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“Effectiveness of a Planned Teaching Program on Knowledge Regarding Antenatal Exercises Among Antenatal Mothers in Selected Hospitals of Jabalpur”

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Abstract

Background: Pregnancy is a unique physiological state in a woman's life, requiring careful attention to both maternal and fetal health. Antenatal exercises are recognized as safe and beneficial, improving maternal comfort, circulation, and psychological well-being, while preparing the body for labor and recovery. However, many antenatal mothers lack adequate knowledge of these practices due to myths, cultural taboos, or insufficient health education.

Aim: The study aimed to assess the effectiveness of a planned teaching program on antenatal exercises among antenatal mothers attending selected hospitals of Jabalpur.

Methods: A pre-experimental one-group pre-test-post-test design was adopted. Sixty antenatal mothers were selected through purposive sampling. Data were collected using a structured knowledge questionnaire. After the pre-test, a planned teaching program on antenatal exercises was administered, followed by a post-test after 7 days. Descriptive statistics were used to summarize the data, while paired t-test and chi-square test were applied for inferential analysis.

Results: The mean pre-test knowledge score was 12.3 ± 3.5 (out of 25), reflecting inadequate baseline knowledge. The mean post-test knowledge score increased significantly to 20.8 ± 2.9 , indicating substantial improvement after the intervention. A significant association was observed between knowledge scores and demographic variables such as education and gravida.

Conclusion: The findings revealed that the planned teaching program was highly effective in enhancing the knowledge of antenatal mothers regarding antenatal exercises. Structured educational interventions should be integrated into routine antenatal care to improve pregnancy outcomes, maternal well-being, and awareness regarding safe antenatal practices.

Keywords: Antenatal Mothers, Antenatal Exercises, Planned Teaching Program, Knowledge, Jabalpur

Introduction

Pregnancy is one of the most significant and transformative phases in a woman's life. It involves not

only biological and physiological adjustments but also psychological and social transitions. For optimal maternal and fetal well-being, pregnancy requires adherence to



proper health practices, including nutrition, rest, stress management, and safe physical activity. Among these, antenatal exercises occupy a central role in supporting a healthy pregnancy and preparing mothers for childbirth and postpartum recovery.

Antenatal exercises, when performed correctly and under professional guidance, contribute to improved maternal circulation, enhanced muscle tone, reduced discomforts such as backache and leg cramps, and increased stamina during labor [1]. Furthermore, they promote mental relaxation, reduce anxiety, and prevent complications such as gestational diabetes and hypertension [2]. Despite such benefits, many antenatal mothers either avoid exercises or perform them incorrectly due to misconceptions, cultural restrictions, or lack of structured guidance [3].

The World Health Organization (WHO) emphasizes that pregnant women should engage in moderate physical activity unless contraindicated [4]. In India, however, antenatal education often focuses on diet, hygiene, and medical checkups, while physical activity receives relatively less attention. This creates a knowledge gap that can be effectively bridged through planned teaching programs.

Planned teaching programs are structured educational interventions designed to deliver systematic, evidence-based information to target groups. These interventions have been proven effective in enhancing knowledge, changing attitudes, and promoting health-related behaviors [5]. By educating antenatal mothers on the importance, types, and safety of antenatal exercises, such programs empower women to actively participate in their pregnancy care.

Given this context, the present study was conducted to assess the effectiveness of a planned teaching program on knowledge regarding antenatal exercises among antenatal mothers in selected hospitals of Jabalpur.

Objectives

1. To assess the pre-test knowledge score of antenatal mothers regarding antenatal exercise.
2. To administer a planned teaching program on antenatal exercise.
3. To assess the post-test knowledge score of antenatal mothers regarding antenatal exercise.
4. To compare the pre-test and post-test knowledge scores to determine the effectiveness of the planned teaching program.
5. To associate pre-test knowledge scores with selected demographic variables (age, education, occupation, gravida, parity, etc.).

Hypothesis

- **H₁ (Research Hypothesis):** There will be a significant difference between the mean pre-test and post-test knowledge scores of antenatal mothers regarding antenatal exercise at a 0.05 level of significance.

