

RESEARCH BRIEF | MAY 2018

# Dynamics of Postpartum IUD Use in India

Quality of care received and interim results three months after insertion

## KEY RECOMMENDATIONS

### **Institutionalize quality of care in pre-service trainings of all family planning providers**

To improve quality of care during all family planning visits, providers should receive training on all four domains of quality of care: respectful care, counseling to enable appropriate method selection, counseling on effective use of method chosen, and information on continuation of contraceptive use and care.

### **Incorporate comprehensive counseling about postpartum family planning into antenatal care visits by frontline health workers**

Frontline health workers have a significant opportunity to provide information about postpartum family planning to pregnant women. As the vast majority of PPIUD users had seen and discussed family planning with a frontline health worker in the three months preceding delivery and IUD insertion, ensuring the information received during these visits includes comprehensive counseling will better equip women to ask questions and make decisions about family planning in the immediate postpartum period.

### **Train frontline health workers to visit recent adopters and counsel women who want to discontinue the IUD**

Frontline health workers have a critical opportunity to provide information to recent adopters of the PPIUD who are dissatisfied with the method. While most users had spoken to frontline health workers about the IUD before starting the method, less than half of PPIUD users who discontinued the PPIUD spoke to an ASHA about their desire to stop. ASHAs should be trained to visit all women who recently began using the PPIUD to understand their concerns and fertility desires and encourage those who want to stop the IUD but continue preventing pregnancy to switch to another suitable method.

### **Engage husbands of recent PPIUD adopters**

Most women who discontinued the PPIUD spoke to their husband about this desire to stop. The advice given by most of these husbands was to stop using the method, while only 12 percent suggested switching to another method. As women are going to their husbands for support, husbands should be equipped to encourage their wives to explore other modern methods as long as their desire to prevent pregnancy remains.

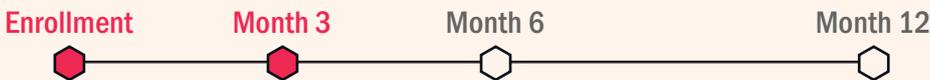
## INDIA CONTRACEPTIVE USE DYNAMICS LONGITUDINAL STUDY METHODS

Through the Evidence Project, Population Council researchers are conducting a longitudinal study of 2,699 married women aged 15-49 who began using IUD/PPIUD, injectable, or oral contraceptive pill (OCP). These reversible contraceptive users are first being interviewed within one month of starting the method (known as the enrollment survey) and at 3-, 6- and 12-months follow-up. Respondents from Haryana and Odisha states in India were enrolled into the study from December 2016 to October 2017 (see **Map 1**). In Haryana, all respondents were recruited through accredited social health activists (ASHAs) at the community level. In Odisha, PPIUD users were recruited at government health facilities, interval IUD and OCP users were recruited primarily through ASHAs, and injectable users were recruited primarily at non-governmental organization (NGO) facilities.

The purpose of this research study is to provide evidence that can be used to strengthen the family planning program and meet the needs of reversible contraceptive users who want to prevent pregnancy in India. With support from USAID/India, Population Council researchers are exploring contraceptive use dynamics of married women by conducting a cohort study with the following research objectives:

1. To assess one-year modern spacing contraceptive discontinuation rates by modern spacing methods (postpartum IUD/interval IUD, injectables, OCPs) among a cohort of modern spacing contraceptive users.
2. To measure influencing facilitators for contraceptive continuation and discontinuation, including intensity of experienced side effects.
3. To measure the Method Information Index (MII) that measures client's recall of counseling information received.
4. To assess influencing factors that lead to contraceptive switching or non-switching.
5. To explore providers' attitudes about contraceptive discontinuation and switching, and their practices with clients who want to discontinue or switch.

Map 1  
Study Implementation Sites



## BACKGROUND

Evidence suggests that in India, compared to married women in general, postpartum married women have a much higher need for family planning (FP) that remains unmet. Unmet need for family planning among women who had given birth within the past year was 31 percent in 2015-16, more than double the unmet need among married women in general (13 percent) (IIPS and ICF, 2017).

