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Original Research Article

Study of knowledge, attitude, practices regarding PPIUCD among antenatal women at a tertiary care centre in Northern India

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ABSTRACT

Background: PPIUCD has been introduced in the national family welfare program since March 2010 in several states. AN IUCD can be inserted in 48 hours postpartum, referred to here as postpartum intrauterine contraceptive device. This study was done to assess the Knowledge, attitude and practice of postpartum Intrauterine contraceptive device in antenatal patients at a tertiary care centre in Northern India.

Methods: This is a questionnaire based cross sectional observational study including 350 antenatal women attending antenatal OPD over a period of 6 months.

Results: Out of these 350 women, 126 women (36%) had knowledge of PPIUCD. only 30 % of women had previous knowledge about PPIUCD however only 10 % of women practiced it in the past. After appropriate counselling 18% of women agreed for insertion of PPIUCD after this delivery.

Conclusions: The study concludes that the antenatal women had poor knowledge regarding PPIUCD. Practices were even worse. This might be attributed to low education , refusal by family especially male partner, and religious beliefs. But once appropriate knowledge and information is provided, attitude gradually changes.

Keywords: Knowledge, PPIUCD, Practices

INTRODUCTION

In developing countries, about 61% of births occur at interval that is shorter than 36 months. More than 100 million women in developing countries would prefer to avoid a pregnancy but they may not be using any form of contraception.¹

This may be due to poor knowledge of contraceptives, fear of side effects and inability to return for a contraceptive advice. PPIUCD has been introduced in the national family welfare program since March 2010 in several states.² AN IUCD can be inserted in 48 hours postpartum, referred to here as postpartum intrauterine contraceptive device.³ Postpartum period is one of the important and crucial time when women and couples are more receptive and motivated for family planning

methods. If a contraceptive is provided prior to discharge from the hospital, then the women or couple need not return specially for contraception.

The couple has been protected before they assume sexual activity.⁴ PPIUCD is associated with less discomfort, fewer side effects, lower incidence of infection, relief of overcrowded outpatient facilities, protection against unwanted pregnancy and consequent abortion. HIV positive women on antiretroviral therapy can also avail the benefit of PPIUCD.

Apart from this, it does not interfere with breastfeeding.⁵ In addition, complaints associated by IUCD insertion are masked by postnatal lochia and afterpains.⁶ The objective of the present study was to assess the Knowledge, attitude and practice of postpartum Intrauterine contraceptive

device in antenatal patients at a tertiary care centre in northern india

METHODS

This is a cross sectional observational study including 350 antenatal women attending antenatal OPD over a period of 6 months from 1 January 2018 to 30 June 2018 in department of Obstetrics and Gynecology, KGMU, Lucknow.

Inclusion criteria

- Antenatal women attending ANC OPD in their 1st antenatal visit irrespective of gestational age, willing to participate for the study, able to understand Hindi or English.

Exclusion criteria

- Women not giving consent for study
- Women not understanding Hindi and English.

All the women enrolled in the study were evaluated using a pre-designed questionnaire. Questionnaire was filled for each woman with help of resident doctor or intern doctor. women were assessed regarding knowledge of contraceptives and practices in past.

Women were provided with appropriate knowledge of postpartum Intrauterine contraceptive device insertion and its advantages. They were given the option of PPIUCD insertion after this delivery. Data was analysed by using frequency and percentage.

RESULTS

350 antenatal women attending the antenatal OPD at their first antenatal visit were included in the study. All the participants were evaluated regarding knowledge of contraceptive methods.

Out of these 350 women, 126 women (36%) had knowledge of PPIUCD. Table 1 shows the demographic characteristics of individuals. Women who had prior knowledge regarding PPIUCD were maximum in age group of 25-35 years.

Table 1: Demographic characteristics.

Age (years)	No. of women	% of women	No. of women having knowledge of PPIUCD
18-25	153	43.71	36 (28.57%)
25-35	120	34.28	54 (42.85%)
>35	77	22	36 (28.57%)

Table 2 shows socioeconomic status of participating women. Maximum percentage of women having knowledge of PPIUCD were in upper middle class

however the women belonging to upper middle class were very few.

Table 2: Socioeconomic status.

Socioeconomic status	No. of women	% of women	No. of women having knowledge of PPIUCD
Upper middle class	10	2.85	10 (100%)
Lower middle class	72	20.57	45 (62.5%)
Upper lower class	98	28	42 (42.85%)
Lower class	170	48.57	29 (17.05%)

Table 3 shows that 43.71% of participating women were illiterate. Only 9.7% of these women had knowledge regarding PPIUCD.

Table 3: Educational status.

Category	No.	%	% having knowledge of PPIUCD
Illiterate	153	43.71	8 (5.22%)
Below 10 th standard	106	30.28	54 (50.94%)
10-12 th standard	52	14.86	33 (63.46%)
Graduate	31	8.86	24 (77.4%)
Postgraduate and above	8	2.28	7 (87.5%)

Among the women participating in study 36.5% of women were primigravida. 63.5% of the women were multigravida. Most of women (63.5%) participating in the study were multigravida (Table 4).

