

Research Article



Awareness about Antenatal and Postnatal Exercises amongst Rural Pregnant Women

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ABSTRACT

Exercise is safe for both the mother and fetus during pregnancy and recent research support the recommendation to initiate or continue exercise in most pregnancies. The benefits included maintenance of aerobic and musculoskeletal fitness levels, prevention of excessive maternal weight gain, facilitation of labour, help for gestational glucose control and improve psychological adjustment to changes of pregnancy and more rapid postnatal recovery. Risk of caesarean section can be reduced if pregnant woman perform structured physical exercise. There are few barriers like fatigue, lack of time and pregnancy discomforts to physical activity during pregnancy. Aim of the study is to assess the knowledge of antenatal and postnatal exercises among the rural ante natal and postnatal women, to determine the source of information and to determine how many of the rural antenatal women practice antenatal and postnatal exercise. Cross sectional observational study was conducted among rural pregnant women from in and around Thandalam attending Saveetha Medical college obstetrics Gynaecology department. After obtaining ethical clearance and informed consent 130 pregnant women without risk factors were recruited for the study. The participants were interviewed. Demographic details were collected Their knowledge and the source of information about antenatal and postnatal exercises were assessed and what type of exercise they usually practice and how many of them practice antenatal and postnatal exercise were determined and data were analysed. Majority of the women 92.3% belongs to age group between 21 – 30 years. 3.84 %strongly agree, 7.69%agree that exercise during antenatal period makes delivery easier. 2.31% strongly agree, 6.15% agree that exercise during antenatal period improves maternal and fetal health. 9.23% strongly agree, 7.69% agree, that exercise during postnatal period avoids weight gain. 0.76% agrees and 0.76% neither agrees nor disagrees that exercises during postnatal period avoids postnatal depression or stress. In case of fitness or beauty consciousness, 4.61% strongly agree and 3.07% agree that exercise must be done during postnatal period. 38.46% of women had the opportunity to get information about antenatal and 42% postnatal exercise. 66% got their source of information about antenatal exercises during antenatal consultation and 87.03% got the source of information during postnatal consultation. 77% antenatal women preferred walking as exercise and during postnatal period 85.29% of women practiced only walking. Majority of the women 57.69% lacked information about exercises during pregnancy. 18.45 % agree that there is lack of time which prevents them from doing exercise. Awareness and attitude regarding antenatal and postnatal exercise should be improved. Health care professionals should emphasize and promote pregnant women towards health-enhancing physical activity.

Keywords: Antenatal Exercise, Health care Professionals, postnatal exercise, rural women, attitude for exercise, awareness for exercise, benefits.

INTRODUCTION

Exercise has become a fundamental aspect of women's lives and an important constituent of antenatal and postnatal care.¹⁻³ Physical exercise programs for pregnant women are recommended and are steadily increasing in popularity.⁴ Recent studies show that, exercise is safe for both the mother and fetus during pregnancy and support the recommendation to initiate or continue exercise in most pregnancies.¹

The benefits included maintenance of aerobic and musculoskeletal fitness levels, prevention of excessive maternal weight gain, facilitation of labour, help for gestational glucose control and improve psychological adjustment to changes of pregnancy and more rapid postnatal recovery.²

With the objective of providing information for physical exercise programs for pregnancy women, the American College of Obstetricians and Gynaecologist (ACOG)

published recommendations for the safe practice of water or ground-based physical activities during pregnancy. In accordance with these recommendations, irrespective of the pregnant women's physical fitness level, exercise should be low-impact, moderately-intense and regular. Sedentary women should increase their activities gradually and progressively.¹

According to the American College of Obstetricians and Gynecologists (ACOG) and the American College of Sports Medicine (ACSM), a pregnant women without obstetric or medical problems are encouraged to engage in at least 30 minutes of moderate exercise a day (i.e.,) avoiding exercises with risk of abdominal trauma.^{1,5} In the combined CDC-ACSM recommendations for physical activity and health, moderate exercise is defined as exercise of 3-4 METS or any activity that is equivalent in difficulty to brisk walking.⁶



