

**A STUDY TO ASSESS THE KNOWLEDGE REGARDING LIFE STYLE MODIFICATION
AMONG PEOPLE WITH DIABETES MELLITUS IN SELECTED
AREA OF MAHESANA DISTRICT**

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ABSTRACT

A patient with diabetes mellitus may or may not show the symptoms of diabetes. The diagnosis is established with symptoms of diabetes plus blood sugar values. The values are different in a diabetic compared to a non-diabetic. In a non-diabetic, the fasting glucose levels are less than 100 mg/dl whereas in a diabetic, the fasting glucose levels is more than 126mg/dl; in a non-diabetic the post meal glucose levels are less than 140 mg/dl whereas in a diabetic they are more than 200 mg/dl. According to a study there are several types of diabetes mellitus; they may differ with cause, clinical course or treatment. The major types of diabetes are Type I diabetes (previously referred to as insulin dependent diabetes mellitus), Type II diabetes (previously referred to as non-insulin dependent diabetes mellitus), Gestational diabetes mellitus and Diabetes mellitus associated with other conditions or syndrome. The main aim of the study was to assess the knowledge regarding life style modification among people with diabetes mellitus in selected area of mahesana district. In the present study quantitative research approach and descriptive research design was used. The study was conducted in selected area of Mahesana district. 100 people with diabetes mellitus were selected as sample by Non Probability convenient sampling technique. Objectives • To assess the knowledge regarding life style modification among people with diabetes mellitus in selected area of Mahesana district. • To find out the association between knowledge with their selected demographic variables regarding life style modification among people with diabetes mellitus in selected area of Mahesana district.

Keywords: Assess, knowledge, life style modification, diabetic mellitus, people.

INTRODUCTION

India is at present facing an epidemiological transition with more urbanization, and a rapid shift in the economy. As a result of this, changes in Lifestyle occur with a westernized dietary pattern and reduced physical activity, leading to increased consumption of dietary fat, sugar and calories. This has led to a shift in health burden from communicable disease to non-communicable diseases, particularly diabetes. India today leads the world with its largest number of subjects. This explosion does not only relate itself to the genetic factors but may be attributed to the role of the environment. Diabetes is a clinical syndrome characterized by hyperglycemia due to deficiency or diminished effectiveness of insulin. Each cell in the body needs glucose in the form of sugar as fuel to function effectively. The cell can never use nor burn this fuel unless it is properly processed with the help of the hormone insulin. Lack of insulin, whether absolute or relative, affects the metabolism of carbohydrate, protein, fat, water and electrolytes, sometimes with grave consequences.¹

According to a study there are several types of diabetes mellitus; they may differ with cause, clinical course or treatment. The major types of diabetes are Type I diabetes (previously referred to as insulin dependent diabetes mellitus), Type II diabetes (previously referred to as non-insulin dependent diabetes mellitus), Gestational diabetes mellitus and Diabetes mellitus associated with other conditions or syndrome.²

The prevalence of diabetes in Southern India was found to be 14 % among Chennai residents, in Bangalore 12 % and Hyderabad 17% which was higher than in Eastern India 12 % (Kolkata), in Northern India 12% (New Delhi) and in Western India 10% (Mumbai). What's worse, over the next 30 years, a three -fold excess of diabetes is predicted for urban areas in India. Worldwide 3.2 million deaths are attributable to diabetes every year. One in 20 deaths is attributable to diabetes, 8700 deaths every day, and six deaths every minute. At least one in ten deaths among adults between 35 and 64 years old is attributable to diabetes. Half of all people with diabetes older than 65 years are hospitalized each year.³

MATERIALS AND METHODS

a quantitative research approach using descriptive survey research design was used for the study. 100 tool: self structure questionnaire. non-probability convenient sampling techniques were used. Results: in this study overall the highest percentage in the demographic data including the age group 25% (below 45), gender 98% (male), religion 86% (Hindu), education status 34% (higher secondary), occupation status 45% (self-employee), monthly income 38% (less than 5000), dietary pattern 74% (vegetarian), do you have diabetic mellitus 100% (yes), knowledge regarding life style modification with diabetic mellitus 73% (no), source of knowledge 38% (social media). Out of 100 samples poor knowledge is 42%, adequate is 47% and good is 11%. Chi-square test to associate the level of knowledge and selected demographic variable.

