# STUDY OF SMOKING HABITS IN SOLDIERS OF POLICE ACADEMY

Thesis

Submitted by

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## List of Abbreviations

**BMI**: Body mass index

**CHD**: Chronic heart disease

**CNS**: Central nervous system

**COPD**: Chronic obstructive pulmonary disease

**CVD**: Cardio vascular disease

**ETS**: Environmental tobacco smoke

FDA : Food and drug administration

**HDL-C**: High density lipoprotein- cholesterol

**LDL-C**: Low density lipoprotein-cholesterol

NNS : Nicotin nasal spray

NRT : Nicotin replacement therapy

**PVD**: Peripheral vascular disease

**SIDS**: Sudden infant death syndrome

**WHO**: World health organization

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### **INTRODUCTION**

According to the World Health Organization (WHO), one hundred million deaths were caused by tobacco in the 20th century, and if current trends continue, there will be up to one billion deaths attributed to tobacco use in the 21st century. There are more than one billion smokers in the world, and globally the use of tobacco products is increasing, with the epidemic shifting to the developing world. More than 80% of the world's smokers live in low and middle income countries. It is estimated that tobacco use kills 5.4 million people a year and accounts for 10% of adult deaths worldwide, with up to 50% of smokers dying from a tobacco-use related disease. Unchecked, tobacco related deaths will increase to more than eight million a year by 2030, and 80% of those deaths will occur in developing countries. Tobacco use is a risk factor for six of the eight leading causes of deaths in the world including respiratory and cardiovascular diseases, stroke and several malignant diseases. (Anderson, 2006)

Smoking is an important risk factor for cardiovascular diseases especially coronary artery diseases, stroke, and carcinoma of lung, chronic bronchitis and emphysemas. It also increases the risk of peripheral vascular diseases and is associated with cancer of larynx, oral cavity, esophagus, pancreas, and urinary bladder (*Nair and Brandt*, 2004).

Tobacco products contain more than 50 established or identified carcinogens and these may increase risk of cancer by causing mutations that disrupt cell cycle regulation or through

their effect on the immune or endocrine systems (*Rennard and Daughton*, 2005).

Globally, 4.9 million deaths each year are attributed to tobacco use, and this annual toll may increase to 10 million within the next 20 to 30years. Of these deaths, 70% are likely to occur in developing countries (*Maziak et al.*, 2004).

Smoking cessation is associated with significantly reduced risks of both respiratory and non respiratory malignancies. Lung cancer risk appears to decrease gradually after smoking cessation approaching that non smoker after 10-15 years (*Jorenby et al.*, 2004).

A study in Egypt that surveyed 548 industrial workers, showed 18% and 12% for the prevalence of smoking exclusively waterpipes and smoking both waterpipes and cigarettes respectively (30% total prevalence of waterpipe smoking). This varied by level of smoking, which was classified into: light (≤10 cigarette equivalent), moderate (11–20 cigarette equivalent), and heavy (>20 cigarette equivalent). Forty-seven percent of the heavy smokers smoked waterpipes (either exclusively, 22.5%, or with cigarettes, 24.5%). These numbers declined to 41% and 32% among the moderate and light smokers. (*Azab et al.*, 1995).

### Aim of the work

The aim of this work is to study the characteristic of smoking habits in soldiers of police academy.

#### HISTORY OF TOBACCO SMOKING

Tobacco has been smoked for thousands of years Tobacco smoking with pipes and cigars was common to many Native American cultures prior to the arrival of European explorers 1500 vears ago. During World War I, it was typical for tobacco products to be included in military rations. Following the war, cigarette smoking was advertised as part of a glamorous, carefree lifestyle, and became socially acceptable for women. In the 1930s, medical and military leaders grew concerned with the possibility that tobacco might be hazardous to human health and their scientists were the first to confirm this link. In the United States, biologist Raymond Pearl demonstrated the negative health effects of tobacco smoking as early as 1938. In the 1950s and 1960s, the medical community along with various governmental bodies, and Reader's Digest magazine, began campaigns to reduce the degree of smoking by showing how it damaged public health (Ian, 1999).

