Research Article

Knowledge, attitude, and practice of pregnant women toward antenatal physiotherapy in Al-Qurayyat: A cross-sectional study

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ABSTRACT

Objective: The aim of this study was to explore and determine the knowledge, attitude, and practice toward the role of physical therapy among pregnant women of Al-Qurayyat. **Materials and Methods:** A descriptive cross-sectional study was conducted in over 3 months in 2019 of pregnant women attending antenatal clinics at Al-Qurayyat General Hospital, Al-Qurayyat city, KSA. A total of 134 pregnant women in any trimester were approached with a self-administered questionnaire. Questions regarding their knowledge, attitude, and perception of antenatal physiotherapy were asked. A descriptive analysis of data obtained was done. **Results:** Knowledge regarding antenatal exercises was favorable, 80% of the respondents were aware of physiotherapy and 44% of the participants had adequate knowledge of the benefits of antenatal exercise, and 24% were believed that physiotherapy is mainly concerned with exercise. The attitude of the patients toward antenatal physiotherapy was poor, 48% of participants had a positive attitude toward physiotherapy during antenatal care and 58% of participants perceived that antenatal exercises reduce pregnancy-related complications and ensure a safe delivery. The perception of physiotherapy was also poor and only 47% of the participants were exercising their present pregnancy. **Conclusion:** Knowledge regarding antenatal physiotherapy was favorable, but the attitude and perception of the patients were fairly low.

KEY WORDS: Antenatal physiotherapy, Attitude, Knowledge, Perception, Pregnancy

INTRODUCTION

Pregnancy, childbirth, and postpartum are common events in women's life. Pregnant women facing a lot of changes in their body such as discomfort, complications, and difficulties in physical activity. Hence, women need to be powerful enough to beat on these changes by getting good physical activity. Physical activity is important for mother and child, and it may reduce the risk of adverse maternal, fetal, and neonatal and help to overcome pregnancy-related complications and maintain proper physical fitness.[1,2]

Therefore, physiotherapy plays a significant role during pregnancy. Some studies have confirmed that physiotherapy interventions in prenatal period help pregnant women in reducing complications of pregnancy, reduce the time spent in labor, and help to recover quickly after delivery.[3,4]

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Despite these positive impacts, pregnant women do not exercise as recommended, particularly in developing nations. Nonetheless, their low level of education, adverse socio economic conditions, lack of access to excellent health facilities and fear of exercise during childbirth frequently contribute to a sedentary lifestyle of pregnancy.[5,6]

During pregnancy, attitudes toward physiotherapy have dramatically altered over the previous 20 years. Recent studies indicate that exercise is secure for both mother and fetus during pregnancy in most instances and support the suggestion for continuous exercise during most pregnancies. To evaluate the effects of their exercise programs on the developing fetus, all active pregnant women should be examined periodically and adjustments can be made if necessary. Women with medical or obstetric complications should be carefully evaluated before recommendations on physical activity participation during pregnancy are made. Despite the fact that pregnancy is associated with profound anatomical and physiological changes, exercise has minimal risks and confirmed benefits for most women.[7,8]

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Some authors have investigated the beliefs and attitudes of women with respect to the practice of physical activity in pregnancy and the factors that affect their behavior in relation to exercise.[9,10]

Therefore, this study was carried out to determine the knowledge, attitude, and practice of exercise during pregnancy among antenatal mothers.

MATERIALS AND METHODS

Study Design

This study is an observational cross-sectional study. A total of 134 respondents participated in this study.

Participants

This study was conducted at the outpatient clinic of obstetrics and gynecological conditions, Al-Qurayyat General Hospital; 134 respondents participated in this study. The inclusion criteria were as follows: (1) The age ranged between 18 and 50 years old; (2) all pregnant women; and (3) Saudi women. Exclusion criteria were as follows: (1) High-risk pregnancy and (2) women who have any neurological or psychological condition that could alter their ability to read and answer the questionnaire. Informed written consent was obtained from all the pregnant women.

Data Collection Tool

Modified self-administered questionnaire was adapted from the previous study by Safaraz *et al*.[11]

The questionnaire was on closed-ended questions and information which include basic demographic data, their knowledge, attitude, and practice toward the physiotherapy. The questionnaire is also translated into Arabic and reviewed by language experts.

Permission was obtained from Al-Qurayyat General Hospital to fill out the questionnaire among pregnant women presenting themselves for regular antenatal checkups in the Department of Obstetrics and Gynecology.

