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"A SURVEY STUDY TO ASSESS THE KNOWLEDGE REGARDING SELF CARE IN PATIENT WITH DIABETES MELLITUS AMONG PREGNANT WOMEN IN SELECTED MEHSANA."

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Abstract

Background

Diabetes mellitus is a collection of metabolic disorders caused by a relative or total deficiency of a digestive hormone called insulin, or by the inability or resistance of body cells to use the insulin that is available. Gestational diabetes mellitus (GDM) is widely acknowledged as any degree of glucose intolerance with onset or first identification during pregnancy. Gestational Diabetes Mellitus affects one out of every 25 pregnancies worldwide. According to the American Diabetes Association, Gestational Diabetes Mellitus affects 7% of all pregnancies. It is the most common metabolic condition in pregnant women. Stillbirths and congenital abnormalities are more common in diabetic pregnancies. As the prevalence of obesity and Diabetes Mellitus among women of childbearing age grows, also rises the incidence of hyperglycemia in pregnancy. Healthcare providers must deliver clear, unambiguous messages emphasizing the significance of avoiding unwanted pregnancies and glycogen control.

Objective

The main aim and objective of the survey study were to evaluate the knowledge regarding self care practices with diabetes mellitus among pregnant women in selected Mehsana.

Materials and methods

A descriptive design was adopted. 100 Antenatal mothers were selected by using convenient sampling technique on the basis of inclusion criteria to assess the knowledge regarding self-care management of Patient with diabetes mellitus among pregnant women. The data was collected from selected rural community of Mehsana. Who fulfilled inclusive criteria, Consent was taken from them by explaining the purpose of the study. A self-structured Checklist was used to assess knowledge regarding self-care management of Patient with diabetes mellitus in Pregnant Women.

Result:

The result shows that regarding the level of knowledge on self-care management of diabetes mellitus among 100 Pregnant Women, 76% had inadequate knowledge, 16% had moderate knowledge, and 6% had adequate knowledge. There was association between the socio-demographic variables like age and Number of children significant and there was no significant association with other socio demographic variables like educational status, Religion, family history with Diabetes mellitus and Source of information.

Conclusion:

The study highlights the need to organize the health education campaigns on self-care management of diabetes mellitus to enhance their knowledge.

Key Words:

Knowledge, Self-care practice, Diabetes mellitus, Pregnant Women

Introduction

Diabetes mellitus, also referred to as diabetes, was initially discovered to be a condition with sweet urine. Diabetes mellitus is a collection of metabolic disorders caused by an inability or resistance of body cells to use the insulin that is present, or by a relative or complete deficiency of the digesting hormone insulin. Nowadays, Type 2 diabetes or pregnancy-related diabetes affects the majority of women. According to the International Diabetes Federation, the prevalence of high blood sugar during pregnancy rises sharply with age and is highest among women over the age of 45 in 2017.

Most people agree that gestational diabetes mellitus (GDM) is any degree of glucose intolerance that begins or is first noticed during pregnancy. Due to familial clustering and the identification of multiple candidate genes linked to increased risk, risk factors are genetic predisposition. There are also non-genetic factors that contribute to gestational diabetes mellitus, such as maternal age, obesity, food, and lifestyle. The three Ps of diabetes during pregnancy are polyuria, polyphagia, and polydipsia, along with fatigue, weakness, unexpected visual changes, tingling or numbness in the hands and feet, and dry skin. Diabetes mellitus cannot be cured, but it can be managed with the right treatment, including exercise, nutrition, and medication. Diabetes may be controlled and complications from it can be avoided with proper care and routine medication administration.

Pregnant women are more likely to experience this metabolic condition, which is linked to severe maternal and newborn problems. Early diagnosis of this condition occurs in late pregnancy. By 2030, there will likely be twice as many diabetic patients, which will have an impact on pregnant women. After Tamilnadu, Gujarat has the second-highest percentage of diabetes in the nation.

As the incidence of both obesity and Diabetes Mellitus among woman of child bearing age continue to raise well, so as the prevalence of hyperglycemia in pregnancy. Gestational Diabetes Mellitus develops in 1 in 25 pregnancies worldwide. According to American Diabetic Association Gestational Diabetes Mellitus is common condition affecting 7% of all pregnancies. Depending on the population sample and diagnostic criteria, prevalence range from 1-14 %.