Postnatal depression (PND) ⁷ and urinary incontinence ⁸ are the major problems among postnatal women. Women who perform PFM (Pelvic Floor Muscle) exercise had low rates of urinary incontinence during postpartum period ^{9,10}

Aim and Objectives

1. Aim of the study is to assess the knowledge of antenatal and postnatal exercises among the rural antenatal and postnatal women
2. To determine the source of information
3. To determine how many of the rural antenatal women practice antenatal and postnatal exercise

METHODOLOGY

Cross sectional observational study was conducted among rural pregnant women from in and around Thandalam attending Saveetha Medical college obstetrics Gynaecology department. After obtaining ethical clearance and informed consent 130 pregnant women were recruited for the study. Pregnant women with risk factors were included in the study and pregnant women with maternal medical disorders, previous LSCS and malpresentation were excluded. The participants were interviewed. Personal information like Name, Age, Occupation, Educational qualification was collected. Their knowledge and the source of information about antenatal and postnatal exercises were assessed and what type of exercise they usually practice and how many of them practice antenatal and postnatal exercise were determined. Data was entered on MS Excel and SPSS (Statistical Package for Social Sciences) Software Version 21.0 will be used for analysis. Simple Proportions was calculated.

RESULTS

Table : 1. Demographic details: Majority of the women 51.53% belongs to age group between 21 – 25 years, 40.77% belongs to age group between 26 -30 years, 6.15 % belongs to age above 30 years and 1.59% belongs to age between 15-20 years. In this study 44.61% had primary and secondary school education, 30% had higher secondary school education, 18.46% had no formal education, 4.61% were undergraduates and 2.30 % were postgraduate. About 51.54% of them got married at the age of 21-25 years. About 73.07% of them were housewives while 26.92% of them were working

Table 1

Variable	Categories	%
Age	15-20	1.59
	21-25	51.53
	26-30	40.77
	>30	6.15
Educational status	Illiterate	18.46
	Primary and secondary school	44.61
	Higher secondary school	30
	Undergraduate	4.61
	Postgraduate	2.30
Age at the time of marriage	15-20	1.54
	21-25	51.54
	26-30	45.38
	>30	1.54
Occupation	Home maker	73.07
	Job	26.92

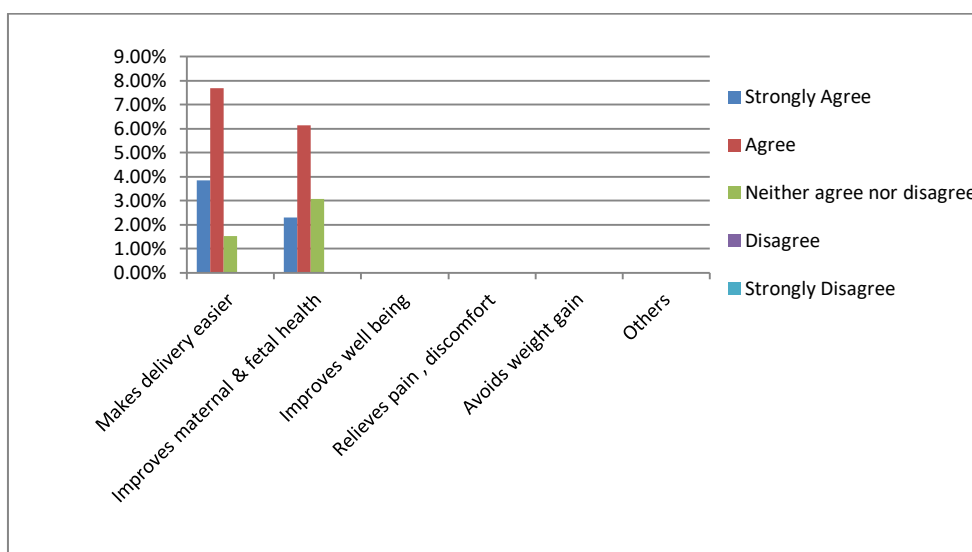


Figure 1: Knowledge about Antenatal exercise

Fig1: Among the study subjects who knew the advantages of antenatal exercises, (3.84%) strongly agree, (7.69%) agree and (1.53%) neither agree nor disagree that exercise during antenatal period makes delivery easier.

