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A STUDY TO EVALUATE THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMMEONKNOWLEDGE ANDPRACTICE REGARDING ANTENATAL EXERCISES AMONG ANTENATAL MOTHERS IN CHIGATERI DISTRICT HOSPITAL AT DAVNAGERE

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Abstract:

Antenatal exercises are specially designed physical activities performed during pregnancy to support maternal health and prepare the body for childbirth. These exercises help to improve posture, circulation, reduce pregnancy-related discomforts, and enhance overall well-being. Incorporating regular movement during pregnancy can contribute to smoother labour and postpartum recovery. Globally, the participation rate in antenatal exercises varies, with studies showing only 15–30%ofpregnant women engage in regular prenatal physical activity,despite known benefits.Hence thefocus ofthis study was to evaluate the effectiveness of structured teaching programme on knowledge and practice regarding antenatal exercises among antenatal mothers in chigateri district hospital at Davnagere.

Methodology: A Pre-test post-test research design and evaluative approach was used in the study. The data was collected from 60 subjects, selected through non -probability purposive sampling technique.Data was collected using structured interview schedule.

Results: The overall analysis of level of knowledge of antenatal mothers regarding antenatal exercises showed that: In knowledge,majority90% of the subjects had inadequate knowledge and 10% had moderate knowledge in pre-test, where as in post-test 83.3% of subjects had adequate knowledge and 16.7%hadmoderate knowledge. In practice majority91.6 %of the subjects had poor practice and 8.4 % had moderate practice in pre-test, where as in post-test 58.3 % of subjects had good practice and 41.7 % had moderate practice.In knowledge,The mean knowledge scores of the subjects atpre - testwere6.67(33.35%)with standard deviation 2.12found to be moderate knowledge regarding antenatal exercises. After administration of Structured teaching programmeme an knowledge scores of the subjects was 16.1 (80.5 %) with standard deviation2.91 found to be improvement in the level of knowledge among antenatal mothers. In practice the pre-test mean practice scores was found to be 3.73(37.3%) and the mean post-test knowledge scores were8.53(85.3%)which shows the mild increase in the practice level of antenatal mothers regarding antenatal exercises.

Conclusion: Findings of the study show that there was a significant difference in pre-test and post-testlevel of knowledge and practice of antenatal mothers. From this itis concluded that the Structured teaching programme is effective in improving the level of knowledge and practice of antenatal mothers. And there was a significant association between level of knowledge and practice of antenatal mothers with their selected demographic variables such as Educational Qualification,Occupation,and Income.

Keywords:Knowledge;antenatalmothers;antenatalexercises,structuredteaching program mme; Pre- experimental Group

1. Introduction

Preparation for parenthood classes provide the opportunity for talks, exercise and discussion sessions with a combined approach from midwives, physiotherapists, health visitors and other care professional.They should aim to create alearning environment with a relaxed atmosphere, where parents can enjoy developing a confidence to cope with pregnancy, labour, delivery. Specific therapeutic aims of physical preparation include the prevention / relief of minor discomforts such as backache, 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. Most pregnant women restrict their mobility and their participation in routine activities,but studies have proved that daily exercise can reduce chance ofmiscarriageby40%,1,2united state researchers James Clapp and Co-workers have observed that moderate exercises such as walking / cycling can prevent pregnancy induced hypertension (PIH).

Exercise can also prevent early onset of labour, premature rupture of membrane and can help to shorten the duration of labour. Exercise helps mother to loose pregnancy weight faster, it decreases aches and pain associated with pregnancy. The general benefits of aerobic exercise fo rpregnant women include reducing blood pressure decreases cardiac-vascular such as clot formation, helping to maintain ideal body weight and managing stable diabetes. Pregnant women who exercise have generally shorter labour and faster, easier deliveries.A study of conditioned female a the lets showed that 2nd stage of labour was shorter, presumably owing to strengthened abdominal muscles. Moderate exercise during pregnancy stimulates circulation,helps to keeps joints flexible,creates good muscle tone and promotes a general sense of well-being(Jacobson et al 1991). It is also suggested that women who exercise regularly during pregnancy have an improved course of pregnancy and labour compared to those who lead a sedentary life style. Exercise during pregnancy continues to demonstrate marked benefitsfor mother and fetus. The type, intensity,frequency and duration of the exercises seems to be important determinants of beneficial effects. Maternal benefits include improved cardio-vascular function, limited weight gain and fat retention, improved attitude and mental state, easier and less complicated labour, quick recovery and improved fitness.

