

## Knowledge and attitude of Pakistani women towards antenatal exercise: A cross-sectional survey across Lahore

Mizna Hasan,<sup>1</sup> Saima Zahid,<sup>2</sup> Sana Hafeez,<sup>3</sup> Zeest Hashmi,<sup>4</sup> Hira Mannan,<sup>5</sup> Danish Hassan<sup>6</sup>

### Abstract

Exercise has become a significant part of antenatal care. Adequate knowledge amongst pregnant females is important to encourage them to work on it. The aim of this study was to attain information on the level of knowledge, attitude and practice towards antenatal exercise amongst women in Lahore, Pakistan. This was a cross-sectional survey in which a Knowledge, Attitude and Practice (KAP) questionnaire was used to gather data from 250 pregnant females. The data was analysed using SPSS version 16.0 found the following results: relaxation and breathing n=136 (54.4%), back care exercises n=178 (71.2%) were the main known antenatal exercises. Prevention of back pain n=111 (44.4%), excess weight gain n=127 (50.8%), strengthening muscles n=141 (56.4%) and better ability to cope with labour n= 115 (46.0%) were perceived as advantages. In the survey, n= 218 (87.2%) of the females had a negative attitude towards antenatal exercises. The survey confirmed most of the pregnant females in Lahore had inadequate knowledge and a negative attitude towards antenatal exercises.

**Keywords:** Pregnancy, Antenatal exercises, Knowledge, Attitudes, Antenatal practices.

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### Introduction

The American College of Sports Medicine states that both, the mother and the unborn child benefit from exercise during pregnancy. Fitness increases with consistent exercise and helps women to give birth to healthier offsprings,<sup>1</sup> the discomfort during pregnancy is reduced, not much weight is gained and affords ease during labour. Exercise aids women psychologically as well. Scientific literature supports the fact that regular exercise is advantageous, for both, mental and physical health.<sup>2,3</sup> Cultural background also has a significant association with knowledge about antenatal exercise among

pregnant women.<sup>4</sup> Over the past 20 years, attitude towards exercise during pregnancy has changed.<sup>5,6</sup>

Through regular exercise during pregnancy, muscles are strengthened, improves women's psychological health, reduces gestational diabetes, controls weight gain, eases back pain<sup>1</sup> through stretching and yoga, decreases duration of labour and caesarean section rates, reduces recovery time<sup>7,8</sup> and regular walking improves the circulation. Exercise during pregnancy causes abdominal muscles to unstiffen, separate and stretch to accommodate the growing baby. To prevent overstretching and encourage closure of the separation after birth, tummy exercises should be done.<sup>9</sup> Kegel's exercises strengthen the pelvic floor muscles which can stretch during delivery. Strong pelvic floor muscles halt leaks from both, the bladder and bowel.<sup>9,10</sup>

Breathing and relaxation techniques are also effective in coping with emotional stress and labour pain. Aerobic exercise causes rapid breathing which increases the heart rate, oxygen and blood required for the muscles. The same can be achieved through walking, dancing, calisthenics and swimming.<sup>3</sup> Antenatal exercises also decrease adipose tissue growth and prevents excessive gestational weight gain.<sup>9</sup> Women must stop exercising in case of any vaginal bleeding or uterine cramps and should straightway consult their doctor before continuing with exercises. Priravej and Sakisirinukul suggest the involvement of all members of the healthcare team in planning an exercise regimen.<sup>3</sup> Professionals like physical therapists must be incorporated in health management programmes for the duration of pregnancy and workout exercise programmes for the antenatal period. Though the benefits of these exercises are proven, it is important to ascertain the knowledge in the local population which presently believes in limited activity and bed rest during the antenatal period. The aim of the study was to attain information on the knowledge, attitudes and practices towards antenatal exercise amongst women in Lahore, Pakistan.

### Methodology

The study design was a cross-sectional survey which was conducted in Jinnah Hospital and Hameed Latif in Lahore.

