



EFFECTIVENESS OF VATP ON KNOWLEDGE REGARDING ANTENATAL EXERCISES AMONG ANTENATAL WOMEN AT CHC RAIPUR DEHRADUN UTTARAKHAND

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ABSTRACT

A Pre Experimental study was conducted to assess the level of knowledge regarding antenatal exercise among the antenatal women at CHC Raipur Dehradun Uttarakhand A Pre Experimental one group Pre- test Post-test design was used to assess the knowledge of antenatal women regarding antenatal exercise. The sample consists of 80 antenatal women of CHC Raipur at Dehradun, Uttarakhand. Purposive sampling technique was used for selection of samples. The data was collected using self structured questionnaire. The result reveals that out of 80 samples, greater numbers of antenatal women 69 (86.25%) had poor knowledge, 11 (13.75%) had average knowledge and no one had the adequate knowledge concerning antenatal exercise. The pre- tests mean score was 8.09 (26.96) with 2.212 SD. After administering VATP 75 (93.75%) antenatal women had good knowledge, 05 (6.25%) had average knowledge and no one had the poor knowledge. The post-test mean score 24.30 (81%) with 2.368 SD was found significantly higher than pre test mean score 8.09 (26.96) with a mean difference of 16.21. the calculated 't' value 42.007, at the <0.05 level of significance which showed the effectiveness of VATP. The chi square, Fisher's test and Yates correction test reveals that there was no significance association between demographical variable and pre test knowledge score. The study concluded that VATP was effective to enlarge the knowledge of antenatal women.

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INTRODUCTION

Pregnancy is an incomparable, exciting and often cheerful time in a women's life, as it highlights the women's amazing productive and developmental powers while providing a bridge to the future. This is the reproductive process by which a baby is conceived, growing inside the mother womb and finally born into the world. There are many aspects of pregnancy that are starting with the planning of couple and then conception, growth and development of fetus, labor, delivery and post partum period.

Physical movements and exercise have an effectively accepted connection to health and wellbeing. Exercise is very significant for all the women of all ages. Exercise should carry on in pregnancy to keep the energy, strength and stamina. Women have to do weight wearing exercise all over the life because that will help to prevent the osteoporosis. During pregnancy keep up a regular exercise routine can help women to stay healthy and feel a sense of well being. Routine exercise throughout pregnancy can enhance posture and reduce some usual discomfort for instance backaches and fatigue. There is proof that the exercise and physical activity may prevent from the gestational diabetes, boost stamina, relief stress and helpful for the labor and delivery.

Antenatal care is a part of the health care system and health prevention and promotion programme. Healthy maternity with better neonatal consequences is predicated that the antenatal health care services were proper, regular exercise is indicates for its overall health benefits. Modern popular culture has accepted the concept of a "fit pregnancy". Scientific literature assists the claim that routine exercise during pregnancy sustains a small risk and it is helpful in terms of both maternal physical and mental health as well as benefit for the fetus.

In the third BC, Aristotle states that the women with sedentary lifestyle have the more trouble in delivery childbirth (Vaughan, 1951). James Lucas, a surgeon at Leeds general infirmary in England present a paper to the medical society of London inside he stated that the exercise in antenatal period could result in a lessen fetus birth dimensions and thereby women can give simply birth with minimum pain and discomfort.¹

Over 1985, the American College of Obstetricians And Gynecologists issue the first guidelines regarding the prenatal exercise for pregnant women. These exercises comprise restrictions on FHR to 140 beats per minute, and the time period for exercise at a time not longer than 15 minute. Afterword in 1994 the ACOG take out the limitation on heart rate and exercise can be over in self restraint but there should

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not cause the fatigue. Moving forward, in 2002, ACOG precede an announcement that the safety of exercise during pregnancy and upgrading the health benefits either before active and inactive women. The ACOG advised of 30 min or longer of moderate exercise almost, otherwise, days of the week be reaffirmed by ACOG in 2009.² the dispute of Canadian Physical Activity Guidelines 2011 suggests- that gathering 150-minutes of weekly medium- to stronger aerobic workout for the period 10-minutes or extra may be acceptable for antenatal women.³

The ACOG advocate that women have low-risk pregnancies can take part in moderate-intensity exercise. Currently, only 15.1% of pregnant women exercise at the recommended levels, which is remarkably lower than the general population's 45%. One possible reason is that women with preconception thoughts about exercise during pregnancy are consider as risky.⁴

A study conducted by torch research institute (USA) on prenatal exercise, and studies from various countries recommend that only around 40% of pregnant women exercise, even though approximately 92% are motivated by their physician to exercise, although with some 69% of the antenatal women being advised to restrict their physical activity. Women with moderate intensity exercise regime reputedly increases the birth weight of infant within the normal range, but it happen only if exercise is decreased in advanced pregnancy. Lower intensity exercise decreases the low back pain. Heart rate and blood pressure have been within the normal range following yoga than walking, and yoga is also prevent the occurrence of pregnancy complications like pregnancy-induced hypertension with associated intrauterine growth retardation and prematurity.⁵

Objectives of Study

1. To assess the pre-test knowledge of antenatal women regarding antenatal exercises.
2. To provide the video assisted teaching program on antenatal exercises among antenatal women.
3. To assess the post-test knowledge of antenatal women regarding antenatal exercises.
4. To evaluate the effectiveness of video assisted teaching program on knowledge regarding antenatal exercises.
5. To find out association between pre test knowledge score with their selected demographic variables among antenatal women.

