel DB et al. On the development of nicotine dependence in adolescence. Drug and Alcohol

Dependence. 2007;91(1):26-39 (http://www. ncbi.nlm.nih.gov/pmc/articles/PMC2042038/, accessed 18 August 2014).

- Fox HC, Sinha R. Sex differences in drugrelated stress-system changes: implications for treatment in substance-abusing women. Harvard Review of Psychiatry. 2009;17(2):103-19 (http://www.ncbi.nlm.nih.gov/pmc/articles/ PMC2746371/, accessed 18 August 2014).
- 60. Wetter DW et al. Gender differences in smoking cessation. Journal of Consulting and Clinical Psychology.1999;67:555-62.
- Stroud LR et al. Prenatal glucocorticoids and maternal smoking during pregnancy independently program adult nicotine dependence in daughters: a 40-year prospective study. Biological Psychiatry. 2013;75(1):47-55.
- 62. Schnoll RA, Patterson F, Lerman C. Treating tobacco dependence in women. Journal of Womens Health (Larchmt). 2007;16(8):1211-18.
- 63. Clark MM et al. The prevalence of weight concerns in a smoking abstinence clinical trial. Addictive Behaviors. 2006;31(7):1144-52.
- 64. Filozof C, Fernandez Pinilla MC, Fernandez-Cruz A. Smoking cessation and weight gain. Obesity Reviews. 2004;5:95-103.
- 65. Pisinger C, Jorgensen T. Waist circumference and weight following smoking cessation in a general population: the Inter99 study. Preventive Medicine. 2007;44(4):290-295.
- Shiffman S, Paton SM. Individual differences in smoking: gender and nicotine addiction. 1999;1(Suppl 2):S153-7; discussion S165-6.
- 67. Flegal KM et al. The influence of smoking cessation on the prevalence of overweight in the United States. The New England Journal of Medicine. 1995;333:1165-70 (http://www.nejm. org/doi/full/10.1056/NEJM199511023331801, accessed 21 August 2014).
- Williamson DF et al. Smoking cessation and severity of weight gain in a national cohort. The New England Journal of Medicine. 1991;324: 739-45 (http://www.nejm.org/doi/full/10.1056/ NEJM199103143241106, accessed 21 August 2014).

- 69. Hoch E et al. How prevalent is smoking and nicotine dependence in primary care in Germany? Addiction. 99: 2004;1586-98.
- Bjornson W et al. Gender differences in smoking cessation after 3 years in the Lung Health Study. American Journal of Public Health. 1995;85: 223-30 (http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1615316/pdf/amjph00440-0081.pdf, accessed 21 August 2014).
- Bohadana A et al. Gender differences in quit rates following smoking cessation with combination nicotine therapy: influence of baseline smoking behavior. Nicotine & Tobacco Research. 2003;5:111-6.
- Brose LS et al. What makes for an effective stop-smoking service? Thorax. 2011;66:924-6 (http://thorax.bmj.com/content/early/2011/06/27/thoraxjnl-2011-200251.full, accessed 21 August 2014).
- Esterlis I et al. Sex-specific differences in GABA(A)-benzodiazepine receptor availability: relationship with sensitivity to pain and tobacco smoking craving. Addiction Biology. 2013;18:370-8.
- Jarvis M. Gender differences in smoking cessation: real or myth? Tobacco Control. 1994;3: 324-8 (http://www.ncbi.nlm.nih.gov/pmc/ articles/PMC1759379/pdf/v003p00324.pdf, accessed 21 August 2014).
- 75. Lynch WJ, Sofuoglu M. Role of progesterone in nicotine addiction: evidence from initiation to relapse. Experimental and Clinical Psychopharmacoly. 2010;18:451-61.
- Perkins KA, Scott J. Sex differences in long-term smoking cessation rates due to nicotine patch. Nicotine & Tobacco Research. 2008;10:1245-50.
- Scharf D, Shiffman S. Are there gender differences in smoking cessation, with and without bupropion? Pooled- and meta-analyses of clinical trials of Bupropion SR. Addiction. 2004;99:1462-9.
- Jarvis MJ et al. Dispelling myths about gender differences in smoking cessation: population data from the USA, Canada and Britain. Tobacco Control. 2013;22:356-60.
- 79. Czogala J et al. Assessment of passive exposure to aerosol from electronic cigarettes. Pres-

entation at the 2013 International Meeting of the Society for Research on Nicotine and Tobacco (SRNT) Conference, Boston, MA, USA, 13-16 March 2013. Madison, WI: SRNT, 2013.

