



KNOWLEDGE, ATTITUDE AND PRACTICES REGARDING POSTPARTUM  
CONTRACEPTION BELLARY MEDICAL COLLEGE AND RESEARCH CENTER,  
BALLARI.

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**ABSTRACT**

**Introduction-** Globally, an estimated 300,000 maternal deaths occur each year due to complications related to pregnancy and childbirth. Alarming, approximately 75% of these deaths are preventable, highlighting significant gaps in maternal healthcare services and awareness. One of the crucial contributors to maternal morbidity and mortality is closely spaced pregnancies. **Materials & Methods** - This is an observational and cross-sectional study conducted on women admitted in OBG Department, in Labor ward or on immediate postnatal day, who were asked structured questions about their knowledge and perception about contraception. **Results-** It was observed that 77.6% of women were aware of oral contraceptive pills, and 66.4% were aware of barrier methods. However, awareness of long-acting reversible contraceptives like intrauterine devices (55.6%) and injectables (38.8%) was relatively low. Reported side effects in the past use were minimal, with 12.5% of IUCD users reporting discomfort or bleeding, and 11.6% of pill users experiencing nausea or cycle irregularities. The majority (94.4%) believed family planning is important, and 88.8% agreed it helps prevent future complications, indicating a generally positive attitude toward contraception. Our results show that counseling had a substantial impact: willingness to use contraception rose from 55.6% to 88% post-counseling. After counseling, the most preferred method was the IUCD (40%), followed by injectables (22%) and permanent sterilization (12.4%). **Conclusion-** Our study reinforces the critical need for postpartum family planning interventions. Though baseline knowledge exists for common methods, awareness of long-acting and emergency options remains low. Counseling significantly improves both willingness and informed choice, making it an essential component of postnatal care.

**KEYWORDS**

Postpartum contraception, Intrauterine devices, Oral pills.

**INTRODUCTION**

Globally, an estimated 300,000 maternal deaths occur each year due to complications related to pregnancy and childbirth. Alarming, approximately 75% of these deaths are preventable, highlighting significant gaps in maternal healthcare services and awareness.<sup>[1]</sup> One of the crucial yet often overlooked contributors to maternal morbidity and mortality is closely spaced pregnancies.<sup>[2]</sup>

Studies indicate that optimal birth spacing—specifically an interval of 3 to 5 years between pregnancies—increases the chances of fetal-maternal survival by 2.5 times.<sup>[3]</sup> This is a critical public health insight highlighted in the National Family Health Survey-5 (NFHS-5), which underscores the importance of spacing in improving maternal and child health outcomes.<sup>[4]</sup>

A key opportunity to address these issues lies in postpartum family planning (PPFP)—the prevention of unintended and closely spaced pregnancies during the first 12 months after childbirth. It has been observed that ovulation can resume as early as 25 days postpartum, even in women who are breastfeeding.<sup>[5]</sup> This means that women can become pregnant again soon after delivery, often without being aware of the risk.<sup>[6]</sup>

In India, 65% of women in the first year after childbirth have an unmet need for family planning.<sup>[7]</sup> This unmet need contributes significantly to the low usage of modern contraceptive methods during a period when the body is still recovering, and when closely spaced pregnancies can be especially dangerous.<sup>[8]</sup>

The lack of awareness, myths and misconceptions, cultural taboos, and limited access to family planning services further compound the problem. It is therefore imperative to address these barriers by promoting knowledge, reshaping attitudes, and improving accessibility and acceptance of contraceptive methods among postpartum women.<sup>[9]</sup>

This study is not only essential for advancing maternal and child health but also for empowering women to make informed reproductive choices, ultimately contributing to healthier families and communities.

**Aims Of The Study**

To assess knowledge, attitude and practice of contraceptive use among postpartum women at BMCRC Ballari.

**Primary Outcome, Secondary Outcomes, Side Effects**

1. **Primary Outcome-** To know about the knowledge and the attitude about contraceptive use
2. **Secondary Outcome-** To promote the use of postpartum contraceptive

**MATERIALS & METHODS**

This is an Observational and Cross-sectional study conducted on women admitted in OBG Department, in Labor ward or on immediate postnatal day, who were asked a structured questions about their knowledge and perception about contraception. They were simultaneously educated and encouraged about the use of modern contraceptive methods and the benefits of the same.