Hypothesis of Study

Level of significance <0.05

H1:- There is a significant difference between pre test and post test knowledge score of antenatal women regarding antenatal exercises.

H2:- There is a significant association between pre test knowledge score of antenatal women with their selected demographic variables.

REVIEW OF LITERATURE

A literature review includes content that focus to scrutinize the critical area of present knowledge including substantive

findings as well as theoretical and methodological contribution to a particular topic.

A cross sectional descriptive study was done by Elamurugan S, *et al* on knowledge, attitude and practice during pregnancy conducted with 200 antenatal mothers. Result showed that the totals mean knowledge score was 20.53+-2.08. Considering the overall response of antenatal mothers on their antenatal exercise, their knowledge was less than average. 66% answered that they have heard about the antenatal exercises. About 21% and 13% answered that they did not know. 51% felt it was necessary to do antenatal exercise during pregnancy. 18% were practicing exercises in pregnancy.⁶

A comparative study was done by Ojukwu CP, Okemuo AJ, Nmecha CC, & Emelie A on knowledge, attitude and practice of antenatal exercise among rural and urban pregnant women in Enugu, Nigeria. Total 300 pregnant women (194 urban and 106 rural) participated in this study. Result shows that the majority of the women (urban- 97.4%, rural-90.6%) had positive knowledge of antenatal exercises with preponderance in the urban women (p=0.009). however, the total knowledge score revealed a poor knowledge of antenatal exercises (75.3% and 77%) by both urban and rural dwellers respectively. Urban women significantly show higher (90.7%) practice of antenatal exercises Compared to rural women (72.6%).¹²

A cross sectional study was done by Lovenwss and Hasting on the knowledge, attitudes and practices towards exercise among women attending antenatal care at university teaching hospital in Lusaka, Zambia. Total 300 pregnant women participated in this study and majority (n=222) 74% showed inadequate levels of knowledge on the type of exercise done in pregnancy. Most participants (n=279) 93% attached positive attitudes towards exercise and seeking medical advice on exercise during pregnancy. Only (n=201) 67% reported practicing some form of exercise during their current pregnancy and 63% (n=189) in previous pregnancies. Responses for not exercising by respondent included not knowing the type of exercises to perform 60% (n=180).⁷

A descriptive study was conducted by Edinah Sabiri, Issah K, Micky Olutende Oloo, Esther V. on knowledge of prenatal exercises among expectant mothers in Kakamega Kenya. Total 306 expectant mothers of 15-39 year included in this study. Results shows that the 17% of sampled population did not know that the exercise was useful in pregnancy, the subject showed knowledge of exercise in preventing incontinence (80.4%), decrease risk of preeclampsia (71.6%) and decreasing risk of diabetes mellitus and hypertension at (65.7%) and (68.6%).⁸

A study was done by Abedzadeh, Masoumeh *et al.* to assess the knowledge and performance pregnant women on exercises during pregnancy and postpartum periods. Total 200 women were selected for the study. Result of study shows that the 60% of the women had moderate knowledge about pregnancy and postpartum exercise. During pregnancy, only 39% of the women had physical activity and most of the exercise was walking. 48.7% of women had continued to exercise till 9th month of pregnancy. The conclusion of the study is most of the women had moderate knowledge about physical activities and did not have good performance.⁹

RESEARCH METHODOLOGY

Research Approach

The researcher has found that quantitative research approach was considered appropriate to measure the effect of VATP on antenatal exercises in terms of knowledge of antenatal women.

Research Design

The investigator has employed the pre experimental one group pretest, post test design to assess the effectiveness of video assisted teaching program on knowledge of antenatal women regarding antenatal exercise.

Instrument

The researcher was selected Objective type questions with options provided to assess the knowledge of antenatal women before and after the implementation of VATP. A thorough review of published as well as unpublished literature concerning the knowledge of antenatal mothers regarding antenatal exercises and its relation to socio demographic variable was undertaken to get cues for the development of an instrument.

It consists of two sections:

Section I: - Socio demographic tool

Section II: - Self structured questionnaire

Data Collection Procedure

After getting administrative approval and ethical clearance from ethical committee. Researches approach the participants by purposive sampling. Purpose and need for the study was explained to the participants and consent was taken. The self structured knowledge questionnaire pre-test was administered to each of the 80 samples. The sample was taken an average of 20 minutes to complete the research instrument. Then the VATP was administered to antenatal women. On the day seven post-test was conducted using same instrument for all subjects and there was no any drop out of subject.

