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KNOWLEDGE, ATTITUDE AND PRACTICE OF ANTENATAL EXERCISES AMONG PREGNANT WOMEN OF RURAL POPULATION ATTENDING ANTENATAL CLINIC IN NCMCH, ISRANA, PANIPAT.

Obstetrics & Gynaecology

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ABSTRACT

Background: Mothers are urged to lead active lifestyles throughout their pregnancies if there are no obstetrical or medical issues. Preventing gestational diabetes, pre-eclampsia, and reducing lower back discomfort are a few advantages of exercise during pregnancy. Regular exercise is encouraged for its benefits to one's overall health. **Aim:** The aim of the study was to determine the level of knowledge, attitude, and practice related to exercise in the antenatal period among women and to assess the awareness about their health during pregnancy. **Material and Methods:** A cross-sectional study with simple random sampling (a convenient sampling) is conducted on antenatal women attending the antenatal clinic of NCMCH, ISRANA using an interviewer-administered questionnaire for a period of 3 months. The data was collected and compiles using SPSS software. **Results:** In our study, found that out of 120 women, only 65 had knowledge related to exercise in the antenatal period and 55 women had no knowledge, it was also found that 113 women had a positive attitude toward exercise during the antenatal period and 7 had a negative attitude and also 26 women out of 120 practiced exercises during their antenatal period. These parameters show that there is a lack of knowledge, attitude, and practice related to exercise in the antenatal period in women in our area. **Conclusion:** By doing the study, our main goal was to check the knowledge attitudes and, practices in women and also to aware women of these practices so that the recovery duration post-delivery could be reduced.

KEYWORDS

Antenatal Exercises, Knowledge, Attitude, Practice, Pregnancy.

INTRODUCTION:

Pregnancy is to be considered as an opportunity to embrace habit to exercise and women should be encouraged to maintain those habits. Antenatal exercises are tailored to promote health benefits to both pregnant women and fetuses. [1,2] Antenatal exercise (ANEx) offers few hazards and significant benefits, according to the National Institute for Health and Care Excellence (NICE) and the American Congress of Obstetricians and Gynecologists (ACOG) guidelines, while some modification may be necessary depending on the needs of the mother and the fetus. Low-impact or moderate exercise for 30 minutes most days of the week, according to ACOG recommendations, aids in weight control, lowers the chance of developing gestational diabetes mellitus (GDM), and improves psychological well-being. [1,3,4]

One of the health initiatives that dramatically lowers chronic metabolic illnesses is physical activity during pregnancy. [5] Exercise is a systematic or planned, repetitive movement intended to increase or maintain physical fitness, whereas physical activity is a biological movement caused by the contraction of skeletal muscles. Exercise and physical activity during pregnancy help women stay physically fit, prevent excessive weight gain during pregnancy, lower their risk of developing gestational diabetes, preeclampsia, and needing a cesarean section, and lower their risk of developing macrosomia. [1,5,10]

In the majority of nations, prenatal care is a component of public health promotion and prevention programs. [6] Prenatal care, or antenatal care (ANC), is care provided before birth and involves the promotion of the health of both the mother and the fetus as well as education, screening, counseling, and treatment. Proper antenatal health care services are essential for a safe delivery and better neonatal outcomes, and frequent exercise is encouraged for its benefits to general health, lower back pain relief, and the mental and physical well-being of mothers. [10]

The idea of a "fit pregnancy" is widely accepted in contemporary popular culture. Over the past 20 years, attitudes toward activity during pregnancy have undergone a significant transformation. [6] According to reports, physical inactivity ranks as the fourth most important risk factor for non-communicable diseases (NCDs) and adds to the overall burden of disease. Most pregnancies are thought to be safe and good for exercise. [8,9] Pregnancy exercise programs are suggested and are becoming more and more well-liked. [11] No matter how physically fit a pregnant woman is, it is advised that she engage in frequent, low-impact, moderate-intensity exercise. Inactive women should gradually and steadily raise their activity levels. [12]

The women's attitudes about exercise during pregnancy were strongly influenced by their knowledge of the advantages and risks of antenatal exercise. Numerous research has been conducted to determine the attitudes and beliefs of women toward the practice of physical activity during pregnancy. [13,18]

Promoting physical activity in women of reproductive age may be a viable strategy for preventing excessive weight gain, gestational diabetes mellitus, and consequent difficulties faced by children delivered from pregnancies, according to both sporadic and reliable evidence. [18] Therefore, giving pregnant women the necessary instruction and emphasizing the advantages of exercise reduces their concern about potential negative effects on the fetus. It also draws attention to the fact that specialized exercise during pregnancy with the preparation of the pelvic floor muscles and the abdominal, prepares the mother for an easier vaginal delivery without harm to the fetus, as well as improves mothers' performance for participating in physical activity. [18, 19] some data suggest physical exercise during pregnancy is associated with shorter labors and fewer delivery difficulties, such as a reduced need for cesarean sections. Exercise during pregnancy has been shown to minimize labor problems and lengthen labor times. [20,21]

According to research conducted in various communities, people's levels of movement are insufficient, and many live sedentary lifestyles. Similar to this, little is known about exercising while pregnant. Numerous prior studies [24-29] showed that pregnant women lack adequate knowledge of antenatal exercise.