The World Health Organization recommends that waiting a minimum of 24 months after a live birth to attempt another pregnancy can significantly improve health outcomes for both the mother and the infant (WHO 2005). To help women and couples meet their reproductive goals, offering FP services during the postpartum period is paramount, and has been named a proven high impact practice in family planning (HIPs 2017). After implementing the safe motherhood initiative Janani Suraksha Yojana as part of the National Rural Health Mission, India has seen an

increase in institutional deliveries from 39 percent in 2005-06 to 79 percent in 2015-16 (Gupta et al., 2012; Jhpiego 2015; IIPS and Macro International, 2007; IIPS and ICF, 2017), allowing for greater access to voluntary postpartum family planning (PPFP) services. Realizing the unmet need of women in the first year postpartum, the government, with technical support from Jhpiego, introduced PPFP services in 2008, including immediate postpartum provision of the copper intrauterine device (IUD). Rapid postpartum IUD (PPIUD) scale-up across the country has resulted in over 1.3 million PPIUD insertions since 2010 (Jhpiego, 2017).

While data are available for injectable and OCP users enrolled in the study (see **Box 1**), this brief focuses on PPIUD acceptors and describes their characteristics, quality of care received at the time of PPIUD insertions, contact of PPIUD users with frontline health workers, and contraceptive continuation three months after insertion. This study did not observe providers in these family planning counseling interactions.

## METHODS

**Box 1** presents the methodology of the longitudinal study of reversible contraceptive users in India. Of 2,699 women enrolled into the study, 412 were PPIUD users and are the focus of this brief.

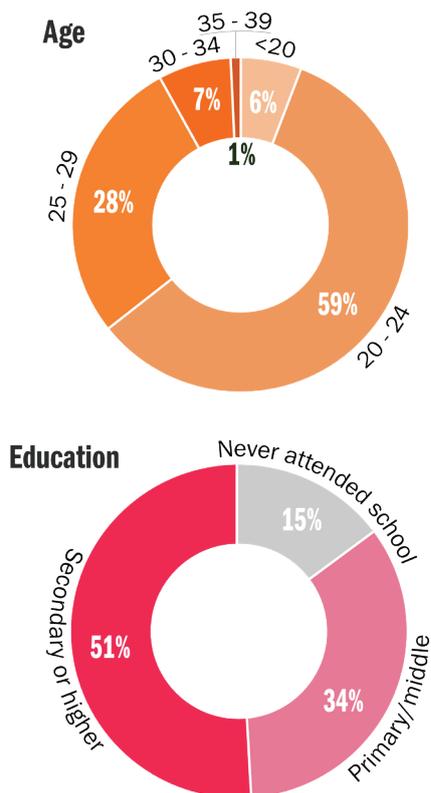
## RESULTS

### BACKGROUND CHARACTERISTICS

The median age of PPIUD users enrolled in the study was 23 years, with a range from 18 to 36 years. One in two respondents had attended secondary school or higher (51%), while 15 percent had never attended school (see **Figure 1**). Most respondents were Hindu (97%), and two percent were Muslim. The majority of women were housewives (92%), and a small proportion worked as agricultural laborers (4%) and farmers (1%). While all respondents were married, about 16 percent were not living with their husband at the time of the enrollment survey. Half of respondents owned their own mobile phones (51%).

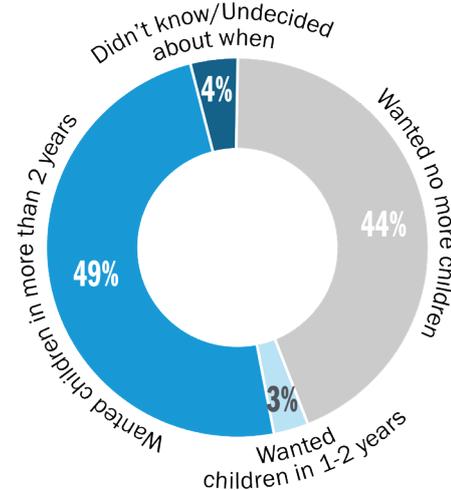
For nearly two-thirds of respondents (62%), this was their very first time using any contraceptive method. Among those who reported previously using a method, the most common method recently used was OCPs (27%), followed by the withdrawal method (18%). The median age at first contraceptive use was 22 years.

