Astudy to Assess the Effectiveness of Video-Assisted Teaching Programme on Antenatal Exercises Among Antenatal Mothers at Government Maternity Hospital, Opd, Tirupati

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***Abstract*—Background: Motherhood is another name for the selfless love and devotion towards the baby. Before childbirth, the lady was a woman after childbirth the woman is transformed into a mother. Giving birth is asking to run a marathon it requires stamina, determination, and focus. Keeping physically active during pregnancy is good preparation for the hard work of labor. A series of physical exercises are performed by the antenatal mother to bring about optimal functioning of all systems and prevent complications.**

Objectives:

1. To assess the knowledge of Antenatal mothers regarding Antenatal Exercises by pre-test

2. To evaluate the effectiveness of video-assisted Teaching on knowledge regarding Antenatal Exercises among Antenatal Mothers by post-test

3. To identify the association between knowledge regarding Antenatal Exercises among Antenatal mothers with their selected Demographic variables.

Methods: In the present study the the research approach used for the present study was pre-experimental approach and Non-probability Purposive sampling technique was used. The setting of the study was OPD at Government maternity Hospital, Tirupati. The tool used in the study was structured interview scheduled, interview schedule having two sections. Section-1 consists of socio-demographic data. Section-II consists of knowledge assessment questionnaire on video assisted teaching Programme on antenatal exercises among antenatal mothers. Knowledge assessment questionnaire was developed under the guidance of experts, to establish the reliability, split half method was used. The tool was administered to 10 members. The reliability score was r= 0.99 which indicates the tool was highly reliable for final study. Prior permission was taken from medical superintendent maternity hospital, Tirupati. The final data were collected from 50 samples Pre-test done between 12-7-2024 to 15-7-2024, and post-test done between 19-7-2024 to 23-7-2024. Investigator introduced herself to mothers and explained the significance of the study.

Results: In this study out of 50 antenatal mothers in this pre-test assessment of knowledge on antenatal exercises 33(66%) had inadequate knowledge, 17 (34%) had moderate knowledge, and 0 (0%) none had adequate knowledge. In the post test assessment 0 (0%) none had inadequate knowledge, 21 (42%) had moderate knowledge, 29 (58%) had adequate knowledge. And there was significant association of pre-test knowledge regarding antenatal exercises with various demographic variables like educational status, family income at P<0.01 level. It also showed that there was significant association of post-test knowledge regarding antenatal mothers with various demographic variables like educational status and work status at P<0.01 level, after video assisted teaching. which is significant at P<0.01 level which shows that there is an increase in the level of knowledge among antenatal mothers after video-assisted teaching on antenatal exercises among antenatal mothers.

Conclusions: The study concluded that there was an increased level of knowledge among antenatal mothers after video assisted teaching Programme on antenatal exercises.

***Index Terms*—Antenatal Exercises, Antenatal mothers, Video-assisted teaching Programme.**

I. INTRODUCTION

Pregnancy is a life-changing momentous event, which can leave a feeling of ecstatic. Pregnancy is a life cycle in every woman's life. It's a time when women need to be prepared mentally, and physically, to meet the challenges of childbirth and the transition to

parenthood. Giving birth is asking to run a marathon it requires stamina, determination, and focus. Keeping physically active during pregnancy is good preparation for the hard work of labor.[1]

A series of physical exercises are performed by the antenatal mother to bring about optimal functioning of all systems and prevent complications. Preparation for parenthood classes provides the opportunity for talks, exercise, and discussion sessions with a combined approach from midwives, physiotherapists, health visitors, and other care professionals.[2] They should aim to create a learning environment with a relaxed atmosphere, where parents can enjoy developing confidence to cope with pregnancy, labour, and delivery. Specific therapeutic aims of physical preparation include the prevention, and relief of minor discomforts such as backache, and the prevention of future gynaecological orthopaedic problems. Exercise sessions should be designed to stimulate interest in the physical changes occurring, to promote body awareness, and to facilitate physical and mental relaxation.[3]

Most pregnant women restrict their mobility and their participation in routine activities, but studies have proved that daily exercise can reduce the chance of miscarriage by 40%. United States researchers, James Clapp and Co-workers have observed that moderate exercises such as walking can prevent pregnancy-induced hypertension (PIH). Exercise can also prevent the early onset of labour, and premature rupture of membrane and can help to shorten the duration of labour. Exercise helps mothers to lose pregnancy weight faster, it decreases aches and pain associated with pregnancy. [4]

During the clinical posting in the Antenatal OPD and Antenatal ward, the investigator observed that during their antenatal period, majority of mothers were suffering from minor ailments i.e., Backache, Leg cramps, Edema, Weight gain, etc, and lack of knowledge about antenatal exercises. [5-6] So, the investigator felt that need to conduct a study on a video-assisted planned teaching program on antenatal exercises among antenatal mothers which would help them to practice, and there by prevent complications which also induce safe delivery.

