



## Epidemiology of Type II Diabetes Mellitus in Andhra Urban Population

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### Abstract

Diabetes Mellitus proves to be major cause of morbidity and mortality around the world and contribute largely to healthcare costs. The study of 51 hospitalised DM patients was undertaken in Visakhapatnam city in Andhra Pradesh state of India. The hospitalised DM patients were aged from 41 to 90 years, that is late middle age to old age. The males and females were equally affected by the disease and its complications. The maximum affected were in the age group 61-70 years. The disease had a toll on people of all walks of life and with active lifestyle. The study revealed very pathetic situation as the people affected with DM were in productive age. The burden of the disease affected the quality of life and the economic condition of the patients.

**Keywords:** Diabetes Mellitus (DM); Anthropometry; BMI; Hospitalised; Disease Burden; Lifestyle; Quality of Life

### Introduction

Diabetes Mellitus proves to be major cause of morbidity and mortality around the world and contribute largely to health care costs. Deshpande (2008) points out that the risk of death of patients with DM is twice that of the population of the same age without DM. Seema., *et al.* [1] opine that DM poses significant health-care burdens on both families and society. Adishesiah [2] suggests that multidisciplinary interventions help in management of DM patients and delay the onset of complications which are usually life threatening and affect the quality of life. The present study was undertaken to assess the incidence of diabetes and complications associated with it. According to studies the prevalence of diabetes in India is about 2.1% in the urban population and 1.5% in the rural areas. Thus, about 2% of the total population in our country is suffering from diabetes and there is almost an equal number having undetected diabetes. Urbanization and increasing prosperity have raised the prevalence rate.

### Objective

To understand and trace out the critical factors haunting the DM patients selected from an urban population.

### Methodology

The study was designed to assess the incidence of diabetes with complications. A sample of 51 subjects in Visakhapatnam city, Andhra Pradesh, India was selected. The details of the patient's family, socioeconomic status, anthropometry, diet and physical activity was collected while the patients' health status was obtained from the case history. The data was analysed and correlated for understanding the epidemiology of Diabetes in urban patients.

### Results and Discussion

The study revealed very pathetic situation as the people affected with DM were in the productive age. The burden of the disease affected the quality of life and the economic status of the patients.

It can be observed from Figure 1, that 35% of the diabetic patients were in the age group of 61-70 years, followed by 25% in the age group of 51-60 years.

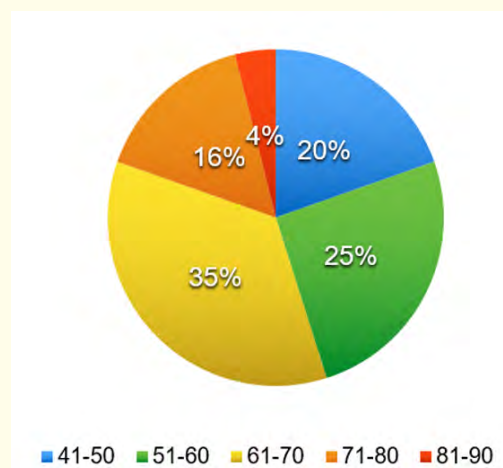


Figure 1: Diabetics (%) according to the age group.

According to data shown in Figure 2, the total subjects selected for the study, the males are 53% and females are 47%.

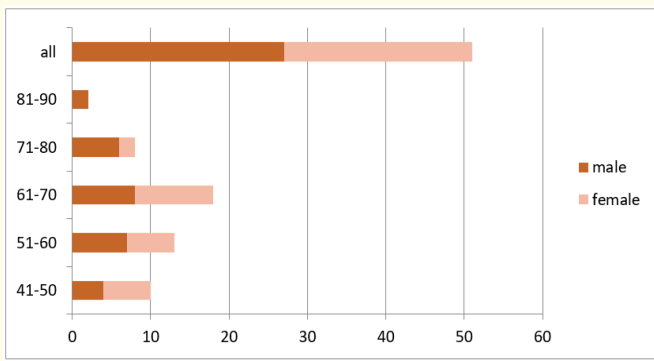


Figure 2: Distribution of sample by age, gender.

As per BMI (Figure 3), 56% males and 58% females were normal i.e., in 18.5-25 category of BMI classification, while 33% and 29% respectively were in 26-30 (overweight) category. Very few were obese (4% males and 12% females) and extremely obese (7% males).

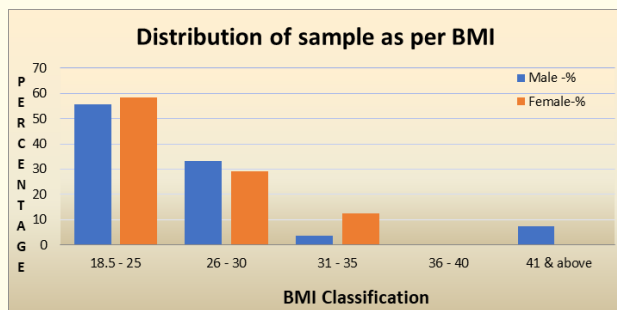


Figure 3: Distribution of sample according to BMI.

It can be observed from Figure 4, that both male n female patients were actively involved in physical activity. Moderate exercise will help to expend more energy and bring about decrease in body weight in obese persons consuming reduced diet.

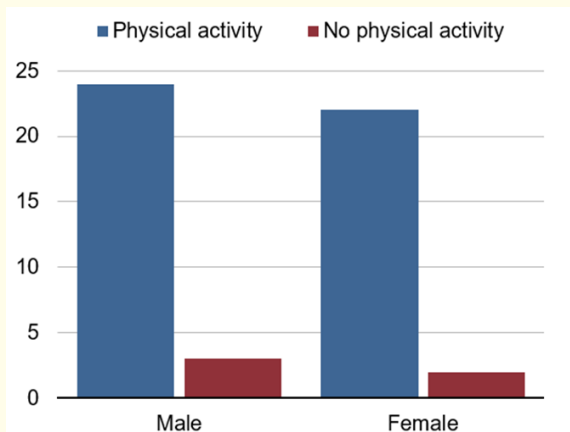


Figure 4: Sex Wise distribution of Physical Activity.

From Figure 5, it can be observed that the complications of heart, eye, dental and renal disease were predominant. Poor oral health, effects of some drugs on the digestive system, limited mobility, dexterity or vision can all cause discomfort associated with eating. Fluid intake is often lower in older people which can cause dehydration, particularly during bouts of illness. Obesity leads to development of risk factors like metabolic disorders, cardiac disorders, proneness to accidents and low life expectancy [3-15].

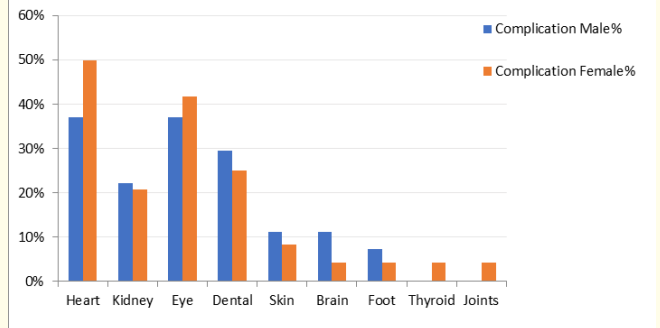


Figure 5: Percentage incidence of Complications related to Diabetes.

Conclusion

The study was designed to assess the incidence of diabetes with complications in a sample of 51 subjects in Visakhapatnam city, Andhra Pradesh, India. The study revealed very pathetic situation as the people affected with DM were in the productive age. The burden of the disease affected the quality of life and the economic status of the patients.

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