Fatal benefits may include decreased growth of the fat organ, improved stress tolerance, and advanced neurobehavioral maturation. In the absence of medical contraindication,women should be encouraged

to maintain their pregnancy activity level. This initiated the investigator to conduct study on antenatal exercises among antenatal mothers.

Need for the study

Pregnancy is a time when women need to be prepared mentally and physically to meet the challenges of child birth and the transitions to parenthood. The main aim of the authors study were to investigate the effects of undertaking a regular exercise programme during and following pregnancy on psychological well-being, pregnancy and birth outcomes. Data were collected at 3 points during and following pregnancy using a variety of outcome measures and was analyzed using appropriate statistical testing, conclusions were drawn indicating that women who participated in regular physical activity tend to have protection against reduction of psychological well-being as measured by variety of psychological constructs.

The purpose of teaching and practicing of pelvic floor muscle exercise in primiparous women during pregnancy and the postpartum period.This was a secondary data analysi From a prospective multi center cohort study, the child birth and pelvic symptoms study,by pelvic floor disorders network. Primi parous women (n = 759) with term singlet on delivery were interviewed 6 months after delivery.64% of the women had been taught PFME, most with verbal(76%)and written instructions(55%)and a few(10%) during pelvic examination. The results of the study shows,more white women were taught PFME than were Asian women (48%), African American women (36%) / Hispanic women(39%, $p<0.001$). More women with college education (74%)were taught,compared with women without a college education(37%, $p< 0.001$).Walking for health in pregnancy assessed by RT3 accelero meter activity accounts and activity energy expenditure of 36 pregnant women at 20-32 weeks of gestation during treadmill walking andfree-living conditions. During treadmill walking; oxygen consumption was collected, and activity energy expenditure was estimated for a 30minutes'walk at a self- selected walking pace.

Results shows that: Encouraging pregnant women to walk for 30-40 minutes per day at a self-selected walking pace, may be an appropriate health recommendation.

Use of an exercise intervention for high risk and vulnerable population, such as pregnant women at risk for gestational hypertension / preeclampsia requires special consideration. A comparative trial testing the two types of physical exercises stretching and walking–for sedentary pregnant women at risk for preeclampsia.The intervention consists of 40 min walking at moderate intensity five times a week from 18 weeks gestation until birth. The comparator exercise consists of 40 min of stretching

exercise without increasing heart rate to more than 10% of resting heart rate, five times a week from 18weeks gestation until birth.

During clinical posting investigator has observed and also asked many of the mothers regarding importance of antenatal exercises and practice of antenatal exercises among antenatal mothers.The most of them are having lack of knowledge on antenatal exercise. This indicated that the investigator to underst and structured teaching programme on antenatal exercises.

Objectives of the study

To assess the existing knowledge of antenatal mothers regarding antenatal exercises by using structured interview schedule.

To assess the practice of antenatal mothers regarding antenatal exercises by using check list.

To evaluate the effectiveness of structured teaching programme on antenatal exercises as evident from gain knowledge and practice score.

To find association of pre-test knowledge and practice score with selected demographic variables.

Hypotheses

H1: There will be significant difference between mean pre-test and post-test scores of knowledge and practice regarding antenatal exercises among antenatal mothers by using structured interview schedule and check list at0.05level of significance.

H2:There will significant association of pre-test knowledge and practice scores of antenatal exercises with selected demographic variables.

Assumptions of the study:

Antenatal mothers may have deficit knowledge regarding antenatal exercises.

Structured teaching programme will significantly increase the knowledge level of antenatal mothers.

Conceptual Framework:

The modified conceptual frame work for the study is based on general system theory by ludwig von bertanalffy (1968) modified by j.w Kenny The present study is aimed at evaluating the effectiveness of structured teaching programme on knowledge and practice regarding antenatal exercises among antenatal mothers. This conceptual framework focuses on holistic, interdisciplinary approach, communication between investigator and antenatal mothers.

2. Material and Methods

A Pre-test post-test with Purposive sampling is a type of non-probability sampling method was used in the study.

