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# PROSPECTIVE OBSERVATIONAL STUDY ON GERIATRIC DIABETIC PATIENTS

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## ABSTRACT

**STUDY OBJECTIVE:** This Prospective observational study on Geriatric Diabetic patients was conducted to establish the current status of diabetic patients in Gorakhpur. **PARTICIPANTS:** Patients with Diabetic Mellitus. **STUDY DESIGN:** Prospective observational study. **STUDY SITE:** 1). Star Hospital, Gorakhpur, U.P. **PATIENTS AND METHODS:** Forty patients were studied using a prescription auditing Performa. Data was recorded from the patient's attending the outpatient department using a chance random sample method. Patients who co-operated were interviewed and information was filled in the Performa. **RESULT:** The result suggested that the current status of geriatric patients suffering from diabetes in star hospitals of Gorakhpur. Demographic analysis of data revealed that the study population comprised of more male (56%) than female (44%). Majority of the patients were in the age group of 50-60 years (32%) and 50-60 kg weight (40%). About three per cent of females and eight per cent of the males had a family history of diabetes. **CONCLUSION:** This study concluded that the present status of diabetes is more common in male than female in Gorakhpur. Based on these base line data and analysis, in the present time, an intervention was suggested to improve the current status of diabetes for future control. This study may be more meaningful to improve, further, the prescribing through successful implementation of interventional program in the health care centers and give more attention on male and over age and weight patient than female lesser weight patient in Gorakhpur.

**KEYWORDS:** Diabetic patient, prospective study, outpatient department, Star Hospital.

**OBJECTIVES:** This study will investigate the hypothesis that detail the current status of geriatric diabetic patient and use of a care platform and its educational content by Diabetic

patients will positively influence perceived quality of life, wellbeing and degree of self-reliance. Furthermore, it will inform the majority of geriatric diabetic patient whether they are male or female and the influence of platform use on clinical parameters, like glycemic control, will be investigated. It also inform the age and weight of patient which comprises more patients. It will assess the effects of clinical parameters and quality of life on micro- and macro-vascular complications and mortality.

**Other objectives are**

To reduce the symptoms of diabetic patients.

To concentrate on non-pharmacotherapy.

To make sure rationale use of medicine.

## PATIENTS AND METHODS

The study was conducted at star hospitals after obtaining consent to collect information from patients attending the physician in outpatient department. Forty prescriptions from one physician were collected from star hospitals at Gorakhpur for a period of one month (march to april 2014). Individual patients were interviewed using the prepared questionnaire for this study after their visit to the doctor.

The patients who co-operated were interviewed and information was filled in Performa. The tool used was a set of prepared questionnaire for each patient whose diagnosis was based on clinical evidence provided by the doctor and the technique adopted was personal interview with the patient. All the patients were asked for information as specified in the questionnaire. Their habits, socio-economic status, past medication and disease and occupation were also asked as mentioned in the patients' information. Verbal consent was taken from every patient before enrolling in this study. This was an observational study aimed at identifying the current status of geriatric diabetic patient in Gorakhpur.

Questions were asked about the smoking status and educational level and family history of any diabetes in the past. All the patient history per prescription was observed.

## STUDY VARIABLES OF DATA

The study variable in the study are - age, sex, weight, smoking, occupation, family history, clinical diagnosis, anti- diabetic prescribed, single/multiple drug therapy, brand name, generic name, dosage forms of anti- diabetic drug.

Physicians take a medical history to establish the diagnosis of diabetes. The physicians use **impaired glucose tolerance (IGT) and impaired fasting glucose (IFG)** for the confirm diagnosis of diabetes.

## INCLUSION AND EXCLUSION CRITERIA

Only outpatients suffering from diabetes alone were included in the study. Diabetic patients who suffered from other disease such as hypertension and other heart problem were also included in the study. Patients of encephalitis, chronic bronchitis, depression, chronic ulcer, cancer and pneumonia were excluded.

## COLLECTION OF DATA

All the data was collected directly from the hospital pharmacy and from patient. In the collection of data mainly three people were involved, collector, doctor and patient. All the information were taken from the patient regarding diabetes symptoms, drugs used, frequency of taking drugs, route of administration, past medication disease history and their economic conditions.

