



KNOWLEDGE AND ATTITUDE TOWARDS ACCEPTABILITY OF PPIUCD

Obstetrics & Gynaecology

Dr Puneetha V S	Assistant Professor, Department of OBG, Karnataka Institute of Medical Sciences, Hubballi
Dr Saraswathi A K	Assistant Professor, Department of OBG, Karnataka Institute of Medical Sciences, Hubballi
Dr Deepa L*	Junior Resident, Department of OBG, Karnataka Institute of Medical Sciences, Hubballi *Corresponding Author
Dr Pragathi Akkalkot	Junior Resident, Department of OBG, Karnataka Institute of Medical Sciences, Hubballi

ABSTRACT

Introduction: The PPIUCD program offers the chance to reach expectant mothers directly with affordable spacing choices throughout their postpartum stay and to offer a choice of safe and efficient contraception. However, due to a number of misconceptions and myths, its adoption rate is not at its maximum. **Study Design and Place of Study:** Cross sectional study done at Karnataka institute of medical sciences, Hubballi. **Materials and Methods:** In the study, 100 women were included, and sociodemographic traits, knowledge and attitudes about contraception, particularly PPIUCD, were observed. The reasons for PPIUCD refusal were also analyzed. **Statistical Analysis:** The data collected was recorded and entered in the MS Excel master sheet. Data was tabulated and analyzed using software Statistical Package for Social Sciences (SPSS) version 22. Categorical data are presented as numbers and percentages (%). Quantitative variables are presented using mean and standard deviation. Qualitative variables have been analyzed using Pearson's chi-square test and Fisher exact tests. A p value of <0.05 was considered as statistically significant. **Results:** The acceptability rate of PPIUCD post-delivery, in our study, before contraception counselling is about 9%. The predominant reason for refusal of PPIUCD among the 91% refusals was the fear of complications (43%). **Conclusion:** Since, it offers numerous reasons for lower acceptance rates of PPIUCD post-delivery, this study will be highly helpful in increasing the effectiveness of the PPIUCD plan. Additionally, it will support the realization of the family planning vision.

KEYWORDS

Copper T, PPIUCD, contraception, acceptability, postpartum family planning.

INTRODUCTION

India is one of the most populous country in the world surpassing China with a population of 1.42 billion. Globally, family planning is acknowledged as a crucial medical intervention for women throughout their reproductive years. The idea of postpartum family planning specifically emphasizes contraception spacing and the prevention of unplanned pregnancies. It is generally known that if there is a gap of more than two years between the two pregnancies, one-third of maternal mortality and 10% of infant mortality can be reduced [1].

There are multiple options of contraception available and offered in the post partum period. The Long-Acting Reversible Contraceptive (LARC) choice was made available to women immediately, safely, effectively, and reliably through the 2010-launched PPIUCD program, which allows for direct outreach to beneficiaries with affordable spacing options [2].

According to the Cochrane review from 2010, postpartum intrauterine contraceptive device (PPIUCD) has been acknowledged as an ideal contraceptive method in postpartum period in the majority of women due to its ease of insertion, assurance of nonpregnant state, accessibility, long duration of action, reversibility, almost no systemic side effects, especially no effect on breastfeeding, high efficacy, and continuation rate [3,4]. This PPIUCD meets the WHO MAC criteria-1.

There is numerous research on the experiences with PPIUCD, but rarely any of them extrapolate the causes of nonacceptance.

The IUD, a LARC method, offers reversible contraception that is safe and uncomplicated for most patients to use, extremely successful for several years, and related with satisfaction scores noticeably greater than for short-term methods (eleven).

The Centers for Disease Control and Prevention (CDC) rank IUDs, which come in hormonal and nonhormonal varieties, in the top tier of contraceptive effectiveness [5].

However, there are specific conditions that make using an IUCD contraindicated, including known or suspected intrauterine or cervical infections, known or suspected genital cancer, and uterine cavity abnormalities that have dramatically altered the cavity.

Despite the fact that PPIUCD has numerous benefits, its acceptance rate is not optimal due to a variety of misconceptions about it among expectant mothers as a result of their inadequate information and dispelling myths about CuT.

AIMS AND OBJECTIVES

- To evaluate the knowledge and attitude about PPIUCD acceptance among parturient women.
- To assess the various reasons for non-acceptance of PPIUCD.

