

ABSTRACT

Diabetes mellitus is a metabolic disorder of multiple etiologies characterized by hyperglycaemia and associated with impaired carbohydrates, fat and protein metabolisms. The objective of this study was to compare risk factors for development of type 2 diabetes in diabetes group and non diabetes group. This is the clinical based case control study. Fifty cases and fifty controls were selected. An interview schedule method was used to recruit the subjects and obtain information on socio demographic characteristics, life style and health status. Weight, height, waist circumference and hip circumference were measured for anthropometric assessment. Food frequency questionnaire was used to find out frequency intake of food items. The measure of association between exposure and diabetes was determined by calculating odds ratio. Mean age of the cases and controls was same (49 ± 11.04). Subjects who had family history type (2) diabetes and who had hypertension were 2.26 and 4.13 times more likely to develop non insulin dependent diabetes mellitus. Body mass index (BMI) more than 25 kgm^2 were 23 times more likely to develop type 2 diabetes mellitus. It was statistically significant ($p < 0.05$). Subjects who had waist to hip ratio more than 0.9 in males and more than 0.85 in females were 29.04 % and 11.0 times more likely to develop type (2) diabetes respectively. It was statistically significant ($p > 0.05$). Mean BMI and waist: hip ratio was high in cases compare to controls. Subjects who smoked cigarette and who consumed alcohol were 2.17 and 1.46 times more chance to develop type (2) diabetes mellitus respectively. Smoking was not statistically significant ($p > 0.05$). Alcoholic habits was statistically significant ($p < 0.05$). Subjects who did moderate activity were beneficial effect compare to less actively subjects and heavy active subjects and those who were preferred to eat sweet food items were 2.84 more likely to develop non insulin dependent diabetes mellitus. Family history of non insulin dependent diabetes mellitus, hypertension, high sweet preference, and higher body mass index, higher waist to hip ratio, smoking, alcoholic habits and high frequency consumption of wheat flour and polished rice were risk factors for development of type (2) diabetes mellitus.

Key words; hyperglycaemia, family history and hypertension