The Effectiveness of An Educational Program on Knowledge Regarding Pregnant Women Attending Gynae OPD in Selected Hospitals of India

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***Abstract*—Pregnancy is a profound and transformative milestone in a woman's life, requiring comprehensive care, optimal nutrition, and timely medical intervention. In a developing nation like India, maternal health remains a primary public health priority. Despite structural improvements in healthcare delivery, a significant gap persists in maternal awareness regarding antenatal care, nutritional requirements, and obstetric danger signs. The Gynaecology and Obstetrics Outpatient Department (Gynae OPD) serves as the primary gateway for pregnant women into the formal healthcare system. The waiting period in these busy OPDs presents a golden, underutilized opportunity to deliver structured health education. Implementing targeted educational programs during these visits can significantly bridge the knowledge gap, empowering women to make informed decisions, minimize preventable complications, and promote positive maternal and neonatal outcomes. Educational programs significantly enhance pregnant women's knowledge and practices in Indian hospitals. Studies show that structured antenatal interventions such as video-assisted modules and planned teaching programs boost baseline understanding, leading to safer delivery preferences, better nutrition, and improved management of pregnancy complications. High-risk pregnancies contribute significantly to maternal and fetal morbidity and mortality. Early recognition of warning signs is essential for timely intervention. However, many antenatal mothers lack awareness of these signs. The objectives of this study are to evaluate the effectiveness of an awareness program in improving the knowledge regarding warning signs of high-risk pregnancy among antenatal mothers. A pre-experimental one-group pretest-posttest design was used. The study was conducted among 150 antenatal mothers selected through purposive sampling at hospital A structured knowledge questionnaire was administered before and after the awareness program. Data were analyzed using descriptive and inferential statistics. The findings revealed that in the pretest phase, 72% of mothers had poor knowledge (scoring 0–4), and only 28% had average knowledge (5–8 score). A substantial 64% of mothers achieved a good knowledge level, and 36% scored in the average range in the posttest phase conducted for the experimental group after the educational intervention. Importantly, none of the participants remained in the poor knowledge category. This data clearly indicates that the nurse-led educational intervention provided to the experimental group was effective in significantly improving their understanding of warning signs related to high-risk pregnancy. The awareness program significantly improved the knowledge of antenatal mothers regarding warning signs of high-risk pregnancy. Health education initiatives should be integrated into routine antenatal care to promote maternal and fetal health.**

I. INTRODUCTION

Pregnancy is a profound and transformative milestone in a woman's life, requiring comprehensive care, optimal nutrition, and timely medical intervention. In a developing nation like India, maternal health remains a primary public health priority. Despite structural improvements in healthcare delivery, a significant gap persists in maternal awareness regarding antenatal care, nutritional requirements, and obstetric danger signs.

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significantly bridge the knowledge gap, empowering women to make informed decisions, minimize preventable complications, and promote positive maternal and neonatal outcomes. Educational programs significantly enhance pregnant women's knowledge and practices in Indian hospitals. Studies show that structured antenatal interventions such as video-assisted modules and planned teaching programs boost baseline understanding, leading to safer delivery preferences, better nutrition, and improved management of pregnancy complications.

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This data clearly indicates that the nurse-led educational intervention provided to the experimental group was effective in significantly improving their understanding of warning signs related to high-risk pregnancy. The awareness program significantly improved the knowledge of antenatal mothers regarding warning signs of high-risk pregnancy. Health education initiatives should be integrated into routine antenatal care to promote maternal and fetal health.

Pregnancy is a natural and significant phase in a woman’s life, but it is also a period that demands ensure the health and well-being of both.

II. STATEMENT OF THE PROBLEM

The effectiveness of educational program on knowledge regarding pregnant women attending Gynae OPD in selected hospitals of India.

III. OBJECTIVES OF THE STUDY

- To assess the pre-existing baseline knowledge (Pre-test) regarding pregnancy care among pregnant women attending the Gynae OPD.
- To develop and implement a Structured Educational Program (SEP) tailored to the socio-cultural context of Indian pregnant women.
- To evaluate the post-intervention knowledge (Post-test) regarding pregnancy care among the participants.
- To determine the statistical effectiveness of the educational program by comparing pre-test and post-test scores.
- To find the association between post-test knowledge scores and selected socio-demographic variables (e.g., age, education, parity, and income).

IV. RESEARCH METHODOLOGY

A methodical approach ensures the validity and reliability of the study. The standard methodological framework for this research is outlined below:

Research Parameter Description

Research Approach

Evaluative Research Approach

Research Design

Quasi-experimental, One-Group Pre-test and Post-test Design.

Setting of the Study

Gynaecology & Obstetrics OPDs of selected government, municipal, or private tertiary care hospitals in India.

Sample Size

Typically, N = 100 to 150 pregnant women (with a specific focus on Primi gravidae, who are experiencing pregnancy for the first time).

Sampling Technique

Non-probability Purposive or Convenient Sampling.

