

1. FOCUSING TOBACCO USE AND ADDICTION

Cancer Primary Prevention under Health Promotion perspective

The World Health Organization (WHO) estimates that some 30% of cancer cases could be avoided by primary prevention measures.

Most cancer cases are related to environmental factors. Environmental changes made by man, people consumption and lifestyles choices may enhance or decrease the risk of cancer. Evidences have demonstrated that some types of food, a sedentary lifestyle, smoking, excessive use of alcoholic beverages, excessive sun-exposure without protection, occupational environment, and sexual behavior may be related, to a higher or lesser degree, to some types of cancer (WHO, 1993).

These facts show that a lot can be done for cancer primary prevention.

Tobacco hazards

Among the known cancer risk factors today, the use of tobacco has deserved a special attention, as it is a disease; a disease generated by nicotine addiction.

In 1988, the United States Health Department published a lengthy report on studies that proved tobacco to cause addiction (U.S. *Surgeon General*, 1988). In this report, the United States Health Department has concluded that:

1. Cigarette and other tobacco products do cause addiction.
2. Nicotine is the tobacco products component that causes addiction.
3. Pharmacological and behavioral processes that foster tobacco addiction are similar to those that promote addiction of drugs such as heroine or cocaine.

In 1993, the World Health Organization (WHO) included tobacco use as a mental and behavioral disorder in the tenth revision of the International Classification of Diseases (ICD-10) (Slade 1993, WHO, 1997).

Tobacco use is acknowledged, today, as a disease resulting from nicotine addiction, and tobacco products users are continuously exposed to about 4,700 toxic substances, 60 of them cancer-causing ones, thus users are prone to develop impairing and fatal diseases.

Thousands of studies have proven tobacco use to cause almost 50 different diseases, especially cardiovascular conditions, cancer and chronic obstructive pulmonary diseases (WHO, 1996; Doll, 1994; U.S. Surgeon General, 1989; Rosemberg, 2002). These studies showed that tobacco use causes 45% of coronary artery deaths (myocardial infarction), 85% of chronic obstructive pulmonary disease (emphysema), 25% of cerebrovascular deaths (strokes), and 30% of cancer deaths. It is to be stressed that more than 90% of lung cancer cases occur in smokers, which shows the strong correlation between this disease and tobacco use (U.S. Surgeon General, 1989; Doll, 1994).

Due to tobacco toxicity, total deaths due to its use is currently of 4 million a year, and if expansion trends are kept, deaths from tobacco use are expected to be 8.4 million a year, in the year 2020, reaching individuals in their working years (35-69 years of age) (WHO, 2001).

In Brazil, cardiovascular diseases and cancer are the main causes of disease-related deaths, and lung cancer is the main cause of death due to cancer.

In Brazil the main death causes by illness are cardiovascular diseases and cancer whose major risk factor is tobacco use.

In Brazil, deaths from tobacco use are estimated in some 200,000 a year (PAHO, 2002).

Lung cancer mortality is the leading cause of death by cancer among men and the second cause among women. In 1999, there were 14,127 deaths due to lung cancer. Among women the mortality rates by lung cancer is increasing faster than among men. An analyzes of a temporal series of lung cancer mortality from 1979 to 1999 showed that lung cancer mortality among men

increased 57%, whereas among women it increased 122% (Ministry of Health / Brazilian National Cancer Institute, 2002)

It is important to stress that the current scenario of lung cancer mortality results from the gradual increase of the habit of smoking, which started some 50 years ago, especially in males. Among women, after years of social reprove and moral oppression of women smokers, they become a potentially promising target from the point of view of the tobacco industry, and marketing strategies lead them to smoke more and more, even though they start later in life than men. As a result, the late effects of such tobacco use expansion among women are beginning to show. Cancer mortality statistics among Brazilian women show that since 1995, lung cancer mortality exceeded cervix uteri cancer mortality, and currently ranks second among cancer deaths in women.

In addition to the risks posed for smokers, from the 70s onwards there were published researches proving that children exposed to environmental tobacco smoke had higher respiratory illnesses rates higher than those who were not exposed.

Researches on passive smoking have piled up over the 1980s, and a major consensus report on the risks of passive smoking was published in 1986 by the US National Academy of Sciences National Research Council and the US Surgeon General. This report of the US Surgeon General presented three major conclusions:

1. Passive smoking causes diseases, including lung cancer, in healthy non-smokers.
2. Children of smoking parents, when compared to children of non-smokers, present higher rates of respiratory affections, in addition to respiratory symptoms and slightly decreased pulmonary function as they grow up.
3. The sheer separation between smokers and non-smokers in the same air space may reduce, but does not prevent non-smokers exposure to tobacco environmental smoke.