- 80. Electronic cigarettes an overview. Heidelberg: German Cancer Research Center (DKFZ); 2013 (http://www.dkfz.de/de/tabakkontrolle/download/Publikationen/RoteReihe/Band\_19\_e-cigarettes\_an\_overview.pdf, accessed 21 August 2014).
- Pellegrino RM et al. Electronic cigarettes: an evaluation of exposure to chemicals and fine particulate matter (PM). Annali di Igiene. 2012;24:279-88.
- Williams M et al. Metal and silicate particles including nanoparticles are present in electronic cigarette cartomizer fluid and aerosol. PLOS One. 2013;8:e57987 (http://www.plosone.org/ article/info%3Adoi%2F10.1371%2Fjournal. pone.0057987, accessed 21 August 2014).
- Etter JF. Electronic cigarettes: a survey of users. BMC Public Health. 2010;10:231 (http://www. biomedcentral.com/1471-2458/10/231, accessed 21 August 2014).
- 84. Bullen C et al. Effect of an electronic nicotine delivery device (e cigarette) on desire to smoke and withdrawal, user preferences and nicotine delivery: randomised cross-over trial. Tobacco Control. 2010;19:98-103.
- 85. Eissenberg T. Electronic nicotine delivery devices: ineffective nicotine delivery and craving suppression after acute administration. Tobacco Control. 2010;19:87-8.
- Vansickel AR et al. A clinical laboratory model for evaluating the acute effects of electronic "cigarettes": nicotine delivery profile and cardiovascular and subjective effects. Cancer Epidemiology Biomarkers & Prevention. 2010;19:1945-53 (http://cebp.aacrjournals.org/ content/19/8/1945.long, accessed 21 August 2014).
- Bullen C et al. Electronic cigarettes for smoking cessation: a randomised controlled trial. The Lancet. 2013;282(9905):1629-37 (http:// www.thelancet.com/journals/lancet/article/ PIIS0140-6736(13)61842-5/abstract, accessed 21 August 2014).
- Action on Smoking and Health (ASH) Fact Sheet, July 2014. Use of e-cigarettes in Great

Britain. London, ASH, 2014 (http://www.ash. org.uk/files/documents/ASH\_891.pdf, accessed 21 August 2014).

- 89. Dawkins L et al. 'Vaping' profiles and preferences: an online survey of electronic cigarette users. Addiction. 2013;108:1115-25.
- 90. Kralikova E et al. The electronic cigarette: what proportion of smokers have tried it and how many use it regularly? Addiction. 2012;107(8):1528-9.
- 91. Kralikova E et al. Do e-cigarettes have the potential to compete with conventional cigarettes? A survey of conventional cigarette smokers' experiences with e-cigarettes. Chest. 2013;144(5):1609-14.
- 92. Pudle I, Velika B, Grinberga D. Latvia 2011 Country Report - Global Youth Tobacco Survey (GYTS). Riga: Centre for Disease Prevention and Control of Latvia; 2011 (http://www.spkc. gov.lv/file\_download/1136/Global\_Youth\_Tobacco\_Survey\_in\_Latvia\_2011.pdf, accessed 19 December 2014).
- 93. Ministry of Social Affairs and Health Finland, National Institute for Health and Welfare Finland, World Health Organization, Department of Health & Human Services USA, Centers for Disease Control and Prevention. Global Youth Tobacco Survey (GYTS). Fact Sheet Finland 2012. Helsinki: Ministry of Social Affairs and Health; 2012 (http://www.julkari.fi/bitstream/ handle/10024/116017/Finland%20GYTS%20 2012%20Factsheet%20(Ages%2013-15)%20 Final.pdf?sequence=1, accessed 21 August 2014).
- Dautzenberg B et al. E-cigarette: a new tobacco product for schoolchildren in Paris. Open Journal of Respiratory Diseases. 2013;3: 21-4 (http://www.scirp.org/journal/PaperInformation. aspx?PaperID=28003, accessed 19 December 2014).
- 95. Demjén T et al. Short overview of measures and studies relating to the 2012 amendments of the Act on the Protection of Non-Smokers in Hungary, and recommendation about the impact assessment of the Act. Budapest: National Institute for Health Development; 2013 (http:// www.fokuszpont.dohanyzasvisszaszoritasa. hu/en/content/situation-hungary, accessed 21 August 2014).

- 96. Goniewicz ML, Lingas EO, Hajek P. Patterns of electronic cigarette use and user beliefs about their safety and benefits: an Internet survey. Drug & Alcohol Review. 2013;32(2):133-40 (http://www.ncbi.nlm.nih.gov/pmc/articles/ PMC3530631/, accessed 21 August 2014).
- Goniewicz ML, Zielinska-Danch W. Electronic cigarette use among teenagers and young adults in Poland. Pediatrics. 2012;130(4):e879-85 (http://pediatrics.aappublications.org/ content/130/4/e879.long, accessed 21 August 2014).
- Rapport et avis d'experts sur l'e-cigarette [Report and opinion of experts on the ecigarette]. Paris: Office Français de Prévention du Tabagisme; 2013 (http://www.ladocumentationfrancaise.fr/var/storage/rapports-publics/134000328/0000.pdf, accessed 21 August 2014).
- 99. Directive 2014/40/EU of the European Parliament and of the Council of 3 April 2014 on the approximation of the laws, regulations and administrative provisions of the Member States concerning the manufacture, presentation and sale of tobacco and related products and repealing Directive 2001/37/EC. In: Official Journal of the European Union, L 127/1. Brussels: European Union; 2014 (http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L\_.2014.127.01.0001.01.ENG, accessed 21 August 2014).
- 100. Advisory note. Waterpipe tobacco smoking: health effects, research needs and recommended actions by regulators. WHO Study Group on Tobacco Product Regulation (TobReg). Geneva: World Health Organization; 2005 (http://www. who.int/tobacco/global\_interaction/tobreg/ Waterpipe%20recommendation\_Final.pdf, 21 August 2014).
- 101. Gatrad R, Gatrad A, Sheikh A. Hookah smoking. BMJ. 2007;335:20.
- 102. Al Ali R et al. A comparative study of systemic carcinogen exposure in waterpipe smokers, cigarette smokers and non-smokers. Tobacco control. 2013.
- 103. Eissenberg T, Shihadeh A. Waterpipe tobacco and cigarette smoking: direct comparison of toxicant exposure. American Journal of Preventive Medicine. 2009;37(6):518-23 (http://www. ncbi.nlm.nih.gov/pmc/articles/PMC2805076/, accessed 21 August 2014).

