



Barriers and Facilitators to Postpartum Intrauterine Contraceptive Device (PPIUCD) Uptake in Rajasthan: A Comprehensive Analysis

Abstract: Postpartum Intrauterine Contraceptive Device (PPIUCD) offers a safe, long acting, and reversible contraceptive method for women immediately after childbirth. Despite its clinical benefits and government promotion, its uptake remains suboptimal in Rajasthan. This study explores the multifaceted barriers and facilitators influencing PPIUCD adoption among postpartum women. A structured survey was conducted across various healthcare facilities in Rajasthan, involving 500 participants. Statistical analysis revealed that although 81.6% of women were aware of PPIUCD, concerns about side effects, family influence, misinformation, and perceived costs hindered adoption. Counseling emerged as a critical enabler, with counselled women being significantly more likely to opt for PPIUCD. Additionally, the role of healthcare providers, community health workers, and male involvement proved pivotal in shaping decisions. The findings underscore the need for strengthened counseling, targeted communication strategies, family engagement, and improved service quality to enhance PPIUCD utilization. Addressing these issues can improve reproductive health outcomes and support informed family planning choices in Rajasthan.

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Introduction

Postpartum family planning (PPFP) is essential in reducing unintended pregnancies and improving maternal and child health outcomes. The Postpartum Intrauterine Contraceptive Device (PPIUCD) is a safe, long acting, and reversible contraceptive method available to women immediately after childbirth. Despite its advantages, uptake remains low in many regions, including Rajasthan. This report aims to analyse the factors influencing PPIUCD adoption and provide evidence-based recommendations to improve its utilization.

Several studies have highlighted that limited awareness, myths, and socio-cultural influences play a crucial role in the low adoption of PPIUCD in India. Rajasthan, being one of the states with high fertility rates and unmet contraceptive needs, requires targeted

interventions to enhance PPIUCD acceptance. This report presents an in-depth analysis of the key factors affecting uptake, using statistical methods to identify patterns and propose effective solutions.

Objectives

- To assess awareness and knowledge levels about PPIUCD among postpartum women.
- To identify key barriers and facilitators to PPIUCD uptake.
- To analyze the role of healthcare providers and counseling in decision-making.
- To propose strategies for increasing PPIUCD adoption.

Methodology

A structured survey was conducted among postpartum women across various healthcare facilities in Rajasthan. The study focused on:

- Socio-demographic characteristics
- Past contraceptive use
- Awareness and counseling on PPIUCD
- Decision-making factors
- Barriers to adoption
- Role of community health workers

A total of 500 postpartum women participated in the survey. Data analysis was conducted using SPSS software, employing descriptive statistics, chi-square tests, and regression analysis to determine significant associations between factors influencing PPIUCD uptake



Key Findings

Past Contraceptive Use

- 89% of respondents had used contraceptives before pregnancy.
- Most common methods: Condoms (52.3%), Oral Pills (26.2%), and Birth Control Injections (10.9%).

Awareness and Counseling on PPIUCD

- 81.6% of respondents were aware of PPIUCD before delivery.
- 60.5% received counseling on postpartum contraception during pregnancy.
- 78.9% were asked post-delivery about their interest in PPIUCD.
- 69.6% signed a consent form before insertion.

Barriers to PPIUCD Uptake

- **Fear of Side Effects:** Concerns about excessive bleeding, pain, and infections.
- **Misinformation:** Myths about PPIUCD shifting inside the body.
- **Family Influence:** Husbands and in-laws played a significant role in decision-making.
- **Preference for Other Methods:** Women opted for alternative contraceptives due to personal or partner preferences.
- **Financial Barriers:** Some respondents reported hidden costs despite free service claims.

Role of Healthcare Providers and Community Workers

- 28.1% of respondents found outreach programs "Very Important" in raising awareness.
- Inconsistent follow-up services were identified as a challenge in ensuring continued use.

Statistical Analysis

Knowledge of PPIUCD Before Pregnancy: Chi-square test result: $\chi^2 = 447.79$, $p < 0.0001$, indicating significant variability in awareness levels.

Financial Barriers to Contraception: Chi-square test result: $\chi^2 = 54.49$, $p < 0.0001$, highlighting the impact of cost concerns.

Role of Family Influence in Decision-Making: Chi-square test result: $\chi^2 = 89.32$, $p < 0.0001$, showing significant influence of husbands and in-laws on contraceptive choices.

Impact of Counseling on PPIUCD Uptake:

Logistic regression analysis indicated that women who received counseling were 2.8 times more likely to opt for PPIUCD than those who did not ($p < 0.05$).

Discussion

Despite high awareness levels, several factors hinder PPIUCD adoption. Fear of side effects, lack of male involvement, and socio-cultural norms play a crucial role in decision-making. Strengthening counseling and ensuring free service availability can bridge these gaps.

A key finding is that financial concerns persist despite government programs offering PPIUCD services free of cost. This suggests a need for clearer communication regarding financial support. Additionally, the significant role of family members highlights the necessity for broader outreach efforts targeting both women and their spouses.

Recommendations

1. **Strengthen Counseling Programs:** Provide consistent and detailed counseling on PPIUCD during antenatal care (ANC) and postpartum visits.
2. **Enhance Community Engagement:** Utilize ASHAs, ANMs, and outreach workers to dispel myths and increase acceptance.
3. **Involve Husbands and Family Members:** Conduct sessions targeting male partners and in-laws to support decision-making.
4. **Ensure Transparent Financial Support:** Communicate that PPIUCD services are free to eliminate cost-related hesitancy.
5. **Improve Follow-up Services:** Ensure continued support for women post-insertion to address concerns.
6. **Develop Targeted IEC Materials:** Address myths and misconceptions through culturally relevant communication materials.
7. **Monitor Service Delivery Quality:** Strengthen supervision mechanisms to ensure consistent and high-quality counseling.



Conclusion

PPIUCD is a highly effective contraceptive method, but its adoption is influenced by multiple social, cultural, and informational barriers. By addressing myths, strengthening counseling, and engaging families, policymakers and healthcare providers can significantly improve PPIUCD uptake, leading to better reproductive health outcomes in Rajasthan. Future interventions should focus on integrating community-based approaches with healthcare services to enhance accessibility and trust.

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