Phase–I:

In this phase, pre - test was conducted on a total of 60 antenatal mothers,by a structured interview schedule and checklist method of gathering self - reported information from respondents through self – administration of the questionnaire.

Phase–II:

Inthis phase, aSTP regarding antenatal exercises was conducted to the subjects and explained to them. All the questions or queries were clarified which were asked by the subjects.

PhaseIII:

In this phase, post test was conducted on 7th day after administration of the STP; the same structured interview schedule and checklist method of gathering self - reported information from respondents through self –administration of the questionnaire.

Inclusive criteria:

The study includes the antenatal mothers who are

Who were attended OPD of Chigateri District Hospital.

Anyagegroup,after18 weeks of gestational age.

Who known to speak Kannada or English.

Exclusion Criteria:

Those who were in high risk pregnancies.

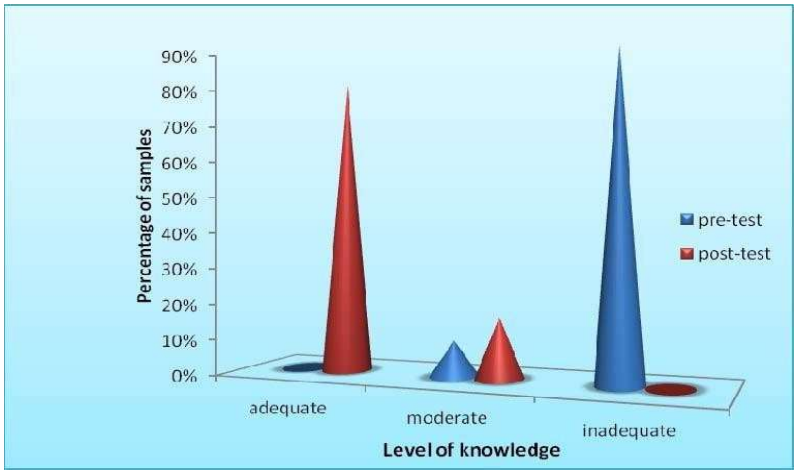
Those who are not willing to participate in the study.

Data Collection Instrument

SectionA-It consists of socio-demographic profile.

SectionB-It consists of structured knowledge interview schedule.

Comparision of pre-test and post-test knowledge level antenatalmothers.



The above graph shows that 90%antenatal mothers had inadequateknowledge, 10% had moderate knowledge in the pre -test, while 83.35% antenatal mothers had adequate knowledge,16.7% had moderate knowledgein the post -test.

Mean,median and standarddeviation of pre-test and post-test Knowledge scores:

Sl no	Knowledge aspects	No. of Items	Max Score	Pre-test			Post-test		
				Mean	Mean (%)	SD	Mean	Mean (%)	SD
1	General information about antenatal exercises		6	1.25	20.83		4.21	70.16	
2	Types of antenatal exercises		14	5.31	37.92		8.67	61.92	
3	Over all knowledge		20	6.67	33.35		16.1	80.5	
4	Over all practice		10	3.73	37.3		8.53	85.3	

Chi-square computed between pre-test knowledge scores of antenatal mothers with selected demographic variables.

N=60

Variables	Knowledge		Chi square	Df	Pvalue (0.05)	Inference
	Below Median	Median and above				
1. Age						
a. 20-25years	20	11	1.421	2		NS
b. 26-30years	06	04				
c.31yearsandabove	10	04				
2. Religion						
a.Hindu	17	08	0.562	3		NS
b.Muslim	12	08				
c.Christian	06	04				
d.Anyother	01	04				

3. Educational Qualification						
a.Noformaleducation	13	07	9.154	3		S
b.Primaryeducation	14	06				
c.Highschool	08	07				
d.Collegiateeducation	01	04				
4.Occupation						
a.Housewife	19	08	8.003	3		S
b.Employee	05	05				
c.Business	10	04				
d.Dailywages	02	07				
5.Income						
a.Lessthan3000	13	7	4.099	3		NS
b.Rs.3001-6000	11	9				
c.Rs.6001-9000	03	2				
d.Rs.9001andabove	09	6				
6.AreaOfResidence						
a.Urban	31	14	0.110	1		NS
b.Rural	05	10				
7.Typeoffamily						
a.Nuclear	26	19	0.177	1		NS
b. Joint	10	05				

The above table shows X^2value computed between the knowledge level of antenatal mothers and selected demographic variables.Variables such as Educational Qualification, Occupation,were significantat 0.05 level of significance.Thus it is inferred that there is a significant association between the knowledge of antenatal mothers regarding antenatal exercises and selected demographic variables.Hencethe hypothesis stated there will be a significant association between the pre-test

knowledge scores of antenatal mothers of chigateri district hospital at Davnagere with their selected demographic variables is accepted.

