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## A study on knowledge, attitude and practices regarding PPIUCD among antenatal women at a tertiary care centre in Dakshina Kannada

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### Abstract

**Background:** Despite optimal efforts by family planning program, very few couples are opting for spacing methods particularly PPIUCD. Thus, it becomes more relevant to educate a women during their antenatal period so that they would be able to adopt it in their immediate postpartum.

### Objectives:

- To assess knowledge, attitude and practices regarding PPIUCD among antenatal women.
- To know about the willingness for PPIUCD usage when knowledge is provided to antenatal women.

**Methods and Design:** This is a questionnaire based cross sectional observational study conducted on 300 antenatal women attending antenatal check-up at the department of obstetrics and gynaecology in AJ institute of Medical Sciences, Mangalore during May 2022 to August 2022.

**Results:** Out of the 300 antenatal women, 82% had knowledge regarding family planning methods of which 124(41%) had knowledge of PPIUCD. Only 12% of these women, had used PPIUCD in the past. After appropriate counselling, 62% of the women agreed for insertion of PPIUCD after this delivery.

**Conclusion:** The antenatal period is the ideal time to educate and counsel a women on appropriate family planning methods like PPIUCD. The study concludes that the antenatal women have a poor knowledge regarding PPIUCD usage and its advantages, and it might be attributed to the religious beliefs and to poor educational status and many other factors. This study highlights the need of educational and motivational activities to create awareness among antenatal women to eradicate the phobia associated with PPIUCD usage.

**Keywords:** PPIUCD, knowledge, attitude, practices

### Introduction

The drive for population stabilization has been a long hard public health battle in India. Intrauterine contraceptive device (IUCD) is very effective (99%) and an inexpensive family planning method which is reversible, requires little effort on the part of the user once inserted, and offers 5–10 years of protection against pregnancy. Wider use of IUCD would reduce the overall number of unintended pregnancies more than any other method. However, its acceptance rate is low. Globally, about one of the five women in reproductive age group use IUCD, while in India, the corresponding figure is about 3/100 women <sup>[1]</sup>.

The Government of India launched Postpartum IUCD (PPIUCD) services in the year 2000 in selected states, which were universalized in all the states by the year 2010. Under the program, the device is inserted immediately after delivery. Postpartum period is generally considered to be an ideal time to introduce contraception since women are strongly motivated at this time. Even though expulsion rate for PPIUCD is higher, benefits of providing highly effective contraception immediately after delivery outweigh this disadvantage. The Government of India provided IUCD free of cost, nonetheless, it still is largely underutilized <sup>[2]</sup>.

The advantages of PPIUCD is that it is convenient; saves additional visits, an effective method for contraception before discharge from hospital, has low risk of uterine perforation because of the thickened wall of the uterus, reduced perception of initial side effects(bleeding and cramping) due to normal puerperal changes, no effect on lactation. It saves time and effort and resources as procedure is performed on the same delivery table for post placental/ intra-caesarean insertions and reduces overcrowding in outpatient facilities.

Counselling for PPIUCD should be ideally in the antenatal period for postpartum family planning, introducing all other methods

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(POPs, centchroman, Injectable, implants, barriers, LAM) as a basket of choice, including PPIUCD insertion and mentioning her choice on the antenatal card. The next counselling should be at the time of admission in early labour when she will be receptive to information about family planning, as contractions are infrequent or at the time of admission during elective caesarean section. If all these situations are missed, she should be counselled within 48 hours of vaginal birth. If these 48 hours are missed there is a wait of 4 weeks, after which IUCD insertion can be done [1].

**Methods**

This is a questionnaire based cross sectional observational study conducted on 300 antenatal women attending antenatal check-up at the department of obstetrics and gynaecology in AJ institute of Medical Sciences, Mangalore during May 2022 to August 2022.

