

Research Article

Tobacco Smoking, the Meeting Point of Health Issues of the 21st Century

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Abstract

Tobacco use remains a global health problem. It is the leading cause of preventable death. It causes and/or exacerbates many diseases, including cancer, COPD, cardiovascular disease, HIV infection and tuberculosis. All of these diseases are major public health challenges for the 21st century and require tobacco control efforts. Smoking cessation is an essential component in the treatment of smoking-related diseases. It improves patients' quality of life and life expectancy, reduces respiratory decline, the risk of cardiovascular disease and HIV mortality, and contributes to the cure of tuberculosis. Healthcare professionals need to be involved in tobacco control and effective, evidence-based smoking cessation strategies.

Keywords: Smoking, Cancer, Cardiovascular, HIV infection, COPD, Tuberculosis

Introduction

In 2022, over 20% of the global population smoked. Despite a decline in smoking prevalence, it remains a major global health issue, responsible for over 8 million deaths including 1.3 million non-smokers, a year [1]. There is a clear link between tobacco use and a range of health problems, including cancer, COPD, maladies cardiovasculaires, HIV infection, tuberculosis (TB). Tobacco control is essential to address these issues.

Cancer, COPD, HIV Infection, Cardiovascular Disease, TB and Smoking

Cancer

The International Agency for Research on Cancer (IARC) [2] has recorded 20 million new cancer cases and 9.7 million cancer deaths in 2023. Smoking is a major risk factor for cancer, especially lung cancer (12.4% of all new cancer cases and 18.7% of all cancer deaths). The incidence of lung cancer is increasing worldwide and may increase by 47% between 2020 and 2040 [3].

Chronic Obstructive Pulmonary Disease (COPD)

It affects 10.3% of the global population, accounts for 4.7% of annual global mortality and has a significant economic burden. COPD is characterized by progressive, partially reversible airflow limitation caused by chronic inflammation of the airways. Smoking is the major risk factor for COPD [4].

Cardiovascular Disease

It is a leading cause of death, with nearly two million deaths annually attributed to smoking-related heart disease, including

myocardial infarction, stroke, abdominal aortic aneurysm, and peripheral arterial disease. Smoking is a major risk factor for acute cardiovascular events, with smokers more at a younger age [5].

HIV Infection

39.9 million people worldwide are living with HIV; 630,000 die each year and 1.3 million are newly infected. The advent of antiretroviral therapy has reduced AIDS-related mortality, but the proportion of deaths from non-AIDS diseases has increased. Smoking is prevalent in this population; it causes cardiovascular and pulmonary (e.g. COPD, lung cancer) diseases and reduces life expectancy of life in patients [6-8].

Tuberculosis

In 2023, 7.5 million new cases of tuberculosis (TB) were diagnosed. TB was responsible for 1.3 million deaths, and 410,000 people developed multidrug-resistant or rifampin-resistant tuberculosis. Over 80% of TB cases and more than 90% of deaths occur in low- and middle-income countries. The main drivers of the TB epidemic remain the spread of HIV and the emergence of drug-resistant TB; however, tobacco use is estimated to account for 17.6% of TB cases and 15.2% of TB-related deaths in high-incidence countries [9,10]. Smoking (active or passive) increases the risk of tuberculosis infection, progression to TB disease, mortality and recurrence [11].

Stopping Smoking and Tobacco Control

Stopping Smoking: Component of Treatment for Smoking-related Diseases

Smoking is the leading cause of cancer, particularly lung cancer, but quitting improves the quality of life and life expectancy of cancer

patients. It reduces the decline in lung function, the frequency of COPD exacerbations, the risk of death in patients with cardiovascular disease or HIV infection, but improves the prognosis of tuberculosis and adherence to anti-tuberculosis treatment [12]. Therefore, health professionals need to help smokers quit with evidence-based smoking cessation interventions [13,14].

Tobacco Control: Public Health Priority

The WHO Framework Convention on Tobacco Control (FCTC) [15], adopted by over 190 countries, aims to protect present and future generations from the health, social, environmental and economic consequences of tobacco consumption and exposure to tobacco smoke. It provides a framework for a global tobacco control strategy to reduce smoking prevalence and exposure to tobacco smoke.

Conclusion

Tobacco use is a major cause of many diseases with a significant impact on public health. Tobacco control has become a major public health issue that must mobilise governments and all healthcare providers.

Conflict of Interest

The authors have no conflict of interest to declare

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