

# Smoking and Lung Cancer

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The U.S. Surgeon General's report in 1982 estimated that 85% of the carcinomas of the lung are because of cigarette smoking.<sup>1</sup> Since the recognition of this strong association between smoking and lung cancer, efforts have been made to reduce and eliminate the use of tobacco. Two important changes have occurred in the U.S. during the past few decades. First is the reduction in the quantity of tobacco in cigarettes. The average tobacco content by weight of cigarettes peaked in 1953 and declined 39.1% by 1981. This reduction was achieved by incorporation of filters and by fluffing the tobacco. The second major change is the reduction of per capita consumption of tobacco. Maximum smoking prevalence in men occurred in the late 1940's and in women in the mid 1960's. The highest smoking prevalence occurred in males born between 1911-1920 when over 70% of the adult population smoked. The highest prevalence (40%) in females was in the group born between 1931-1940. The prevalence of smoking in the U.S. has been progressively declining except in females between the ages of 18-24 since 1982. The overall prevalence of smoking from 1965 to 1985 in males has dropped from 55% to 32% and in females from 34% to 28%.

While there has been a reduction in per capita consumption of tobacco, the incidence of lung cancer has continued to increase. During 1987 more than 100,000 lung cancer deaths occurred in the U.S. There appears to be a lag period of between 10-20 years between the peak incidence of smoking and the peak incidence of lung cancer. A progressive decrease in lung cancer mortality has been noted in younger people for the past 15-20 years. Since 1982, the trend for lung cancer mortality has been declining for women below age 45 and for most age groups of men

below 65. It appears now the U.S. has reached the maximum of lung cancer deaths and a slow decrease in this incidence will continue in years to come.<sup>2</sup>

While these positive changes have been taking place in the U.S., tobacco consumption has been steadily increasing in most of the Islamic countries. This is partly because the major tobacco companies of the western world have started vigorous promotion of tobacco sales in the third world. Although cigarette consumption per capita in most of the Islamic countries is lower than in the developed countries, the prevalence of smoking is higher than in the developed countries. In Egypt the annual tobacco consumption increased from 38,500 tons in 1978 to 46,000 tons in 1983, an increase of about 20%.<sup>3</sup> This annual increase in tobacco consumption exceeds by far the annual increase in population. In a WHO survey conducted in 1982, 37.4% of males in Cairo were cigarette smokers.

About 300 years ago, the British ambassador to the Court of Akbar the Great introduced smoking to the king. His court physician, concerned for his master's health, bubbled the smoke through water containing small fish which barely survived the experiment. Despite this warning, the king developed a liking for tobacco and the habit soon spread to his subjects.<sup>4</sup> The production of tobacco in Pakistan has been progressively increasing. The prevalence of cigarette smoking appears to be high among educated, professional and business people. A survey in the Sind Medical College in 1983 found that 21% of the male medical students smoked.<sup>5</sup> Another survey in Karachi showed 45% of the males smoked.<sup>6</sup> Cigarette consumption is increasing by 8% annually in Pakistan. Because of this increased tobacco consumption, all the problems related to smoking have also become very common. Lung cancer was rare in Pakistan in the 1950's and 1960's and now it has become the leading cancer. Similarly, myocardial infarction has become common and is occurring in younger people. Similar trends of tobacco consumption are noted in other Islamic countries.

It is apparent that most of the western countries have been successful in reducing tobacco consumption; the trends are just the opposite in Islamic countries. Most Islamic countries will face an increasing incidence of lung cancer, cardio-vascular mortality,

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and other consequences of tobacco consumption in the coming decades. Because the excise tax on tobacco is a source of revenue, many governments in the third world pay only lip service to the efforts of reducing cigarette consumption. A lot higher price is paid to treat the high cost of diseases caused by smoking. There is a tremendous need to educate the masses at all levels if such trends are to be reversed.

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