# A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING **GESTATIONAL DIABETES MELLITUS AND** ITS PREVENTION AMONG ANTENATAL MOTHERS IN SELECTED HOSPITALS, **PUDUCHERY**

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### **KEY WORDS:**

DIABETES MELLITUS (DM)

GDM - GESTATIONAL DIABETES MELLITUS

#### **I.INTRODUCTION**

Carbohydrate intolerance is the most common metabolic complication of pregnancy. Gestational Diabetes Mellitus (GDM) poses numerous problems for both mother and fetus.

Gestational diabetes mellitus (GDM) is defined as glucose intolerance of variable degree with onset or first recognition during pregnancy. Infants of mothers with preexisting diabetes mellitus experience double the risk of serious injury at birth.

For pregnant women with poor diabetic control, the risk for a baby to be born with birth defects is about 6-10%; which is twice the rate when the mother's diabetes is well controlled. Some of the associated birth defects include spinal cord defects (spina bifida), heart defects, skeletal defects, and defects in the urinary, reproductive, and digestive systems. Also babies born to women with diabetes have an increased chance

of having breathing difficulties, low blood sugar (hypoglycemia) and jaundice (yellowish skin) at birth.

### II.BA CKGROUND OF THE STUDY

Diabetes is a major public health problem in India with prevalence rates reported to be between 4.6% and 14% in urban areas, and 1.7% and 13.2% in rural areas. India has an estimated 62 million people with Type 2 diabetes mellitus (DM); this number is expected to go up to 79.4 million by 2025. Management of diabetes and its complications imposes a huge economic burden on the society; hence effective strategies are urgently needed to control this epidemic.

### **III.Review of literature**

Crprk k etal (2013) Conducted a study to assess the risk factors for gdm development in gestation ,perinatal macrosomy in offspring from gdm .the study involved 146 women with gdm and 1806 women with normal carbohydrate metabolism during pregnancy ,506 newborns of gestational diabetic mothers and 993 newborns oh healthy mothers, as well as 200 women with a history of gdm. the study results shows that overweight and obesity are not risk factors of gestational diabetes mellitus, delivery of child with macrosomy feautures and of overt diabetes mellitus later in.

### IV.OBJECTIVES OF THE STUDY

- > To assess the pretest knowledge on knowledge regarding gestational diabetes mellitus and its prevention among antenatal mothers
- To develop and administer the structured teaching programmme on gestational diabetes mellitus and its prevention among antenatal mothers
- > To assess the post test knowledge regarding gestational diabetes mellitus and its prevention among antenatal mothers.
- To compare the pretest and post test knowledge regarding gestational diabetes mellitus and its prevention among antenatal mothers.
- > To determine the association between posttest knowledge regarding gestational diabetes mellitus and its prevention among antenatal mothers.

# V.Hypothesis

- H1 There will be a significant difference in the level of knowledge on gestational diabetes meliitus and its prevention before and after structure teaching programme among antenatal mothers
- H2 There will be significant association of postlevel of knowledge in existing knowledge of antenatal mothers with selected demographic variables

### **Delimitation**

- The study will be conducted only with antenatal mothers
- The study is limited to only 30 antenatal mothers

#### VI.METHODOLOGY

### Research design

Research design is used for this study was pre experimental design(one group pre and post test design)

## Variables of the study

Dependent variable: knowledge regarding gestational diabetes mellitus and its prevention

**Independent variable**: structured teaching programme

# Setting of the study

Selected hospitals at puducherry

# **Population**

All antenatal mother

# Sample size

30 antenatal mothers

# Sampling technique

Convenient sampling technique

# Sampling criteria

### **Inclusion criteria**

Antenatal mothers with age group between 18-30 years

### **Exclusion criteria**

- Antenatal mothers of age below 18 years
- Antenatal mothers with physical problems

### **Description of data collection**

### Part 1 consists of demographic data

### Part 2 consists of knowledge questionnare regarding gestational diabetes mellitus

The researcher prior to data collection checked validity and reliability of the tool

### Methods of data collection

The investigator obtained permission from the concerned authorities of the hospital informed consent was taken from the subject and maintained confidentiality

## **Data analysis and interpretation**

Descriptive and inferential statistical technique

### Score interpretation of the instrument

Tool comprises of score 1 was given to correct answers and score 0 was given to wrong answers

- 14-20 = good
- 7-13=average
- Below 6 poor

### VII.Data analysis and interpretation of data

Table 1 reveals knowledge level of the antenatal mothers regarding gestational diabetes mellitus and its prevention in pre test and post test

S.no	Level of knowledge	Pretest		Post test	
		Frequency	Percentage	Frequency	Percentage
1	poor	8	26.6	0	0
2	average	22	73.4	6	20
3	good	0	0	24	80

**Table 1 reveals** in prelevel of knowledge that majority 8(26.6%) of them respondent were had poor knowledge,22(73.4%)had average knowledge,0(0%) had good knowledge.in post compare to pre test their improvement in knowledge which shows good knowledge 80%.

Table 2 reveals comparision of the mean pretest and post test knowledge score of the students.

GROUP	MEAN	N	SD	MEAN
				ERROR
PRETEST	7.5	30	2.89	0.527
POSTTEST	16	30	0.615	0.112
			All	

TABLE 2 reveals their is massive improvement in structured teaching programme which evidenced in mean level

#### VIII.DISCUSSION

The first objective of the study was to assess level of knowledge on gestational diabetes mellitus and its prevention among antenatal mothers before and after the structured teaching programme.

Table 1 reveals that majority 8(26.6%) of them were poor knowledge, 22(73.4%) had average knowledge,0(0%)had good knowledge.

The second objective of the study to assess the post test knowledge regarding the gestational diabetes mellitus and its prevention

In post test 24(80%)had good knowledge,6(20%)had average knowledge in gestional diabetes mellitusand its prevention it shows that the integrated teaching programme was effective to improve the knowledge level of the student.

The third objective of the study finds out the association between the knowledge regarding gestational regarding gestational diabetes mellitus and its prevention with their selected demographic variables.

### **RESULT:-**

The result shows that 8(26.6%) of them had poor knowledge,9(73.5%) were average,0(0%) were poor in pretest Assessment. And in post test 24(80.0%) good knowledge and 6(20%)had average, the value represents and shows that the massive improvement of knowledge was improved after structured teaching programme and their was a significant association between the knowledge regarding gestational diabetes mellitus with the demographic variables age, type of family, religion are found to be significant<0.05> level.

### **CONCLUSION AND SUMMARY:**

The study concludes that it is important that the risk factors for GDM are recognized in order the clinicians are able to identify those at risk of getting GDM for early diagnosis and further intervention and applied knowledge regarding gestational diabetes mellitus to health professionals and also to the antenatal mother will prevent complications earlier for both the mother and the baby.

### **IMPLICATIONS**

• The nurses need to take up the responsibility to create awareness among the people to improve their knowledge on gestational diabetes mellitus and its prevention

- A structured teaching programme can be developed and utilization to create awareness among the antenatal mothers regarding gesational diabetes mellitus and its prevention
- The finding of the study will help the nursing personals working in hospitals to plan health education based on the knowledge and practice on gesatational diabetes mellitys and its prevention.