II. MATERIALS AND METHODS

This study was carried out in Government Maternity Hospital, OPD, Tirupati., the target population of this study consisted of includes all antenatal mothers who were living in Tirupati. The sample of the present study includes Antenatal mothers of GMH, Tirupati. Who were attending OPD Among them, 50 were selected to receive a video-assisted teaching program on Antenatal exercises.

Sample size formula adjusted sample size formula was adopted by,

A=n/(1+(n-1)/p)

A= Assumed Sample, n= No of sample P= Total antenatal mothers (Population)

A=n/(1+(n-1)/p)

A=50/ (1+(50-1)/5000)

A=50/ (1+(49)/5000)

A= 1.009850%

A=49.55

III. TOOLS FOR DATA COLLECTION

The tool was divided in to 3 parts.

Section A- It includes demographic data includes as Age, Religion, Educational status of the antenatal mothers, Occupation of the antenatal mother, Type of family, Family income, and Source of information about antenatal exercises.

Section B**.** Structured questionnaire regarding knowledge of antenatal exercises. The total items are 30. Each right answer carries a '1' Mark and the wrong answer carries '0' marks. Except, for Q. No:7 and Q. No:8 as it has more than one correct option i,e Q.NO:7 carries 13 Marks, and Q.No:- 8 carries 9 Marks.

A. Data collection procedure:

Data collection was done at the Government Maternity Hospital OPD, Tirupati. Formal permission was obtained from the Authority of GMH to conduct the Final study. The investigator chose 50 samples purposively of those who were attending OPD of GMH, Tirupati. Initially established rapport with the study subjects and explained the purpose of the study. Consent from the subjects was obtained and confidentially was maintained throughout the study. A pretest was given to the subjects who fulfilled the inclusion criteria. The data collection method was followed by an interview schedule on the same day Video assisted teaching Programme was conducted. After one week a post-test was conducted for the same

subjects. The duration of the total data collection was 3 weeks.

B. Results and discussion:

A total of 50 antenatal mothers were participated in the study. The socio demographic variables shown that in relation to regarding to education of women out of 50 Antenatal mothers 4 (8%) were illiterate, 5 (10%) were primary education, 11(22%) were secondary education, 13 (26%) were higher education, 9(18%) were graduation, 4(8%) were post- graduation, 4 (8%) were professional. Pertaining to work status out of 50 Antenatal mothers 3(6%) were cooly, 5 (10%) were agricultural labor, 7(14%) were home maker, 22(44%) were private employee, 11 (22%) were government employee, 2(4%) were others. Regarding the family income out of 50 Antenatal mothers 18(36%) were belongs to income group 1, 12 (24%) were income group 2 ,7(14%) were income group 3, 13(26%) were income group 4. Regarding gravida out of 50 Antenatal mothers 24(48%) were primi, 20 (40%) were second, 5(10%) were third, 1 (2%) were > three. Pertaining to religion out of 50 Antenatal mothers the majority 45(90%) were Hindu, 4 (8%) were Muslim, 1 (2%) were Christian. Pertaining to residence out of 50 Antenatal mothers 4 (8%) were urban, 5(10%) were rural, the majority 41(82%) were urban slum. Regarding the number of children out of 50 Antenatal mothers the majority 28(56%) were none, 17 (34%) were one child, 5 (10%) were two children. Regarding type of family out of 50 Antenatal mothers 40 (80%) were nuclear family, 7(14%) were joint family, 3 (6%) were extended family. Pertaining to source of information out of 50 antenatal mothers 7 (14%) were mass media, 19 (38%) were relatives, 16 (32%) were health professionals, 8 (16%) were friends.

Table 1: Frequency of Level of Knowledge on Antenatal Mothers on Antenatal Exercises N=50

Sl. No	Level of Knowledge	Pre-test		Post test	
		Frequency(F)	Percentage (%)	Frequency(F)	Percentage (%)
1	Inadequate	33	66.00	0	0.00
2	Moderate	17	34.00	21	42.00
3	Adequate	0	0.00	29	58.00
	Total	50	100.00	50	100.00

The above Table reveals that in the pre-test assessment of knowledge on antenatal exercises 33(66%) had inadequate knowledge, 17 (34%) had moderate knowledge, and 0 (0%) none had adequate knowledge. In the post test assessment 0 (0%) none had inadequate knowledge, 21 (42%) had moderate knowledge, 29 (58%) had adequate knowledge.

