# ORIGINAL RESEARCH PAPER

**Obstetrics & Gynaecology** 

A STUDY TO ASSESS THE EFFECTIVENESS OF PRE-PLANNED TEACHING PROGRAM ON KNOWLEDGE AND ATTITUDE OF ANTENATAL MOTHERS ON ANTENATAL EXERCISES.

**KEY WORDS:** Ante natal, Antenatal Exercises, Knowledge and Attitude.

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**AIM OF THE STUDY:** To assess the effectiveness of pre-planned teaching program on knowledge and attitude of antenatal mothers on antenatal exercises.

**BACKGROUND AND PURPOSE:** Researchers have found that antenatal mothers who maintain an exercise program during pregnancy reduces the thunder thighs than those who are not active. Hence Physiotherapy plays an important role in improving the knowledge and attitude of antenatal mothers on antenatal exercises.

# **OBJECTIVES OF THE STUDY**

- To assess the effectiveness of pre-planned teaching program on knowledge of antenatal mothers on antenatal exercises.
- To assess the effectiveness of pre-planned teaching program on attitude of antenatal mothers on antenatal exercises.

#### METHODOLOGY:

SUBJECTS: Thirty antenatal mothers who met the inclusioncriteria were included for the study.

**DURATION**: Pre planned teaching program for 45 min. The post test was taken after 2 weeks.

**DATA ANALYSIS:**The pre and post test data has been collected from the subjects. The data has been analysed in statistics using the paired t test.

**RESULTS:** There were significant changes in the level of knowledge and attitude of antenatal mothers on antenatal exercises.

**CONCLUSION:** Thus the pre-planned teaching program had an effect in improving the level of knowledge and attitude of antenatal mothers on antenatal exercises.

#### INTRODUCTION

Exercise keeps the person fit both physically and mentally. In general, many health problems can be prevented by doing exercises. It also plays an important role during pregnancy. In biblical times, it was recognized that Hebrew slave woman had easier labour than Egyptian mistress.

In recent years there has been an increase in the number of women engaged in physical fitness activities. The exercise spirit had captured women of all ages including women in the child bearing years. Taking advantage of such a phenomenon, the Physiotherapist can play a vital role to encourage the antenatal mothers to take active participation in exercise.

The Physiotherapist has an important role in promoting health throughout the child bearing period and to help women adjust to both the physical and psychological changes in pregnancy. Exercise during pregnancy is safe for an average well nourished woman and needs few restrictions. Physiotherapy plays an important role in imparting knowledge to antenatal mothers on antenatal exercises which will improve their level of attitude towards antenatal exercise. Existing research supports the view that healthy women experiencing normal pregnancies can benefit from regular exercise. The safety and efficacy of exercise depends upon the relationship between exercise quantity and quality and extent of maternal foetal physiologic response.



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# AIM / OBJECTIVE OF THE STUDY:

To assess the effectiveness of pre-planned teaching program on knowledge and attitude of antenatal mothers on antenatal exercises.

# RESEARCH DESIGN ANDMETHODOLOGY

An experimental study design was conducted with 30 antenatal mothers within the age group of 25 to 35 years who fulfilled the inclusion criteria, at the Physiotherapy centre in Chennai for a duration of 2 weeks.

#### **Inclusion Criteria:**

- 30 antenatal mothers of age of 25 to 35 years
- · Both primigravid and multigravid mothers
- Antenatal mothers above 24 weeks and below 36 weeks of gestation
- Voluntary participants

# **Exclusion criteria:**

- Antenatal mothers with clinical disorder which may worsen with exercise
- Antenatal mothers who were unwilling to participate.
- Antenatal mothers who were at high risk

#### TOOLS USED:

The instrument used for data collection was an interview guide. This was developed based on the objective of the study and thorough review of literature and content validity from experts. The interview guide consists of three parts.

## PART-I

Demographic data consisting of basic details like age, occupation, education, type of family, etc.

#### PART-II

It consists of 16 questionnaires for assessing the knowledge. It was related to simple exercises during antenatal period, benefits of exercise, steps involved in exercises, warning signs and precautions to be taken during the exercises.

#### PART-III

It consists of three-pointlikert scale with positive and negative

statements for assessing the attitude.

#### PROGRAM CONDUCTED:

Pre-planned teaching program which includes the antenatal exercises and back care was conducted using charts consisting of pictures and diagrams of antenatal exercises for 45 min, as scheduled with proper prior permission, at the PHC Chennai, where 30 antenatal mothers actively participated in the program.

