



Effectiveness of Video Teaching Programme in prevention of Gestational Diabetic Mellitus among Antenatal Mothers

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ABSTRACT

Gestational Diabetic Mellitus is the type of diabetes in pregnancy. It normally shows up in the second 1/2 of pregnancy and numerous impacts fetal development rate and causes moderate foundational improvement. The goal of prevention in pregnancy to change dietary patterns, maintain balanced glucose level and to replace them with a healthy lifestyle for mother. The main purpose of this study to assess the effectiveness of video teaching programme in prevention of gestational diabetic Mellitus among antenatal mothers. Quantitative experimental approach and pre-experimental one group pre-test and post-test design used in this study. The sample size was 60 antenatal mothers. A pre-test was conducted to assess the knowledge on antenatal mothers followed by administration of video teaching programme. After one hour conducted post-test using the same questionnaire. The study finding revealed that after the administration of video teaching programme among antenatal mothers post-test mean score of knowledge was 27.10 with Standard Deviation 2.60 was higher than the pre-test mean score of knowledge was 9.02 with Standard Deviation 2.69. Hence there was a statistically significant difference between pre-test and post-test knowledge scores and the hypothesis was accepted. The calculated paired 't' test value of $t=33.64$ was found to be statistically highly significant at ($P<0.001$) association between post-test knowledge scores and socio-demographic variables. This clearly infers there is a significant improvement in the post-test level of knowledge regarding gestational diabetic Mellitus among antenatal mothers.



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INTRODUCTION

Gestational diabetes mellitus is one of the most frequent metabolic diseases during pregnancy and approximately affects 7% of all pregnancies. GDM is hyperglycaemia or glucose intolerance and it diagnosed second or third trimester during pregnancy. A fasting glucose level $>126\text{mg/dl}$ or an irregular plasma glucose $>200\text{mg/dl}$ meets limit for analysis of gestational diabetic Mellitus (Parimalam, 2018). The fundamental reason for gestational diabetes, whose predominance is quickly expanding around the world, is hereditary variables with gained factors like absence of activity, weight brought about by high-fat eating routine, stress, maturing hindering insulin activity, prompting the beginning of

diabetes (Olagbuji *et al.*, 2015). The number of ladies with diminished sugar resistance who create gestational diabetes (Lynch *et al.*, 2015). The predominance of diabetes goes from 4.6% to 14% in metropolitan territories and 1.7% to 13.5% in provincial regions. In India, it is assessed that 62 million individuals are experiencing type 2 DM, which is relied upon to increment 79.4 million by 2025 and homes second biggest number internationally. India assessed that around 4 million are influenced by GDM and across India, the predominance of gestational diabetes goes from 3.8% to 41% (Shaw and Chisholm, 2003). Symptomatic measures depended on a 3-h 100g oral glucose resistance test(OGTT) and were picked to distinguish ladies at high danger for the advancement of diabetes after pregnancy. It suggested the accompanying OGTT glycemic limit: fasting esteem >5.1 mmol/L; 1-h esteem >10.0 mmol/L and 2-h esteem >8.5mmol/L (Agarwal *et al.*, 2009).

In particular, the administration of gestational diabetes involves calorie, insulin treatment and supplement limitations and standardize blood glucose levels (Moreno-Castilla *et al.*, 2016). Teach about keeping up ordinary BMI to help and development are needed to help the ladies in making way of life changes fundamental to fruitful sustenance treatment. Pregnant ladies with gestational diabetes practice and pharmacotherapy with insulin is recommended (Lapolla *et al.*, 2009). Typically, if standard wholesome treatment neglects to constantly hold fasting plasma glucose under 105 or blood glucose two hours after a feast under 140, insulin treatment is suggested. America Diabetes Association suggests insulin treatment when wholesome treatment neglects to continue fasting glucose at the level of 105 milligrams for each decilitre or less (Simmons, 2015). The confusion threatening the mother incorporate the danger of toxemia and eclampsia, birth trench wounds caused colossal baby, low blood glucose polyhydramnios and higher rate of bacterial disease. Fetal difficulties incorporate low blood calcium and undeveloped jaundice, if untreated, just as the expanded danger of significant distortions in newborn children and the expanded commonness of maternal mortality (Muche *et al.*, 2020). The purpose of this study [1] To evaluate the effectiveness of a video-assisted teaching program regarding the self-administration of insulin among antenatal mothers with gestational diabetic Mellitus. [2] To associate the pre-test and post-test regarding self-administration of insulin among antenatal mothers with gestational diabetic Mellitus. [3] To determine the association between the video-assisted regarding self-administration of

insulin among selected variables.