**Inclusion criteria:** All pregnant women attending their 1<sup>st</sup> antenatal check-up in AJIMS, Mangalore irrespective of gestational age and willing to participate in the study.

**Exclusion criteria:** Women not giving consent for the study. All the women enrolled in the study were evaluated using a pre-designed questionnaire, of which part 1 assessed the knowledge of PPIUCD, part 2 assessed the attitude of the women and part 3 assessed the willingness of the women for PPIUCD insertion after counselling.

**Result**

Out of 300 women, the highest number of women belonged to the age group between 25-35 years - 115(38.3%), followed by 110(36.6%) women belonging to 18-25 years age group and 75(25%) belonging to >35 years age group.

**Table 1:** Demographic characteristics

Age (years)	Number of women	% of women	Number of women having knowledge of PPIUCD
18-25	110	36.6%	26
25-35	115	38.3%	58
>35	75	25%	40

Table 2 shows that highest number of women belonged to the lower class socioeconomic status but very few had knowledge of PPIUCD (31 out of 125 had knowledge of PPIUCD). More women belonging to the upper middle class family had knowledge of PPIUCD as compared to the number of women belonging to lower socioeconomic class.

**Table 2:** Based on socioeconomic status

Socioeconomic status	Number of women	% of women	Number of women having knowledge of PPIUCD
Upper middle class	45	15%	28
Lower middle class	75	25%	40
Upper lower class	55	18%	25
Lower class	125	41.6%	31

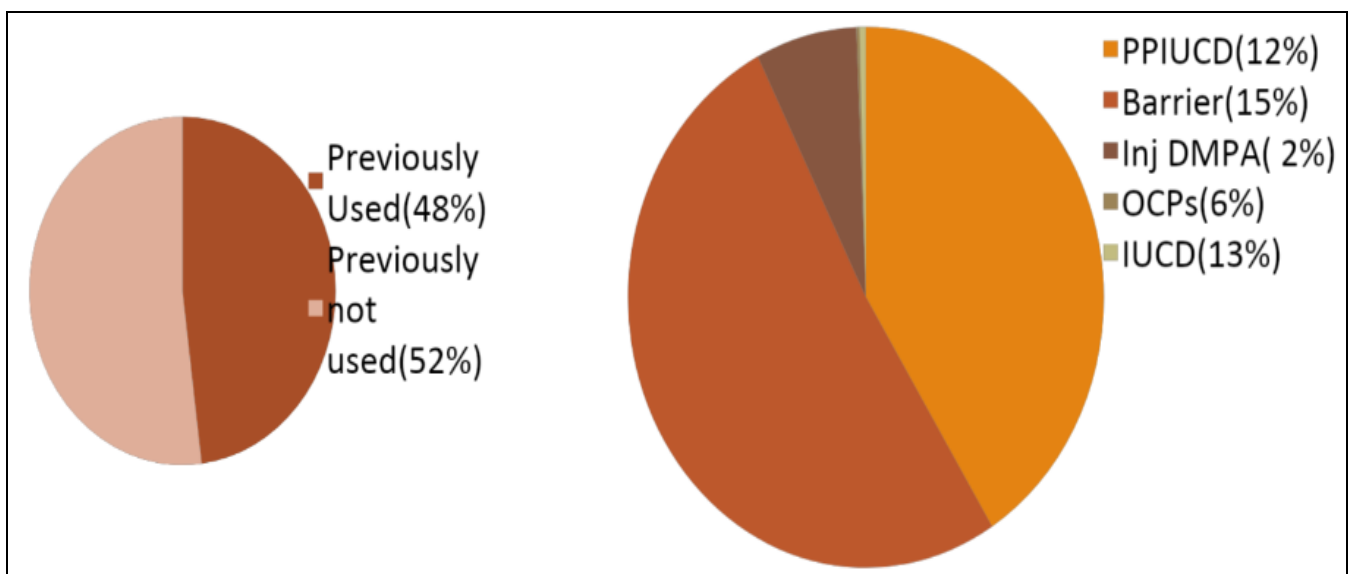
Table 3 depicts that the graduates were aware of PPIUCD as compared to the ones without education. This chart accurately

depicts the role of education on family planning.

