

Gestational Diabetes Mellitus: Knowledge and Awareness

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ABSTRACT

Gestational diabetes mellitus is a disorder of glucose intolerance which occurs for the first time during pregnancy. Gestational diabetes mellitus is major public health issue which is increasing day by day all over the world. It leads to the risk of obesity, type 2 diabetes and possibly adult cardiovascular disease in infant and increases rate of caesarean delivery and prenatal injury. This preliminary study is done to analyse the knowledge and awareness about GDM in antenatal women. Data were collected from government and private hospitals like Amrit Kaur Hospital, Shree maternity Child Hospital, Jain fertility Child ICU Hospital etc. Questionnaires were given to pregnant women who Visited hospitals for antenatal check up. A total no of 250 respondents were included in this study. Of total number of women only 52% were known to GDM. So, the knowledge about GDM is average in women and most of the women gain this knowledge from their own experience. The study reveals that health program and camps should be organized to increase the knowledge about GDM.

Keywords- Gestational Diabetes Mellitus, Awareness, cardiovascular disease

INTRODUCTION

GDM is regarded as the developing diagnostic and epidemiological hassle in current years. Gestational diabetes mellitus is a disorder of glucose intolerance which occurs for the first time during pregnancy. Gestational diabetes mellitus is major public health issue which is increasing day by day all over the world. At the time of gestation placenta release a hormone called the human placental lactogen or human chorionic somatomamotrophic hormone (HCM). This hormone enables the foetus to grow and modifies the metabolism of the mother and increase the blood sugar level of the mother. It makes the mother much less attentive to insulin meaning the body of the mother is unable to use insulin properly and this decreased sensitivity to insulin increases the blood glucose level in mother. It leads to the risk of obesity, type 2 diabetes and possibly adult cardiovascular disease in

infant and increases rate of caesarean delivery and prenatal injury.

Objectives- To analyse the knowledge and awareness about GDM in antenatal women.

METHODS

The present study was done in government and private hospitals of Beawar region namely Amrit Kaur Government Hospital, Shree Maternity Child Hospital and Jain fertility Child ICU Hospital. This study was conducted between the periods of six months from Jan 2019 to June 2019. All pregnant ladies who voluntarily participated in the study were included and who can't deliver response like critically ill mothers, those not able to pay attention/ speak; ladies with intellectual fitness hassle have been excluded from the study.

A total number of 250 respondents were included in this study. For the study a

well-prepared questionnaire was given to the pregnant women who visited the hospitals for antenatal check-up. The respondents were requested to fill the questionnaire. Questionnaire contained 21 questions in all with 11 questions on awareness about GDM, and risk factors, diagnosis, treatment, and outcomes of GDM and 10 questions related to their socio-demographic details like name, age, occupation, weight etc. The source of knowledge about GDM were also obtained. All questions had categorical responses (yes and no) and were implemented with an item score of '1', '0' respectively. All respondents who replied 'Yes' had been given rating of '1' and those who answered 'No' were given a rating of '0'. Each correct response was given a rating of 1 and each woman became scored out of a complete of 11. A rating of 0-4 was taken into consideration as poor information, 5-8 as fair, and 9-11 as excellent knowledge of GDM. The average score of mothers on understanding of GDM and its chance elements, screening and treatment and consequences of GDM were calculated.

RESULT

Table 1: Knowledge about GDM and its risk factors, diagnosis, treatment and outcomes in antenatal women

Questions	Participants who replied 'yes' (Respondents- 250)	
	n	%
Knowledge about Diabetes Mellitus	219	87.6
Awareness about Gestational Diabetes Mellitus	130	52
Knowledge of causes of GDM	90	36
Is Obesity is a risk-factor for GDM?	150	60
Is GDM history is a risk factor for the Diabetes in future Pregnancy?	122	48.8
Have you know about Oral Glucose Tolerance Test?	83	33.2
Is treatment is necessary to cure GDM?	95	38
Is only diet and exercise can treat GDM?	62	24.8
Is insulin is required to cure GDM?	165	66
Does GDM cured after parturition or not?	79	31.6
Is GDM affects baby's health?	142	56.8
Does history of GDM develops type 2 Diabetes in future?	61	24.4

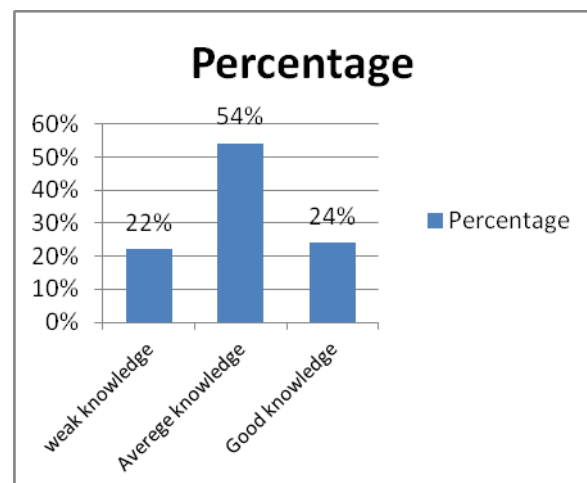
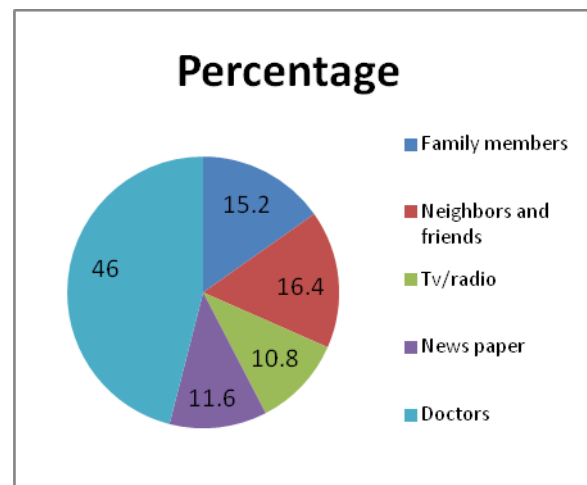
250 antenatal mothers have been filled the questionnaire and only 52% knew about GDM. Overall, 24% women had good information, 54% had little knowledge, and 22% had weak knowledge of GDM. The median knowledge rating changed into 6.5. The previous knowledge of GDM was known to only a few ladies through tv/radio, own family members, Doctors, friends and neighbors and newspapers.

Table 2: Sources of knowledge about GDM

sources	Participants who replied 'yes' (Respondents- 250)	
	n	%
Family members	38	15.2
Neighbors and friends	41	16.4
Tv/Radio	27	10.8
News paper	29	11.6
Doctors	115	46

Table 3: Knowledge about GDM

Score	n	Percentage
Good knowledge (0-4)	55	22%
Average knowledge (5-8)	135	54%
Weak knowledge (9-11)	60	24%



DISCUSSION

The study suggests that only 24% of the respondents had good knowledge about GDM approximately. Prevalence of GDM is increasing all over the world in conjunction with type 2 diabetes mellitus. GDM if left untreated results in extreme maternal and neonatal complications. The knowledge and proper diagnosis and treatment of GDM helps in improving health and lives of pregnant women during pregnancy and afterwards.

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