- 104. Jacob P et al. Comparison of nicotine and carcinogen exposure with water pipe and cigarette smoking. Cancer Epidemiology, Biomarkers & Prevention. 2013;22:765-72 (http://cebp.aacrjournals.org/content/22/5/765.long, accessed 21 August 2014).
- 105. Schubert J et al. Mainstream smoke of the waterpipe: does this environmental matrix reveal as significant source of toxic compounds? Toxicology Letters. 2011;205(3):279-84.
- Akl EA et al. The effects of waterpipe tobacco smoking on health outcomes: a systematic review. International Journal of Epidemiology. 2010;39(3):834-57 (http://ije.oxfordjournals.org/ content/39/3/834.long, accessed 21 August 2014).
- 107. Knishkowy B, Amitai Y. Water-pipe (narghile) smoking: an emerging health risk behavior. Pediatrics. 2005;116(1):e113-9 (http://pediatrics.aappublications.org/content/116/1/e113. full, accessed 21 August 2014).
- 108. Maziak W et al. CO exposure, puff topography, and subjective effects in waterpipe tobacco smokers. Nicotine & Tobacco Research. 2009;11(7):806-11 (http://www.ncbi.nlm.nih. gov/pmc/articles/PMC2699927/, accessed 21 August 2014).
- Rastam S et al. Comparative analysis of waterpipe and cigarette suppression of abstinence and craving symptoms. Addictive Behaviors. 2011;36(5):555-9 (http://www.ncbi.nlm.nih. gov/pmc/articles/PMC3061840/, accessed 21 August 2014).
- 110. Jawad M et al. Waterpipe smoking: prevalence and attitudes among medical students in London. International Journal of Tuberculosis and Lung Disease. 2013;17(1): 137-140.
- 111. Ministry of Health of Turkey, Public Health Institution of Turkey. Global Adult Tobocco Survey Turkey 2012. Ankara: Ministry of Health; 2014 (http://www.who.int/tobacco/surveillance/survey/gats/report\_tur\_2012.pdf?ua=1, accessed 21 August 2014).
- 112. Global Adult Tobocco Survey (GATS). Report. Ukraine 2010. Kyiv: Ministry of Health of Ukraine; 2010 (http://www.who.int/tobacco/surveillance/en\_tfi\_gats\_ukraine\_report\_2010. pdf, accessed 21 August 2014)

- Jensen PD et al. Waterpipe use predicts progression to regular cigarette smoking among Danish youth. Substance Use & Misuse. 2010;45(7-8):1245-61.
- 114. Tobacco habits. Stockholm: Swedish National Institute of Public Health; 2013.
- 115. Scientific Committee on Emerging and Newly Identified Health Risks (SCENIHR) (2008).
  Health effects of smokeless tobacco products.
  Brussels: European Commission; 2008 http:// ec.europa.eu/health/ph\_risk/committees/04\_ scenihr/docs/scenihr\_o\_013.pdf
- 116. Ashley DL et al. The scientific basis of tobacco product regulation. Report of a WHO Study Group. Geneva: World Health Organization; 2007 (WHO Technical Report Series, No. 945; http://www.who.int/tobacco/global\_interaction/ tobreg/who\_tsr.pdf, accessed 22 August 2014).
- Benowitz NL. Nicotine and smokeless tobacco. CA: A Cancer Journal for Clinicians. 1988;38:244-7.
- Benowitz NL. Snuff, nicotine and cardiovascular disease: implications for tobacco control. Journal of the American College of Cardiology. 1999;34(6):1791-3.
- 119. Benowitz NL. Nicotine addiction. New England Journal of Medicine. 2010;362(24):2295-303 (http://www.ncbi.nlm.nih.gov/pmc/articles/ PMC2928221/, accessed 22 August 2014).
- 120. Holm H et al. Nicotine intake and dependence in Swedish snuff takers. Psychopharmacology (Berl). 1992;108(4):507-11.
- 121. Ebbert JO, Carr AB, Dale LC. Smokeless tobacco: an emerging addiction. The Medical Clinics of North America. 2004;88(6):1593-605.
- 122. Post A et al. Symptoms of nicotine dependence in a cohort of Swedish youths: a comparison between smokers, smokeless tobacco users and dual tobacco users. Addiction. 2010;105(4):740-6.
- 123. TNS Opinion & Social. Tobacco. Special Eurobarometer 332, Wave 72.3. Brussels: European Commission; 2010 (http://ec.europa.eu/public\_opinion/archives/ebs/ebs\_332\_en.pdf, accessed 22 August 2014).
- 124. Lundqvist G et al. Patterns of tobacco use: a 10-year follow-up study of smoking and snus

habits in a middle-aged Swedish population. Scandinavian Journal of Public Health. 2009;37:161-7.

