IJFANS INTERNATIONAL JOURNAL OF FOOD AND NUTRITIONAL SCIENCES
ISSN PRINT 2319 1775 Online 2320 7876
, UGC CARE Listed (Group -I) Journal Volume 12, Iss 02, 2023

THE INVESTIGATIONS ON EFFECTS OF THE VARIABLES ON EXPERIMENTAL AND CONTROL GROUPS' OF THE RECURRENCE OF GDM IN ANTENATAL MOTHERS

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Abstract

Gestational diabetes mellitus, also known as or GDM and diabetic disorders Type 1 diabetes is brought on by the immune response destroying pancreatic cells. 5–10% of diabetes diagnosed in the entire population is caused by it. The aim is to evaluate the effects of the variables on experimental and control groups' of the recurrence of GDM in antenatal mothers. Methodology are based on purposive sampling technique. Antenatal mothers in the experimental group attended the video teaching at their first antenatal visit (6-12 weeks). Video training focused mainly on group walking, dietary modification, monitoring body weight and maintaining BMI and modifying the sleeping pattern. Results are antenatal mother background variables, the majority of females in the group performing the experiment were between the ages of 31 and 35; 21 (52.5%); had completed their college education; 28 (70%); were housewivesAmong the antenatal mothers in the control group, the majority were between the ages of 26 and 30; 23 (57.5%) had completed their college educations; 30 (75.5%) were housewives. the majority of women in those in the experiment had BMIs over 25, 36 (90%), as well as waist-hip ratios more than 0.85, 38 (95%). had done their housework with help 38(95%). The factors that lead to continued resistance to insulin in GDM are expected to be as varied as in the wider community given that GDM represents a spectrum of young women suffering a tolerance for glucose. The factors are age, educational status, family, health information are responsible for the GDM in antenatal mothers.

Keywords: *Gestational diabetes mellitus, antenatal mothers, health information, variables*

Introduction

"Gestational Diabetes Mellitus" (GDM) is characterized as varying degrees of tolerance for carbohydrates that initially becomes apparent or begins during childbirth (Boath et al., 2023).

The term "gestational diabetes mellitus", also called GDM, refers to varied degrees of sugar intolerance that are initially identified during birth. GDM is diagnosed by looking for physical indicators of risk in pregnant women and, among at-risk women, looking for abnormal glucose tolerance, and which is often mild and silent although not always (Mishra and Kishore, 2018; Bennett et al., 2023). The extensive range of physicochemical and genetic defects that characterize non-pregnant mellitus seem to represent the root cause

of GDM (Paulsen et al., 2023). In actuality, women with GDM have a higher-than-average chance of acquiring diabetes apart from delivery (Yang et al., 2023; Zakaria et al., 2023). Consequently, GDM offers a special chance to research the early pathophysiology of Type 2 diabetes and to develop prevention measures (Bennett et al., 2023; Khunti et al., 2023).

Material and method

A quantitative research technique influences of lifestyles adjustment on the recurrence of GDM and the success of the pregnancy was evaluated using that was evaluation in nature. GDM diagnosis and pregnancy outcome were the dependent variables, while lifestyle style change intervention was the independent variable.

The sampling technique used was purposive sampling method. The setting was randomly selected as an experimental and control setting.

Experimental group are the mothers follows Video teaching on “Prevention on recurrence of GDM" was developed after extensive literature review. It focused mainly on group walking, dietary modification, monitoring body weight and maintaining BMI and modifying the sleeping pattern. The video teaching lasts for about 20 mts. It was presented in front of experts in JKKM College of Nursing. It was modified according to their suggestions. Antenatal mothers in the experimental group attended the video teaching at their first antenatal visit (6-12 weeks). After the pilot study it was further decided to supplement with a booklet. Booklet was prepared and supplemented after the video teaching for their ready referral.

