

Pregnant women's Knowledge About Exercise During Pregnancy: Military Hospital-2022

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Abstract

Introduction: Exercise is a bodily activity that improves or maintains physical fitness and overall health and wellness exercise during pregnancy is important and can help with some common discomforts of pregnancy and even help prepare the pregnant women body for labor and delivery. ⁽⁶⁾

Objective: To study the pregnant women knowledge regarding exercise during pregnancy.

Methods This is a descriptive cross sectional hospital base study which was carried out in military hospital in Khartoum state - Sudan, the data were collected by structured questionnaire and analyzed using the statistical program for social sciences (SPSS) version 21 Convenient sampling technique was used and the samples were 70 pregnant women. The knowledge is categorized good (>60%), Moderate (50%-60%), poor (< 50%). A statistical significance was considered at p -value of < 0.05.

Result: The study revealed that the total mean knowledge about type of exercise was (95.7%), walking was the most common exercise among the study sample, 90.0 believe that exercise during pregnancy facilitates normal delivery, and vaginal bleeding was considered as contraindication among (84.3%). factors influencing exercise during pregnancy (31.4%) said fear from complication is one of the factors influencing exercise during pregnancy The overall knowledge of pregnant women about exercise during pregnancy was poor (36.3%).

Conclusion: Nursing education is the major tasks of nursing profession. The study concluded that there is insufficient knowledge of pregnant women about exercise during pregnancy 52 (74.3%). Followed by no relation between educational level, age and knowledge about type of exercise, regarding benefits and contraindications to exercise during pregnancy (p . value < 0.05). so the study recommended to conduct more researches to enhance in increasing mother's knowledge about exercise during pregnancy.

Key words: knowledge, pregnancy, exercise, lifestyle, Health effect, contraindications

Introduction

Physical activity, defined as any bodily movement produced by the contraction of skeletal

muscles in all stages of life, maintains and improves cardiorespiratory fitness, reduces the risk of obesity and associated comorbidities, and results in greater longevity. Women who begin their pregnancy with

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a healthy lifestyle (e.g., exercise, good nutrition, nonsmoking) should be encouraged to maintain those healthy habits. Women who do not have healthy lifestyles should be encouraged to view the pre-pregnancy period and pregnancy as opportunities to embrace healthier routines. Exercise defined as physical activity consisting of planned, structured, and repetitive bodily movements done to improve one or more components of physical fitness (1), is an essential element of a healthy lifestyle, and obstetrician-gynecologists and other obstetric care providers should encourage their patients to continue or to commence exercise as an important component of optimal health so it help in an improvement in cardiovascular and metabolic function, and increased strength and bone density. Regular exercise appears to lower the risk of gestational diabetes mellitus (GDM), gestational hypertension, and preeclampsia. (2), (Evidence also exists for the role of exercise in preventing incontinence during pregnancy and in the postpartum period (3).

As postulated by the American College of Obstetrics and Gynecology (ACOG) pregnant women achieve at least 150 min or more per week of moderate-intensity were labeled as physically active (PA). (4)

Furthermore, exercise duration, frequency and intensity can be prescribed on an individual basis to avoid potential hyperthermia. Although care needs to be taken when prescribing exercise, the benefits of being active during the prenatal period far outweigh the risks (3).

The factors influencing exercises during pregnancy include mothers have hard schedule, insufficient knowledge, fear from complication, husband disagreement and physical exercises during Pregnancy not common behavior. Encouraging exercise in women with an uncomplicated pregnancy should form an integral part of antenatal care to maintain a healthy life. The prenatal nurse monitors the health status of the mother and fetus, provides emotional support, and teaches the pregnant woman and her family about physiological and psychological changes during pregnancy, fetal development, labor and childbirth, and care for the newborn So, the purpose of this study to assess the pregnant women's knowledge about exercise during pregnancy.