- 125. Patja K et al. Trends of tobacco use in Sweden and Finland: do differences in tobacco policy relate to tobacco use? Scandinavian Journal of Public Health. 2009;37:153-60.
- 126. Australian Government, Australian Institute of Health and Welfare. 2010 National Drug Strategy Household Survey report. Canberra: Australian Institute of Health and Welfare; 2011 (Drug Statistics Series, No. 25; http:// www.aihw.gov.au/WorkArea/DownloadAsset. aspx?id=10737421314, accessed 22 August 2014).
- 127. Alpert HR, Koh H, Connolly GN. Free nicotine content and strategic marketing of moist snuff tobacco products in the United States: 2000-2006. Tobacco Control. 2008;17(5):332-8.
- 128. Mejia AB, Ling PM. Tobacco industry consumer research on smokeless tobacco users and product development. American Journal of Public Health. 2010;100(1):78-87 (http://www. ncbi.nlm.nih.gov/pmc/articles/PMC2791252/, accessed 22 August 2014).
- 129. Amos A, Haglund M. From social taboo to "torch of freedom": the marketing of cigarettes to women. Tobacco Control. 2000;9:3-8 (http:// tobaccocontrol.bmj.com/content/9/1/3.full, accessed 22 August 2014).
- Amos A, Mackay J. Tobacco and women. In: P. Boyle et al, editors. Tobacco: science, policy and public health. Oxford: Oxford University Press; 2004;329-51.
- Tobacco Control Database for the WHO European Region [online database]. Geneva: World Health Organization; 2014 (http://data.euro. who.int/Tobacco/, accessed 22 August 2014).
- Effertz T, Kaiser C. Die MAYBE-Kampagne von Philip Morris – Verbotenes Jugendmarketing! [The MAYBE campaign by Philip Morris - forbidden youth marketing]. Lebensmittel und Recht. 2012;16: 230-38
- 133. De Wilde F. Investor Day Brand Portfolio and Commercial Approach. Philip Morris International Investor Day, June 21, 2012, Lausanne (slide presentation). Lausanne: Phillip Morris International; 2012 (https://www.media-server. com/m/instances/8hjnb6wm/items/v2b4bx9m/

assets/788xcb3b/0/file.pdf, accessed 22 August 2014).

- 134. De Wilde F. Remarks by Frederic de Wilde, Senior Vice President, Marketing and Sales, Philip Morris International Inc. Investor Day, Lausanne, June 21, 2012. Lausanne: Phillip Morris International; 2012 (https://www.media-server.com/m/ instances/8hjnb6wm/items/v2b4bx9m/assets/ asns5846/0/file.pdf, accessed 22 august 2014).
- Baumann D. Maybe ein Fehler [Maybe a mistake]. Frankfurter Rundschau, 27 July 2012. (http://www.fr-online.de/wirtschaft/marlborowerbung-maybe-ein-fehler,1472780,16726246. html, accessed 22 August 2014).
- 136. Tabakindustrie Marlboro-Werbekampagne verboten [Tobacco industry – Marlboro publicity campaign prohibited]. Frankfurter Allgemeine Wirtschafft. 9 October 2013 http://www.faz.net/ aktuell/wirtschaft/unternehmen/tabakindustriemarlboro-werbekampagne-verboten-12611297. html, accessed 22 August 2014.
- 137. Behörde verbietet Marlboro-Werbekampagne in Deutschland [Authority forbids Marlboro advertising campaign in Germany]. WAZ. 10 October 2013 (http://www.derwesten.de/wirtschaft/ behoerde-verbietet-marlboro-werbekampagnein-deutschland-id8545023.html, accessed 22 August 2014.
- 138. Jazbinsek D. Wie die neue Marlboro-Kampagne auf Jugendliche wirkt - Methodik und Ergebnisse einer Online-Befragung. Kurzfassung [How the new Marlboro campaign affects young people - methodology and results of an online survey. Short version]. Kirchhundem: Dieter Mennekes-Umweltstiftung; 2013 (http://www. dieter-mennekes-umwelt.de/downloads/Maybe-Studie-Kurzfassung.pdf, accessed 22 August 2014).
- 139. Vereinbarung zwischen Swiss Cigarette und der Schweizerischen Lauterkeitskommission betreffend Selbstbeschränkungen der Zigarettenindustrie in der Werbung [Agreement between Swiss Cigarette and the Swiss Commission for Fairness concerning restrictions imposed by the cigarette industry in advertising]. April 27, 2005. Zurich: Schweizerische Lauterkeitskommission; 2005
- 140. (http://www.swiss-cigarette.ch/schweizerischelauterkeitskommission.html?no\_cache=1&cid= 2081&did=872&sechash=164afeb2, accessed 19 December 2014).