The same way subjects also strongly agree (2.31%), agree (6.15%), neither agree nor disagree (3.07%) that exercise during antenatal period improves maternal and fetal health.

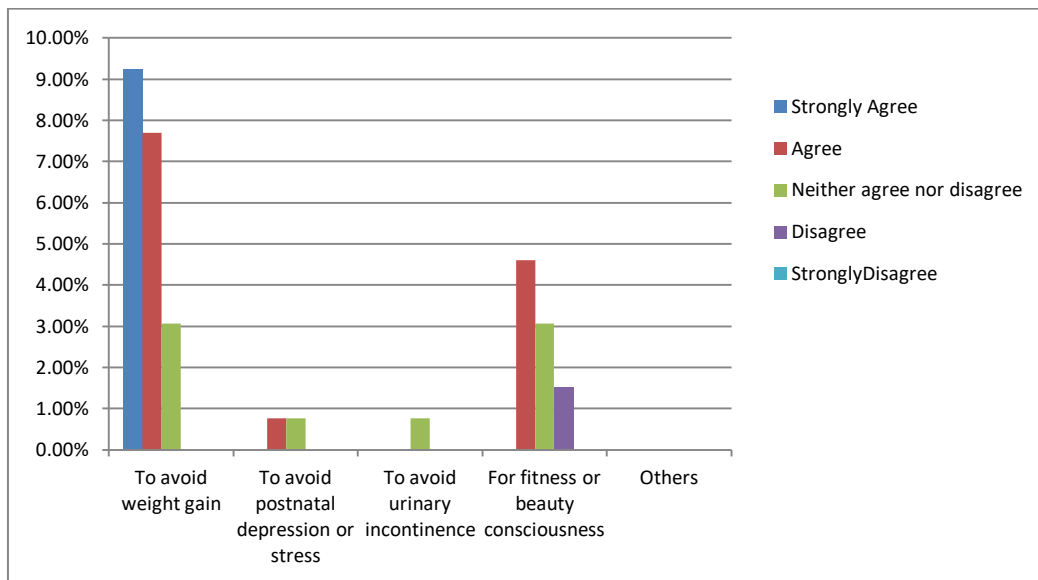


Figure 2: Knowledge about postnatal exercise

Fig2: Among the women who knew the advantages of postnatal exercises, (9.23%) strongly agree, (7.69%) agree, 3.07% neither agree nor disagree that exercise during postnatal period avoids weight gain. 0.76% agree and 0.76% neither agree nor disagree that exercises during postnatal period avoids postnatal depression or stress. In case of fitness or beauty consciousness, 4.61% strongly agree and 3.07% agree that exercise must be done during postnatal period.

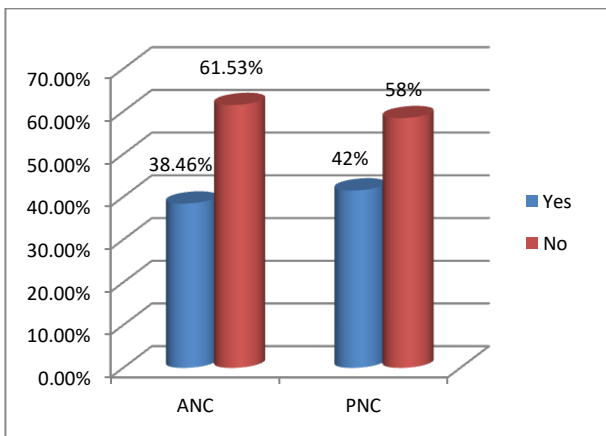


Figure 3: Opportunity to get information about antenatal and postnatal exercises

Fig 3: Among the study subjects, (38.46%) of women had the opportunity to get information about antenatal and 42% postnatal exercise, while the majority of study subjects 61.53% about antenatal exercise and 58% about postnatal exercise did not have the opportunity to get information about exercise done during antenatal and postnatal period.

