



## A STUDY TO ASSESS THE KNOWLEDGE AND PRACTICE ON DIABETES MELLITUS AND ITS DIET AMONG THE DIABETIC PATIENT ADMITTED IN NEMCARE HOSPITAL, ASSAM, WITH VIEW TO COMPILING AN INFORMATION BOOKLET

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### ABSTRACT

**Introduction:** Diabetes is an important public health disorder for many reasons. The disease is not only a problem for the individual but is also considered to have a major social impact on the society as well because of its complications, seriousness and cost. The aim of the study is assess the Knowledge and Practice and correlation between knowledge and practice among the diabetic patients on diabetes mellitus and its diet. **Method:** Descriptive correlation research design, Non-probability purposive sampling technique, structured questionnaire was used. Data was collected from NEMCARE Hospital, analyzed by SPSS. **Results:** The finding showed subjects knowledge 54.26%, practice 45.74%, positive correlation between knowledge and practice was found with correlation value of  $r=0.359$ . **Conclusion:** To prevent diabetes and its complication, for increasing the knowledge and practice on diabetes mellitus there is need for frequent educational campaign among the people.

**KEYWORDS :** Diabetes Mellitus, Knowledge, Practice, Diet, Information booklet.

### INTRODUCTION

“When it comes to eating right and exercising, there is no 'I'll start tomorrow'. Tomorrow is disease.” -Terri Guillemets

Diabetes mellitus is a highly prevalent chronic disorder<sup>1</sup>. Diabetes in an important public health disorder for many reasons, the disease is not only a problem for the individual but is also considered to have a major social impact on the society as well because of its complications, seriousness and cost. It is estimated that more than 180 million people worldwide have diabetes to stop this number is likely to be more than double by 2030<sup>2</sup>.

A study by American Diabetes Association reports that Indian will see the greatest increase in people diagnosed with diabetes by 2030. The high incidence is attributed to a combination of genetic susceptibility plus adoption of high calories, low activity life style by India's growing middle class.<sup>3</sup>

A study by the Indian Council of Medical Research (ICMR) has revealed that 5.5% of Assam's population is in the grip of type 2 diabetes. The report was unveiled at a conference on diabetes held recently in Bhubaneswar, Odisha. In Assam it has been observed that diabetes is on the rise in both urban and rural pockets.<sup>4</sup>

### Objectives

1. To assess the knowledge of the diabetic patient related to Diabetes Mellitus and its diet.
2. To assess the practice of the diabetic patient related to Diabetes Mellitus and its diet.
3. To find out the correlation between knowledge and practice on diabetes mellitus and its diet among the diabetic patient.

### Review of Literature

1. Eunice Gathoni Wamucii, Dr. Florence Kyallo, Dr Beatrice Kiage (2020) conducted a cross sectional study on knowledge and self-care practices, selected 190 respondents among patients visiting the diabetic clinic. The study result revealed that mean diabetes knowledge score was 7.7 out of a total of 14 and the mean self-care activities score was 7.6 out of a total of 14, indicating a deficit in a number of key areas in the knowledge and self-management of diabetes. There was statistical significant relationship between patient's level of knowledge of diabetes self-care practices and age, education level, and employment status. Statistically significant association was also found between adherence to recommended diabetes self-care practices and age, education level, employment status.<sup>5</sup>
2. Abrar Ali Wazqar Meaad Mohammed Baatya, Fahad Saqib Lodhi, Adeel Ahmed Khan (2020) conducted a cross-sectional analytical study on Assessment of knowledge and foot self-care practices

among diabetes mellitus patients in a tertiary care centre among 409 patient. The study result shows that, 72.4% had a poor level of knowledge whereas only 4.2% expressed a good level of knowledge. Almost two-thirds (63.3%) of patients showed a poor level of practice related to diabetic foot self-care.<sup>6</sup>

3. Hansaram, Sinha AP, Chongloi N, Sahoo B, Ara M and Savita (2022) conducted a cross-sectional study to assess the knowledge of the diabetes patients regarding diabetic diet among 100 diabetic patients. The study result shows that poor knowledge of the patient regarding diabetic diet.<sup>7</sup>

### Methodology

In order to accomplish the objectives of the study, “quantitative-descriptive Research approach”, descriptive correlation research design was adopted by the investigator. Study was conducted in Nemcare Hospital Guwahati among 94 diabetic patients.

