



Preliminary Review on: Antenatal Exercises

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ABSTRACT

Antenatal exercises aim at improving the physical and psychological well-being of an expected mother for labor and preventing pregnancy-induced pathologies by various physical means. Health professionals who care for pregnant women should discuss potential health benefits and harms of exercise. Although most pregnant women do not meet minimal exercise recommendations, there are a growing number of physically active women who wish to continue training throughout pregnancy. During the first trimester, pregnancy brings certain changes in the body for example: morning sickness, fatigue or low energy levels, nausea and increased secretion of the relaxin hormone. Exercise helps to overcome these changes and improves the mood and energy level of the mother. Healthy pregnant women should exercise for at least 150 min per week or 20-30 min everyday in moderate to vigorous aerobic intensity.

KEYWORDS: Antenatal, pregnancy, hormone, prenatal, stretching

INTRODUCTION

Prenatal care, also known as **antenatal care**, is a type of preventive healthcare. It is provided in the form of medical checkups, consisting of recommendations on managing a healthy lifestyle and the provision of medical information such as maternal physiological changes in pregnancy, biological changes, and prenatal nutrition including prenatal vitamins, which prevents potential health problems throughout the course of the pregnancy and promotes the mother and child's health alike. The availability of routine prenatal care, including prenatal screening and diagnosis, has played a part in reducing the frequency of maternal death, miscarriages, birth defects, low birth weight, neonatal infections and other preventable health problems..

ADVANTAGES OF ANTENATAL EXERCISE

- Reduces morning sickness.
- Reduces insomnia, anxiety and stress.
- Reduces other pregnancy-related complaints, eg: fatigue, leg cramps, oedema of extremities, etc.
- Prevents excessive weight gain during pregnancy.
- Improves muscle strength.
- Improves core stability.
- Maintains muscle length and flexibility.
- Improves glycemic control.
- Improves posture.
- Enhances relaxation.
- Prepares for physical demands of labour.

PRECAUTIONS

- Exercises should be performed under supervision.
- Avoid supine lying more than 5 minutes after 3 months of gestation.
- Do not hold your breath.
- Do not change positions quickly.
- Stay hydrated at all times (before, during and after workouts).
- Follow proper warm-up and cool-down process.
- Ensure bladder emptying before workouts.
- Avoid exercises which demands higher balancing and different groups of muscles.

VARIOUS FORM OF EXERCISES WHICH CAN BE PERFORMED DURING PREGNANCY

1. Cardiovascular exercise:-

- The intensity of the workout will be decided by an assessment on pre-pregnancy fitness level.
- It is important to choose any aerobic activity based on one's interests, such as walking, swimming, hiking etc.
- So if walking is the only cardio workout done by an individual, it can be practiced 20-30 minutes 3-4 times a week safely.

2. Stretching exercise:-

(a) Pectoral stretch:-

- This exercise helps in the opening of the chest and prevents the development of round shoulders.
- Nudge the ball in the corner or near the wall.
- Sit in a comfortable position keeping the back on the ball.
- Keep your hands by the side or clasp them behind your head.
- Rest the head on ball and let the elbows expand and open your chest.
- Repeat 3 to 5 times.

(b) Piriformis stretch:-

- Piriformis muscle plays an important role in pelvic stabilization and ADL's.
- Sit on the chair with neutral pelvis.
- Now keep your foot over the opposite knee and bend forward from the hips keeping your pelvis neutral until you feel the stretch.
- Hold it for 20-30 seconds.
- Repeat for the other side as well.
- Do 3 to 5 sets.

(c) Hamstring:-

- Shortening of hamstring can cause back pain and pelvic misalignment.
- This stretch can be performed in various positions and bilaterally or unilaterally.
- Sit in long sitting position, bend one knee and try to reach your extended leg as much as you can.
- Hold it for 20-30 seconds and repeat it for 3-5 times on each side.
- During first trimester, supine lying hamstring stretch can also be done.

(d) Calf Stretch:-

- The more the available length of Tendo achilies, the more force production during push off phase of walking and greater stability.
- Place rolled towel, mat or foam roller on the floor.
- Place ball of the foot on the towel, mat or roller and heel on the floor. Keep the leg straight. Hold this position for 20-30 seconds.
- Repeat on the other side and perform 3-5 sets on each side.

RESULT

With proper attention to risk stratification and surveillance, exercise is safe for the mother and fetus. Benefits of exercise in pregnancy include reduction in Cesarean section rates, appropriate maternal and fetal weight gain, and managing gestational diabetes. Exercise as a means of preventing gestational diabetes, preeclampsia, or prenatal depression cannot be reliably supported. Overall, the current evidence suffers from a lack of rigorous study design and compliance with physical activity interventions.

CONCLUSION

Research thus far has been unable to consistently demonstrate proposed benefits of exercise in pregnancy, such as preventing gestational diabetes, preeclampsia, or perinatal depression. However, moderate- and high-intensity exercise in normal pregnancies is safe for the developing fetus and clearly has several important benefits. Thus, exercise should be encouraged according to the woman's preconception physical activity level.

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