- 141. Guidelines for implementation of the WHO Framework Convention on Tobacco Control. Geneva: World Health Organization;
  2011 (http://whqlibdoc.who.int/publications/2011/9789241501316\_eng.pdf, accessed 22 August 2014).
- 142. Lorillard, Inc. reports first quarter 2012. Results and acquisition of blu ecigs. Lorillard New Details. 25 April 2012 (http://investors.lorillard. com/investor-relations/news/news-details/2012/ Lorillard-Inc-Reports-First-Quarter-2012-Results-and-Acquisition-of-blu-ecigs/default.aspx, accessed 22 August 2014).
- 143. Lorillard, Inc. reports first quarter 2012. Results and acquisition of blu ecigs. Lorillard New Details. 25 April 2012 (http://investors.lorillard. com/investor-relations/news/news-details/2012/ Lorillard-Inc-Reports-First-Quarter-2012-Results-and-Acquisition-of-blu-ecigs/default.aspx, accessed 22 August 2014).
- 144. Nolte E et al. Availability, accessibility, usage and regulatory environment for novel and emerging tobacco, nicotine or related products. Brussels: European Union; 2013 (http://www.rand.org/ pubs/research\_reports/RR211.html , accessed 18 September 2014).
- 145. Lorillard, Inc. reports fourth quarter and full year 2012 results - raises dividend 6.5%. Lorilland News Details. 13 February 2013 (http://investors.lorillard. com/phoenix.zhtml?c=134955&p=irolnewsArticle&id=1784543, accessed 22 August 2014).
- 146. United States Securities and Exchange Commission Form 10-K. Annual report pursuant to section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2012. Winston-Salem, NC: Reynolds American Inc.; 2013 (http://www.reynoldsamerican. com/secfiling.cfm?filingID=1193125-13-50521, accessed 22 August 2014).
- 147. News release. British American Tobacco establishes stand-alone company, Nicoventures Limited. 5 April 2011. London: British American Tobacco; 2011 (http://www.bat.com/group/ sites/UK\_9D9KCY.nsf/vwPagesWebLive/ D08FLL93?opendocument&SKN=1, accessed 20 September 2014).
- 148. Half-yearly report to 30 June 2013. London: British American Tobacco; 2013 (http://www.bat.com/group/sites/

UK\_9D9KCY.nsf/vwPagesWebLive/ DO9JMHPL?opendocument&SKN=1, accessed 22 August 2014).

- 149. Calantzopoulos A. Investor Day Brand Portfolio and Commercial Approach. Philip Morris International Investor Day, June 21, 2012, Lausanne (slide presentation). Lausanne: Phillip Morris International; 2012 (https://www.mediaserver.com/m/instances/8hjnb6wm/items/v2b-4bx9m/assets/qa4ps3n3/0/file.pdf, accessed 22 August 2014).
- 150. Executive Agency for Health and Consumers. Specific Request EAHC/2011/Health/11 for under EAHC/2010/Health/01 Lot 2. Economic analysis of the EU market of tobacco, nicotine and related products. Revised Final Report. 20 September 2013. London: Matrix Insight Ltd; 2013 (http://ec.europa.eu/health/tobacco/docs/ tobacco\_matrix\_report\_eu\_market\_en.pdf, accessed 19 September 2014).
- 151. Nolte E, Conklin A, Brereton L, Celia C, Goshev S, Tsang F, Pasmans C. Availability, accessibility, usage and regulatory environment for novel and emerging tobacco, nicotine or related products. December 2012. Prepared for the Executive Agency for Health and Consumers (EAHC). Santa Monica, CA: Rand Corporation; 2013 (http://ec.europa.eu/health/tobacco/docs/ tobacco\_rand\_availability\_en.pdf, accessed 19 September 2014).
- 152. Vaping Vamps [website]. The best e-cigarette brand for women. Minnesota: Vaping Vamps; 2014 (http://www.vapingvamps.com/about-us/, accessed 19 September 2014).
- 153. Flavor Vapes [website]. Cruquius: United Tobacco Vapor Group;2014 (http://www.flavorvapes. com/, accessed 19 September 2014).
- 154. Young adult smokers opportunity profiles. San Francisco: Legacy Tobacco Documents Library; 2009 (http://legacy.library.ucsf.edu/tid/ hyp46b00, accessed 24 August 2014).
- 155. Re: synopsis of the women's cigarette market (1974). Tobacco Documents Online [website]. 2014 (http://tobaccodocuments.org/product\_ design/501167118-7121.html, accessed 19 September 2014).
- 156. Product attribute image study. Exploratory research (1981). Tobacco Documents Online [website]. 2014 (http://tobaccodocuments.org/

product\_design/501983273-3308.html, accessed 22 August 2014).