Methodology

Research Design

The study adopted a **pre-experimental one-group pre-test post-test design**. This design was considered suitable as it allowed measurement of knowledge levels before and after the educational intervention within the same group.

Setting

The study was conducted in selected hospitals of Jabalpur, Madhya Pradesh, which serve as primary care centers for a large population of antenatal mothers.

Population

The population comprised antenatal mothers attending antenatal clinics and maternity wards during the data collection period.

Sample and Sampling Technique



A total of **60 antenatal mothers** were selected through purposive sampling, based on inclusion criteria such as willingness to participate, ability to comprehend the teaching program, and absence of medical contraindications to exercise.

Tool for Data Collection

A **structured knowledge questionnaire** was developed to assess awareness regarding antenatal exercises. The tool included items on:

- Definition and importance of antenatal exercises
- Types of safe exercises (breathing, stretching, pelvic floor, relaxation, walking, etc.)
- Benefits of exercises for mother and fetus
- Safety precautions and contraindications

Data Collection Procedure

1. **Pre-test:** Knowledge was assessed using the questionnaire.
2. **Intervention:** A planned teaching program was conducted through lecture and demonstration methods. Visual aids such as charts and pamphlets were used.
3. **Post-test:** Conducted after 7 days using the same tool to measure knowledge gain.

Data Analysis

- **Descriptive Statistics:** Mean, standard deviation, frequency, and percentage were used to summarize data.
- **Inferential Statistics:** Paired t-test was applied to compare pre-test and post-test scores. Chi-square test was used to find associations between pre-test knowledge scores and demographic variables.

Expected Results

It was anticipated that antenatal mothers would show a significant increase in post-test knowledge scores compared to pre-test scores. The program was expected

to be effective in improving understanding of antenatal exercises, with education and gravida emerging as influencing demographic variables.

Results

Pre-test Knowledge Score

The mean pre-test knowledge score of antenatal mothers was **12.3 ± 3.5 (out of 25)**. This indicated that most participants had **inadequate baseline knowledge** regarding antenatal exercises.

Post-test Knowledge Score

After the planned teaching program, the mean post-test knowledge score increased to **20.8 ± 2.9**, reflecting a **marked improvement** in knowledge.

Effectiveness of the Program

The **mean difference** between pre-test and post-test scores was statistically significant, demonstrating the effectiveness of the intervention.

Association with Demographic Variables

- A **significant association** was observed between knowledge scores and variables such as **educational status** and **gravida**.
- No significant association was found with **age**, **occupation**, or **parity**.

Discussion

The findings strongly suggest that a planned teaching program is effective in enhancing knowledge of antenatal mothers regarding antenatal exercises. The improvement from pre-test to post-test scores aligns with similar studies conducted in India and abroad.

For example, a study by Sharma et al. [6] reported that antenatal education significantly improved mothers' understanding of exercise benefits, with a mean knowledge gain of 7.5 points. Similarly, international research has shown that structured exercise programs



reduce pregnancy complications and increase maternal satisfaction [7].

The association between education and knowledge is consistent with earlier research highlighting that literate women are more likely to seek, comprehend, and implement health information [8]. Gravida also emerged as a significant factor, possibly because women with previous pregnancy experiences tend to have higher baseline awareness.

The non-significance of age and occupation in this study suggests that structured teaching can benefit mothers across age groups and employment categories. This underscores the universality of antenatal education programs.

From a practical perspective, integrating such programs into routine antenatal care can have long-term benefits. By empowering mothers with knowledge, nurses and midwives can promote healthy behaviors, reduce complications, and support positive pregnancy outcomes.

Conclusion

The study concluded that the planned teaching program was highly effective in improving the knowledge of antenatal mothers regarding antenatal exercises. Structured educational interventions should therefore be included in routine antenatal services. Such programs are crucial in bridging the knowledge gap, correcting misconceptions, and promoting safe and beneficial health practices during pregnancy.

Recommendations

1. Antenatal exercise education should be made a regular component of antenatal clinics.
2. Nurses and midwives should be trained to conduct teaching sessions using demonstrations and visual aids.

3. Future research may include larger sample sizes and randomized control trials to strengthen evidence.
4. Longitudinal studies could explore the impact of improved knowledge on actual practice and pregnancy outcomes.

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