**Inclusion Criteria**

All pregnant women with atleast 1 living child

**Exclusion Criteria**

1. Women with any medical or surgical illness
2. Women with delivery related complications
3. Women with gynecological complications
4. Pregnancy as a result of artificial reproductive technique
5. Primigravida and Primipara.

**Method Of Collection Of Data (Including Sampling Procedure, If Any)**

A structured questionnaire, self-administered or through an interview method.

The study was conducted using computer-based software where systemic random sampling technique is used.

**Statistical Analysis**

Data collected was entered in Microsoft Excel 2007 and then analyzed by using SPSS 29 on personal computer and subjected to descriptive analysis. The results were presented in percentages, means, tables and charts.

**RESULTS**

**Table 1: Demographic Characteristics of Participants (n = 250)**

| Variable             | Category            | Frequency (n) | Percentage (%) |
|----------------------|---------------------|---------------|----------------|
| Age Group            | 18–24 years         | 56            | 22.4%          |
|                      | 25–30 years         | 124           | 49.6%          |
|                      | >30 years           | 70            | 28%            |
| Education Level      | No formal education | 56            | 22.4%          |
|                      | Primary             | 69            | 27.6%          |
|                      | Secondary           | 97            | 38.8%          |
|                      | Graduate and above  | 28            | 11.2%          |
| Parity               | Para 2              | 152           | 60.8%          |
|                      | Para ≥3             | 98            | 39.2%          |
| Socioeconomic Status | Low                 | 111           | 44.4%          |
|                      | Middle              | 105           | 42%            |
|                      | High                | 34            | 13.6%          |

**Table 2: Knowledge about Contraceptive Methods (n = 250)**

| Contraceptive Method          | Yes (n) | %     | No (n) | %     |
|-------------------------------|---------|-------|--------|-------|
| Oral contraceptive pills      | 194     | 77.6% | 56     | 22.4% |
| Intrauterine device (IUCD)    | 139     | 55.6% | 111    | 44.4% |
| Injectable contraceptives     | 97      | 38.8% | 153    | 61.2% |
| Barrier methods (condoms)     | 166     | 66.4% | 84     | 33.6% |
| Female sterilization          | 181     | 72.4% | 69     | 27.6% |
| Lactational amenorrhea method | 83      | 33.2% | 167    | 66.8% |

**Table 3: Reported Side Effects of Contraceptives in previous use (n = 112 users)**

| Method         | Side Effect Reported     | n  | % (of users) |
|----------------|--------------------------|----|--------------|
| IUCD           | Abdominal pain, bleeding | 14 | 12.5%        |
| Pills          | Nausea, irregular cycles | 13 | 11.6%        |
| Injectables    | Weight gain, spotting    | 9  | 8%           |
| Barrier method | Discomfort               | 4  | 3.5%         |

**Table 4: Attitudes Toward Postpartum Contraceptive Use (n = 250)**

| Statement                                                  | Agree (%)   | Disagree (%) | Neutral (%) |
|------------------------------------------------------------|-------------|--------------|-------------|
| Family planning is important after childbirth              | 236 (94.4%) | 8 (3.2%)     | 6 (2.4%)    |
| Contraception prevents complications in future pregnancies | 222 (88.8%) | 14 (5.6%)    | 14 (5.6%)   |
| My partner supports postpartum contraceptive use           | 180 (72%)   | 42 (16.8%)   | 28 (11.2%)  |
| Religious or cultural beliefs affect my decision           | 58 (23.2%)  | 164 (65.6%)  | 28 (11.2%)  |
| I am open to using modern contraceptive methods            | 216 (86.4%) | 14 (5.6%)    | 20 (8%)     |