- 157. Review of female targeted brands (1988). Tobacco Documents Online [website], 2014 (http://tobaccodocuments.org/product\_design/507124752-4797.html, accessed 22 August 2014).
- 158. Wakefield M et al. The cigarette pack as image: new evidence from tobacco industry documents. Tobacco control. 2002;11(Suppl. 1):173-80 (http://tobaccocontrol.bmj.com/content/11/ suppl\_1/i73.full, accessed 22 August 2014).
- 159. Slim cigarettes. Brussels: European Commission; 2013 (http://ec.europa.eu/health/tobacco/ docs/fs\_slim\_cigarettes\_en.pdf, accessed 22 August 2014).
- Doxey J, Hammond D. Deadly in pink: the impact of cigarette packaging among young women. 2011; Tobacco Control. 20(5):353.
- Hammond D et al. Impact of female-oriented cigarette packaging in the United States. Nicotine & Tobacco Research. 2011;13(7):579-88 (http://www.ncbi.nlm.nih.gov/pmc/articles/ PMC3165942/, accessed 22 August 2014).
- 162. Women and smoking: Time to face the crisis. Dublin: Irish Cancer Society; 2012 (http://www. cancer.ie/sites/default/files/content-attachments/women-and-smoking.pdf, accessed 22 August 2014).
- 163. How we market our products. A targeted approach. In: British American Tobacco [website]. London: British American Tobacco (http://www.bat.com/group/sites/ UK\_9D9KCY.nsf/vwPagesWebLive/ DO9EBFUJ?opendocument&SKN=1, accessed 18 September 2014).
- 164. Hastings G, Liberman J. Tobacco corporate social responsibility and fairy godmothers: the Framework Convention on Tobacco Control slays a modern myth. Tobacco Control. 2009;18:73-4.
- 165. US Department of Health and Human Services, National Institutes of Health, National Cancer Institute. The role of the media in promoting and reducing tobacco use. Bethesda, MD:US Department of Health and Human Services; 2008 (Tobacco Control Monograph, No. 19; http://cancercontrol.cancer.gov/brp/tcrb/mono-

graphs/19/m19\_complete.pdf, accessed 22 August 2014).

- 166. Big surprise: tobacco industry prevention campaigns don't work. Washington DC:Campaign for Tobacco Free Kids; 2013 (www.tobaccofreekids.org/research/factsheets/pdf/0302.pdf, accessed 22 August 2014).
- 167. Die Projektkförderung der Philip Morris Stiftung [Project funding of the Philip Morris Foundation]. Munich; Philip Morris Stiftung; 2012 http://www. philipmorrisstiftung.de/projektfoerderung/index. php, accessed 22 August 2014).
- 168. Reemtsma Liberty Award [website]. Berlin: Reemtsma; 2012 (http://www.liberty-award.de/ index.php?id=364, accessed 22 August 2014).
- 169. Lucky Strike Designer Award. Lucky Strike Junior Designer Award. Hamburg: Raymond Loewy Foundation; 2012 (http://www.raymondloewyfoundation.com/index.php?id=2&L=1&tx\_ ttnews[tt\_news]=, accessed 22 August 2014).
- Pall Mall Foundation Überblick [Pall Mall Foundation Overview]. Hamburg: Pall Mall Foundation; 2012 (http://www.pall-mall-foundation. at/pgs09/100/index.php, accessed 22 August 2014).
- 171. Sowing Season: Sabancı Foundation Grant Program Stories. Istanbul: Sabanci Vakfi; 2013 (http://www.sabancivakfi.org/files/arsiv-data/ ekim-zamani-2013/ekimzamani2013.pdf, accessed 22 August 2014).
- 172. The Tobacco Control Scale 2013 in Europe. Brussels: Association of European Cancer Leagues; 2014 (http://www.europeancancerleagues.org/images/TobaccoControl/ TCS\_2013\_in\_Europe\_13-03-14\_final\_1.pdf, accessed 24 August 2014).
- Deadly influence a story about the tobacco industry's last battle. Stockholm: Tobaksfakta; 2012.
- 174. Oberg M et al. Worldwide burden of disease from exposure to second-hand smoke: a retrospective analysis of data from 192 countries. The Lancet. 2011;377(9760):139-46.
- 175. Breaking the cycle of children exposed to tobacco smoke. London: British Medical Association; 2007 (http://www.co.marquette. mi.us/departments/health\_department/smoke-

freeup\_org/docs/Children\_Smoking\_Report.pdf, accessed 22 August 2014).