MATERIALS AND METHODS

This study is a cross sectional study conducted over a period of one month in the labour ward, Karnataka institute of medical sciences, Hubballi. The questionnaire proforma was given to the women who were admitted for delivery in early of stages of labour. They were asked to fill the questionnaire. Interpreters were provided whenever necessary.

100 women in all, were enrolled in the study. To gauge knowledge and attitudes towards contraception, particularly postpartum contraception, a pretested semi-structured validated questionnaire was filled out. Age, parity, religion, education, and socioeconomic level were among the demographic factors that were noted. The ladies received one-on-one counselling for postpartum contraception using a standardized counselling methodology, and they were informed of the various postpartum contraceptive methods. All women who accepted PPIUCD received post-placental insertion at the time of delivery. The reasons given by the ladies who rejected the PPIUCD were noted and analysed.

Exclusion Criteria:

All the contraindications for PPIUCD like

- Hb<10 gm/dl
- Fever during the time of labour and delivery
- Premature rupture of membranes >18hrs
- Postpartum hemorrhage
- Manual removal of placenta
- Women with fibroids or uterine malformations

Sample Size:

Sample size has been calculated using the following formula

$$N = \frac{Z_{1-\alpha/2}^2 \cdot p(1-p)}{d^2}$$

Wherein, N is the minimum sample size for the study

$Z_{1-\alpha/2}$ – From Z table at type 1 error of 5% (confidence level of 95%) = 1.96

p = Prevalence of outcome of interest (from previous studies) d = absolute error (taken as 5% for the present study)

In a previous study done by Agrawal K et al the awareness about copper T contraceptive method was seen in 67.3% (p) of study participants. On substituting the same in the above formula, at an absolute error of 10% and confidence level of 95%, the minimum sample size was calculated to be 85. We planned to enrol 100 subjects for the present study.

Statistical Analysis

The data collected was recorded and entered in the MS Excel master sheet. Data was tabulated and analysed using software Statistical Package for Social Sciences (SPSS) version 22. Categorical data are presented as numbers and percentages (%). Quantitative variables are presented using mean and standard deviation. Qualitative variables have been analysed using Pearson's chi-square test and Fisher exact tests. A p value of <0.05 was considered as statistically significant.

RESULTS

Among the 100 study subjects recruited for our study, questionnaire was given to the parturient before any counselling regarding any form of contraception or regarding PPIUCD. This was done to obtain an unbiased prevalence of acceptability and knowledge regarding post-partum PPIUCD. The results were as shown in the following tables.

Table 1 shows the demographic data of the study population. It was noticed that the majority of women in this study were from rural background (85%), nonworking (93%), with only primary schooling (37%), belonging to age group of about 25-29 years (39%).

Table 2 shows the acceptability of PPIUCD based upon demographic characteristics. We can see from this table that no matter the education status, age, parity, number of ANC visits or religion, the acceptability to PPIUCD before any form of medical counselling is same and poor. People do not accept this method of contraception easily, though it is provided free of cost at government health care setups, by the Indian government. It was noticed that even with the awareness of contraception (98%), (90.8%) refused PPIUCD insertion.

Though 68 members of the study population were aware about the Copper-T as a method of contraception, only 8 members (11.8%) accepted as shown in table 3.

81% of them thought that PPIUCD and its tails interfere with the sexual function. The reasons for refusal of the PPIUCD, majority being concern and fear of complications (43%), Husband's refusal (14%) and interference for future conceptions (10%) is shown in Table. 4

Table 1: Demographic Data Of The Study Population

Demographic data of the study population (n=100)	N (frequency)	Percentage (%)
Age(years)		
Less than 20	17	17
20–24	35	35
25–29	39	39
30–34	9	9
Literacy status		
Illiterate	23	23
Primary schooling	37	37
High school	29	29
Degree	11	11
Occupation		
Nonworking	93	93
Working	7	7
Address		
Rural	85	85
Urban	15	15
Religion		
Hindu	60	60
Muslim	38	38

Christian	2	2
Duration of Marriage		
<1 year	16	16
1-3 years	27	27
3-5 years	34	34
>5 years	23	23
Parity		
1	42	42
2	25	25
3	30	30
>4	3	3
Status of Birth		
Planned	61	61
Unplanned	39	39
ANC Visit		
<4 visits	39	39
4 and more visits	61	61