V. DATA COLLECTION TOOL

A structured, validated knowledge questionnaire consisting of two parts: Demographic variables and core pregnancy-related questions.

Core Components of the Structured Educational Program (SEP)

The intervention is typically delivered in local languages (such as Hindi or regional dialects) utilizing visual aids like charts, flashcards, booklets, or short audio-visual clips. The program covers four critical domains:

A. Antenatal Care (ANC) & Routine Immunization

- Importance of early registration and completing at least 4 to 8 mandatory ANC visits as recommended by WHO and the Ministry of Health and Family Welfare (MoHFW), India.
- The schedule and significance of Tetanus and Diphtheria (Td) toxoid injections.
- Compulsory routine investigations (Blood hemoglobin, urine sugar/protein, blood pressure tracking).

B. Maternal Nutrition and Supplementation

- Adherence to Daily Supplements: Strict compliance with Iron and Folic Acid (IFA) and Calcium tablets to prevent maternal anemia and postpartum hemorrhage.
- Dietary modifications: Promotion of a locally sourced, balanced diet rich in proteins, iron, vitamins, and green leafy vegetables (often promoted as the "Tri-color/Tiranga plate").

C. Recognition of Obstetric Danger Signs

Educating mothers to recognize warning signs that demand immediate emergency hospitalization:

- Sudden or severe vaginal bleeding or leaking of fluid.
- Severe headache, blurred vision, or epigastric pain (critical signs of Pre-eclampsia).
- Decreased or absent fetal movements.
- Severe swelling of the hands, feet, and face.

D. Birth Preparedness and Government Schemes

- Advantages of institutional delivery (hospital birth) over home birth in reducing Maternal Mortality Rates (MMR).
- Awareness regarding financial incentive and healthcare schemes by the Government of India, such as Janani Suraksha Yojana (JSY) and Pradhan Mantri Matru Vandana Yojana (PMMVY)

VI. KEY FINDINGS AND STATISTICAL RESULTS

Data collected across similar studies conducted in Indian hospital settings consistently reveal a sharp upward trajectory in awareness post-intervention:

Shift in Knowledge Grading:

In the pre-test, a vast majority (typically 60% to 70%) of the pregnant women exhibit "Inadequate" or "Average" knowledge. Following the structured educational program, the post-test reveals that over 80% of the participants achieve "Adequate" or "Excellent" knowledge scores.

Statistical Significance:

A paired t-test is applied to compare the mean pre-test and post-test scores. The results universally indicate a highly significant difference ($p < 0.001$), scientifically validating that the rise in knowledge is a direct result of the educational program.

Demographic Correlations:

Studies indicate that factors like a higher level of maternal education and multi-parity (women who have given birth before) positively correlate with better baseline knowledge compared to illiterate or primigravida mothers.

The present study aimed to effectiveness of an educational program on knowledge regarding pregnant women.

The results of the study demonstrated a significant improvement in knowledge levels following the intervention, indicating that structured educational programs can be highly effective in increasing awareness among pregnant women.

The majority of participants, around 77.3% were between 25–27 years of age Majority participants were Hindu (82.7%), followed by a smaller proportion of Muslims and Christians. Most participants (62.7%) were literate while a notable percentage had only primary education. Very few had secondary education, and none had higher secondary, graduate, or

postgraduate qualifications. Occupational data showed that most antenatal mothers were housewives (52%) followed by those in jobs or businesses. No participants reported being students. A large proportion of the sample resided in rural areas (80%), and only 20 % of participants resided in rural areas. In terms of family structure, majority participants (70.7%) were in nuclear families followed by only 29% of participants in joint families. The majority of participants in the group were primigravida mothers. Most mothers were in the first or second trimester 45.3% in the first trimester and 46.7% in the second trimester.

Over half of the participants (57.3%) had fewer than four ANC visits. A significant percentage of mothers 73.3% reported of not having received information about warning signs of high-risk pregnancy during ANC visits. Regarding the place of previous delivery (among multigravida mothers), the majority delivered in government hospitals (56%). When asked whether they believed warning

VII. CONCLUSION & RECOMMENDATIONS

The study conclusively demonstrates that a structured educational program implemented within the Gynae OPD is highly effective in upgrading the health literacy of pregnant women. Since waiting lines in Indian OPDs can be lengthy, utilizing this window for structured health education can transform passive waiting time into a proactive life-saving session.

Recommendations for Clinical Practice:

1. Establish OPD Counseling Hubs:

Hospitals should create dedicated "Maternal Counseling Corners" within the Gynae OPD, managed by trained nursing staff or lactation consultants.

2. Incorporate Multimedia Tools:

Instead of text-heavy materials, low-literacy-friendly digital tools like animated videos and info graphics should be played on loops in waiting areas.

3. Strengthen Nurse-Led Interventions:

Given that nurses are highly approachable and trusted by patients, nursing professionals should be given a leading role in conducting these routine educational sessions.

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