conferenceseries.com

World Summit on OBESITY AND WEIGHT MANAGEMENT

December 15, 2021 | Webinar

Correlation between tobacco usage and obesity

Rakesh Gupta
President and Director of Public Health, Strategic Institute for Public Health Education and Research (SIPHER)-India.

Abstract

Statement of the Problem: 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) 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. Obesity increases the likelihood of various diseases and conditions, particularly cardiovascular diseases, type 2 diabetes, obstructive sleep apnea, certain types of cancer, osteoarthritis, and depression.

Methodology & Theoretical Orientation: We have conducted a google search with keywords (Obesity OR Tobacco OR Tobacco and Obesity) We selected article type as “systematic review” and “meta-analysis”, language as “English”, species as “human”

Findings: Initial genetic evidence suggests a possible common biological basis for nicotine addiction and obesity2. The results strongly suggested that higher adiposity influences smoking behavior and could have implications for the implementation of public health interventions aiming to reduce the prevalence of these important risk factors. Addiction is the main reason for smokers failing to quit. However, concerns about weight gain are an independent factor in smokers deciding not to quit, especially young women. Also, the general perception that smoking may protect against obesity is a common reason for starting smoking among adolescents. Quitting smoking may be associated with 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 identify health risks—obesity—and modifiable risk factors—smoking—that contribute to health disparities among adolescents. However, the increase in one risky behavior 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 behavior 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 could be used to curb or suppress appetite6.

Normal weight subjects tend to have a greater number of smoking cessation plans than the other weight groups, but the difference was not 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 behavioral determinants, but neither has been controlled adequately by population-based approaches to behavior 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 consistently show an inverse association between current cigarette smoking and body weight, followed by weight gain after smoking cessation.

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 behavioral alternative to eating, resulting in decreased food intake.

Conclusion & Significance: A link between obesity and smoking behavior could have implications for weight control and smoking prevention strategies, as well as for the prevention of multiple non-communicable diseases. Therefore, smoking cessation interventions should include weight management support. Despite the health benefits of quitting tobacco, post-cessation weight gain, and new-onset obesity and diabetes are a significant concern.

Biography

Dr Rakesh Gupta is President and Director of Public Health, Strategic Institute for Public Health Education and Research (SIPHER)-India. He is former Director Health Services Punjab-India and an Alumni of John Hopkins School of Public Health, Baltimore-2012 and University of California San-Francisco-2012.He is a recipient of WHO Award 2015 on World No Tobacco Day.

rakesh60.mahajan@gmail.com