

Tobacco Usage and Obesity

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Introduction

Tobacco usage in any form and obesity are the major public health challenges and the prevalence of both is increasing globally. Tobacco increases the risk of Non-Communicable Diseases (NCDs) eg. Cancer, respiratory and cardiovascular diseases, and is the leading preventable cause of death in developed countries. Obesity is the fifth leading cause of death, globally, and accounts for 44% of cases of diabetes and 23% of ischemic heart disease. The Framingham Study showed that the life expectancy of obese smokers is around 13 years shorter than non-obese, never smokers¹. Over 80% of smokers wish to quit smoking but only 33% attempt to do so. Of those who attempt to quit, 75%-80% relapse within six months.

What is obesity and what is the source of it: Obesity is a medical condition in which excess body fat has accumulated to an extent that it may harm health. People are generally considered obese when their body mass index (BMI), a measurement obtained by dividing an individual's weight by the square of the person's height, is over 30 kg/m² the range 25–30 kg/m² is defined as overweight. It increases the probability of various diseases and conditions, especially cardiovascular diseases, type 2 diabetes, obstructive apnea, certain types of cancer, osteoarthritis, and depression. Obesity has almost tripled across the world since 1975. In 2016, overweight was over 1.9 billion adults, 18 years of age and above. About 650 million of these were obese. 39 per cent of adults aged 18 years and older in 2016 were overweight, and 13 per cent were obese. In areas where overweight and obese kill more people than underweight, half of the world's population lives.

Keywords

Tobacco, Obesity, Population

Key facts about tobacco use

Tobacco kills about 50% of its users. It kills more than 8 million people each year. (1.35 Million in India) More than 7 million of those deaths are the result of direct tobacco use while around 1.2 million are the result of non-smokers being exposed to second-hand smoke. The economic costs of tobacco use are substantial and include significant health care costs for treating the disease caused by tobacco use as well as the lost human capital that results from tobacco-attributable morbidity and mortality. Tobacco users have a lower body weight on an average than non-smokers, but tend to gain weight after quitting smoking; however, active smokers who smoke more intensively tend to weigh more than light smokers.

Initial genetic evidence suggests a possible common biological basis for nicotine addiction and obesity². The findings also indicated that higher adiposity impacts smoking activity and may hinder the adoption of public health measures to decrease the incidence of these key risk factors. Addiction is the main reason for smokers failing to quit. However, concerns about weight gain are an independent think about smokers deciding to not quit, especially young women. Also, the overall perception that smoking may protect against obesity may be a common reason for starting smoking among adolescents. Beliefs that smoking protects against obesity could also be over-simplistic, especially among younger and heavier smokers. Quitting smoking could also be related to temporary weight gain. Promising

interventions may need to be more widely applied to reduce the consequences of both obesity and tobacco use³.

The association between smoking, body weight, and body fat distribution are little explored, and they remain to be elucidated. The weight gain may be limited by smoking because of reduced food intake. Also, because smoking is a strong risk factor for emaciating diseases such as cancer, lower weight among smokers may result from weight loss due to a concomitant pre-clinical disease⁴.

It is important to spot health risks—obesity—and modifiable risk factors—smoking—that contribute to health disparities among adolescents. However, the increase in one risky behaviour leading to a decrease in the prevalence of the other complicates the issue. Obesity was most prevalent among ex-smokers and the least prevalent among current smokers. It is clear that from the analysis, the group of current smokers were less likely to be obese in comparison with non-smokers and ex-smokers were more likely to be obese than both current smokers and nonsmokers⁵.

Empirical models confirm an association between cigarette consumption and BMI in both males and females. The negative relationship varies with age. However, the increase in one risky behaviour leading to a decrease in the prevalence of the other complicates the issue. The higher prevalence of frequent cigarette uses among both adolescents and young adults of lower BMI suggest that smoking might be wont to curb or suppress appetite⁶.

Normal weight subjects tend to possess a greater number of smoking cessation plans than the opposite weight groups, but the difference wasn't statistically significant. In the clinic, it is necessary to consider not only BMI but also other factors associated with a smoking cessation plans⁷.

In developed countries, smoking and excess body weight (weight adjusted for height) are two of the most important risk factors for chronic disease and premature death. Both

factors have strong behavioural determinants, but neither has been controlled adequately by population-based approaches to behaviour change. In India, public health attention has traditionally been focused on the problem of under-nutrition. However, there is now evidence of a double burden of over-nutrition as well as under-nutrition⁸.

Obesity and tobacco in any form are important risk factors for a wide variety of non-communicable diseases, but their inter-relationship is complex and not well understood. Observational studies clearly indicate an inverse correlation between current consumption of cigarettes and weight, followed by weight gain following cessation of smoking.

How would quitting tobacco impact: The mechanisms through which smoking decreases body weight are complex and incompletely understood. Most of the effects of cigarette smoking on body weight are mediated by nicotine, although smoking a cigarette may also serve as a behavioural alternative to eating, resulting in decreased food intake.

Conclusion

A link between obesity and smoking behaviour could have implications for weight control and smoking prevention strategies, also as for the prevention of multiple non-communicable diseases. Smoking prevention approaches would also provide assistance for the weight control. Despite the health benefits of quitting tobacco, post-cessation weight gain, and new-onset obesity and diabetes are an enormous concern.

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