

Injectable Contraceptive (Antara) Among Married Women: A Narrative Review on Knowledge, Awareness and Educational Interventions

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Abstract

Background: Injectable contraceptive Antara (Depot Medroxyprogesterone Acetate-DMPA) is a safe, effective, and reversible family planning method introduced under the National Family Planning Programme of India. Despite its availability, utilization remains low due to inadequate knowledge, misconceptions, and fear of side effects among married women.

Materials and Methods: A narrative review was conducted using published literature from research articles, government reports, and family planning guidelines. Relevant studies focusing on knowledge, awareness, utilization, and educational interventions regarding Antara among married women were reviewed and analyzed.

Results: The review revealed that knowledge regarding Antara among married women ranged from inadequate to moderate. Lack of awareness, myths, socio-cultural barriers, and insufficient counseling were major factors affecting acceptance. Educational interventions such as structured teaching programme, video-assisted teaching, and counseling significantly improved knowledge and awareness levels.

Conclusion: Educational interventions are effective in improving knowledge and acceptance of Antara among married women. Strengthening health education and counseling services can enhance utilization of injectable contraceptives and contribute to better reproductive health outcomes.

Keywords: Antara, Injectable Contraceptive, DMPA, Family Planning, Knowledge, Awareness, Educational Intervention, Married Women .

Introduction

Family planning is a fundamental component of reproductive health that enables individuals and couples to achieve their desired number of children and determine the spacing and timing of pregnancies. Effective family planning contributes significantly to the reduction of maternal and infant mortality, prevention of unintended pregnancies, and improvement of overall family well

being. The Government of India has implemented various family planning initiatives to provide safe, affordable, and accessible contraceptive options to eligible couples.

Among the available contraceptive methods, injectable contraceptives have emerged as an effective and convenient option for women seeking long-term yet reversible protection against pregnancy. Depot Medroxyprogesterone Acetate (DMPA), introduced under the Antara Programme by the Ministry of Health and Family Welfare,

Government of India, is a progesterone-only injectable contraceptive administered once every three months. It offers more than 99% effectiveness when used correctly and provides privacy, convenience, and freedom from daily compliance requirements associated with oral contraceptive pills.

Despite its proven safety and effectiveness, the utilization of Antara remains relatively low in many parts of India. Several factors contribute to its limited acceptance, including inadequate knowledge, misconceptions regarding side effects, cultural beliefs, lack of family support, and insufficient counseling by healthcare providers. Many women remain unaware of the benefits, mode of action, eligibility criteria, and possible side effects of injectable contraceptives.

Fear of infertility, menstrual irregularities, and other misconceptions often discourage women from adopting this method. Knowledge and awareness play a crucial role in influencing contraceptive behavior and decision-making among married women. Studies have shown that women who receive appropriate health education and counseling are more likely to accept and continue using modern contraceptive methods. Educational interventions such as structured teaching programmes, video

assisted teaching, health counseling, and community awareness campaigns have demonstrated significant effectiveness in improving knowledge and promoting positive attitudes toward family planning methods.

Healthcare professionals, particularly nurses and community health workers, have an important responsibility in providing accurate information and addressing misconceptions related to injectable contraceptives. Strengthening educational interventions can improve awareness, increase acceptance of Antara, and contribute to better reproductive health outcomes. Therefore, this narrative review aims to explore the existing literature regarding knowledge, awareness, and educational interventions related to injectable contraceptive (Antara) among married women. The review also highlights the importance of educational strategies in improving contraceptive acceptance and utilization, thereby supporting family planning goals and enhancing maternal and child health.

Review Methodology

This narrative review was conducted to explore the knowledge, awareness, and educational interventions related to Injectable Contraceptive (Antara) among married women. Relevant literature was identified through a comprehensive search of published research articles, review papers, government reports, family planning guidelines, and online databases including PubMed, Google Scholar, Scopus, and Research Gate. Studies published between 2018 and 2025 in the English language were considered for review. The inclusion criteria consisted of studies focusing on Antara (Depot Medroxyprogesterone Acetate-DMPA), contraceptive knowledge, awareness, utilization, counseling, and educational interventions among women of reproductive age. Articles unrelated to injectable contraceptives or lacking relevant information were excluded. The selected literature was carefully reviewed, analyzed, and organized into thematic categories such as knowledge and awareness, factors influencing utilization, educational interventions, and the role of healthcare professionals. The findings were synthesized narratively to provide a comprehensive understanding of the topic.