**Figure 1**  
**Background characteristics of PPIUD users (n=412)**



Nearly all PPIUD users had at least one living child (98%).<sup>1</sup> Most had one child (59%), 30 percent had two, and the remaining nine percent had between three and five. Slightly more than half of respondents (56%) would like a child in the future, with most women (49%) wanting to wait more than two years to have their next child, three percent wanting to wait from one to two years, and four percent undecided (see **Figure 2**).

**Figure 2**  
**Percent distribution of PPIUD users by fertility preferences at enrollment (n=412)**



### QUALITY OF CARE RECEIVED AT IUD INSERTION

All respondents received their postpartum IUD at a government hospital immediately after delivery. **Figure 3** (see page 4) presents 22 items measuring users' assessment of quality of care received during this visit. These measures of quality are broken down into four domains of process quality (Jain et al 2018): respectful care, method selection, effective use of the selected method, and continuity of contraceptive use and care (see **Box 2**).

#### Respectful care

Nearly all respondents (99%) reported they were treated well or very well by the provider. While more than two-thirds reported that their questions were answered to their satisfaction (70%), slightly fewer (59%) reported that the provider allowed them to ask questions. A little more than one in two PPIUD clients believed that others couldn't see or hear them during the visit, and 60 percent believed that the information they shared with the provider would be kept confidential.

## What is quality of care?

Measures of quality are broken down into four domains of process quality (Jain et al., 2018):

1. **Respectful care:** Concerns interpersonal interactions between the provider and client and assesses aspects of privacy and confidentiality.
2. **Method selection:** Questions focus on information that a provider should seek to enable appropriate method selection at the decision-making point.
3. **Effective use of the selected method:** Information given to the respondent about the method selected.
4. **Continuity of contraceptive use and care:** Includes follow-up appointments and the ability to change methods.