A Frenchman named Jean Nicot (from whose name the word nicotine was derived) introduced tobacco to France in 1560. From France, tobacco spread to England. By the mid-17th century tobacco smoking had been introduced to many countries, despite

the attempts of many rulers to stop the practice with penalties or fines. Like tea, coffee and opium, tobacco was just one of many intoxicants that were originally used as a form of medicine (*Tanya*, 2004).

The practice of smoking tobacco is believed to have started with American Indians. The word "tobacco" will have been taken from the Y-shaped pipe called "tobacco" used by the Indians as a device for snuffing tobacco. The Indians smoked by crushing tobacco leaves and rolling them into cylinders of corn husks or other vegetable wrappers. They drank the smoke that billowed from these cylinders as soon as they were lighted. The Indians were well aware of the strange power that these burning leaves wielded over them (*Mackay and Crofton*, 1996).

In North America the most common form of smoking was in pipes, which today are best known as the <u>peace pipes</u> offered as a sign of goodwill and diplomacy. In the Caribbean, Mexico, Central and South America, early forms of cigarettes and cigars were the most common smoking tools. Only in modern times has the use of pipes become fairly widespread (*Robicsek*, 2004).

Cannabis smoking was common in the Middle East before the arrival of tobacco and has been known to be in existence since 2000 BC. Smoking, especially after the introduction of tobacco,

was integrated with important traditions like weddings, funerals and was expressed in architecture, clothing, literature and poetry. Soon after its introduction to the Old World, tobacco came under frequent criticism from state and religious leaders. Despite many intensive efforts, restrictions and bans were almost universally ignored (*Sander and Zhou*, 2004).

During the 1920s, the adverse health effects of smoking began to become more obvious. Women who smoked were considered to be vulnerable to premature aging and loss of physical attractiveness; they were viewed as unsuitable to be wives and mothers in a German family. Office of Racial Politics said that a smoking mother's breast milk contained nicotine, a claim that is proved to be correct in modern research (*Anders et al.*, 2008).

## THE SMOKING EPIDEMIC

Tobacco is probably the single greatest cause of non-communicable diseases and is likely to produce a world pandemic unless urgent preventive action is taken. The prolonged incubation period of many tobacco related diseases has prevented recognition of the size of the threat. From the time when smoking begins in population, half a century may elapse before cigarette related deaths reach epidemic proportion. Cigarette smoking is a major public health problem in fact, cigarette smoking can be considered the major public health problem. It seems that the 3<sup>rd</sup> World countries actively participate in and promote this rank exploitation of the innocents for many reasons; first tobacco is a good agricultural crop and the expertise for cultivation and processing is available. Second, it is a convenient way of raising revenue. Third, it holds out visions of foreign exchange earnings (Seneviratne, 1980).

Another point of view is that, in developed countries, it is generally understood that smoking causes many dangerous health hazards and major campaigns have been launched to reduce the rate of smoking. In most developing countries, however, the situation is extremely serious because the public is not aware of the dangers to the same extent, nor are educational, legislative and

other measures being taken to combat the smoking epidemic (Jones et al., 1983).

Proportion of smokers in the population has decreased during last decades. However, there has been a corresponding 50% increase in smoking rates in developing countries (*Ragab and Albukhari*, 2001).

In countries where smoking is long established, almost all smokers begin before age 18 years (*Chariton*, 1996). Young people are therefore an important focus for action. Trends in smoking among young people follow those in adults (*Community Health Assessment Project*, 2003).

The prevalence of smoking in the various age grips for 1995 and 2000 shows that, in the older groups, at least, some people are quitting. The younger age groupings, however, show a very large increase in smoking now compared to the same age groupings in 1995. This is very worrisome, as many of those young people can be expected to become addicted and to remain lifelong smokers (Guidelines for Conduct of Tobacco Smoking Surveys of General Population, 1982).