RESULT

1. -A Distributions of respondent in relation to age group of below 45 were 25, 46-55 were 21, 56-65 were 31, above 65 were 23 and percentage wise age group of below 45 were 25%, 46-55 were 21%, 56-65 were 31%, above 65 were 23%. -A distribution of respondent in relation to gender in that male were 98 and female were 2 and percentage of male were 98% and female were 2%. -A distribution of respondent in relation to religion in that Hindu is 86, Muslim is 14, christen 0, other 0 and percentage wise religion in that Hindu is 86%, Muslim is 14%, christen 0%, other 0%. -A distribution of respondent in relation to education status in that primary is 26, secondary is 25, higher secondary is 45, graduate and above is 4 and percentage wise education status in that primary is 26%, secondary is 25%, higher secondary is 45%, graduate and above is 4%. -A distribution of respondent in relation to occupation status in that govt. employee is 26, private employee is 25, self-employee is 45, other is 4 and percentage wise occupation status in that govt. employee is 26%, private employee is 25%, self employee is 45%, other is 4%. -A distribution of respondent in relation to monthly income in that below 5000 is 38, 5001-10000 is 12, 10001-15000 is 14, above 15000 is 36 and percentage wise monthly income in that below 5000 is 38%, 5001-10000 is 12%, 10001-15000 is 14%, above 15000 is 36%. -A distribution of respondent in relation to dietary pattern in that vegetarian were 74, non vegetarian were 11, mixed were 15 and percentage wise dietary pattern in that vegetarian were 74%, non vegetarian were 11%, mixed were 15%. -A distribution of respondent in relation to do you have diabetic mellitus in that yes were 100, no were 00 and percentage wise do you have diabetic mellitus in that yes were 100%, no were 00%. -A distribution of respondent in relation to knowledge regarding lifestyle modification with diabetic mellitus in that yes were 27, no were 73 and percentage wise regarding lifestyle modification with diabetic mellitus in that yes were 27%, no were 73%. -A distribution of respondent in relation to sources of knowledge in that books were 21, social media were 38, peer group were 35, other were 06 and percentage wise source of knowledge in that books were 21%, social media were 38%, peer group were 35%, other were 06%.
2. It deals with the analysis of data related to knowledge score. The tool contained multiple choice questions. The respondents chose an option which they felt was the most appropriate. The respondents were given 1 for the correct option and 0 for wrong option. The obtained scores were analyzed in terms of mean and standard deviation. Also details regarding the content of knowledge assessment are presented in the description of scores. Out of 100 samples poor knowledge is 42%, adequate is 47% and good is 11%.
3. It deals with association of the knowledge with their selected Demographic.

Age and their knowledge calculated chi-square is 1.65 is less than table value 12.59, degree of freedom is 6

and 0.05 level of significant for the knowledge of sample there for age is not significant for the knowledge of sample.

Gender and their knowledge calculated chi-square is not calculated.

Religion and their knowledge calculated chi-square is 4.38 is less than table value 12.59, degree of freedom is 6 and 0.05 level of significant for the knowledge of sample there for religion is not significant for the knowledge of sample.

Education status and their knowledge calculated chi-square is 0.07 is less than table value 12.59, degree of freedom is 6 and 0.05 level of significant for the knowledge of sample there for education status is not significant for the knowledge of sample.

Occupation status and their knowledge calculated chi-square is 7.75 is less than table value 12.59, degree of freedom is 6 and 0.05 level of significant for the knowledge of sample there for status is not significant for the knowledge of sample.

Monthly income and their knowledge calculated chi-square is 8.19 is less than table value 12.59, degree of freedom is 6 and 0.05 level of significant for the knowledge of sample there for monthly income is not significant for the knowledge of sample.

Dietary pattern and their knowledge calculated chi-square is 1.4 is less than table value 9.49, degree of freedom is 4 and 0.05 level of significant for the knowledge of sample there for dietary pattern is not significant for the knowledge of sample.

Do you have diabetic mellitus. Knowledge regarding lifestyle modification with diabetic mellitus and their knowledge calculated chi-square is 2.15 is less than table value 12.59, degree of freedom is 6 and 0.05 level of significant for the knowledge of sample there for knowledge regarding lifestyle modification with diabetic mellitus is not significant for the knowledge of sample.

CONCLUSION

The present study aimed to assess the knowledge regarding lifestyle modification among people with diabetes mellitus in selected areas of the Mahesana district. Based on the findings from 100 respondents, The findings indicate a **critical need for targeted health education and awareness programs** on lifestyle modification for diabetes management. Despite the known risks and complications associated with diabetes, the majority of patients lacked adequate knowledge on how lifestyle changes could help manage or mitigate their condition.

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