Gestational Diabetes Mellitus is an intense field of research study. It shows that prevalence of Gestational Diabetes Mellitus increases by 45% but still knowledge regarding Gestational Diabetes Mellitus and self care management is very low. Hence the investigator felt that this study would help the antenatal woman to enhance their knowledge regarding Gestational Diabetes Mellitus and self care practice of Gestational Diabetes Mellitus management which in turn would help to prevent complication during pregnancy.

Materials and Methods

The study was carried out in the Mehsana district, Visnagar. Quantitative research approach was used to assess knowledge regarding self care practices with diabetes mellitus among pregnant women in selected Mehsana. A descriptive design was chosen for the investigation. A non-probability convenient sampling method was used to collect 100 samples of pregnant women who met the inclusion criteria. Researcher administrated self structured checklist to assess the knowledge regarding self care practices with diabetes mellitus among pregnant women and after that information booklet was distributed to pregnant women. Research tool comprises of following: PART 1- Selected Socio demographic variables. PART 2- Self structured checklist to assess knowledge regarding self care in patient with diabetes mellitus among pregnant women. The checklist consists of 20 statements after that tabulate the data and statistical analysis was done by researcher, results show that it is feasible and practicable. Chi-Square was used to identify the association between knowledge regarding self care in patient with diabetes mellitus among pregnant women with their selected socio demographic variables.

Ethical consideration

Informed Consent obtained from study sample after discussing with each of them the purpose of the study and all related matters for the research purpose. Study participants were informed that obtained data is confidential and will be used only for research purpose.

Inclusion criteria:

- Pregnant women who are willing to participate in this study.
- Pregnant women who can read and understand Gujarati & Hindi

Exclusion criteria:

- Pregnant women who are not willing to participate in the study?

Data collection method:

The purpose of interview was explained to all the women with self introduction. A self-structured Checklist was used to assess knowledge regarding self-care in Patient with diabetes mellitus in Pregnant Women.

Data analysis

Polite and Hungler (1999) described analysis as “a process of organizing and synthesizing data in such a way that research question can be answered and hypothesis tested. Interpretation is refers to process of making sense of the results and of examining the implication of the finding within a broader context. This chapter deals with the analysis and interpretation of data collected from health care personnel to evaluate the knowledge regarding

self care in patient with diabetes mellitus among pregnant women in selected Mehsana. Researcher used descriptive and inferential statistics (Manual) to calculate the analysis from the data.

Result:

Table 4.1: Frequency and percentage distribution of samples based on level of knowledge regarding self care management among pregnant women.

Level of knowledge	Frequency (N_1)	Percentage %
Inadequate knowledge	76	76%
Moderate knowledge	18	18%
Adequate knowledge	6	6%

Table 4.1 shows that, majority of women 76 (76%) had Inadequate knowledge, 18 (18%) had Moderate knowledge, 6 (6%) had Adequate knowledge regarding self care management in diabetes mellitus among pregnant women.

Figure 4.1: Frequency and percentage distribution of samples based on level of knowledge regarding self care management among pregnant women.