## ANALYSIS OF DATA

1. Compilation of data was done.
2. Data were classified in different independent variable.
3. The data was tabulated using excel in the computer.
4. Percentage was calculated.

## RESULTS

The results suggested that the current status of male and female patients suffering from diabetes in Gorakhpur star hospital is presented in [Table 1]. Demographic analysis of data revealed that the study population comprised of more male than female. Majority of the patients were in the age group of 50-60 years [Table 2] and 50-60 kg weight [Table 3]. About three per cent of females and eight per cent of the males had a family history of diabetes.

**Table 1: Demographic distribution of diabetic patients according to sex.**

| Sex | Male (n = 23) | Female (n = 17) | Total (n = 40) |
|---|---|---|---|
| No. | 23 | 17 | 40 |
| Percentage (%) | 57.5 | 42.5 | 100 |

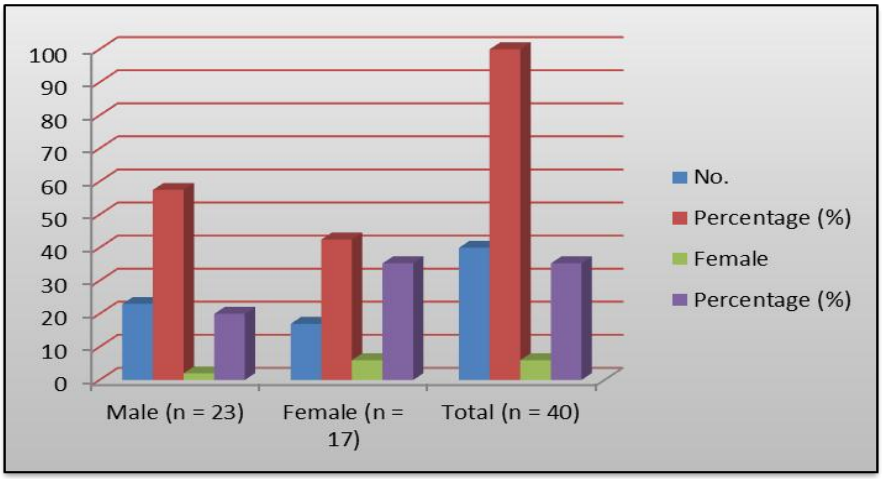



**Table 2: Demographic distribution of diabetic patients according to age.**

| Sr. no. | Age groups (yrs.) | Male (n =23) | Percentage (%) | Female (n = 17) | Percentage (%) | Total (40) |
|---|---|---|---|---|---|---|
| 1 | 30-40 | 2 | 08.61 | 3 | 17.64 | 5(12.5%) |
| 2 | 40-50 | 3 | 13.14 | 6 | 35.29 | 9(22.5%) |
| 3 | 50-60 | 6 | 26.08 | 6 | 35.29 | 12(30%) |
| 4 | 60-70 | 8 | 34.78 | 1 | 07.14 | 9(22.5%) |
| 5 | 70-80 | 4 | 17.39 | 1 | 70.14 | 5(12.5%) |
| Total | | 23 | 100 | 17 | 100 | 40100%) |