**Table 5: Impact of Counseling on Willingness to Use Contraception**

| Before Counseling      | After Counseling      | Change |
|------------------------|-----------------------|--------|
| Yes – 139 (55.6%)      | Yes – 220 (88%)       | +32.4% |
| No – 83 (33.2%)        | No – 14 (5.6%)        | -27.6% |
| Undecided – 28 (11.2%) | Undecided – 16 (6.4%) | -4.8%  |

**Table 6: Preferred Contraceptive Method After Counseling (n = 250)**

| Method                    | Frequency (n) | Percentage (%) |
|---------------------------|---------------|----------------|
| IUCD                      | 100           | 40 %           |
| Oral pills                | 29            | 11.6%          |
| Injectable contraceptives | 55            | 22%            |
| Barrier method            | 19            | 7.6%           |
| Permanent sterilization   | 31            | 12.4%          |
| None                      | 16            | 6.4%           |

## DISCUSSION

This study aimed to assess the **knowledge, attitude, and practice (KAP)** of postpartum contraceptive use among women admitted in the obstetrics department, either in the labor ward or on the immediate postnatal day. The findings reflect a significant gap in awareness and a considerable unmet need for family planning in the postpartum period, which is consistent with national trends.

## Knowledge And Awareness

In our study, **77.6%** of women were aware of oral contraceptive pills, and **66.4%** were aware of barrier methods. However, awareness of long-acting reversible contraceptives like intrauterine devices (55.6%) and injectables (38.8%) was relatively low. This correlates with findings from the **NFHS-5**, which reported that although awareness of some contraceptive methods is widespread, knowledge about modern and long-acting options remains inadequate, especially among rural and less-educated populations.<sup>[9]</sup>

A similar study by **Murarkar et al. (2020)**<sup>[10]</sup> conducted in a tertiary care center in India reported that **only 52%** of postpartum women were aware of IUCDs, highlighting the consistent underexposure to long-term contraception across different regions.

## Side Effects (Usage In Previous Pregnancy)

Reported side effects were minimal, with **12.5%** of IUCD users reporting discomfort or bleeding, and **11.6%** of pill users experiencing nausea or cycle irregularities. These rates are comparable to the side effect profiles documented in WHO reports, where such effects are typically mild and manageable but can influence continuation rates if not adequately explained during counseling.<sup>[16]</sup>

## Attitude And Cultural Influences

The majority (94.4%) believed family planning is important, and 88.8% agreed it helps prevent future complications, indicating a generally positive attitude toward contraception. However, **23.2%** reported that **cultural or religious beliefs affect their willingness to use contraceptives**, consistent with findings from **Ali and Cleland (2005)**,<sup>[12]</sup> who emphasized the role of sociocultural influences in contraceptive use decisions in South Asian contexts.

Moreover, 72% of participants reported partner support, suggesting that male involvement may be a key determinant of contraceptive uptake—an observation also supported by **Prusty (2014)**<sup>[13]</sup> in her analysis of male attitudes influencing contraceptive use in India.

## Effectiveness Of Counseling

Our results show that counseling had a substantial impact: **willingness to use contraception rose from 55.6% to 88% post-counseling**. This supports previous studies like **Sebastian et al. (2012)**,<sup>[14]</sup> which demonstrated that integrating postpartum family planning (PPFP) counseling during delivery or immediate postnatal care significantly increases acceptability and future use of contraception.

## Preferred Methods And Usage

After counseling, the most preferred method was the **IUCD (40%)**, followed by **injectable contraception (22%)** and **Permanent sterilization (12.4%)**. A comparable pattern was noted by **Winfrey (2017)**,<sup>[15]</sup> who found that when properly counseled, women are more likely to choose long-acting reversible methods like IUCDs during the postpartum period. Interestingly, **6.4% of participants still chose not to use any method**, indicating residual barriers such as fear of side effects or lack of decision-making autonomy.

## CONCLUSION

Our study reinforces the critical need for postpartum family planning interventions. Though baseline knowledge exists for common methods, awareness of long-acting and emergency options remains low. Counseling significantly improves both willingness and informed choice, making it an essential component of postnatal care. Correlating with prior national and international studies, our findings advocate for strengthening educational outreach and male involvement to bridge the unmet need in the first postpartum year.

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