**Table 3:** Based on Educational status

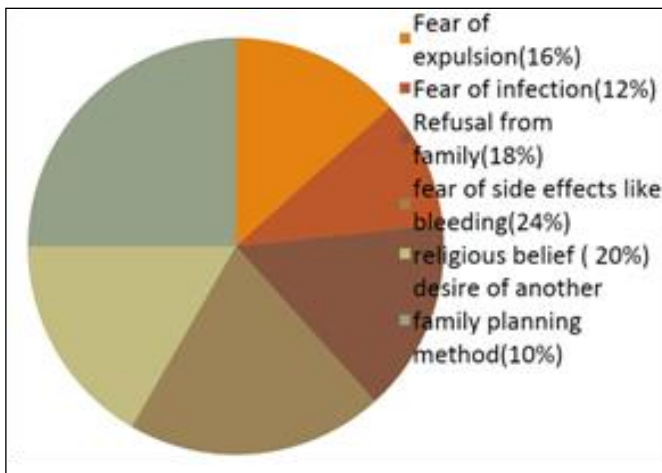
Education	Number of women	% of women	Number of women having knowledge of PPIUCD
Illiterate	141	47%	42
Below 10 <sup>th</sup> standard	62	20.6%	25
10-12 <sup>th</sup> standard	54	18%	24
graduate	18	6%	15
postgraduate	25	8.3%	18

Diagram 1 depicts that 48% of the 300 women participating in the study had used contraceptive before, out of which 12% had used PPIUCD. More number of women choose to use barrier methods followed by IUCD followed by PPIUCD and OCPs and INJ DMPA.



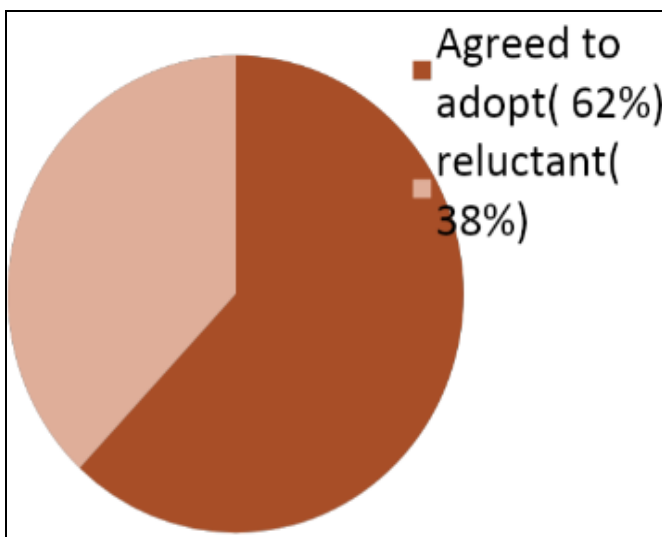
**Diagram 1:** Distribution of women who used contraceptives previously

Diagram 2 depicts that the most common reason for non-acceptance of PPIUCD was fear of side effects like bleeding and religious belief.



**Diagram 2:** Reasons for denial

Diagram 3 shows that 62% of the women were willing for PPIUCD after counselling and explaining about the benefits and risks associated with it. 38% were reluctant to use PPIUCD for various reasons.



**Diagram 3:** Willingness for usage of PPIUCD after counselling

Table 4 depicts that the number of primigravida and multigravida involved in the study is almost equal. The multigravidas showed more willingness to adopt PPIUCD than primigravida.