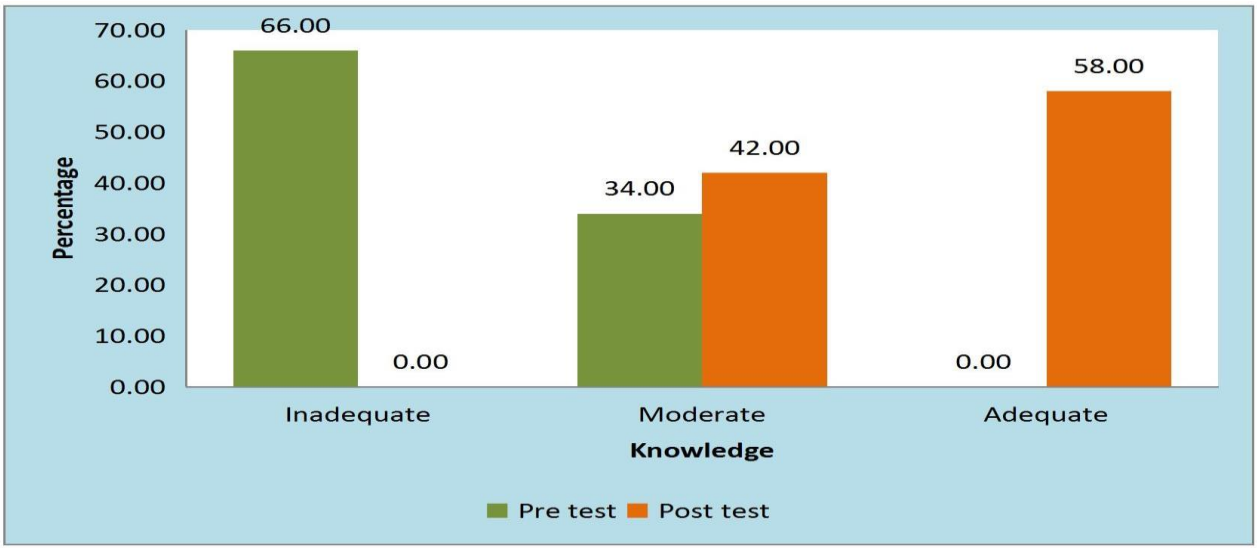

Fig 1: Shows Percentage distribution of the respondents according to theirknowledge

Table 2: Mean, Standard Deviation And T-Value of Pre And Post Test Scores Among Antenatal Mothers Of (Video-Assissted Teaching) On Knowledge Regarding Antenatal Exercises.

Pretest Vs Posttest Difference: Mean, S.D and t-value

Sl. No	Knowledge	Mean	N	Std. Deviation	t-value	p value	sig
1	Pre-test Knowledge	22.98	50	4.719	34.345	0.000	**
2	Post-test Knowledge	37.54	50	5.191			

Paired Samples Correlations

Sl. No		N	Correlation	p value	sig
1	Pre-test Knowledge & Post test Knowledge	50	0.821	0.000	**

TABLE 3: Mean, standard deviation and t-value of pre and post test scores among antenatal mothers of (video-Assisted teaching) on knowledge regarding antenatal exercises.

** = Significant at 0.01 level

The data presented in the table III show the comparison of pre- test and post- test and t-value knowledge on antenatal exercises among antenatal mothers. The maximum mean score was 22.98 and standard deviation 4.719 were obtained for knowledge on antenatal exercises in the pretest, and post -test mean is 37.54 and standard deviation 5.191 with the t-value 34.345. which is

significant at **P<0.01** level which shows that there is an increase in the level of knowledge among antenatal mothers after video assisted teaching on antenatal exercises among antenatal mothers.

C. Association of Demographic Variables of Antenatal Mothers with Pre And Post Test Scores on Knowledge Regarding Antenatal Exercises (Video-Assisted Teaching)

The study shown that there was significant association of pre-test knowledge regarding antenatal exercises with various demographic variables like educational status, family income at **0.01** level and the other variables were not had significant with the antenatal exercises among antenatal mothers.

It also showed that there was significant association of post-test knowledge regarding antenatal mothers with various demographic variables like educational status and work status at **0.01** level, after video assisted teaching. And the other variables were not had significant with the antenatal exercises among antenatal mothers.

Limitations: The study is limited to antenatal mothers, who are,

- Both prime and multi- gravid
- Attending Government Maternity Hospital, OPD
- Willing to participate in the study were included
- Speak and understand Telugu
- Not associated with medical complications
- Present during data collection period

Conflict of Interest: The authors confirm that they have no conflicts of interest for this study.

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