Research Methods

A hospital -based cross-sectional study design was conducted in military hospital in Khartoum state - Sudan, the targeted population was pregnant women attained in ante natal clinic during the study. The sample included 70 pregnant women who were enrolled in the study, and they were selected by convenient sampling technique. The data were collected by researcher using a structured administered questionnaire to assess the knowledge of pregnant women regarding exercise during pregnancy. The data were analyzed using the Statistical Package of Social Science (SPSS), version 21 and a significance test was checked by chi-square test and the results were accepted when the p-value = 0.05 or less the result presented as cross tabulation and figure. An ethical approval was obtained from Al Farabi College for science and technology. Permission from the administrative authority of military hospital and Verbal consent was obtained from the participants after explaining the purpose of this study, confidently was kept.

Results

Table 1: Distribution of study sample according to advices receiving about exercise during pregnancy(n=70):

Advices	Frequency	Percent
Received	62	88.6%
Not received	8	11.4%
Total	70	100%

The majority of the participant (88.6%) received advice about exercise during pregnancy during antenatal follow-up.

Table 2: Distribution of study sample according to source of information about exercise during pregnancy(n=120):

Advice	Frequency	Percent
Physicians	23	32.9%
General doctor	15	21.4%
Medical assistant	8	11.4%
Midwife	12	17.1%
No answer	12	17.1%
Total	101	100%

Physicians and general doctor are the persons who instructed the pregnant women about exercise during pregnancy (47.5%), (30.7%) respectively and 17.1% received instruction from midwife.

Table 3: Distribution of study sample according to type, recommended level and benefits of exercise should be practiced during pregnancy. (n=70)

Variable	Yes		No	
	F	%	F	%
9/ type of exercise	67	95.7	3	4.3
1.Walking				
2.Swimming.	29	41.4	41	58.6
3.Cycling	11	15.7	59	84.3
4. Ankle, toe exercises	17	24.3	53	75.7
5. Abdominal strengthening exercises	10	14.3	60	85.7
6. Pelvic floor strengthening exercises	18	25.7	52	74.3
7. Back exercise	31	44.3	39	55.7
8. Breathing exercises	37	52.9	33	47.1
9. Relaxation exercises	45	64.3	25	35.7
10/ Recommended level and frequency of exercise	42	60.0	28	40.0
11. what is the benefit of exercise?	63	90.0	7	10.0
1. Facilitates normal delivery				
2. Reduces risk of back pain during pregnancy	38	54.3	32	45.7
3. Prevents excessive weight gain during pregnancy	34	48.6	36	51.4
4. Reduces risk of diabetes during pregnancy	16	22.9	54	77.1
5. Strengthens pelvic floor muscles during pregnancy	20	28.6	50	71.4
6. Reduces formation of varicose veins during pregnancy	18	25.7	52	74.3
7. Reduces of swelling of extremities during pregnancy	24	34.3	46	65.7
8. Increases muscle tone, strength, and endurance during pregnancy	23	32.9	47	67.1
9. Increased energy and power during pregnancy	20	28.6	50	71.4
10. Improvement of body awareness, posture, coordination, and balance during pregnancy	25	35.7	45	64.3
11. Give ability to cope with labor and delivery	25	35.7	45	64.3
Mean of knowledge	613	41.7	857	58.3

Mean 58.3 of the participant had insufficient knowledge about types, frequency and benefit of exercise most of participant said Walking is safe type (95.7%) and 90.0% said the benefit of exercise is Facilitates normal delivery

About the Recommended frequency of exercises during pregnancy, based on individual fitness level is moderate exercise of 30 min per day, two to three times a week during pregnancy more than half of the participant they knew.