- 176. Mackay D et al. Smoke-free legislation and hospitalizations for childhood asthma. New England Journal of Medicine. 2010;363:1139-45 (http://www.nejm.org/doi/full/10.1056/ NEJMoa1002861#t=article, accessed 22 August 2014).
- 177. Sims M et al. Short term impact of smoke-free legislation in England: retrospective analysis of hospital admissions for myocardial infarction. BMJ. 2010;340:c2161 (http://www.bmj.com/ content/340/bmj.c2161.full.pdf+html, accessed 22 August 2014).
- 178. Municipalities with smoke-free beach laws. Enacted as of July 3, 2014. Berkeley, CA: American Non-smokers Rights Foundation; 2014 (http://www.no-smoke.org/pdf/Smokefree-Beaches.pdf, accessed 19 September 2014).
- 179. Global Adult Tobacco Survey. Fact sheet Turkey 2008. Geneva: World Health Organization;
  2010 (http://www.who.int/tobacco/surveillance/en\_tfi\_gats\_turkey\_factsheet\_2009.pdf?,ua=1, accessed 22 August 2014).
- Creating a tobacco-free generation: a tobacco control strategy for Scotland. Edinburgh: The Scottish Government; 2013 (http://www. scotland.gov.uk/Resource/0041/00417331.pdf, accessed 22 August 2014).
- 181. Creating a smoke-free home. REFRESH how to guide for professionals working with families and children. In: Taking action on smoking and health [website]. Edinburgh: ASH Scotland; 2014 (http://www.ashscotland.org.uk/ go-smoke-free/reducing-second-hand-smoke. aspx, accessed 23 August 2014).
- Kaleta D et al. Use of flavoured cigarettes in Poland: data from the global adult tobacco survey (2009-2010). BMC Public Health. 2014;14:127 (http://www.biomedcentral.com/1471-2458/14/127, accessed 23 August 2014)..
- 183. Tobacco Products Scientific Advisory Committee of the Center for Tobacco Products of the Food and Drug Administration. Menthol Cigarettes and Public Health: Review of the Scientific Evidence and Recommendations. Silver Spring MD: U.S. Food and Drug Administration; 2011 http://www.fda.gov/downloads/AdvisoryCommittees/CommitteesMeetingMaterials/

TobaccoProductsScientificAdvisoryCommittee/ UCM269697.pdf, accessed 23 August 2014).

- 184. Menthol capsules in cigarette filters increasing the attractiveness of a harmful product. Heidelberg: German Cancer Research Center (DKFZ); 2012 (Red Series Tobacco Prevention and Tobacco Control, Vol. 17; http://www.dkfz.de/ de/tabakkontrolle/download/Publikationen/RoteReihe/Band\_17\_Menthol\_Capsules\_in\_Cigarette\_Filters\_en.pdf, accessed 23 August 2014).
- 185. Reid JL, Hammond D, Rynard VL, Burkhalter R. Tobacco use in Canada: patterns and trends, 2014 edition. Waterloo, ON: Propel Centre for Population Health Impact, University of Waterloo; 2014 (http://tobaccoreport.ca/2014/, accessed 2 December 2014).
- 186. Ministry of Public Health of Thailand, Centers for Disease Control and Prevention, World Health Organization. Global Adult Tobacco Survey, Thailand Report, 2011. Geneva: WHO Regional Office for South East Asia; 2011 (http://www. who.int/tobacco/surveillance/survey/gats/ thailand\_report\_2011.pdf?ua=1, accessed 23 August 2014).
- 187. Maslennikova GY et al. Russia SimSmoke: the long-term effects of tobacco control policies on smoking prevalence and smoking-attributable deaths in Russia. Tobacco Control. 2013.
- 188. Moodie C et al. Plain tobacco packaging: a systematic review. London: University of London; 2012 (http://phrc.lshtm.ac.uk/papers/ PHRC\_006\_Final\_Report.pdf, accessed 23 August 2014).
- 189. Aveyard P, West R. Managing smoking cessation. BMJ. 2007;335:37-41.
- Moodie C et al. Plain tobacco packaging research: an update. Stirling: University of Stirling; 2013 (http://www.stir.ac.uk/media/schools/ management/documents/Plain%20Packaging%20Studies%20Update.pdf, accessed 23 August 2014).
- 191. Wakefield MA et al. Introduction effects of the Australian plain packaging policy on adult smokers: a cross-sectional study. BMJ Open. 2013;3 (http://bmjopen.bmj.com/content/3/7/e003175. full, accessed 23 August 2014).
- 192. Guillaumier A et al. Socioeconomically disadvantaged smokers' ratings of plain and branded cigarette packaging: an experimental study.

BMJ Open. 2014;4 (http://bmjopen.bmj.com/ content/4/2/e004078.full, accessed 23 August 2014).

- 193. Young JM et al. Association between tobacco plain packaging and quitline calls: a populationbased, interrupted time-series analysis. The Medical Journal of Australia. 2014;200:29-32 (https://www.mja.com.au/journal/2014/200/1/ association-between-tobacco-plain-packagingand-quitline-calls-population-based, accessed 23 August 2014).
- 194. Australian Treat Series 1993 No 30. Department of Foreign Affairs and Trade, Canberra. Agreement between the Government of Hong Kong and the Government of Australia for the promotion and protection of investments. Canberra: Australian Government Publishing Service; 1995 (http://www.austlii.edu.au/au/other/dfat/ treaties/1993/30.html, accessed 20 September 2014).
- 195. Women and smoking: a report of the Surgeon General. Washington, DC: U.S. Department of Health and Human Services; 2001 (http://www. ncbi.nlm.nih.gov/books/NBK44303/, accessed 23 August 2014).
- 196. Wakefield M et al. An experimental study of effects on schoolchildren of exposure to pointof-sale cigarette advertising and pack displays. Health Education Research. 2006;21(3):338-347 (http://her.oxfordjournals.org/content/21/3/338.full.pdf, accessed 23 August 2014).
- 197. McNeill A et al. Evaluation of the removal of point-of-sale tobacco displays in Ireland. Tobacco Control. 2011;20:137-43
- 198. Quinn C et al. Economic evaluation of the removal of tobacco promotional displays in Ireland. Tobacco Control. 2011;20:151-5
- 199. Karl Erik Lund KE, Rise J. Evaluering av det offentlige tobakksforebyggende arbeid i Norge 2003-2007. Kunnskapsgrunnlag for forslaget om et forbud mot synlig oppstilling av tobakksvarer [Evaluation of the public tobaccoprevention work in Norway 2003-2007. Basis of proposal of a ban on visible display of tobacco products]. Stockholm: Statens Institutt for Rusmiddelforskning (SIRUS); 2008 (http://sirus.no/ filestore/Import\_vedlegg/sirusskrifter1.08.pdf, accessed 24 August 2014).