# DATA COLLECTION AND SCORING PROCEDURE: PART-I

Information on demographic data was collected from the 30 antenatal mothers who met the inclusion criteria. Based upon their answer, a tick mark was put against the appropriate response. This was not scored but used for descriptive analysis.

#### PART-II

The interview was used to assess the knowledge of antenatal mothers on antenatal exercises. The antenatal mothers were interviewed. Based upon their response, a tick mark was marked in the YES column and NO column in the 16 questionnaires. Each YES response was given a score of 1 mark and a NO response was given a score of 0 mark.

The level of knowledge of antenatal mothers on antenatal exercises were calculated using the formula, Obtained scorex 100

Total score

<50% - Inadequate knowledge

51-75% - Moderately adequate knowledge

>75% - Adequate knowledge

#### PART-III

#### THREE POINT LIKERT SCALE

It was focussed towards the assessment of attitude of antenatal mothers on antenatal exercises. It consists of 14 items. The positive statements were scored in the order as Disagree-1, Uncertain-2, Agree-3 and the negative statements were scored as Disagree-3, Uncertain-2, Agree-1.

The level of attitude of antenatal mothers on antenatal exercises were calculated using the formula, Obtained scorex100

Total score

<50% - Poor attitude

51-75% - Moderate attitude

>75% -High attitude

# DATA ANALYSIS:

The data was analysed based on the comparison of pre test and post test scores which indicates the score before and after the teaching program, in statistics using the paired t test.

Table: 1 Distribution of the level of knowledge of antenatal mothers on antenatal exercises

	Pre test		Post	test
	Number	Percent	Number	Percent
		age		age
Inadequate knowledge <50%	24	80	0	0
Moderately adequate knowledge 51-75%	06	20	06	20
Adequate knowledge >75%	0	0	24	80

# RESULT

There is significant improvement in the number and the percentage of antenatal mothers who has gained adequate knowledge of antenatal exercises after pre planned teaching program(post test).

Table: 2 Distribution of the level of attitude of antenatal mothers on antenatal exercises Result:

	Pre test		Post test	
	Number	Perce	Number	Perce
		ntage		ntage
Poor Attitude <50%	03	10	0	0
Moderate attitude 51-75%	25	83.3	05	16.7
High Attitude >75%	02	6.7	25	83.3

There is significant improvement in the number and the percentage of antenatal mothers who has gained high attitude of antenatal exercises after pre planned teaching program (post test).

Table: 3 Paired 't' Test In Knowledge And Attitude Of Antenatal Mothers On Antenatal Exercises.

S.No	VARIA BLES	Pre test		Post test		Improveme nt score		Paired 't' test value
		Mean	SD	Mean	SD	Mean	SD	
1	Knowle dge	7.37	1.40	14.93	1.96	7.57	2.62	15.81 P<0.001 Highly significant
2	Attitude	26.00	4.31	38.83	4.67	12.83		12.23 P<0.001 Highly significant

#### RESULT

There is significant improvement in the development of knowledge of antenatal mothers on antenatal exercises after pre planned teaching program (post test) where the p value is highly significant at P<0.001.

There is significant improvement in the development of attitude of antenatal mothers on antenatal exercises after pre planned teaching program (post test) where the P value is significant at P < 0.001

# CONCLUSION:

Physiotherapy plays a vital role in the antenatal period through antenatal exercises, back care, etc. Thus pre planned teaching program had a greater impact in developing the knowledge and attitude of antenatal mothers on antenatal exercises.

# REFERENCES:

- James S. Skinner, Exercise Testing and Exercise Prescription for Special Cases: Theoretical Basis and Clinical Application, Lippincott Williams & Wilking 2005
- Physiotherapy in pregnancy- Antenatal, Post natal and Baby care by Mati and Vandana Balaji
- Obstetrics Illustrated by AWF Miller and K.P. Hanrettyby Churchill Livingstone 1994
- ${\bf 4.} \qquad {\bf Raul\,ArtalMittelMark, Exercise\,in\,Pregnancy, LippincottWilliams\,\&Wilkins}$
- $5. \hspace{0.5cm} \textbf{Gavard JA}, \textbf{ArtalR}, \textbf{Exercise during pregnancy and the postpartum period}.$