Table 4: Distribution of study sample according to Contraindication, factors influencing exercises and type of exercise should be avoided during pregnancy, Other types of exercise(n=70)

Variable	Yes		No	
	F	%	F	%
12. Contraindication of exercise	59	84.3	11	15.7
(1) Vaginal bleeding during pregnancy				
(2) Uterine contractions during pregnancy	31	44.3	39	55.7
(3) Chest pain during pregnancy	27	38.6	43	61.4
(4) Migraine during pregnancy	18	25.7	52	74.3
(5) Difficulty in breathing during pregnancy	26	37.1	44	62.9
(6) Swelling of the extremities during pregnancy	20	28.6	50	71.4
(7) Back pain during pregnancy	18	25.7	52	74.3
8) Extreme weight gain or loss during pregnancy	17	24.3	53	75.7
(9) Diabetes during pregnancy	20	28.6	50	71.4
13. factors influencing exercises during pregnancy	13	18.6	57	81.4
1. do not feel like exercising				
2. have busy schedule	16	22.9	54	77.1
3. Insufficient knowledge	5	7.1	65	92.9
4. fear from complication	22	31.4	48	68.6
5. Husband disagreement	3	4.3	67	95.7
6. physical exercises during Pregnancy does not suit our culture	12	17.1	58	82.9
14. type of exercise should be avoided during pregnancy?	20	28.6	50	71.4
1. Downhill Skiing				
2. Basketball,	21	30.0	49	70.0
3. horseback riding	15	21.4	55	78.6
4. jumping	42	60.0	28	40.0
5. Running	53	75.7	17	24.3
15. Other types of exercise	20	28.6	50	71.4
1. Dancing				
2. Playing tennis	16	22.9	54	77.1
Mean of knowledge	494	32.1	1046	67.9

Mean 67.9 of the participant had moderate knowledge about contraindication, factors influencing exercises and type of exercise should be avoided, (31.4%) they said fear from complication is one of the factors influencing exercise during pregnancy and 84.3% said Vaginal bleeding during pregnancy is one of contraindication 75.7% said Running is the main types of exercise should be avoided during pregnancy.

Table 5: Frequency distribution of the sample according to overall knowledge level about exercise during pregnancy (n=70)

	Frequency	Percent ^o %
Poor	52	74.3%
Moderate	15	21.4%
Good	3	4.3%
Total	70	100.0

Most of the participants had poor knowledge about exercise during pregnancy 74.3%

Table 6: Association between knowledge about exercise during pregnancy and age : (n=70)

			Knowledge			Total	P value
			good	Moderate	poor		
Age	<18 years	Count	13	3	0	16	.466
		% of Total	18.6%	4.3%	0.0%	22.9%	
	18-30 years	Count	31	7	2	40	
		% of Total	44.3%	10.0%	2.9%	57.1%	
	31-40 years	Count	6	5	1	12	
		% of Total	8.6%	7.1%	1.4%	17.1%	
	>40 years	Count	2	0	0	2	
		% of Total	2.9%	0.0%	0.0%	2.9%	
Total		Count	52	15	3	70	
		% of Total	74.3%	21.4%	4.3%	100.0%	

There is no significant association between pregnancy p value .466 it higher than significance education level and knowledge of exercise during level (P. value < 0.05) .

Table 7: Association between knowledge about exercise during pregnancy and education level: (n=70)

			Knowledge			Total	P value
			good	Moderate	poor		
Educational level	illiterate	Count	3	3	0	6	.771
		% of Total	4.3%	4.3%	0.0%	8.6%	
	primary	Count	16	5	1	22	
		% of Total	22.9%	7.1%	1.4%	31.4%	
	secondary	Count	22	5	2	29	
		% of Total	31.4%	7.1%	2.9%	41.4%	
	graduate	Count	10	2	0	12	
		% of Total	14.3%	2.9%	0.0%	17.1%	
	post graduate	Count	1	0	0	1	

There is no significant association between education level and knowledge of exercise during pregnancy p value .771 it higher than significance level (P. value < 0.05) .

