

A STUDY TO ASSESS THE EFFECTIVENESS OF TEACHING PROGRAMME ON KNOWLEDGE REGARDING POSTPARTUM INTRAUTERINE DEVICES AMONG ANTENATAL MOTHERS IN SELECTED RURAL AREA OF JODHPUR DISTRICT

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ABSTRACT

Introduction: India faces a significant challenge of population explosion, adversely affecting economic growth and health outcomes, particularly for women. Among contraceptive methods, postpartum intrauterine devices (PPIUDs) offer a highly effective, safe, and long-term option for family planning. However, their utilization remains limited, especially in rural areas, due to lack of knowledge and misconceptions. Method: A pre-experimental one-group pretest-posttest design was employed with 120 antenatal mothers in a selected rural area. Data were collected using a structured knowledge questionnaire before and after a teaching program on PPIUDs. The intervention consisted of educational sessions using booklets, diagrams, and discussions. Results: Pretest results showed that 55.83% of participants had inadequate knowledge, 31.67% had moderately adequate knowledge, and 12.5% had adequate knowledge of PPIUDs. Posttest results demonstrated significant improvement: 19.17% had inadequate knowledge, 47.5% had moderately adequate knowledge, and 33.33% had adequate knowledge. Paired t-test results indicated a statistically significant increase in knowledge scores ($p < 0.05$). Significant associations were found between pretest knowledge and variables such as occupation, parity, and residence location. Conclusion: The structured teaching program significantly improved knowledge levels about PPIUDs among antenatal mothers. This intervention can be effectively used in rural healthcare settings to promote informed decision-making and better reproductive health outcomes.

Keywords: Postpartum intrauterine devices, antenatal mothers, family planning, teaching program, rural healthcare, contraceptive knowledge.

INTRODUCTION

Health is a valuable asset and an essential component of a happy and productive life. WHO defines family planning as a way of thinking and living that is adopted voluntarily upon the basis of knowledge, attitude, and responsible decisions by individuals and couples to promote health and welfare. About one-third of unintended pregnancies each year result from improper use or failure of contraceptives. A lack of knowledge of contraceptive methods, source of supply, cost, or poor accessibility are the barriers that exist in developing countries. Currently, short-term modern family planning methods are available at all levels of governmental and private health facilities, whereas long-term methods are being provided in health centers, hospitals, and private clinics. The study done in Ethiopia showed that good knowledge about family planning does not necessarily coexist with their good practice. Contraception is the deliberate use of artificial methods or other techniques to prevent pregnancy as a consequence of sexual intercourse. Most effective among them is intrauterine contraceptive device (IUCD). IUCD (intrauterine contraceptive device): A device inserted into the uterus (womb) to prevent conception (pregnancy). The IUCD can be a coil, loop, triangle, or T in shape made of plastic or metal.¹¹ The intrauterine contraceptive device (IUCD) is the most commonly used method of long-acting reversible contraception because of its high effectiveness and safety, ease of use, and cost effectiveness. It provides a nonsurgical option for pregnancy prevention that is as effective as surgical sterilization. The most frequently used intrauterine devices have a plastic frame and release either copper or a progestin to enhance the contraceptive action of the device. Several terms are used to describe IUDs, including IUCD and intrauterine contraception, IUDs; the hormonal IUCD or progestin-containing device is also referred to as an intrauterine system.

OBJECTIVES

1. To assess the existing knowledge regarding postpartum intrauterine devices (PPIUDs) among antenatal mothers in a selected rural area.
2. To assess the effectiveness of a teaching programme on knowledge regarding postpartum intrauterine devices (PPIUDs) among antenatal mothers.
3. To correlate post-test scores with pre-test scores regarding knowledge of postpartum intrauterine devices (PPIUDs) among antenatal mothers.
4. To find out the association between the pre-test knowledge of postpartum intrauterine devices (PPIUDs) and selected demographic variables.

HYPOTHESES

All hypothesis will be tested at a 0.05 level of significance.

H₁: There will be a significant difference between pre-test and post-test knowledge scores regarding postpartum intrauterine devices (PPIUDs) among antenatal mothers.

H₀₁: There will be no significant difference between pre-test and post-test knowledge scores regarding postpartum intrauterine devices (PPIUDs) among antenatal mothers.