Data Analysis

Data were analyzed using Microsoft Excel for data entry and calculating frequencies and percentage.

RESULTS

A total of 134 respondents participated in this study. About 54% of the respondents were above 25 years of age and 82% uneducated. Their socioeconomic status was found that 17% of our respondents belonged to the upper and 82% were middle class. The responses of the participants on parity revealed that the majority of them (72%) were multiparous, Table 1.

The sociodemographic characteristics of respondents are presented in Table 1.

The set of questions was designed to check the respondent's knowledge and perception of and attitude toward the role of physiotherapy in antenatal care. About 80% of our study participants were aware of physiotherapy and 24% of the respondents knew that physiotherapy is mainly concerned with exercises. When the respondents were asked about antenatal exercises, only 45% of them knew about antenatal exercises. Media (30%) were the main source for their information about antenatal exercises. It was also found that 24% of them were of the opinion that gynecologist was best fit to prescribe exercises. The respondents had a knowledge of back care exercises (12%), abdominal exercises (7%), pelvic floor exercises (26%), and relaxation and breathing exercise (52%), respectively, as types of antenatal exercise, Table 2.

When respondents were asked questions to check their knowledge of the benefits of antenatal exercises, most of them agreed that it could help to reduce back pain (46%), prevent excessive weight gain (55%), and help with labor and delivery (70%). About 17% of antenatal exercises cause high blood pressure and 35% believed that antenatal exercises may reduce the risk of urinary incontinence. The finding is given in Table 3.

In our study, only 21% of participants reported that they were referred for physiotherapy by their health-care professionals. Regarding their present exercise routine, 47% of the respondents stated that they continued to perform exercises during pregnancy, walking being the main type of exercise. Respondents also admitted that a tiredness was the main reason for the cessation of their current practice of performing exercises, Table 4.

About 48% of participants perceived that physiotherapy had a positive role in antenatal care. About 82% of them also agreed that it helped the new mother to get

Table 1: Sociodemographic characteristics of respondents

Characteristics	Frequency	Percentage
Age		
<25	62	46
25 and above	72	54
Educational level		
Uneducated	110	82
Intermediate	24	18
High education	0	0
Occupation		
Professional	58	43
Semi-professional	40	30
Unemployed	36	27
Socioeconomic status		
Upper	23	17
Middle	111	83
Parity		
Primiparous	38	28
Multiparous	96	72

Table 2: Awareness of participants toward physiotherapy and antenatal exercises

Variables	Frequency	Percentage
Are you aware of physiotherapy		
Yes	108	80.5
No	26	19.5
What is your perception of physiotherapy		
Exercises	32	24
Massage	36	27
Electrical stimulation	0	0
All	66	49
Are you aware of antenatal exercises?		
Yes	60	45
No	40	30
Not sure	34	25
If yes, where did you learn about it		
Family/friend	30	50
Media	18	30
At antenatal class	10	17
Other	2	3
Who can serve as the best guide to exercises during pregnancy		
Physiotherapist	48	48
Gynecologist	24	24
Self	15	15
Other	12	12
Awareness of different types of antenatal exercises	Yes	Percentage
Back care exercises	17	12
Abdominal exercises	10	7
Pelvic floor exercises	36	26
Relaxation/breathing exercises	71	52

Table 3: Knowledge and attitude of participants about the role of physiotherapy in pregnancy

Variables	Frequency	Percentage
Exercise during pregnancy reduces risk of back pain		
Yes	62	4
No	34	25
Not sure	38	28
Exercise during pregnancy prevents excessive weight gain		
Yes	75	55
No	29	21
Not sure	30	22
Exercise can help cope with labor and delivery		
Yes	94	70
No	19	14
Not sure	21	15
Exercise during pregnancy reduces risk of gestational diabetes		
Yes	64	47
No	38	28
Not sure	32	23
Exercise during pregnancy increases energy and stamina		
Yes	86	64
No	14	10
Not sure	34	25
Exercise during pregnancy would reduce risk of urinary incontinence		
Yes	48	35
No	58	43
Not sure	28	20
Exercise during pregnancy causes high blood pressure		
Yes	23	17
No	87	64
Not sure	24	17
Exercise benefits general health and development of the baby		
Yes	76	56
No	16	11
Not sure	42	31

back into shape. About 58% knew that physiotherapy reduced pregnancy-related complications while 73% believed that it aided postnatal recovery. The findings are given in Table 5.