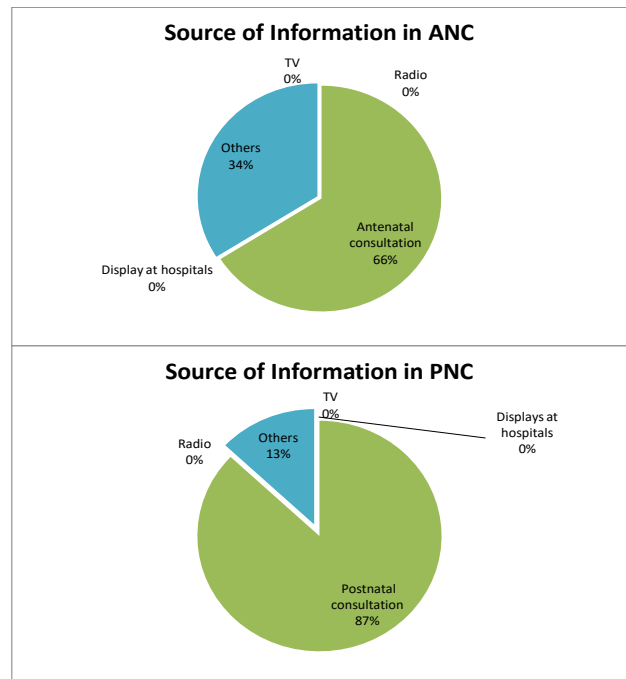


Figure 4 & Figure 5: Source of Information in antenatal and postnatal women

Fig 4 & Fig 5: 66% got their source of information about antenatal exercises during antenatal consultation, while remaining 34% got their information from others. None of them got their information from TV, Radio & Display at hospitals. 87.03% got the source of information during postnatal consultation, while the remaining 12.96% got the information from others.

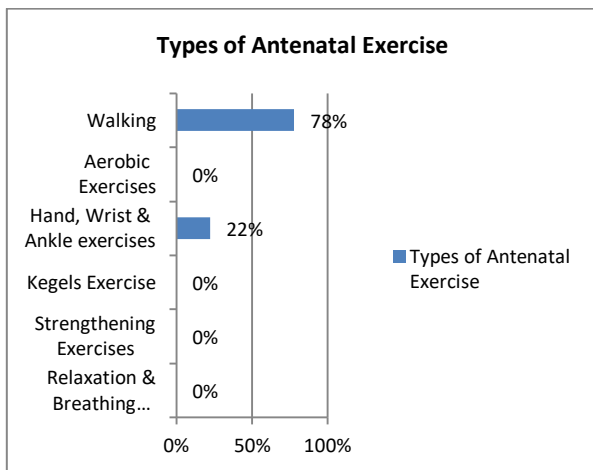


Figure 6: Types of Antenatal exercise

Fig 6: During antenatal period, majority of them preferred walking (77.7%) and hand, wrist and ankle Exercises (22.2%).

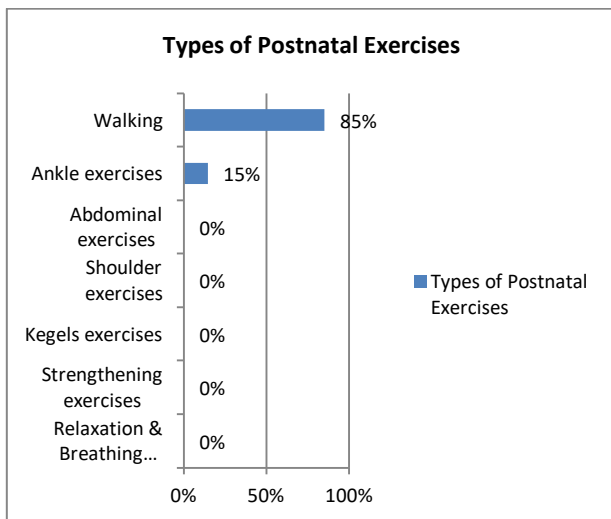


Figure 7: Types of Postnatal exercise

Fig7: During postnatal period, walking (85.29%) and ankle exercises (14.7%) were done.