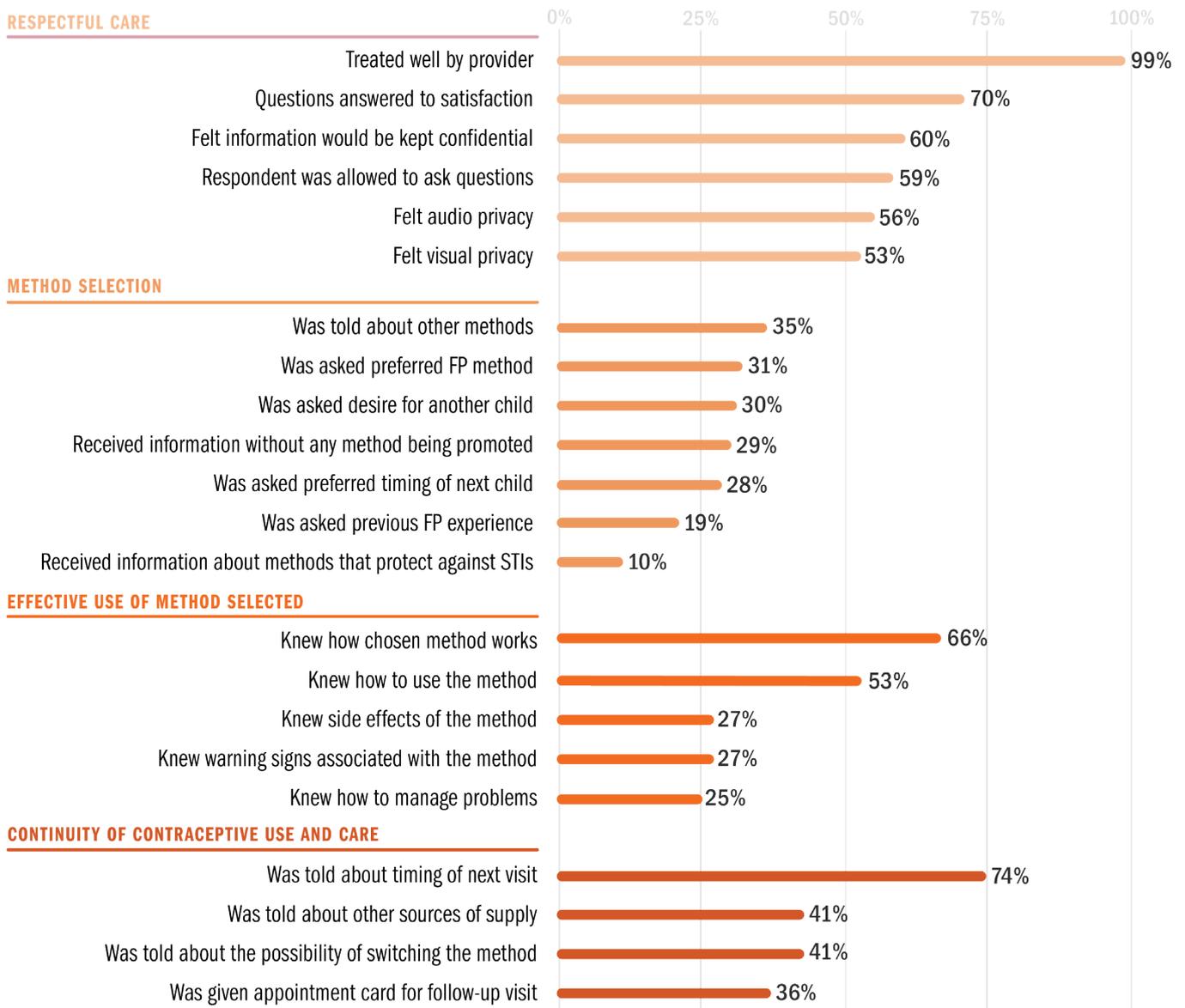
### Method selection

PPIUD users reported low levels of information obtained from providers. Slightly more than one-third of PPIUD users reported that the provider gave information about different FP methods (35%), and 31 percent were asked about their preferred method. Less than one in three PPIUD users (30%) were asked about their desire for another child and preferred timing of next child (28%). Nearly 30 percent reported that no single method was strongly encouraged during their counseling, while 19 percent reported that the provider asked them about their previous FP experience. Only one in ten respondents (10%) received information about the methods that protect against STIs and HIV.

### Effective use of method selected

Two-thirds of respondents (66%) reported receiving information on how the chosen method works and 53

Figure 3  
Aspects of process quality during IUD insertion reported by PPIUD users (n=412)





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percent reported being told how to use the method. Approximately one in four respondents were told about the warning signs associated with the method (27%), and the potential side effects of the selected method (27%). Almost all respondents who reported being told about potential side effects also reported they were told what to do if they experienced a side effect. Of the potential side effects, 19 percent of respondents reported that their provider told them about vaginal discharge, 11 percent reported being informed of backaches, three percent were told about nausea, and three percent were told about irregular bleeding.

### Continuity of contraceptive use and care

Nearly three-quarters of PPIUD users were told by their provider when to return for a follow-up visit (74%); 36 percent were given an appointment card for this visit. Slightly more than 40 percent of respondents reported their provider discussed that they could switch methods if the IUD was not suitable. Forty-one percent reported being told about other sources of supply of FP methods.