Recent meta-analysis studies have shown that among non-smokers constantly exposed to environmental tobacco smoke, the risk of developing lung cancer is 30% higher than in non-smokers non-exposed (Hackshaw et al, 1997). In the United States, tobacco smoke is estimated to be accountable for some 3,000 annual deaths due to lung cancer among non-smokers (United States Environmental Protection Agency, 1993). And risks for cardiovascular diseases among non-smokers exposed to environmental tobacco smoke are 24% higher than among non-smokers (Law et al, 1997).

Women and children are at higher risk due to passive exposure in their household. Furthermore, effects of passive smoking also come from exposure at the workplace, when there is no safety and health regulations to protect workers from involuntary exposure.

Tobacco consumption trends

Around the world

In spite of all the established scientific knowledge on smoking risks, consumption trends are worrisome. In early 90s, some 1.1 billion people around the world used tobacco products. By 1998, this figure was of 1.25 billion. (WHO, 2001).

In this scenario consumption trends among women and youngsters are of special concern, as tobacco companies have more and more focused these groups as targets for their marketing strategies.

Overall, some 9% of women in developing countries and 22% in developed countries smoke cigarettes.

Furthermore, World Bank data show that almost 100,000 youngsters worldwide start smoking at each day, 80,000 of them from developing countries. Mean age for starting to smoke is 15, and 70% of those who try smoking become addicted. These facts lead WHO to consider tobacco use a pediatric disease (World Bank, 1999).

In Brazil

In 1989, a countrywide survey (the National Research on Health and Nutrition - PNSN), showed that 32.6 % of the population over 15 years old or more were smokers. There were near of 28 million smokers in the group over 15 years old. Among them 16,7 million were males and 11,2 million were females (Ministério da Saúde, 1998).

Since then, further existing prevalence data has been collected through a variety of methods and data collection instruments and evolving different groups, what makes it difficult to evaluate the smoking prevalence trends in the country as whole.

By the other hand, in 2001 a survey among 2479 people living in Rio de Janeiro municipality (Ministério da Saúde/INCA 2002b) showed that the smoking prevalence had decreased from 30% in 1989 to 21% in 2001.

Besides this, the monitoring of cigarette per capita consumption shows a reduction of more than 32% between the years 1989 and 2001, even considering the estimates of consumption from illegal market. In 1989 cigarette per capita consumption was 1772 and in 2001 it was 1194.

Social determinants for use of tobacco products

Tobacco is today the second most used drug among youngsters worldwide and in Brazil. This is probably due to the way smoking fills in to society. Being easy to get, their low cost, and years of marketing and advertising actions associating tobacco products to beauty, success, freedom, power, intelligence, and other qualities young people desire, created a positive image of smoking, what lead to its wide social acceptance. The success of these strategies is translated by the fact that 90% of smokers start smoking before the age of 19.

Thus, for tobacco to be effectively controlled, one must realize smoking is not limited to an individual dimension, but derives from a social, political and economic scenario that has historically and deceitfully encouraged individuals to smoke and making it difficult for smokers to quit. Therefore one must address all the issues behind this context.

Trade liberation and the global expansion of tobacco

Even though the use of cigarettes has been decreasing in most developed countries, cigarette smoking around the world has increased in about 50% from 1975 to 1996. It has increased rapidly in developing countries, especially of Asia. Today, 25% of world's smokers live in China. Differently from developed countries, tobacco control initiatives and policies are incipient in many of these countries (World Bank, 1999; WHO, 2001).

World Bank studies have shown that liberation of trade and opening of markets are major factors for such scenario, therefore decisive for increase of tobacco use, especially in low and middle-income countries. How does it happen? Over the past few years, international trade agreements have liberated the trade of goods and services around the world. Cigarettes were no exception, even though it cannot be considered a good, as there is no benefit for those who use it. Liberation of trade has implied in opening markets all over the world for tobacco products, especially cigarettes, leading to a fall in prices and increase in marketing and advertisement. Thus, globalization of the economy made major transnational tobacco companies focus their expansion efforts to countries of low production costs and high potential for consumption; this explains the high market expansion in Eastern European, Latin American, Asian, and African countries over the past few years. Countries such as Japan, Thailand and Taiwan have experienced a major increase in cigarette consumption once major transnational tobacco companies entered in their internal markets (World Bank, 1999).

This is why, by acknowledging expansion of tobacco consumption as a global hazard, the 53th World Health Assembly – the most important WHO governing body, comprised by delegates of the 190 member countries – has drawn a Resolution requesting the General Director a Tobacco-Control Framework Convention to be designed in accordance with article 19 of WHO bylaws. It is the first International Convention sponsored by the WHO.

A framework convention is a legal agreement, an international treaty by which the signing countries agree to endeavor efforts to reach established goals. In this specific case, the purpose is to control global expansion of tobacco use and its deleterious consequences (WHO, 1998).