MATERIALS AND METHODS

A quantitative experimental approach with pre-experimental one group pre-test and post-test design was used to conduct the study. The study was conducted in Government Hospital, Thiruvallur. The data were collected in all age of gravid mother using non-probability consecutive sampling technique with 60 antenatal mothers receiving antenatal care who met the inclusion criteria. The inclusion criteria for the sampling are who are all 2nd trimester of pregnancy and are available at the time of data collection. The survey has been thorough and was conducted on February 10, 2020. The data were collected obtaining written informed consent permission from the department of obstetric and gynaecological in Government Hospital. Data were assembled using a structured interview schedule for pre-test and after one hour conducted post-test to same antenatal mothers— informed consent before and after video-assisted teaching programme of gestational diabetic mellitus. The questionnaire contains 20 questions. The sample characteristics were described using frequency and percentage.

RESULTS AND DISCUSSION

The above graph shows that in the pre-test, 59(98.33%) had inadequate knowledge and 1(1.67%) had moderately adequate knowledge. Whereas in the post-test, 56(93.33%) had moderately adequate knowledge, and 4(6.67%) had moderately adequate knowledge regarding administration of insulin among antenatal mothers with gestational diabetes mellitus (Figure 1).

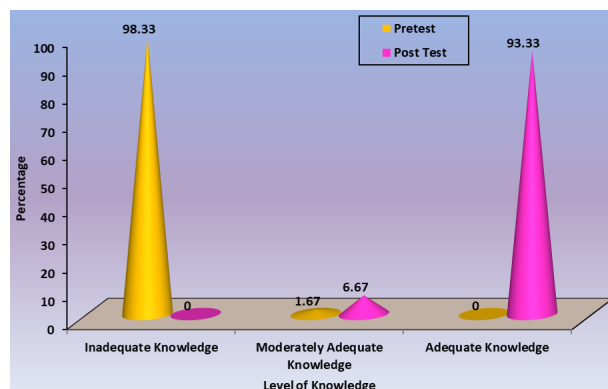


Figure 1: Percentage distribution of level of knowledge regarding self-administration of insulin among antenatal mothers with gestational diabetes mellitus

Table 1 depicts that the pre-test means a score of knowledge was 9.02 with standard deviation

Table 1: Comparison of pre-test and post-test level of knowledge regarding self-administration of insulin among antenatal mothers with gestational diabetes mellitus. N = 60

Knowledge	Mean	SD	Paired 't' test value
Pretest	9.02	2.69	T=33.646
Post-test	27.10	2.60	P=0.0001 S***

***p<0.001,S – Significant

2.69 and the post-test mean score of knowledge was 27.10 with a standard deviation of 2.60. The calculated paired 't' test value of $t = 33.646$ was found to be statistically highly significant at $p < 0.001$ level. This clearly infers that there was significant improvement was observed in the post-test level of knowledge regarding self-administration of insulin among antenatal mothers with gestational diabetic mellitus (Sweeting *et al.*, 2016). Gestational diabetes mellitus is viewed as an ordinary state of glucose prejudice in which a ladies to be a normal code during the third trimester of pregnancy. A background marked by GDM can be considered of glucose with diabetes displays significant levels of blood glucose to be one of the sturdiest danger factors concerning the advancement of type 2 diabetes among ladies who have a background marked by GDM, the danger of creating old-style type 2 diabetes typically goes from 20 to half.

CONCLUSIONS

Gestational Diabetic Mellitus is the type of diabetes in pregnancy. It normally shows up in the second 1/2 of pregnancy and numerous impacts fetal development rate and causes moderate foundational improvement. The goal of prevention in pregnancy to change dietary patterns, maintain balanced glucose level and to replace them with a healthy lifestyle for mother. The study revealed that the video teaching programme was highly effective in improving knowledge of antenatal mothers on gestational diabetic mellitus.

Conflict of Interest

The authors declare that they have no conflict of interest for this study.

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