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<sup>1-4,6</sup>Riphah College of Rehabilitation Sciences, Riphah International University, Lahore, <sup>5</sup>The University of Faisalabad, Faisalabad, Pakistan.  
 Correspondence: Saima Zahid. Email: saima.zahid@riphah.edu.pk

Study was conducted over a six month period from September 2016 to February 2017 after attaining approval from the Ethical Review Committee of Riphah International University. The sample size was calculated using the  $N = z^2 \times p(1-p) / d^2$ , with  $p = 0.20$ ,  $z = 1.96$  and  $d = 0.05$ . A minimum sample of 246 women was required for this study, who were selected using non-probability convenient sampling technique. Inclusion criteria was married pregnant women between the ages of 23 to 44, while exclusion criteria was married pregnant women who were not willing to participate in the study. A questionnaire from a previous study regarding knowledge, attitude and practice (KAP) towards antenatal exercises was used to gather data.<sup>11</sup> The data was analysed by using SPSS version 16.0 statistical software. Mean standard deviation; tables were used to present the socio-demographic data. Pie chart, bar chart, histogram were used to present the data in graphical form.

## Results

For our survey study, 250 women took part with a mean age of 30.33 years. The outcome showed that the women were generally house wives  $n = 173$  (69.2%) and a segment of these women were illiterate  $n = 89$  (35.6%). A section of these women,  $n = 53$  (21.2%) began antenatal care within 1 to 3 months of pregnancy. Women had knowledge of pelvic floor exercises  $n = 100$  (40%), back care exercises  $n = 136$  (54.4%) and relaxation and breathing techniques  $n = 178$  (71.2%), as types of antenatal exercises (Table-1).

Table-1: Knowledge of respondents on different types of exercises in pregnancy.

Variables	Yes n (% age)	No n (% age)
Aerobics	50 (20.0)	200 (80.0)
Pelvic Floor Exercise	100 (40.0)	150 (60.0)
Stretching Exercise	88 (35.2)	162 (64.8)
Muscle Strengthening Exercise	82 (32.8)	168 (67.2)
Abdominal Exercise	42 (16.8)	208 (83.2)
Back Care Exercise	136 (54.4)	114 (45.6)
Relaxation And Breathing Exercise	178 (71.2)	72 (28.8)

Table-2: Attitude of respondents towards antenatal exercises.

Variable	n (% age)
Attitude towards antenatal exercises	
Positive	32 (12.8)
Negative	218 (87.2)
Factors influencing negative attitude antenatal exercises	
I feel tired to exercise	132 (52.8)
I have busy schedule	104 (41.6)
I do not have sufficient information on exercise	200 (80.8)

Though, abdominal exercises  $n = 42$  (16.8%), strengthening exercises  $n = 82$  (32.8%), aerobics  $n = 50$  (20.0%) and stretching exercises  $n = 88$  (35.2%) were the types of exercises minimally acknowledged during pregnancy. A majority of these women 218 (87.2%), had a confirmed negative attitude towards antenatal exercises. However, a minority of women had a positive attitude regarding exercises during pregnancy. This outcome is in tandem with modern researches that have described over the past two years a modification in attitudes toward exercises during pregnancy, with growing a number of pregnant females participating in exercises.<sup>2,3</sup>

It was found in the current study that attitude towards antenatal exercise during pregnancy was determined by those commonly predisposed to tiredness and a lack of sufficient information on the subject (Table-2). Similar findings have been reported by other authors.<sup>12-14</sup> In the research done by Duncombe et al,<sup>15</sup> the most stated explanations as to why women did not exercise during their pregnancies were comprised feelings of tiredness, soreness or sickening and a busy schedule. Ribeiro and Milanez's report<sup>12</sup> stated that the chief obstacles to exercise given by pregnant women were shortage of time, tiredness and an uncomfortable feeling by voluminous females who did not feel motivated enough despite being mindful of the advantages exercise will have on their fitness and the wellbeing of their baby. This conclusion is constant with former studies that have verified a substantial association between sufficient knowledge of antenatal exercises with attitudes toward exercise during pregnancy.<sup>9,12</sup>

Though, the result of this research is limited in its scope, more research needs to be authorized in other settings.

## Conclusion

The study confirms most pregnant women in Lahore have an inadequate knowledge about antenatal exercises, as well as have a negative attitude towards it. Consequently, they are unlikely to exercise for the period of their pregnancy, nor take advantage of its benefits.

**Disclaimer:** None to declare.

**Conflict of Interest:** None to declare.

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