## A LIFESTYLE INTERVENTION FOR THE TREATMENT OF MOTHER WITH GESTATIONAL DIABETES MELLITUS AT SELECTED HOSPITAL SMCH

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### Abstract

The quantitative research approach with non-experimental descriptive design pretest posttest design with control group was adopted for the present study. After obtaining permission from the head of saveetha hospital, the study was conducted. A total of 120 samples who met the inclusion criteria were selected by convenience sampling technique. The investigator induced and explained the purpose of the study to the participants and written informed consent was obtained. The demographic data and the level of gestational diabetes mother was collected using self-structured questionnaire. After a period of life style intervention of treatment of mother b, the collected data were tabulated and analyzed by using descriptive and quantitative statistics. It is a good choice for this study because it allows us to collect data from many women with gestational diabetes mellitus (GDM) and to test the effectiveness of a lifestyle intervention for GDM. A sample of women with GDM was selected. A survey was developed to collect data on the women's lifestyle habits and their blood glucose levels. The survey data was analyzed using descriptive statistics and inferential statistics. The F value is 271.058 and it is more than the table and it is inferred that there is significant difference in the significant relationship between review check-ups on Health- related quality of life.

### INTRODUCTION

The World Health Organization has estimated that currently, there are over 180 million people worldwide living with diabetes. This number is expected to double by the year 2030. Diabetes is a significant global health concern, and its prevalence is projected to continue increasing in the coming years<sup>(1,2)</sup>. The rise in diabetes cases is influenced by factors such as aging populations, unhealthy lifestyles, poor dietary habits, lack of physical activity, and obesity<sup>(2,3)</sup>. These trends highlight the importance of awareness, early detection, and effective management of diabetes to mitigate its impact on public health. Efforts to prevent and control diabetes through education, lifestyle modifications, access to healthcare, and advancements in medical treatments are crucial in addressing this growing health challenge. Public health initiatives and individual actions can play a vital role in curbing the rising prevalence of diabetes and improving the quality of life for those affected by the condition<sup>(4,5,6)</sup>. Gestational diabetes often exhibits few noticeable symptoms, and it is commonly identified through routine screening during pregnancy. Diagnostic tests are used to detect elevated levels of glucose in blood samples, which indicate the presence of gestational

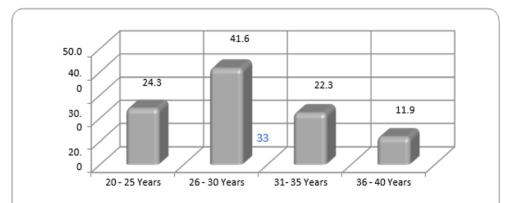
diabetes<sup>(7,8)</sup>.Unlike other types of diabetes, gestational diabetes may not present with typical symptoms such as excessive thirst or frequent urination. As a result, pregnant women are often screened for gestational diabetes as a standard part of prenatal care to identify any potential issues with blood sugar regulation<sup>(9,10)</sup>

### METERIAL AND METHODS

The quantitative research approach with non-experimental descriptive design pretest posttest design with control group was adopted for the present study. After obtaining permission from the head of saveetha hospital, the study was conducted. A total of 120 samples who met the inclusion criteria were selected by convenience sampling technique. A sample of women with GDM was selected. A survey was developed to collect data on the women's lifestyle habits and their blood glucose levels. The survey data was analyzed using descriptive statistics and inferential statistics. The F value is 271.058 and it is more than the table and it is inferred that there is significant difference in the significant relationship between review check-ups on Health- related quality of life.

### **RESULTS AND DISCUSSION**

### Section A:



# Figure 1: Frequency and Percentage Distribution of GDM mothers Respond to lifestyle Modification

The age group 36-40 years had only 11.9% respondents. This age group had least no. of respondents

### Section B:

### Minimizing the number of drugs required for effective diabetes management.

## Table 1: Shows the Minimizing the number of drugs required for effective diabetes management

SI. No	Opinion	Frequency	Percent	Valid Percent	<b>Cumulative Percent</b>
1	Strongly agree	24	20.0	20.0	20.0
2	Agree	32	27.0	27.0	47.0
3	Strongly disagree	23	19.0	19.0	66.0
4	Disagree	24	19.8	19.8	85.8
5	Undecided	17	14.3	14.3	100.0
	Total	120	100.0	100.0	

Opinion of the sample patients presented in table shows that 47 percent of them have agreed (strongly agreed by 20 percent and agreed by 27 percent). However, the disagreement is by 38.8 percent (strongly disagreed by 19 percent and disagreed by 19.8 percent) of the sample. Undecided is opined by 14.3 percent and as a result the possibility of Minimizing the number of drugs required for effective diabetes management is agreeable.

Table 2: Shows the Guidance and advice of Opinion of Sample on guidance
and advice in the Regular check-up

SI. No	Opinion	Frequency	Percent	Valid Percent	Cumulative Percent
1	Strongly agree	30	25.3	25.3	25.3
2	Agree	41	34.5	34.5	59.8
3	Strongly disagree	16	13.2	13.2	73
4	Disagree	18	15.5	15.5	88.8
5	Undecided	14	11.5	11.5	100
	Total	120	100	100	

Table shows that 2 percent of the samples have strongly agreed and 34.5 percent have agreed that sample patients leave the guidance and advice in the Regular checkup. But 28.7 percent of them have disagreed (strongly disagreed by 13.2 percent and disagreed by 15.5 percent) and 11.5 percent are undecided about it

 Table 3: Shows the one-way ANOVA significant difference in blood glucose control due to review check-ups

		Sum of Squares	df	Mean Square	F	Sig	
Between People		5941.6	399	14.891			
Within People	Between Items	281111	29	9693.5	2292.2	0	
	Residual	48933	11571	4.229			
	Total	330044	11600	28.452			
Total		335985	11999	28.001			
Grand Mean = 4.12							

The F value is 2292.172 and the table value at five percent level is 1.185959. Since the calculated value is more than the table, it is inferred that there is significant difference in the review check- ups and medication adherence

## Table 4: Shows the one-way ANOVA significant difference in blood glucose control due to review check-ups

ANOVA							
		Sum of Squares	df.	Mean Square	F	Sig	
Between People		1199.8	399	3.007			
\\/;+h;;e	Between Items	1097.9	4	274.47	271.06	0	
Within People	Residual	1616.1	1596	1.013			
reopie	Total	2714	1600	1.696			
Total		3913.8	1999	1.958			
Grand Mean =	= 2.80						

The F value is 271.058 and it is more than the table and it is inferred that there is significant difference in the significant relationship between review check-ups on Health- related quality of life.

### CONCLUSION

The findings of this study could have practical implications for healthcare providers in optimizing diabetes management strategies. By emphasizing the importance of regular review check-ups, medication adherence, and patient education, this research may pave the way for improved diabetes care and better patient outcomes.

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Authors contribution: The authors conceived and designed the review, acquired, analyzed and interpreted thedata, drafted the article, approved the version to be submitted and take full responsibility for the integrity of the work

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