Table 2: Acceptability To PPIUCD Based Upon Demographic Characteristics

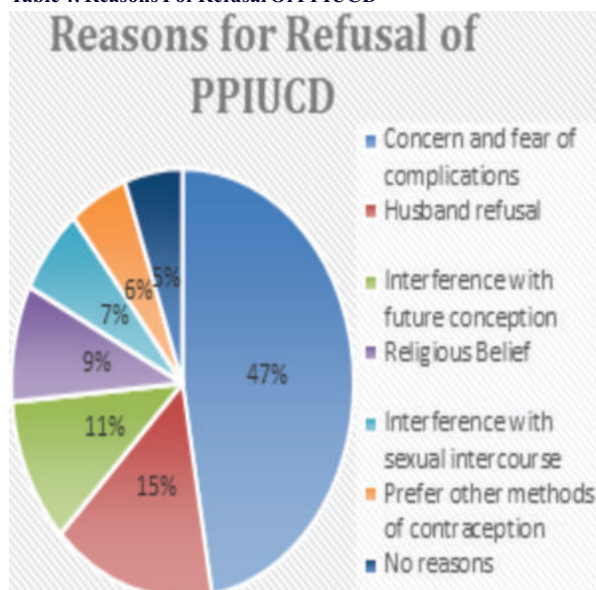
Patient characteristics	Acceptability to PPIUCD		P value
	YES	NO	
Age(years)			0.288
Less than 20	2	15	
20–24	1	34	
25–29	4	35	
30–34	2	7	
Literacy status			0.371
Illiterate	1	22	
Primary schooling	2	35	
High school	4	25	
Degree	2	9	
Occupation			0.061
Non-working	7	86	
Working	2	5	
Religion			0.123
Hindu	5	55	
Muslim	3	35	
Christian	1	1	
Duration of marriage			0.315
<1 year	2	14	
1-3 years	1	26	
3-5 years	2	32	
>5 years	4	16	
Parity			0.945
1	4	38	
2	2	23	
3	3	27	
>4	0	3	
Status of Birth			0.715
Planned	6	55	
Unplanned	3	36	
ANC Visit			0.715
<4 visits	3	36	
4 and more visits	6	55	

Table 3: Knowledge Level About PPIUCD As Method Of Contraception

Knowledge of PPIUCD as a contraceptive option	Acceptability to PPIUCD		P value
	NO	YES	
Knowledge about any method of contraception			0.653
No	2 (100%)	0	
Yes	89 (90.8%)	9 (9.2%)	
Awareness about Copper-T			0.159
No	31 (96.9%)	1 (3.1%)	
Yes	60 (88.2%)	8 (11.8%)	
Source of awareness			0.109
Health worker	33 (91.7%)	3 (8.3%)	
Media	9 (75.0%)	3 (25.0%)	
Relatives	49 (94.2%)	3 (5.8%)	
Myths in family members for rejecting PPIUCD			0.181
Causes infection	30 (96.8%)	1 (3.2%)	
Interferes day-to-day life	15 (93.8%)	1 (6.2%)	
No myth/idea	5 (71.4%)	2 (28.6%)	
Not able to conceive later	41 (89.1%)	5 (10.9%)	
Awareness regarding PPIUCD immediately post-			