Result and Discussion

In the experimental group majority of antenatal mothers were between 31-35 years 21(52.5%) and in the control group, majority of antenatal mothers were between 26-30 years 23(57.5%)

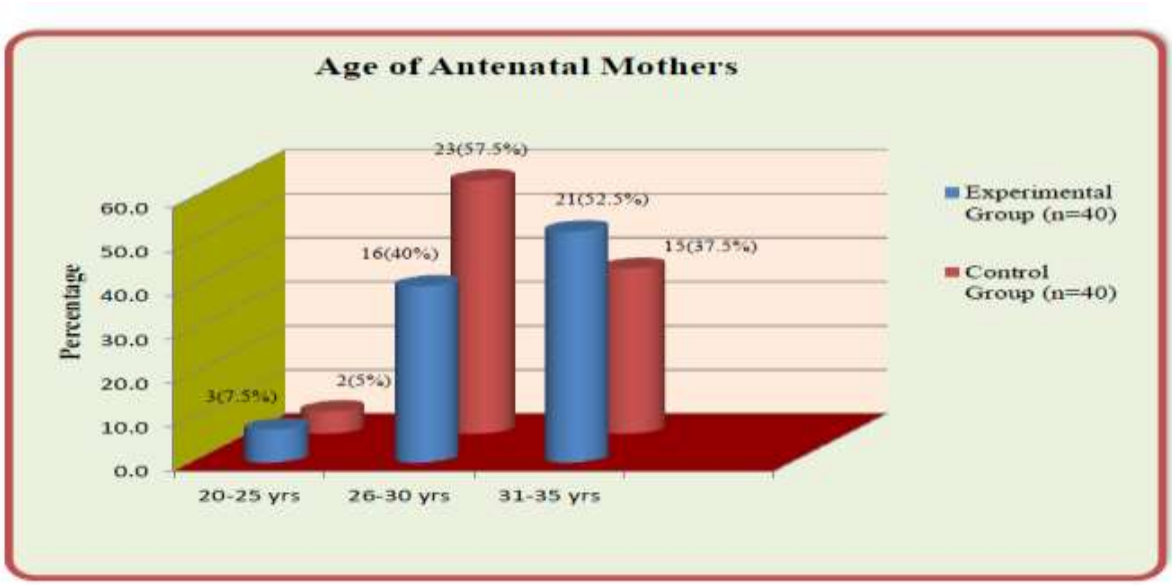

Figure 1: Classification of Antenatal Mothers by Age

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In the experimental group majority of antenatal mothers had completed college level education 28(70%) and in the control group, majority of antenatal mothers had completed college level education 30(75%).

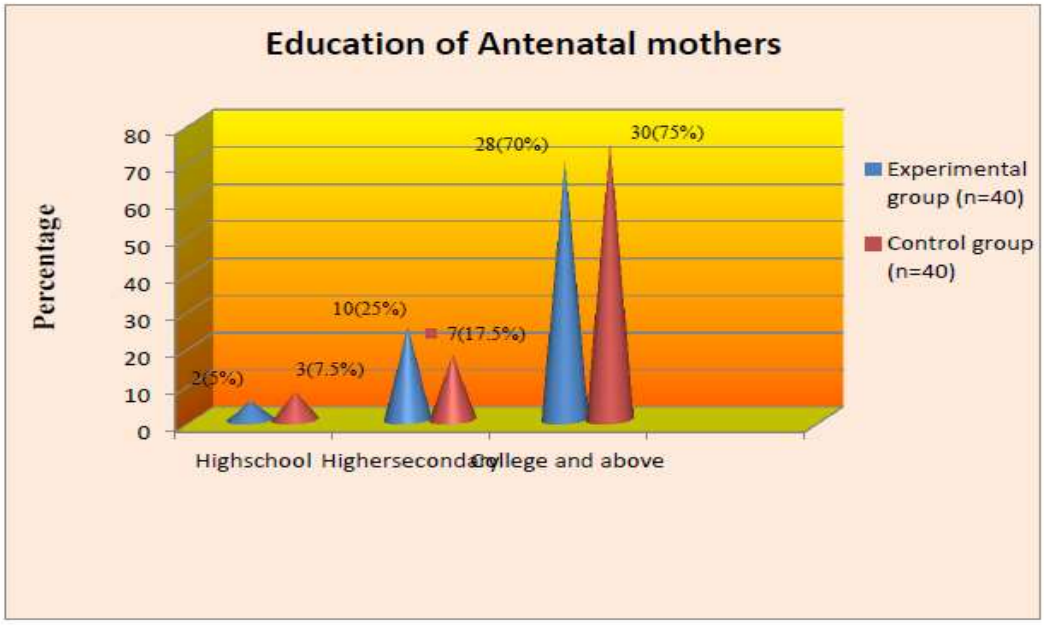

Figure: 2 Educational status of Antenatal mothers

Table – 1: Classification of Antenatal mothers by occupation

Background variable	Category	Experimental Group (n=40)		Control Group (n=40)	
		n	%	n	%
Occupation	Housewife	17	42.5	24	60
	Tailor	8	20	3	7.5
	Teacher	9	22.5	7	17.5
	Storekeeper	1	2.5	3	7.5
	Salesperson	2	5	1	2.5
	Lecturer	3	7.5	2	5

Majority of mothers in the experimental group 17(42.5%) and in the control group 24 (60%) were housewives.

