

Prevalence of Obesity and Hypertension in Newly Diagnosed Type 2 Diabetes Mellitus (T2dm) Patients Of Amritsar

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Abstract

The present study was conducted to observe the prevalence of obesity and hypertension in newly diagnosed diabetic patients of Amritsar (Punjab), attending diabetic clinics. A total sample of 300 newly diagnosed diabetic patients including 162 males and 138 females were studied to assess the prevalence of obesity and hypertension. The prevalence of obesity in diabetic males and females was 58.02% and 73.91% according to BMI, 88.27% and 91.3% according to WC, while 98.14% and 96.3% according to WHR and 85.18% and 90.59% according to WSR, respectively. The prevalence of hypertension was 88.2 % and 84.7% in diabetic males and females, respectively. From the result, it was observed that the percentage prevalence of obesity and hypertension was quite high in diabetic patients of Amritsar. The prevalence of abdominal obesity was higher than general obesity. The percentage prevalence of obesity in diabetic females was higher than diabetic males while the diabetic males were more hypertensive than diabetic females. To manage the profile of the diabetic patients, proper awareness and prevention and management of obesity and hypertension is essential.

Keywords: Obesity, Diabetes, Hypertension, Amritsar, T2DM patients.

Introduction

Diabetes is a chronic non-communicable disease having serious health, economic and social consequences. The World Health Organisation has recently acknowledged that India is the diabetic capital of the world. According to *Patel et al (2011)*, the overall number of people with diabetes in India (based on the *ICMR – INDIAB* study) is estimated to be 62.4 million and this was also confirmed by the 5th edition of the Diabetes Atlas, which gave a figure of 61.3 million people with diabetes in India in the age group of 20 – 79 years. In India the prevalence of diabetes is growing rapidly in both urban

and rural areas (*Pradeepa et al, 2012*). The increasing prevalence of diabetes is associated with increased rate of overweight and obesity. It has been found by *Sharma and Jain (2009)*, that prevalence of diabetes increases by a factor of 2-3 folds in obese individuals, 5-fold in moderately obese and 10-fold in severe obese persons. It has been estimated by *Hossain et al (2007)* that 90% of type 2 diabetes mellitus (T2DM) patients are attributable to excess body weight. *Arner et al (2010)* reported that newly diagnosed T2DM patients are more overweight than non-diabetic patients and they further reported that obesity plays an important role in pathogenesis of T2DM. *Klein et al (1996)* reported that 50% of the subjects with T2DM have