Chi-square computed between pre-test practice scores of antenatal mothers with selected demographic variables.

N=60

Variables	Knowledge		Chisquare	Df	Pvalue (0.05)	Inference
	Below Median	Above Median				
1. Age						
a. 20-25years	17	14	1.211	2		NS
b. 26-30years	08	2				
c.31yearsandabove	12	07				
2. Religion						
a.Hindu	15	10	1.014	3		NS
b.Muslim	14	6				
c.Christian	7	3				
d.Anyother	1	4				
3.Educational Qualification						
a.Noformaleducation	12	8	8.170	3		S
b.Primaryeducation	14	6				
c.Highschool	8	7				
d.Collegiateeducation	03	02				
4.Occupation						
a.Housewife	19	8	4.145	3		NS
b.Employee	6	4				
c.Business	9	5				
d.Dailywages	03	06				

5.Income						
a.Lessthan3000	13	7	8.299	3		S
b.Rs.3001-6000	13	7				
c.Rs.6001-9000	2	3				
d.Rs.9001andabove	9	6				
6.AreaOfResidence						
a.Urban	26	19	0.110	1		NS
b.Rural	11	04				
7.Typeoffamily						
a.Nuclear	27	18	0.120	1		NS
b. Joint	10	5				

The above table shows X^2 value computed between the practice level of antenatal mothers and selected demographic variables. Variables such as Educational Qualification, Income, were significant at 0.05 level of significance.Thus it is inferred that there is a significant association between the knowledge of antenatal mothers regarding antenatal exercises and selected demographic variables. Hence the hypothesis stated there will be a significant association between the pre- test knowledge scores of antenatal mothers of chigateri district hospital at Davangere with their selected demographic variables is accepted.

3. Major Findings of the Study

In this study majority of the subjects were in the age group of20-25years (50.7%). In religion most of the subjects 41.7%belongstoHindus.33.3%mothers were not educated. In occupational status 45%were house wife. Most of the subjects living in rural area75%.Most of the subjects monthly family income less than 3000 (33.3%) and most of the subjects belong to nuclearfamily75%.

Findings related to knowledge and practice score of the antenatal mothers regarding antenatal exercises with selected demographic variables.

The findings of the study revealed that there was association of pre-test knowledge and practice score with selected demographic variables like education,occupation and family income and also some

variables shows there was no association of pre-test knowledge and practice score with selected demographic variables like age, religion, place of residence and type of family.

Findings related comparison of the pre –test and post-test knowledge and practice score of the antenatal mothers.

H1: There will be significant difference between mean pre-test and post-test scores of knowledge and practice regarding antenatal exercises among antenatal mothers by using structured interview schedule and check list at0.05level of significance.

The overall pre-test mean knowledge score obtained by the antenatal motherswas6.67 (33.35%)with standard deviation2.12andtheoverall post-test mean knowledge score obtained by the antenatal mothers was 16.1(80.5%) with standarddeviation2.91.

The total difference in the mean of overall knowledge score was 9.43with the‘t’ value of 20.098 and found to be significant at the level of $P < 0.01$. It means there is significant difference between pre – test andpost-test level of knowledge of antenatal mothers regarding antenatal exercise. Hence the Hypothesis H1 is accepted. Findings related to association between knowledge level of antenatal mothers and selected demographic variable. H2:There will be a significant association between the knowledge scores of antenatal mothers in chigateri district hospital at Davnagere with their selected demographic variables.

Findings revealed that there was a statistically significant association between the pre- test knowledge score with demographic variables such as Educational Qualification, Occupation at the probability level of$P<0.05$.HencetheresearchhypothesisH2statedthat there will be significant association between the pre- test knowledge score of the antenatal mothers with selected demographic variable was accepted.

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Conflict of Interest

Researcher does not have any Conflict of Interest

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