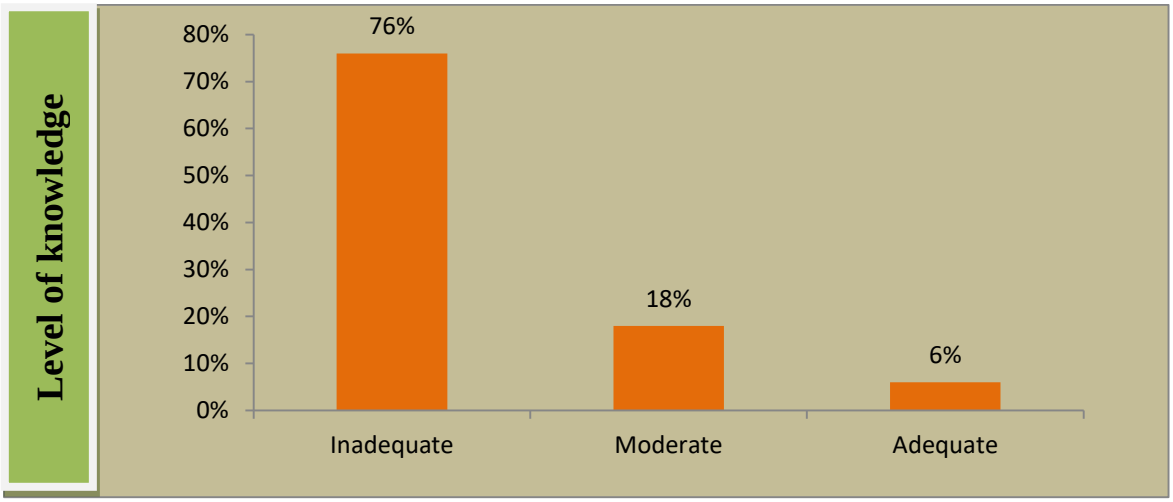

Table 4.2: Evaluate the Knowledge score on Self-care management patient with diabetes mellitus among pregnant women.

S. No	Variables	Mean	SD
1	Level of knowledge,	15.33	3.18

Table 4.2 shows that the mean core of knowledge was 15.33 and SD was 3.18.

Table 4.5: Association between knowledge score on with selected demographic variables.

S. No	Demographic variables		Frequency			Chi Square Value	Table value	Inference
			Inadequate	Moderate	Adequate			
1	Age	a) 21-25	43	11	2	12.20	9.488	S
		b) 26-30	26	02	1			
		c) 30-35	07	05	3			
2	Educational Status	a) Illiterate	39	06	01	14.30	12.592	NS
		b) Primary Education	19	03	01			
		c) Secondary education	13	05	01			
		d) Graduate	05	04	03			
3	Religion	a) Hindu	19	06	02	4.88	5.991	NS
		b)Muslim	57	12	04			
		c) Other	0	0	0			
4	Number Of Children	a) Zero	45	11	0	11.08	9.488	S
		b) One	23	05	03			
		c) More than one	08	02	03			
5	Family History of diabetes mellitus	a) Yes	22	07	0	4.19	5.99	NS
		b) No	54	11	02			
6	Source of Information	Media	34	06	04	2.19	5.99	NS
		Health Care	23	07	01			
		Other	19	05	01			

Table 4.5 shows that chi square analysis showed that there was no significant association between women with demographic variables except age and number of children.

Discussion:

The discussion of the findings is much more subjective section of a research report than presentation of the findings. The purpose of the study was "A SURVEY STUDY TO ASSESS THE KNOWLEDGE REGARDING SELF CARE IN PATIENT WITH DIABETES MELLITUS AMONG PREGNANT WOMEN IN SELECTED MEHSANA."

The first objective of the study was "To assess the knowledge regarding self-care in patient with diabetes mellitus." Out of 100 pregnant women majority 76 %(76%) had moderate knowledge, 18(18%) had inadequate knowledge and fallowed by 6(6%) had adequate knowledge regarding self-care. The mean score of knowledge regarding self-care in patient with diabetes mellitus was 15.11 and standard deviation was 3.18.

The second objective of the study was to find the association between knowledge regarding self-care in patient with diabetes mellitus among pregnant women with their selected socio demographic variables. There was association between level of knowledge regarding self-care and socio demographic variables like age and

Number of children significant. There was no significant association with the other socio demographic variables like Religion, educational status, family history of diabetes mellitus and source of information.

A study conducted by Gerada Y etal among diabetes mellitus patients at Tiku r Anbessa specialized hospital revealed that 6.9% of participants stopped taking their medication when they were feeling better, 69.6% were using abdomen as site of injection and 73.0% used upper arm. About 65.1% Respondents store/keep their insulin in refrigerator. About three fourth (75.7%) of participant took their insulin with themselves when they were out of home for long time. Present study was indicative that 46% diabetes patients preferred abdomen as the preferred site for insulin injections compared to 54% who rotated sites regularly, approx 50% subjects stored insulin correctly.

Conclusion:

Pregnancy is a period of great change for the women in both physiological and psychological aspects. From the present study the result showed that 76 % had above Inadequate knowledge18% had Moderate knowledge and 6% had Adequate knowledge regarding the self care patient with diabetes mellitus among pregnant women.

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