

Atherogenic Aspects of Tobacco Smoking in a Coastal Population of Andhra Pradesh, India

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ABSTRACT Cigarette smoking has been recognized as a public health problem in India. The objective of the study was to evaluate the risk of coronary heart disease between smokers and nonsmokers. The study population involved 500 healthy rural subjects aged 21-70 years from coastal areas of Nellore district, Andhra Pradesh. Based on the current smoking habits, subjects were divided into smoking and nonsmoking groups. Females were less likely than males to smoking habits (38% vs 14%). The mean values of age, body weight, height, body mass index, systolic pressure and diastolic pressure, serum total cholesterol, triglycerides, high-density lipoprotein cholesterol (HDL-C), low-density lipoprotein cholesterol (LDL-C), and the ratios of total cholesterol/HDL-C and LDL-C/HDL-C as atherogenic indices were not statistically different between smokers and nonsmokers. However, the mean pulse rate was significantly greater in smokers than nonsmokers. There were no significant differences in the prevalence of hypertension for diastolic pressure, hypercholesterolemia, hypertriglyceridemia, hypo-alpha-lipoproteinemia and hyper-beta-lipoproteinemia between groups. It was found that the prevalence of hypertension for systolic blood pressure as well as both the atherogenic indices (total cholesterol/HDL-C ratio and LDL-C/HDL-C ratio) were significantly higher in the smoking group than those found in the nonsmoking group ($p < 0.05$). The present study suggest that smoking habit is associated with increased the risk of CHD among smokers as compared to nonsmokers. The consequences of tobacco use and smoking is a public health concern in India as the most important preventable cause of disease and death with regard to the emerging degenerative disease epidemics.

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