DISCUSSION

This study assessed the knowledge, practice, and attitude of pregnant women in Saudi Arabia with

Table 4: Practice forms for antenatal exercises and physical activity among participants

Variables	Frequency	Percentage
Has physiotherapy for antenatal exercises been prescribed during the present pregnancy		
Yes	29	21
No	105	78
If yes, what exercises were prescribed		
Abdominal exercis	3	10
Back care exercise	9	31
Pelvic exercise	10	34
Other	7	25
Do you perform exercises now?		
Yes	63	47
No	71	52
If yes, what type of exercise do you practice		
Walking	50	79.4
Yoga	4	6.3
Other exercises	9	14.3
If you had practiced exercises before pregnancy, are there any reasons why you discontinued them		
Lack of time	43	32
Tiredness	90	57

Table 5: Knowledge and attitude of participants with about the role of physiotherapy in antenatal care

Variables	Frequency	Percentage
Does physiotherapy have a positive role in antenatal care?		
Yes	65	48
No	12	8
Not sure	57	42
Is it important to perform exercise under the guidance of health-care professionals		
Yes	75	55
No	24	17
Not sure	35	26
Do you feel exercise can reduce pregnancy-related complications?		
Yes	78	58
No	15	11
Not sure	41	30
Do you feel exercise helps in post-delivery recovery?		
Yes	99	73
No	6	4
Not sure	29	21
Do you feel the exercising helps you get back to your shape		
Yes	110	82
No	3	2
Not sure	21	15
Do you feel exercise regimen should vary from one pregnant woman to another?		
Yes	103	76
No	15	11
Not sure	16	11
Do you recommend physiotherapy during pregnancy?		
Yes	77	57
No	10	7
Not sure	47	35

respect to the role of physiotherapy in antenatal care. A total of 134 respondents participated in any trimester that 17% of subjects fall into the upper class category and 83% of subjects fall into the middle class.

The women in our study sample were found that 80% of the respondents were aware of physiotherapy and 24% were believed that physiotherapy is mainly concerned with exercise as intervention.

Our study also revealed that 48% of participants had a positive attitude toward physiotherapy during antenatal care and 58% of participants perceived that antenatal exercises reduce pregnancy-related complications and ensure a safe delivery. In fact, few women (47%) reported that they were exercising their present pregnancy. The reported reasons for the participants discontinuing exercise were a lack of time and tiredness. These findings suggest that despite being aware of the benefits of physical exercise, many women do not feel motivated or actively engage in exercises. The present study also revealed that there was limited physiotherapy referral as only 21% of the participants were referred for physiotherapy as part of the antenatal care regimen. This highlights the fact that health-care professionals in our country are unsure of the role of physiotherapy in antenatal care which may further contribute to the ignorance of pregnant women regarding antenatal exercises. The

results of this study also revealed that only 44% of the participants had adequate knowledge of the benefits of antenatal exercise. However, they were not influenced by maternal sociodemographic characteristics. We state that there is an urgent need for the management of hospitals and physiotherapists themselves to put in more effort to create an awareness of the need for antenatal exercises among Saudi.

The finding of this study is contrary to the previous studies of Chidozie *et al*.[12] reported that a majority of Nigerian pregnant women demonstrated inadequate knowledge but had a positive attitude toward antenatal exercises. Knowledge of benefits and contraindications to antenatal exercises significantly influenced the attitude toward exercise in pregnancy.

Nayak *et al*.[13] who suggested that a majority of Indian pregnant women demonstrate inadequate knowledge but have a positive attitude toward the role of physiotherapy in antenatal care.

Shifna *et al*.[14] concluded that awareness in physiotherapy in antenatal care among pregnant women attending antenatal care in Gangawatakoralle is poor. There is a positive effect of physiotherapy interventions in quality of life of pregnant women during pregnancy.

Limitations

This study does not take into account available knowledge of contraindication to exercise during pregnancy. Our community in Qurayyat is a community that has many nationalities; however, we have limited our sample to Saudi women and to the upper and middle socioeconomic classes of society.

CONCLUSION

Our results suggest that the pregnant Saudi woman's knowledge toward the role of physiotherapy during pregnancy is favorable; however, the attitude of the different antenatal exercises and their benefits is inadequate.

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