RESULT

Table 1 Demographical distribution of antenatal women (N=80)

S.no.	Variable	Frequency	Percentage
1.	Age in year		
1.1	20-24	25	31.3%
1.2	25-29	23	28.8%
1.3	30-34	24	30%
1.4	35 and above	08	10%
2	Education of women		
2.1	No formal education	01	1.3%
2.2	Primary education	30	37.5%
2.3	Secondary education	30	37.5%
2.4	Graduation	19	23%
3.	No of children		
3.1	No any	30	37.5%
3.2	One	25	31.3%
3.3	Two	18	22.5%
3.4	More than two	07	8.8%
4.	Occupation of women		
4.1	Homemaker	59	73.7%
4.2	Self-employment	08	10%
4.3	Private employment	12	15%
4.4	Govt. employment	01	1.3%
5.	Residential area		
5.1	Rural	50	62.5%
5.2	Urban	30	37.5%

S.no.	Variable	Frequency	Percentage
.	Type of family		
6.1	Nuclear family	29	36.3%
6.2	Joint family	51	63.7%
7.	Family income		
7.1	Below 5000	20	25%
7.2	5001-12000	37	46.3%
7.3	12001-20000	20	25%
7.4	Above 20001	03	3.7%
8.	Previous knowledge		
8.1	Yes	40	50%
8.2	No	40	50%
9.	Source of information		
9.1	No information	40	50%
9.2	Health care personnel	18	22.5%
9.3	Mass media and literature	22	27.5%
9.4	Any others	00	00%

Table-1 shows the demographical distribution of antenatal women. The data revealed that majority 25 (31.3%) of antenatal women were in the age group of 20-24 years and only 08(10%) of antenatal women were in the age group of 35 and above. In the education majority 30(37.5%) antenatal women had primary and secondary education and only 1 (1.3%) antenatal woman had no formal education.

The data revealed that majority 30(37.5%) antenatal women had no children, and very less 07(8.8%) had more than two children. The data of occupation of mother revealed that majority 59(73.7%) of antenatal women were homemaker, and only 1(1.3%) were govt. employee. In terms of residential area, that the majority 50 (62.5%) antenatal women were living in rural area and 30(37.5%) were living in urban area. Another variable that is the type of family and the data revealed that majority 51 (63.7%) antenatal women had joint family and 29 (36.3%) had nuclear family.

The distribution of antenatal women according to family income revealed that majority 37 (46.3%) antenatal women had 5001-12000 family income and only 03 (3.7%) had above 20001 family income. The distribution of antenatal women according to knowledge about antenatal care, the data revealed that 40 (50%) antenatal women had knowledge about antenatal care and 40 (50%) had no knowledge about antenatal care respectively. The data about source of previous information revealed that 40 (50%) antenatal women had no information, 22(27.5%) were from mass media and literature, 18 (22.5%) were from health care personnel and no antenatal women had information from any other source

Table 2 Findings related to level of pre-test and post-test knowledge regarding antenatal exercises among antenatal women. (N=80)

S. No	Overall knowledge level	Score	Pre-test		Post-test	
			F	%	F	%
1.	Poor	0-10	69	86.25%	00	00%
2.	Average	11-20	11	13.75%	05	6.25%
3.	Good	21-30	00	00%	75	93.75%
Total			80	100%	80	100%

*- Significant at 0.05 level

Table 2 depicts that majority 69(86.25%) of the antenatal women had poor knowledge, 11 (13.75%) had average knowledge and none had good knowledge regarding antenatal exercises in pre-test. Whereas the Majority 75(93.75%) of the

antenatal women had good knowledge, 05(6.25%) had average knowledge and none had poor knowledge regarding antenatal exercises in post-test.

Table no.3 Effectiveness of video assisted teaching program on knowledge of antenatal women regarding antenatal exercises. (N=80)					
Component	Group	Mean	Mean % enhancement	Standard deviation	't value
Overall	Pre-test	8.09	54.04%	2.212	42.007
	Post-test	24.30		2.368	

Table 3 represents the overall knowledge mean in pre test was 8.09 and in post was 24.30 and the overall mean enhancement was 54.04%, hence, the research hypothesis H₁ stated there is a significant difference between pre test and post test knowledge score of antenatal women regarding antenatal exercises accepted and null hypothesis is rejected. The aspect wise 't' test value was observed and showed a significant in all the aspect of knowledge area. The combined 't' test value was significant i.e. 42.007 at P<0.05 level. This indicates video assisted teaching program was effective in improving knowledge of the antenatal women regarding the antenatal exercises.

In terms of association of pre test knowledge with selected demographic variables was calculated by fisher's exact test, Yeats correction test and chi square shows no association with pre Knowledge of antenatal women regarding antenatal. Hence, the research hypothesis H₂ is rejected and null hypothesis is accepted.

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