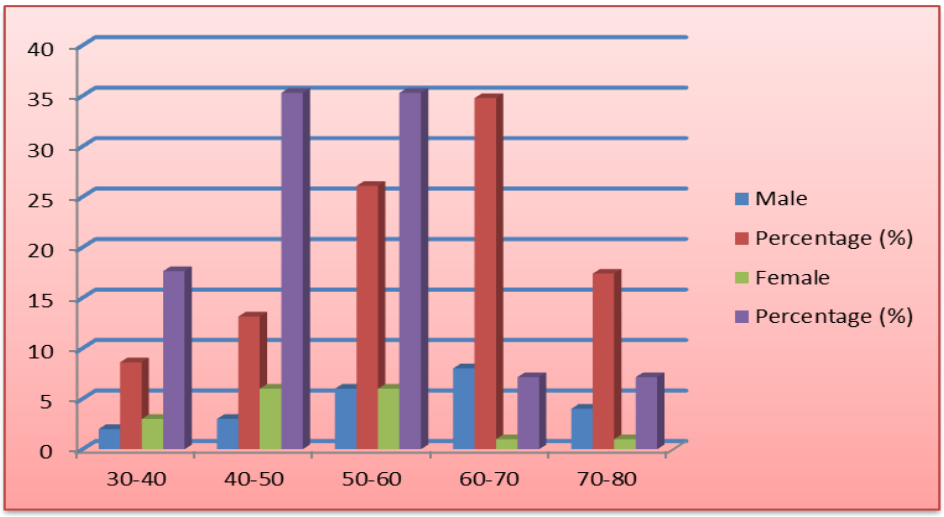
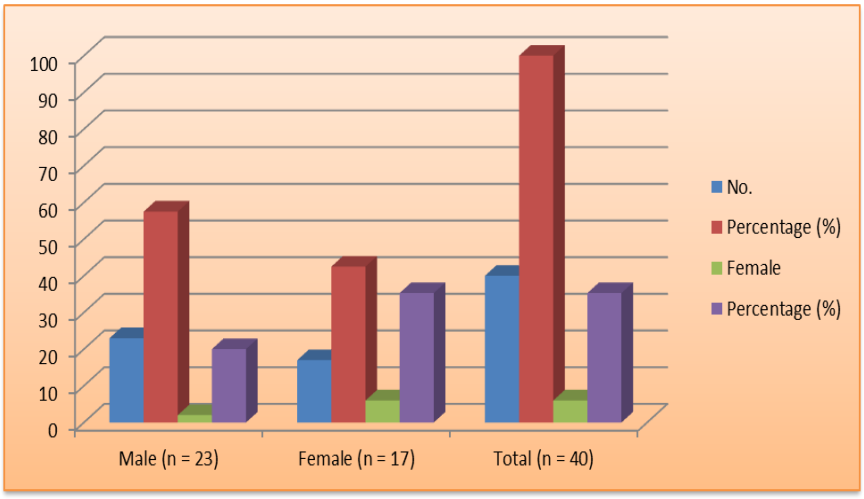



**Table 3: Demographic distribution of diabetic patients according to weight.**

| Sr. no. | Weight groups (kg.) | Male (n = 23) | Percentage (%) | Female (n = 17) | Percentage (%) | Total (40) |
|---|---|---|---|---|---|---|
| 1 | 40-50 | 5 | 21.74 | 2 | 20.00 | 7(16%) |
| 2 | 50-60 | 7 | 30.43 | 6 | 35.29 | 13(40%) |
| 3 | 60-70 | 6 | 26.09 | 6 | 35.29 | 12(28%) |
| 4 | 70-80 | 5 | 21.74 | 3 | 17.64 | 8(16%) |
| Total | | 23 | 100 | 17 | 100 | 40(100%) |




## DISCUSSION

A prescription-based observational survey is considered one of the scientific methods to assess and evaluate the rationality of the prescription current status of disease. Recommendations of various international bodies on diabetes which help to improve diabetic condition of the patient and ultimately reduce the diabetic condition. Analysis of forty cases of diabetic patient, in this study, revealed that diabetes was more prevalent in males than females. Demographic characteristics also showed that males (57.5%) were suffering more from diabetes than females (42.5%). The physicians diagnose the diabetes by history and examination. The diabetic patients do not require more than one drug to control the symptoms hence combination therapy does not require to treat diabetes. In this study (30%) patients were come under 50-60 yrs. Age and only (12.5%) patients were come under 30-40, 60-70 yrs. age and (40%) patients were come under 50-60 kg. weight and only (16%) patients were come under 40-50, 70-80 kg weight. This indicated the diabetic patients mainly suffering in 50-60 yrs. age 50-60 kg weight.

## CONCLUSION

This study concluded that the present status of diabetes is more common in male than female in Gorakhpur. Based on these base line data and analysis, in the present time, an intervention was suggested to improve the current status of diabetes for future control. We recommend that the practitioners can be used as facilitators in future training programs for general practitioners, family physicians and primary care physicians to reduce morbidity, mortality and economic costs of diabetes. In conclusion, national diabetes education program will be beneficial as an initial step, in improving diabetes knowledge and increasing awareness in the medical community to improve the quality of life and productivity of the individual with

diabetes. This study may be more meaningful to improve, the prescribing through successful implementation of interventional program in the health care centers and give more attention on male and over age and weight patient than female lesser weight patient in Gorakhpur.

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