### Variable

#### Socio-demographic Variables

The characteristics and attributes of the study subject are considered as the demographic variables. The demographic variables selected in this study are Age, Gender, Religion, Education, Occupation, Income, Family history of diabetes mellitus, BMI, Duration of diabetes mellitus, Diabetes complications.

#### Research Variables

Research variables are the qualities, properties or characteristics which are observed or measured in a natural setting without manipulating. In this study research variables are knowledge and practice among the diabetic patient.

### Criteria for Sampling Selection

#### Inclusion Criteria

The patient who are:

- Conscious patient
- Willing to participate in the study

#### Exclusion Criteria

The patient who are:

- Terminally ill patient (stroke patients, respiratory distress patient, shock patient)
- Unconscious patient
- Not able to follow the instruction

### Analysis and Interpretation

The data are analyzed and interpreted under 4 section

#### Section I: Description of Subject Characteristics.

In the present study out of 94 diabetic patients, majority belongs to the age group 45-54 years i.e., 33%, 53.2% were male and 46.8% were female, 80.9% patients were following to Hindu religion, 44.7% of the

patient were graduate, 30.9% were government employee, 23.4% had family income of 18,497 – 30,830, 56.4% had the family history of diabetes, 35.1% patients had diabetes mellitus from 1 – 5 years.

## Section II: Assess The Knowledge And Practice Among Diabetic Patients

The finding of the present study showed that 51(54.26%) had moderately adequate knowledge, 24(25.53%) had adequate knowledge and 19(20.21%) had inadequate knowledge among diabetic patients on diabetes mellitus and its diet. 43(45.74%) had adequate practice, 41(43.62%) had moderately adequate practice and 10(10.64%) had inadequate practice among diabetic patients on diabetes mellitus and its diet.

## Section III: Practice Of The Diabetic Patients On Diabetes Mellitus And Its Diet

The finding of the present study showed that 43(45.74%) had adequate practice, 41(43.62%) had moderately adequate practice and 10(10.64%) had inadequate practice among diabetic patients on diabetes mellitus and its diet.

## Section IV: Correlation Between Knowledge And Practice Of Diabetic Patients On Diabetes Mellitus And Its Diet

Table 1: Correlation between knowledge and practice of the diabetic patients on diabetes mellitus and its diet. **N = 94**

| Variables | Mean  | S.D  | Karl Pearson's Correlation 'r' value |
|-----------|-------|------|--------------------------------------|
| Knowledge | 13.69 | 3.10 | r=0.359                              |
| Practice  | 12.08 | 2.69 | p=0.0001, S***                       |

Significant at \*\*\*p<0.0001 3

The finding of the present study showed that calculated Karl Pearson's Correlation value is r=0.359. As the value lies between 0-1, it shows a positive correlation between knowledge and practice which clearly infers that when knowledge among diabetic clients on diabetes mellitus and its diet increases then their practice level also increases.

## CONCLUSION

Diabetes mellitus is a chronic, progressive disease characterized by the body inability to metabolize carbohydrate, fats and protein, leading to hyperglycaemia (high blood glucose level). A positive correlation between knowledge and practice was found which clearly infers that when knowledge among diabetic clients on diabetes mellitus and its diet increases then their practice level also increases. To prevent diabetes and its complication there is need for frequent educational campaign among the people.

## Recommendation

Keeping in view, the findings of the present study, the following recommendations were made:

- Similar study can be done by using a large number of sample, from other hospitals in Assam it increase the validity and generalization of the findings.
- In present study a structured interview schedule was used as a tool, hence the response was limited. It can be corrected by using non-structured interview schedule to gain in-depth information about patient's knowledge and practice.
- Similar study can be done to compare the knowledge and practice on diabetes mellitus and its diet between rural and urban population.
- Further research can be done on this topic with implementation of teaching program to improve the diabetic patient's knowledge and practice.
- An experimental study can be conducted to develop instruction module or other educational media like pamphlet, leaflet, TV program, banner etc on benefits and ways to overcome diabetes by using healthy lifestyle modification.

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