Discussion

This study aimed to assess the pregnant women knowledge regarding exercise during pregnancy. Conducted in Military hospital the population is 70 pregnant women. Majority of the study participants were aged between (18 - 30) years old, this age known as reproductive age this finding is similar to a study conducted in India by D.R Alamurugan Sujindra which show that range of the study group was 35-18 years with a mean age of 4.51+25 years. Concerning

educational level most of the study participant had secondary education 41.4%, on the other hand there is no significant association between educational level and knowledge of mothers about exercise during pregnancy P. value 0.771 this result disagree with study done in India which revealed that majority of the study population had undergone primary education 63%. Most of the study participants were housewife this result agrees with study conducted in India by Dr.Elamurugan Sujindra, the percentage had undergone primary education and were homemakers. %74. Regarding information about exercise during pregnancy majority of the study participant (88.6%) get information about exercise. 32.9% of pregnant women her get instruction from

physician .27.4% general doctor. 17.1% of midwife. 11.4% of medical assistant. This result is not similar to study conducted by Penny Clark, Harriet Gross BA Fifty - five respondents) %96 (indicated that they had received advice about physical activity at least once during pregnancy. Regarding knowledge about type of exercise which should be practiced during pregnancy, majority of study participant mentioned walking this result is logical because walking is safest and most productive activities during pregnancy by evidence the result of this study similar to study conducted in Ethiopia which showed that the prevalence of practice to pregnant women about exercise 90.7% doing walking and about 38.9% doing relaxation, 36.1% is doing Breathing exercise and pelvic floor about 5.6% of pregnant women, 2.8% doing yoga, On the other hand the mean 58.3 of participants knowledge about type of exercise were moderate. where few of 29 our participant knew about the different type of exercises like, 64.3% relaxation exercise and 52.9% doing Breathing exercise, pelvic floor 25.7% this finding disagree with study conducted in Saudi about types and amount of physical activity. This revealed that Less than half of the women were either walking (26%) or exercising (42%) adequately (i.e.-150 min/ week). More than half of pregnant women (60.0%) know about frequency of exercise during pregnancy recommended level and frequency of exercise, based on individual fitness which is 30 minutes per day, two to three times a week during pregnancy as set out by ACOG guideline 2002. Considering the knowledge of respondents on the benefit of exercise during pregnancy, majority of pregnant women believe that it facilitates normal delivery, this result is disagreeing with study conducted by made 2014 in Nigeria which show a majority of Nigerian pregnant women demonstrated inadequate knowledge but had positive attitude towards antenatal exercise. Knowledge about benefits and contraindications to antenatal exercise significantly influenced the attitude towards exercise in pregnancy. The mean knowledge about contraindications of exercise during pregnancy in this study was moderate and the participants only mentioned vaginal bleeding as contraindication and other pregnant women knew the other contraindication of exercise during pregnancy such as uterine contractions, chest pain,

back pain, migraine and difficulty in breathing, This finding is similar to study done by (Mbada) in Nigeria The study show that majority of Nigerian pregnant women demonstrated inadequate knowledge but had positive attitude towards antenatal exercise. Knowledge about benefits and contraindications to antenatal exercise significantly influenced the attitude towards exercise in pregnancy .some of pregnant women said that fear from complication is one of the factors influencing exercise during pregnancy this finding reliable with study conducted in Nigeria by (Mbada) majority of the participant were know about exercise that should be avoided during pregnancy 75.7% said Running is the main types of exercise should be avoided during pregnancy because of aggravating of complication . And when ask about other types of exercise like (Dancing, playing tennis) the majority of sample about 28.6% of women know about it, playing tennis 22.9%. respectively.³⁰ From here, the study reported that overall knowledge of pregnant women about exercise during pregnancy was poor (74.3). This finding is disagree with study conducted in Saudi which revealed that 349 pregnant women, 193(55.3%) had adequate knowledge, a positive attitude, and good practice respectively also this result is similar to study conducted in America to assess knowledge, attitude, and practice of exercise during pregnancy among antenatal mothers, This study is helpful to nursing profession to teach women during pregnancy about the importance of exercise and shows the knowledge of women on exercise during pregnancy was less than average, and their attitude was favorable. However, a very few were actually practicing exercise in pregnancy.

Conclusion

The findings of this study suggest that pregnant women knowledge concerning exercise during pregnancy was poor about 52 (74.3%) and there was no significant association between age, level of education and knowledge of exercise during pregnancy.

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