## CONTRACEPTIVE METHOD DECISION-MAKING

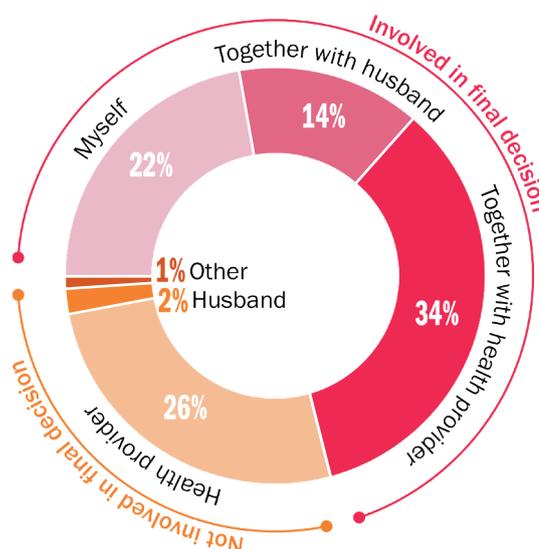
All respondents were asked who made the final decision about the method they received at enrollment after discussions with the provider (Figure 4). Among PPIUD users, 71 percent reported that they were involved in the final decision: 22 percent made the final decision by themselves, 34 percent made the final decision together with their health provider, and 14 percent made the final decision with their husband. Twenty-nine percent of PPIUD users reported that someone else made the final decision.

Most PPIUD users reported that they received the method that they wanted during the facility visit (73%), though 19 percent of respondents reported they did not, and eight percent didn't know (data not shown). Reasons why women did not get their preferred method was not collected in this study.

## CONTACT WITH FRONTLINE HEALTH WORKERS

At enrollment, PPIUD users were asked about their contact with frontline health workers. The majority of PPIUD users had received information about family planning from a frontline health worker in the past (83%). Most women had received information about the IUD from an accredited social health activist (ASHA) (60%), 20 percent received this information from an auxiliary nurse midwife (ANM), two percent from an Anganwadi worker (AWW), and one percent from another type of frontline health worker. In the three months preceding the enrollment survey, most respondents met with a frontline health worker at least once (82%): eight percent met once, 58 percent met between two and five times, and 17 percent met

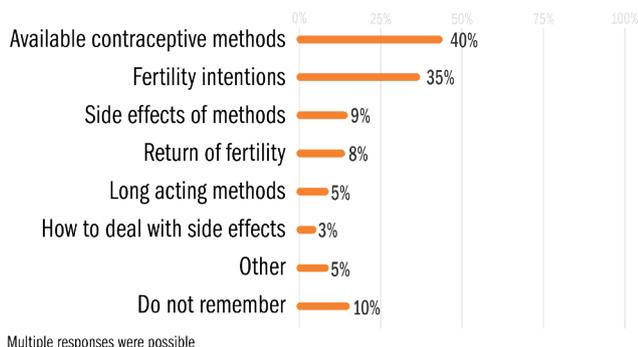
Figure 4  
Percent distribution of PPIUD users by who made the final decision about contraceptive method (n=412)



more than five times with a frontline health worker in the preceding three months.

**Figure 5** presents the topics discussed with frontline health workers in the three months preceding the enrollment survey. The most common topic discussed was available contraceptive methods (40%), followed by fertility intentions (35%). Other topics included side effects, return to fertility, long acting methods, and how to deal with side effects.

**Figure 5**  
**Topics discussed with frontline health workers in the three months preceding the survey reported by PPIUD users (n=412)**