Knowledge and Awareness Regarding Antara

Knowledge and awareness regarding Antara play a crucial role in its acceptance and utilization among married women. Antara is a long-acting reversible contraceptive administered once every three months and provides effective protection against unintended pregnancy. However, several studies have reported that many women possess inadequate knowledge regarding its benefits, mechanism of action, schedule of administration, and possible side effects.

Lack of awareness often results in misconceptions and fear regarding the use of injectable contraceptives. Women who receive information from healthcare professionals and family planning services generally demonstrate better knowledge and more positive attitudes toward Antara. Improving awareness through health education and counseling can enhance informed decision making and increase the utilization of this contraceptive method.

Educational Interventions for Improving Awareness

Educational interventions are effective strategies for improving knowledge and awareness regarding Antara among married women. Various approaches such as structured teaching programmes, video assisted teaching, counseling sessions, and community awareness programmes have been used to educate women about injectable contraceptives.

Studies have shown that educational interventions significantly improve knowledge scores and help women understand the benefits and safety of Antara. These interventions also reduce misconceptions and promote positive attitudes toward family planning. Therefore, educational programmes play an important role in increasing the acceptance and continuation of injectable contraceptives among women of reproductive age.

Role of Nurses in Promoting Antara Awareness

Nurses play a significant role in promoting awareness regarding Antara through health education, counseling, and community outreach activities. They provide accurate information regarding the benefits, administration schedule, effectiveness, and side effects of injectable contraceptives. Nurses also help women address misconceptions and make informed decisions regarding family planning. Through counseling and follow-up services, they encourage the proper use and continuation of Antara. Their contribution is essential in improve contraceptive awareness . Role of Nurses in Promoting Antara Awareness and Continuation. Nurses have an important role in promoting informed choice, appropriate use, and continuation of injectable contraceptive services. Recent evidence indicates that concerns regarding menstrual changes, other perceived side effects, and apprehension may contribute to discontinuation of Antara among users. Therefore, counselling should provide clear and balanced information about the expected benefits, possible side effects, and the importance of follow-up rather than focusing only on

Table: Summary of the studies

Sr. No.	Author / Year	Title of the study	Methodology	Key Findings
1	Patil et al. (2021)	A Descriptive Cross Sectional Study to Assess the Knowledge and Practices Regarding Injectable Contraceptive Medroxyprogesterone Acetate(MPA/Antara) Among Working Women	Descriptive cross sectional study	Knowledge and practice regarding Antara were good among most participants. Higher education was significantly associated with better knowledge and practice.
2	Kumari S. & Singh A.et al. (2024)	A cross-sectional study to assess knowledge, attitude and practice regarding contraception among antenatal women	Cross sectional study	Participants had good knowledge but relatively low contraceptive practice. Education and place of residence significantly influenced contraceptive use
3	Gupta R. & Srivastava K.	A study on effectiveness and acceptance of DMPA (Antara injection) among women	Observational study	Acceptance of DMPA (Antara) was higher among long-term users. Awareness and positive attitude were associated with better acceptance.

4		Khan M. & Ali S. A quasi-experimental study to assess the effectiveness of planned teaching programme on knowledge regarding temporary contraceptive techniques	Quasi-experimental Planned teaching	programme effectively improved knowledge on temporary contraceptive methods. The improvement was statistically significant.
5	Singh P. & Tiwari A.	Effectiveness of video assisted teaching regarding injectable contraceptives under Antara scheme	Pre Experimental Design –	Video-assisted teaching significantly increased women's knowledge about Antara. Post-test knowledge scores improved compared with pre-test scores.

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