delivery			
No	68 (97.1%)	2 (2.9%)	0.03
Yes	23 (76.7%)	7 (23.3%)	
Does parturient know that PPIUCD prevents unwanted pregnancy for 5years?			
No	58 (96.7%)	2 (3.3%)	0.028
Yes	33 (82.5%)	7 (17.5%)	
Does parturient think insertion and removal of PPIUCD is highly painful?			
Do not know	8 (80%)	2 (20%)	0.127
No	14 (82.4%)	3 (17.6%)	
Yes	69 (94.5%)	4 (5.5%)	
Does parturient know that contraception is immediately reversible after PPIUCD removal?			
No	61 (95.3%)	3 (4.7%)	0.67
Yes	30 (83.3%)	6 (16.7%)	
Does parturient think PPIUCD interferes with sexual intercourse?			
Do not know	4 (100%)	0	0.584
No	11 (84.6%)	2 (15.4%)	
Yes	76 (91.6%)	7 (8.4%)	
Does parturient think PPIUCD causes irregular bleeding?			
Do not know	7 (100%)	0	0.065
No	8 (72.7%)	3 (27.3%)	
Yes	76 (92.7%)	6 (7.3%)	
Does parturient think PPIUCD impairs future fertility?			
Do not know	8 (88.9%)	1 (11.1%)	0.105
No	15 (78.9%)	4 (21.1%)	
Yes	68 (94.4%)	4 (5.6%)	
Does parturient think PPIUCD restrict normal day-to-day activities?			
Do not know	8 (88.9%)	1 (11.1%)	0.069
No	20 (80%)	5 (20.0%)	
Yes	63 (95.5%)	3 (4.5%)	
Which contraception method is preferred by parturient?			
DMPA injection	10 (100%)	0	
Barrier method	28 (100%)	0	
Copper T	1 (11.1%)	8 (88.9%)	
Natural Methods	10 (100%)	0	
OCPs	22 (100%)	0	
Permanent sterilization	20 (95.2%)	1 (4.8%)	

Table 4: Reasons For Refusal Of PPIUCD



DISCUSSION

Contraceptive methods are the tool to curb the rapid population growth, which is a critical concern, especially in a developing country like ours, as we have overtaken China to stand as the most populous country. Slower population growth conserves and distributes the limited resources and improves health care and standard of living. Adequate contraception and spacing helps in reducing the maternal and perinatal mortality by 10%. [6] PPIUCDs are safe and readily reversible and long-lasting contraceptives. It is an effective method with a failure rate of 0.5-2HWY [7]. Being highly efficient, it is comparable with surgical sterilization with the benefit of being reversible. Hence, called as the long-acting reversible contraceptive (LARC). It has no interference with lactation, unlike the hormonal contraceptives. And hence, best contraceptive choice in lactating mothers.

According to a Demographic Health Survey (DHS) conducted in 52 developing countries, there is higher rate of mortality in second baby, if spacing between the children is less than 24 months, that is 1.1-2.3 times risk. Making PPIUCD the boon for a nation like ours. In our study majority of women were multigravida, that is 58% , who would have benefitted from PPIUCD.

Considering there factors these studies have been conducted to assess the factors leading to PPIUCD failure in our Indian society. Kirti Agarwal et al. in their study conducted in Maharashtra, India noted that the highest reason for refusal was non supportive family member (61.67%) and myth of not being able to conceive later (59%). Where as in our study we noticed that the most common reason for non-acceptance was concerns and fear of complications (43%) and refusal by spouse (14%). In a Study done, Aruna Nigam et al. in HIMSR Delhi , they noticed that most commonly the relatives refused (59%) and patient refusal was 41% and the most common reason for refusal was fear of complications, myth of malignancy (38%).

We noticed that the knowledge and awareness regarding the PPIUCD was good (68%) but the acceptance was poor (9%). In the study conducted by Alemayehu Goie et al the majority of study participants (63.2%) had heard about IUCD as a contraceptive method and only 12.4% of women accepted the PPIUCD insertion. People do not accept this method of contraception easily, though it is provided free of cost at government hospital by Indian government. Even with the knowledge of PPIUCD as contraceptive, the acceptance is low probably due to myths and the concerns regarding the fear of complications.

By this we can see that there is need for proper and adequate counselling. We have to spread the right knowledge and burst the myths regarding the complications and help them overcome their fear, among the society. This will help to increase the acceptance of PPIUCD among the fertile rural population and to cater their unmet needs of family planning.

CONCLUSION

This study emphasizes the value of providing these women with therapy, disseminating accurate information, and dispelling misconceptions about Cu T. Lack of awareness and proper counselling is the most frequent cause of PPIUCD non acceptance. Regardless of parity, effective counselling is vital. Counselling for the couple is necessary for better acceptance as the husbands are the sole decision makers in the lower socio economic class and rural areas of our society. It is vital to talk and spread adequate facts about contraception and debunk the fallacies surrounding IUCD.

ABBREVIATIONS

PPIUCD- Postpartum Intrauterine Contraceptive Device

OCP- Oral Contraceptive Pill

DMPA – Depot Medroxy-Progesterone Acetate

ANC – Antenatal Care

Cu T – Copper T

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