RESEARCH METHODOLOGY

A quantitative research approach with a pre-experimental one-group pre-test–post-test design was adopted to evaluate the effectiveness of a structured teaching programme on knowledge regarding postpartum intrauterine devices (PPIUDs) among antenatal mothers. The study was conducted at SS Hospital, Bhadwasiya, Jodhpur, among 120 antenatal mothers selected through non-probability purposive sampling.

Data were collected using a self-structured questionnaire consisting of two sections: socio-demographic characteristics and a 30-item knowledge questionnaire on PPIUDs. Each correct response was awarded one mark, with higher scores indicating better knowledge. The structured teaching programme covered the definition, types, benefits, insertion procedure, risks, and follow-up care of PPIUDs using lectures, discussions, and audiovisual aids.

The instrument was validated by seven experts and demonstrated good reliability using the Split-Half (Spearman–Brown) method ($r = 0.83$). A pilot study involving 12 antenatal mothers confirmed the feasibility of the study. Ethical approval and institutional permission were obtained before data collection, and written informed consent was secured from all participants. Data were analyzed using descriptive and inferential statistics to determine the effectiveness of the intervention.

RESULT

A total of 120 antenatal mothers participated in the study. Most participants were aged >35 years (30.0%), had higher secondary education (26.7%), were privately employed (37.5%), had two pregnancies (33.3%), were in the second trimester (45.8%), had a monthly family income of ₹40,001–₹60,000 (37.5%), resided in urban areas (40.0%), and reported healthcare providers (41.7%) as their primary source of health information.

Before the intervention, 55.8% of participants had inadequate knowledge regarding postpartum intrauterine devices (PPIUDs), 31.7% had moderately adequate knowledge, and 12.5% had adequate knowledge. Following the structured teaching programme, the proportion of participants with adequate knowledge increased to 33.3%, while inadequate knowledge decreased to 19.2%, indicating a marked improvement in knowledge levels.

The mean knowledge score significantly increased from 13.27 ± 7.83 in the pre-test to 19.80 ± 6.13 in the post-test. The paired *t*-test demonstrated a statistically significant improvement ($t = 7.638$, $p = 0.001$), confirming the effectiveness of the teaching programme.

Chi-square analysis revealed that occupation ($p = 0.015$), parity ($p = 0.015$), and residence location ($p = 0.001$) were significantly associated with pre-test knowledge, whereas age, educational status, gestational age, monthly family income, and primary source of health information showed no significant association ($p > 0.05$).

DISCUSSION

The present study evaluated the effectiveness of a structured teaching programme on knowledge regarding postpartum intrauterine devices (PPIUDs) among antenatal mothers. The findings demonstrated a significant improvement in participants' knowledge following the educational intervention. The mean knowledge score increased from 13.27 ± 7.83 in the pre-test to 19.80 ± 6.13 in the post-test, with a statistically significant difference ($t = 7.638$, $p = 0.001$), indicating that the teaching programme was effective in enhancing knowledge regarding PPIUDs.

Before the intervention, more than half of the participants (55.83%) had inadequate knowledge, whereas after the teaching programme only 19.17% remained in this category, and the proportion of participants with adequate knowledge increased from 12.50% to 33.33%. These findings suggest that structured educational interventions can substantially improve awareness and understanding of postpartum contraceptive methods among antenatal mothers.

The study also found significant associations between pre-test knowledge and occupation, parity, and residence location, suggesting that socio-demographic factors may influence women's baseline knowledge regarding PPIUDs. However, no significant associations were observed with age, educational status, gestational age, monthly family income, or primary source of health information.

Overall, the findings support the integration of structured teaching programmes into routine antenatal care to improve maternal knowledge and promote informed decision-making regarding postpartum intrauterine contraceptive use. Such educational strategies may contribute to increased acceptance and utilization of PPIUDs, thereby supporting effective postpartum family planning.

CONCLUSION

The present study concluded that the structured teaching programme was effective in improving knowledge regarding postpartum intrauterine devices (PPIUDs) among antenatal mothers. A statistically significant increase in post-test knowledge scores demonstrated the positive impact of the educational intervention. Additionally, occupation, parity, and residence location were significantly associated with baseline knowledge, whereas age, educational status, gestational age, family income, and primary source of health information showed no significant association. The findings emphasize the importance of incorporating structured educational programmes into routine antenatal care to enhance awareness and facilitate informed decision-making regarding postpartum family planning and PPIUD utilization.

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