However, maternal age, unintended pregnancies, women's education levels, access to and use of healthcare, the presence of trained female healthcare professionals, women's health-seeking behaviors, family support, and economic status are all significantly associated with antenatal exercise knowledge and practice among pregnant women living in developing nations.

Very few studies were carried out in India about this aspect of maternal health and hence data in this regard is scarcely available. This study was conducted to determine the level of knowledge, attitude, and practice related to exercise in the antenatal period among women and to assess the awareness about their health during pregnancy.

MATERIAL AND METHODS:

A cross-sectional study with simple random sampling (a convenient sampling) is conducted on antenatal women attending the antenatal clinic of NCMCH, ISRANA using an interviewer-administered

questionnaire.

Duration of study:
3 months (Feb to April, 2023)

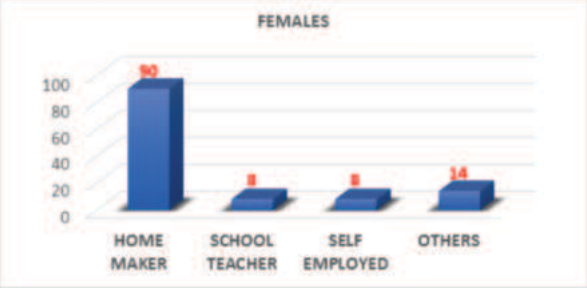
Selection criteria:
Inclusion criteria.
- Pregnant women visiting antenatal clinic with age group from 21 – 35 years.
- Pregnant females giving informed consent.

Exclusion criteria.
- Women who are unable to give consent.
- Women having pre-existing diabetes/hypertension/renal disease or complications related to pregnancy.
- Women having psychological impairment.
- Presence of physical deficiency.
- Multiple pregnancy.
- Women with previous 2 or more caesarean sections.

Statistical Analysis:
Data collected will be analyzed using the appropriate method.

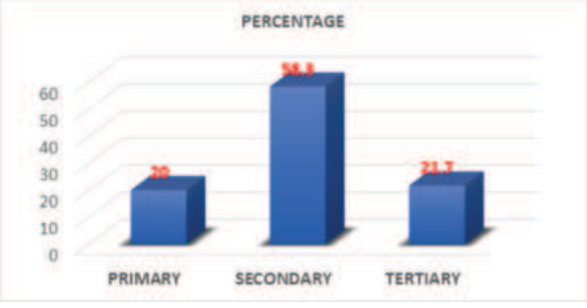
The study does not require any investigation or interventions on patients.

RESULTS:
In our study, we found that the mean age of women was 26.44 years. It was found that 90% of the women in the study were Hindu and 10% were Muslim which means that out of 120 women, 108 were Hindu and 12 were Muslim.



Graph 1: Shows the distribution of women according to their profession.

In our study, we found that 90 females were homemakers, 8 were school teachers, 8 were self-employed, and 14 had other professions.



Graph 2: Shows the distribution of women according to education status.

In our study, 20% of women were primarily educated, 58.3% of women were secondary educated, and 21.7% of women were tertiary educated.

Table 1: Shows questions for knowledge.

	YES Frequency	Percentage	NO Frequency	Percentage
Have you heard about antenatal exercises?	68	56.6	52	43.4
Have you heard of walking?	49	40.8	71	59.2
Have you heard about cycling?	4	3.3	116	96.7
Have you heard about abdominal exercise during pregnancy?	23	19.16	97	80.84
Have you heard about back exercise during pregnancy?	21	17.5	99	82.5
Have you heard about perineal exercise during pregnancy?	19	15.8	101	84.2
Have you heard of swimming?	0	0	120	100
Have you heard of breathing exercises and aerobics?	19	15.8	101	84.2

In our study, we filled out a questionnaire to check the knowledge, attitude, and practices of women regarding exercises during the ante-natal period. The above-mentioned questions were used to assess the knowledge of women. In this table, we can see that most women lack knowledge regarding these practices.

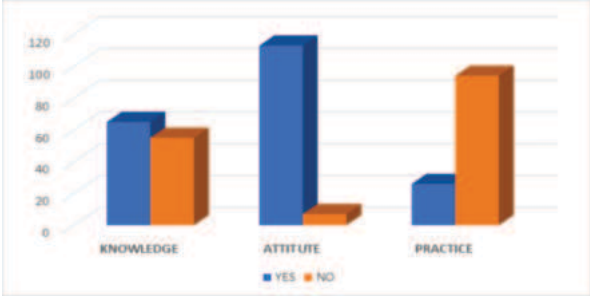
Table 2: Shows the distribution of women according to their knowledge regarding the benefits of ante-natal exercise.