Table –2: Classification of Antenatal mothers by Type of family, Residence and Economical status

Background variable	Category	Experimental Group (n=40)		Control Group (n=40)	
		n	%	n	%
Type of family	Joint	20	50	18	45
	Nuclear	19	47.5	22	55
	Extended	1	2.5	-	-
Residence	Rural	12	30	10	25
	Urban	21	52.5	18	45
	Semi urban	7	17.5	12	30
Economic status based on Ration card colour	All commodity cards	37	92.5	33	82.5
	Sugar cards	3	7.5	6	15
	No commodity cards	-	-	1	2.5

Table 2 shows, majority of mothers in the experimental group had come from joint families 20(50%); residing in Urban area 21(52.5%) and had all commodity ration cards 37(92.5%).

In the control group, majority of Antenatal mothers had come from nuclear families 22(55%); residing in Urban area 18(45%) and had all commodity ration cards 33(82.5%).

In the experimental group, majority of antenatal mothers were Hindus 20(50%) and in the control group, majority of antenatal mothers were Christians 21(52.5%).

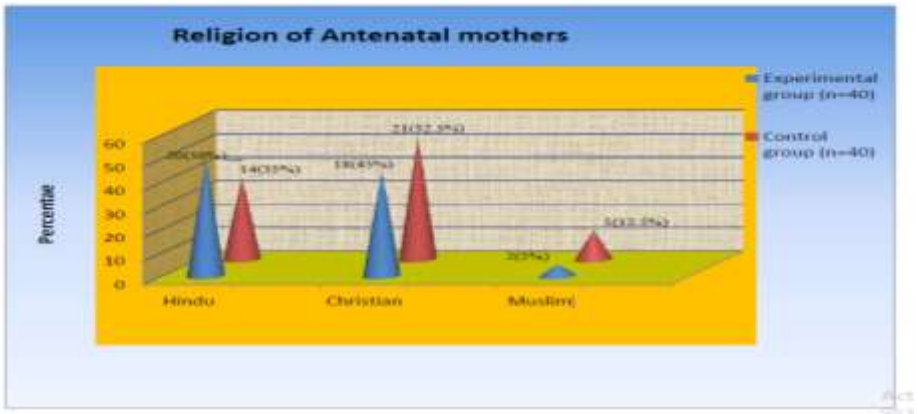

Figure 3: Religion of Antenatal mothers

Data on Health information of Antenatal mothers

Table -3: Classification of Antenatal mothers by BMI and Waist hip ratio

Health information	Category	Experimental Group (n=40)		Control Group (n=40)	
		n	%	n	%
BMI	<18.5	-	-	-	-
	18.5 - 25	4	10	4	10
	>25	36	90	36	90
Waist hip ratio	≤ 0.85	2	5	1	2.5
	>0.85	38	95	39	97.5

BMI- Body mass index

The health information of antenatal mothers shows majority of mothers in the experimental group had their BMI above 25, 36(90%); had waist hip ratio > 0.85, 38(95%).

In the control group, majority of antenatal mothers had their BMI above 25, 36(90%); had waist hip ratio >0.85, 39(97.5%). Dieberger et al., (2023) found relationships between maternal physical activity particularly sedentary time and indicators related to cord blood, obesity, and newborn weight. These results have implications for preventing growing rates of obesity in children along with perinatal adiposity and underscore the necessity of promoting physical activity during pregnancy.

Conclusion

Studies on variables associated with risk for a risk of diabetes following GDM often do not distinguish between each of the different kinds of GDM mentioned above. They often include information on established factors for the development of type 2 diabetes, such as age, occupation, health information, obesity, food increase, and becoming older. Probably given that they represent women who are very close to becoming obesity at their moment of GDM a diagnosis, significantly high blood sugar levels immediately following and during childbirth are correlated with a higher possibility of diabetes.

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