**Table 4:** Distribution based on parity

Parity	Number of women	% of women	Number of women willing for PPIUCD insertion after counselling
Primigravida	152	50.6%	74
Multigravida	148	49.3%	112

**Discussion**

In our study, most women belonged to the age group of 25-35 years followed by the women belonging to 18-25 group. The awareness about PPIUCD was highest among the women belonging to the 25-35 years age group as compared to other age groups. This was similar to the study conducted by Mona Asnani *et al* in a tertiary care centre in Northern India.

Awareness level was also more among women who belonged to upper middle class family as compared to the lower class. This is comparable to the study conducted by Mona *et al.* [12].

The level of education influences health behavioural, in this study, it was observed that the use of immediate PPIUCD increased with the level of education. Women who are educated are empowered to decide fertility control and can better understand the health information offered to them regarding the use of PPIUCD. In this study, the women who were educated had more awareness about PPIUCD than the ones who were uneducated, education thus plays an important role in the health awareness programs.

Our study was supported by the study conducted by Khawaja *et al.* [17]. The study revealed that 55% of the women know about IUDs. In our study, 41% of the women have average knowledge about PPIUCD. This is in agreement with the study by Valliappan *et al.* [18] wherein 44.8% of the women have some knowledge regarding PPIUCD. In the study by Gadade *et al.* [19] also, the majority (58%) of the study population have average knowledge of PPIUCD. Thus, the knowledge of our study population is similar to that of the study by Valliappan *et al.* [18].

This study revealed that 48% of the women had used some kind of family planning method out of which only 12% had used PPIUCD. This is supported by the study conducted by Mona *et al.*, where 10% had previously used PPIUCD. This reveals the reluctant nature of the women in using PPIUCD, it can be due to various reasons including, the misconceptions of its usage and its side effects. Antenatal women need to be counselled regarding PPIUCD and women should be encouraged to use the same.

In terms of attitude, only 62% of the women have a favourable attitude toward PPIUCD, and the remaining 38% of the women have an unfavourable attitude toward PPIUCD. The present study finding is supported by the study findings of Yadav and Koshalya who reported that 50% of the women have a favourable attitude toward PPIUCD [21]. Regarding attitude toward PPIUCD, Sunanda and Sudha [20] communicated that 51.75% of the women have a positive attitude toward PPIUCD and it is supporting the present study.

The antenatal counselling allows the client to have enough time to discuss with the family methods and also to have access information from health care providers which enables them to make an informed decision before the time of delivery as women may have more information on the benefits of initiating postpartum contraceptives utilizations on a timely manner and this can increase their intention to use immediately after delivery.

In the present study, the higher acceptance rate was seen among multigravidas as compared to primigravidas. This is supported by a study conducted by Ashutosh *et al.* [22] in south east Rajasthan. But this is in contrary to study conducted by Mishra *et al.* [14] and Gautam *et al.* [15] in which it was seen that the acceptance rate was more in primigravidas as compared to multigravidas.

This study reveals that the most common reason for denial was the fear of side effects like bleeding followed by religious belief and then followed by denial from family and husband. This is in contrary to the study conducted by Ashutosh *et al.* [22] where the main reason for denial was the refusal from the family followed by fear of side effects. This is also in contrary to the studies conducted by sonali Deshpande *et al.* [16], Mishra *et al.* [14]. This suggests that the health care providers should adopt approaches wherein the risks and benefits of the PPIUCD is being explained and try to clear the doubts and the false belief of people. The

health care providers should also educate the partner regarding the risks associated with multiple pregnancies and the importance of proper spacing of children and the various methods of family planning keeping the maternal health as an utmost priority.

### Conclusion

The antenatal period is the ideal time to educate and counsel a women on appropriate family planning methods like PPIUCD. The study concludes that the antenatal women have a poor knowledge regarding PPIUCD usage and its advantages, and it might be attributed to the religious beliefs and to poor educational status and many other factors. This study highlights the need of educational and motivational activities to create awareness among antenatal women to eradicate the phobia associated with PPIUCD usage

### Conflict of Interest

Not available

### Financial Support

Not available

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