BENEFITS	YES Frequency	Percentage	NO Frequency	Percentage
Decreases risk of back pain	41	34.16	79	65.84
Prevents excessive weight gain	89	74.16	31	25.84
Enhance ability to cope with labor and delivery	54	45	66	55
Rapid postnatal recovery	55	45.8	65	54.2
Strengthens pelvic floor muscles	17	14.16	103	85.84

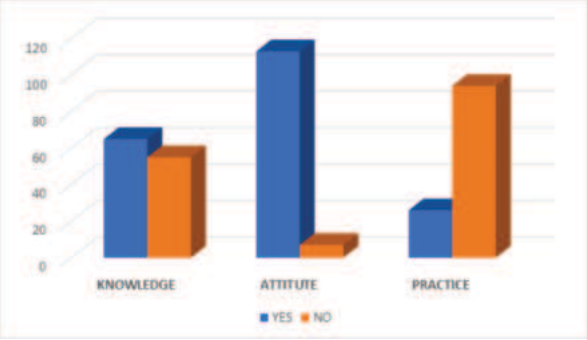
In our study, we found that most of the women lack knowledge about the benefits of these exercises. As there are many benefits of exercise from our study, we have even enhanced the knowledge of women regarding these practices.

Table 3: Shows the distribution of women according to the contraindications they had which prevented them from doing exercise.

CONTRAINDICATIONS	YES Frequency	Percentage	NO Frequency	Percentage
Chest pain	37	30.84	83	69.16
Difficulty in breathing	37	30.84	83	69.16
Vaginal bleeding	35	29.16	85	70.84
Back pain	19	15.84	101	84.16
Premature labor	16	13.3	104	86.7



In our study, we found that a very small number of women had contraindications for exercise and it was seen that the most common reason was women with complaints of chest pain and difficulty in breathing. The least common reason was premature labor.



Graph 3: Shows distribution according to Knowledge, attitude, and practices followed by women.

Table 4: Shows distribution according to Knowledge, attitude, and practices followed by women.

PARAMETERS	YES	NO
KNOWLEDGE	65	55
ATTITUDE	113	7
PRACTICE	26	94

Our study found that out of 120 women, only 65 had knowledge related to exercise in the antenatal period and 55 women had no knowledge, it was also found that 113 women had a positive attitude toward exercise during the antenatal period and 7 had a negative attitude and also 26 women out of 120 practiced exercises during their antenatal period. These parameters show that there is a lack of knowledge, attitude, and practice related to exercise in the antenatal period in women in our area.

DISCUSSION:

Physical activity, which is a crucial component of a healthy lifestyle and helps with the prevention and treatment of many diseases, is defined as a planned, structured physical activity done to enhance one or more aspects of physical fitness. [30] Since pregnancy is linked to the increased incentive to maintain or begin a healthy lifestyle and an increased frequency of medical consultations, which helps monitor physical exercise, pregnancy is a wonderful time to start exercising. [31]

Regular physical activity during pregnancy is linked to many advantages, including a reduced risk of gestational diabetes, hypertension, surgical births, excessive weight gain, weight retention in the postpartum period, and postpartum depression, among others. [3234]

Physical exercises that have been well-researched and determined to be safe and beneficial during pregnancy include walking, stationary cycling, aerobic workouts, resistance training, and stretching. Vaginal bleeding, abdominal pain, regular painful contractions, dizziness, chest pain, and muscle weakness that affects balance are red flags to stop exercising while pregnant. [33-34]

Changes to physical activity are required to lower the risk of harm to the mother and the fetus. In our study we found that only 54% had knowledge related to exercise in the antenatal period the number shows that the knowledge status is very poor. Janakiraman et al did a study and found that only 39.5% of women had adequate knowledge regarding antenatal exercises. [35]

Diverse responders had quite diverse perspectives on exercising while pregnant. Nearly 94% of participants believe that exercise is essential during pregnancy because it helps prevent illnesses, facilitates a normal birth, and hastens the postpartum recovery process. The main reason that 6% of participants don't think exercise is important during pregnancy is that they don't feel like exercising. This infers that programs that raise people's knowledge can encourage those who believe exercise is unnecessary.

CONCLUSION:

In our study, we found that the maximum number of women in our area lacked knowledge regarding the importance of ante-natal exercises but it was seen that women have a positive attitude regarding this. So, by doing the study, our main goal was to check the knowledge attitudes and, practices in women and also to aware women of these practices so that the recovery duration post-delivery could be reduced.

Limitation Of Study:

In our study, the sample size was small which was one limitation, and it was done in a single institute, also the maximum number of women belonged to rural areas and were less educated so they lacked knowledge about these practices.

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