- 200. The agreement on the European Economic Area. Brussels: European Union; 1994 (http:// www.efta.int/media/documents/legal-texts/eea/ the-eea-agreement/Main%20Text%20of%20 the%20Agreement/EEAagreement.pdf, accessed 18 September 2014).
- 201. Lund KE et al. Updated report on the knowledge base concerning the prohibition on the display of tobacco products. Memorandum from the Norwegian Institute for Alcohol and Drug Research (SIRUS) of 20 December 2010. Oslo: SIRUS; 2010 (http://www.sirus.no/filestore/Import\_vedlegg/Vedlegg\_publikasjon/ eng\_NotatomoppstillingsforbudettilRegjeringsadvokatendes2010.pdf, accessed 23 August 2014).
- 202. Scheffels J, Lavik R. Out of sight, out of mind? Removal of point-of-sale tobacco displays in Norway. Tobacco Control. 2013;22:37-42 (http://tobaccocontrol.bmj.com/content/22/e1/ e37.full, accessed 23 August 2014).
- 203. Amos A, Brown T, Platt S. A systematic review of the effectiveness of individual cessation support interventions in Europe to reduce socio-economic inequalities in smoking among adults. Final Report, June 2013. Edinburgh: Centre for Population Health Sciences, University of Edinburgh; 2013 (http://silne.ensp.org/research-article-a-systematic-review-of-the-effectiveness-of-individual-cessation-support-interventions-in-europe-to-reduce-socio-economic-inequalities-in-smoking-among-adults/, accessed 23 August 2014).
- 204. Stead M et al. Is consumer response to plain/standardised tobacco packaging consistent with framework convention on tobacco control guidelines? A systematic review of quantitative studies. PLoS One. 2013;8:e75919 (http://www.plosone.org/ article/info%3Adoi%2F10.1371%2Fjournal. pone.0075919, accessed 23 August 2014).
- 205. Bell K, Richardson L, Greaves L. Review 5. The impact of quitlines on smoking cessation. In: NICE guidelines (PH10). London: National Institute for Health Care ande Evidence; 2008 (https://www.nice.org.uk/guidance/ph10/ chapter/appendix-c-the-evidence, accessed 24 November 2014).
- 206. Sluta-röka-linjen [Stop smoking line][website]. Stockholm: Centre for Epidemiology and Community Medicine; 2014 (http://slutarokalinjen. org/, accessed 18 September 2014).

- 207. Jimenez-Muro A et al. A proactive smoking cessation intervention in postpartum women. Midwifery. 2013; 29(3):240-5.
- Nerin I, Jané M. Women and tobacco: experiences from Spain. In: The NET [website].
   INWAT; 2014 (http://inwat.org/content/wp-content/uploads/2014/03/TheNET\_Winter2014\_Web.pdf, accessed 18 September 2014).
- 209. National Centre for Smoking Cessation ant Training (NCSCT) [website]. Very Brief Advice Training Module. London: NCSCT; 2013 (http:// www.ncsct.co.uk/publication\_very-brief-advice. php, accessed 23 August 2014).
- 210. Chellini E et al. The Pap smear screening as an occasion for smoking cessation and physical activity counselling: baseline characteristics of women involved in the SPRINT randomized controlled trial. BMC Public Health. 2011;11:906.
- 211. Gorini G et al. The Pap smear screening as an occasion for smoking cessation and physical activity counselling: effectiveness of the SPRINT randomized controlled trial. BMC Public Health. 2012;12:740 (http://www.biomedcentral. com/1471-2458/12/740, accessed 23 August 2014).
- Rice VH, Hartman-Boyce J, Stead LF. Nursing interventions for smoking cessation. Cochrane Database of Systematic Reviews. 2013;8 (http://onlinelibrary.wiley.com/ doi/10.1002/14651858.CD001188.pub4/full, accessed 18 September 2014).
- Osservatorio Nazionale Screening [website]. I rapporti annuali [Annual reports]. Florence: Osservatorio Nazionale Screening; 2013 (http://www.osservatorionazionalescreening.it/ content/i-rapporti-annuali, accessed 24 August 2014).

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World Health Organization Regional Office for Europe Scherfigsvej 8, DK-2100 Copenhagen Ø, Denmark Tel.: +45 39 17 17 17. Fax: +45 39 17 18 18. E-mail: contact@euro.who.int Website: www.euro.who.int