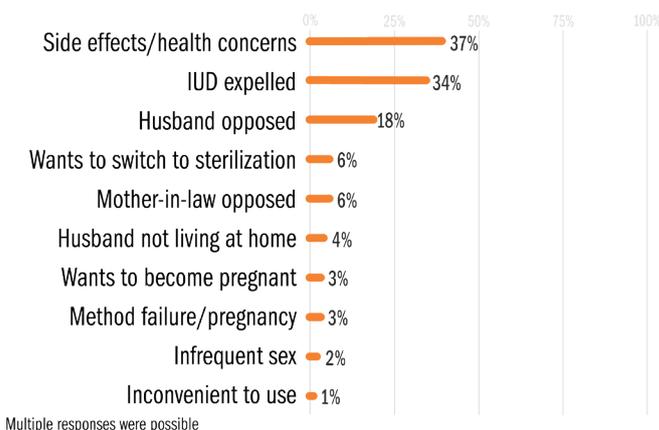
## CONTRACEPTIVE USE AT THREE MONTHS FOLLOWING IUD INSERTION

Seventy-nine percent of PPIUD users completed the three-month follow-up survey (n=327). Three months after beginning PPIUD use, 79 percent were still using the method. The 21 percent that discontinued the PPIUD includes (a) five percent who switched to another modern method, (b) seven percent who switched to a traditional method, and (c) nine percent who stopped contraceptive use altogether. The modern methods switched to after removing the PPIUD were female sterilization (1.5% of PPIUD users interviewed at three-month), OCP (1.5%), the condom (1.2%) and male sterilization (0.3%). Among those who discontinued the PPIUD and did not switch to a different method, (n=29), the majority still need contraception as 48 percent want to wait more than two years before their next child and 31 percent do not want any more children in the future.

### Reasons for IUD discontinuation

Repondents who discontinued the PPIUD (both those who discontinued contraception altogether and those who switched to another method, n=68) provided multiple reasons why they discontinued the method. Only three percent did so because they wanted to become pregnant (**Figure 6**). Common reasons for discontinuing the PPIUD were side

**Figure 6**  
**Reasons for discontinuation reported by PPIUD discontinuers at three month follow-up (n=68)**

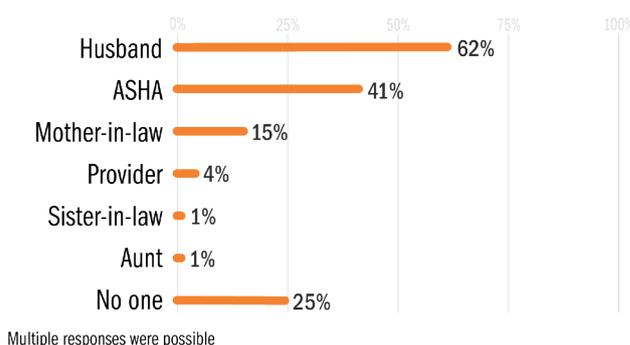


effects and health concerns (35%) and IUD expulsion (34%)<sup>2</sup>. Family opposition was reported less often as a reason for discontinuation (18 percent due to husband opposition and six percent due to mother-in-law opposition). Other reasons listed were desire to switch to female sterilization (6%), husband was not living at home (4%), method failure/pregnancy (3%), infrequent sex (2%), and inconvenient to use (1%).

### Discussions about discontinuation

Among respondents who discontinued using the PPIUD (including switchers and stoppers) by three months (n=68), nearly two-thirds spoke to their husband about their desire to discontinue the method (**Figure 7**). Forty-one percent spoke to an ASHA, fifteen percent to their mother-in-law, four percent to a provider, and one percent each to a sister-in-law and aunt. Twenty-five percent spoke to no one about their desire to discontinue the PPIUD. Respondents were asked if they spoke to the same provider who gave them the PPIUD about stopping the method: 59 percent spoke to the same provider, and 44 percent returned to the same facility (data not shown).

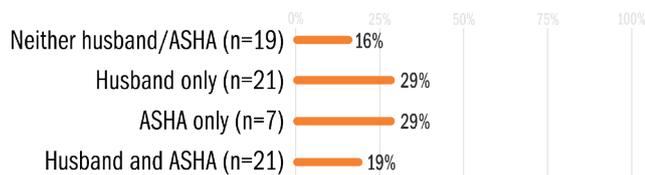
**Figure 7**  
**Individuals with whom PPIUD discontinuers discussed their desire to discontinue the method (n=68)**



Among those who spoke to an ASHA (n=28), nearly half (46%) reported that the ASHA accompanied them to a health facility or hospital. Twenty-one percent reported that the ASHA asked them to stop using the method, while 14 percent reported the ASHA counseled them about other methods (data not shown). Among those who spoke to their husband (n=42), on the other hand, 69 percent reported that their husband asked them to stop using the method. Smaller proportions reported that their husbands asked them to see a doctor/ASHA (14%) or to switch to another method (12%) (data not shown).