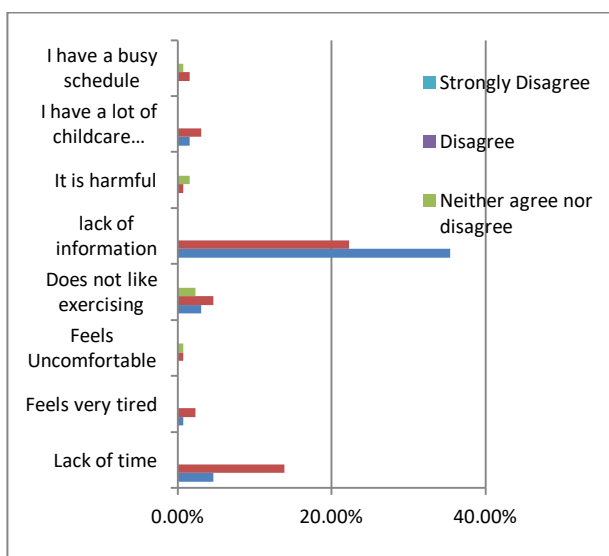


Figure 8: Factors preventing from doing exercise

Fig 8 : Among the study subjects, 1.53% strongly agree and 0.76% agree that they have a busy schedule and 1.53% strongly agree and 3.07% agree that they have a lot of childcare activities while 0.76% agree and 1.53% neither agree nor disagree that it is harmful. Majority 35.38% strongly agree and 22.31% agree that they lacked information about exercises during pregnancy. Some don't like exercising, where 3.07% strongly agree, 4.61% agree and 2.31% neither agree nor disagree. 0.76% agrees and neither agrees and disagree that they feel uncomfortable while doing exercise. Some feel very tired that 0.76% strongly agrees and 2.31% agree during exercise. 4.61% strongly agree and 13.84% agree that there is lack of time which prevents them from doing exercise.

DISCUSSION

Exercise during pregnancy is considered to be a havoc among Indian women due to cultural and familial issues. Some women do not feel motivated to exercise despite being aware of the possible benefits that physical exercise could offer to their health and the health of the baby.

The women in this study were not adequately knowledgeable concerning the practice of physical exercise in pregnancy, but however a few actually exercised.

The present study stated that knowledge about exercise during pregnancy was significantly higher among women with better schooling.

In a study conducted by Ribeiro et al in Brazil , 68.1% of the study population had heard about the performance of physical activity during pregnancy and also had adequate knowledge about it.¹¹ In another study conducted by Emmanuel et al in Nigeria, 81.9% of the study population had heard about physical exercise during pregnancy.¹³ But in the present study, only 47.69% of the study population had heard about exercise during pregnancy which is quite smaller when compared to the above mentioned studies. In the present study, the principal source of information on physical exercise during antenatal consultation was 66% and during postnatal consultation was 87.03%. While in the study conducted by Emmanuel et al, 35.5% of the study population for both antenatal and postnatal period the source of information was based onself-prescription.¹³ In another study conducted by Ribeiro et al, the principal source of information 55.3% was from television.¹¹

Only 20.76% of women were currently exercise during antenatal period and 26.15% during postnatal period in the current study. In a study conducted by Emmanuel et al, 84.7% of the study population exercises during antenatal period and 79% during postnatal period.¹³

In the present study, among the woman who currently exercises during antenatal period mostly preferred walking (77.7%) while the same during postnatal period also (85.29%). While in the study conducted by Emmanuel

et al, the study population mostly preferred aerobics during antenatal and postnatal period along with other exercises.¹³

In the present study, lack of information from study participants was one of the most important factor which was preventing them from doing exercise. This is in correlation with the study conducted by Ribeiro et al.¹¹

The outcome of this study is limited in its generalizability and needs to be validated in other settings.

CONCLUSION

The results from the current study suggest that knowledge about exercise during antenatal and postnatal period is not adequate mainly due to lack of information. Awareness and education must be improved on antenatal & postnatal exercises.

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