**Figure 8** presents the proportion of discontinuers who switched to a different modern method by whom they spoke to about discontinuing. Those who spoke to their husband only or spoke to an ASHA only were most likely to switch to another modern method (29% each), while those who spoke to neither their husband nor an ASHA were least likely to switch to another modern method (16%). Nineteen percent of those who spoke to both an ASHA and their husband switched to another modern method.

**Figure 8**  
**Percent of PPIUD discontinuers who switched to a different modern method, by whom they spoke to**



## DISCUSSION

India's PPIUD program aims to help postpartum women, who have a high unmet need for family planning, space pregnancies and prevent mistimed or unwanted births. The majority of PPIUD users in this study were young, educated, and had one child. Most were involved in making the final decision about which family planning method to use after discussions with the provider, and most had spoken with a frontline health worker at least once about family planning methods in the three months preceding birth and about the IUD. Thus, frontline health workers are an important source of family planning information to pregnant women including information about the PPIUD.

PPIUD users' reports of their interactions with providers at IUD insertion suggest that there is room for improvement in quality of care. It is important

to note that this study did not observe providers in these family planning counseling interactions. Some measures of quality were relatively high, such as certain items of respectful care, while other measures were low, especially around receiving appropriate counseling on method selection. Additionally, one-quarter of respondents reported that their health provider alone made the final decision about the method they received. Differences in quality of care received by age, number of living children, and previous contraceptive use were explored, but no clear patterns emerged.

Respondents' responses may have recall bias but this is likely to be minimal as they were interviewed within one month of receiving the PPIUD. Additionally, respondents' memory of the counseling may be influenced by a positive or negative labor and delivery experience. Furthermore, most PPIUD users reported that a frontline health worker had discussed the IUD in the past but respondents may not have included this counseling in their responses to the survey questions. Similarly, PPIUD users may have received complete family planning counseling during prenatal visits, which may not be reflected in their responses. Nevertheless, the quality of care findings suggest that the postpartum period is a unique time where more attention may need to be given to how family planning counseling is offered to ensure women receive high quality postpartum family planning services by all provider types at all encounters.

Providers and ASHAs are given payments to provide PPIUD services (INR 150 per insertion). PPIUD acceptors are also provided payments to reimburse time spent. Though payments to both providers and clients has been a longstanding component of the family planning program in India, more research is necessary to understand how these payments may influence information given to pregnant and postpartum women.

Approximately four in five PPIUD users were still using the method after three months and five percent switched to a different modern method. Among those who discontinued the IUD, slightly more than one in three did so because of side effects/health concerns experienced while one-third experienced an IUD expulsion. Most women who discontinued the IUD spoke to an ASHA or their husband about their desire to stop using, suggesting the importance of engaging husbands and ASHAs in programming and equipping them with information about method switching so that women who still want to prevent pregnancy can switch to other modern methods.

## ENDNOTES

- 1 Not all women who received a PPIUD have living children. Some who had given birth to a child who died later or had a stillbirth received an IUD postpartum and were enrolled in the study.
- 2 Seven percent (23 women) of all PPIUD users interviewed at the three-month follow-up survey reported their IUD was expelled, which is consistent with proportions of PPIUD expulsion previously reported in India (Jhpiego, 2015; Mishra, 2014).

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### THE EVIDENCE PROJECT

Population Council  
4301 Connecticut Ave. NW  
Washington, DC 20008  
tel: +202 237 9400  
[evidenceproject@popcouncil.org](mailto:evidenceproject@popcouncil.org)



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