Table 4: Parity.

Parity	No. of women	% of women	% having knowledge of PPIUCD
Primigravida	128	36.5	48 (37.5%)
Multigravida	222	63.5	78 (35.13%)

About 62% of women had knowledge of barrier contraceptive but only 28% were practicing it. 54% of women had knowledge of IUCD but only 28% of them used it at least once in her life (Table 5). 45% women had knowledge regarding Combined oral contraceptive pills but only 25% of women practiced it in the past. Asking specifically about PPIUCD only 36% of women had previous knowledge about PPIUCD however only 10 % of women practiced it in the past. All the women were given the knowledge regarding PPIUCD. They were told regarding the benefits of PPIUCD as a contraceptive. After appropriate counselling 18% of women agreed for insertion of PPIUCD after this delivery (Table 6). Out of 126 women who had previous knowledge of PPIUCD, source of knowledge were evaluated. Maximum women had knowledge regarding PPIUCD by medical personnel (42%) followed by TV, newspaper, Pempheet (32%), friends, neighbours, husband (20%) (Table 7)

Table 5: Knowledge and previous practices of different contraceptive methods.

Family planning method	Knowledge (%)	Practice (%)
Barrier method	220 (62.85)	100 (28.57)
IUCD	189 (54)	88 (25.14)
Oral contraceptive pills	160 (45.71)	88 (25.14)
Inj DMPA	105 (30)	36 (10.28)
Non-steroidal contraceptive pills (centchroman)	96 (27.4)	29 (8.28)
Female sterilization	205 (58.57%)	0
Male sterilization	184 (52.57%)	0
Emergency contraceptive	127 (36.28%)	39 (11.14%)
PPIUCD	126 (36 %)	34 (9.7%)

Table 6: Patients willing for PPIUCD insertion with this delivery on counselling.

	No. of women	Percentage
Yes	63	18
No	287	82

Table 7: Source of previous knowledge of PPIUCD.

Source of knowledge	No. of patients	Percentage
TV, newspapers, pamphlets	41	32.5
Medical personnel	54	42.85
Friends, neighbors, husband	26	20.63
Any other	5	3.96

All the women who consented for PPIUCD insertion after this delivery were evaluated for reasons for acceptance of PPIUCD. Most women had more than one reasons for acceptance. 88.88% of women preferred it because of reversibility while 76% women chose it because of long term benefit (Table 8).

Table 8: Reasons for acceptance for PPIUCD.

Reasons	No. of women n=63	% of women
Long term	48	76.19
Safe and reliable	34	53.96
Reversible	56	88.88
No remembrance once inserted	41	65.07
No interference with breast feeding	18	28.57

Reasons for denial were also assessed in women who refused for PPIUCD insertion after this delivery. Most common reasons for refusal were family refusal (80%) and religious beliefs (69%) of women had fear of side effects and 44% of women believed it will interfere with intercourse (Table 9).

Table 9: Reasons for denial.

Reasons	No. of women n=287	% of women
Fear of expulsion	108	37.63
Fear of perforation infection	146	50.87
Family refusal	230	80.13
Fear of side effects (pain, bleeding)	165	57.49
Desire of other family planning method	60	20.90
Religious belief	200	69.68
Interferes with intercourse	127	44.25

DISCUSSION

As the population of our nation is exploding, contraception is the need of hour. Although there are so many contraceptive methods available, an efficacious, long term, cost effective method is desirable in a low resource country as of ours. Also, the postpartum period is very important as women are very receptive for IUCD insertion. This study was conducted to assess the knowledge, attitude and practices of postpartum IUCD. National Family planning programme was started in India in 1956 to address the problem of increasing population. Since then these programmes are operational in India. Despite all the constant efforts unmet need of contraception still exists.⁷

Most women in present study belong to 18-25years age group. In a study by Saroj et al in 2012 majority of women belong to 20-25 years. Awareness level about PPIUCD was highest among age group of 25-35 years, in upper middle class and in women who were educated as postgraduate or more. This was similar to a study done in Egypt by Safwat et al where women with no formal education had acceptance rate of 9.4% while those with formal education was 19.4%.⁸ Education plays an important role on contraceptive use as shown in a study done in Zimbabwe. Women who completed secondary education were about twice as likely to use modern contraceptive as compared to other uneducated women.⁹

In present study most commonly used contraceptive method was barrier method (28.57%) followed by IUCD and OCPs. Study by Gupta N et al supported present study in which most commonly used contraceptive method was barrier method. Bhasin et al also reported condom as most commonly used contraceptive method.¹⁰ The aim of present study was to assess the knowledge and practices among antenatal women in an urban area regarding PPIUCD. In present study 36 % of women had knowledge regarding PPIUCD but only 9.7% women practiced PPIUCD previously. On providing proper knowledge of PPIUCD, 18% of women gave consent for PPIUCD after this delivery. Although 82% of women did not give consent at that time however some of them told that they want some time to think about it. Acceptance rate in present study was found to be 18% which was

higher than findings in central India (11.9%), tertiary care centre Indore (10%), but lower than other studies conducted in Zenana hospital Jaipur (21.8%), Johrat tertiary care hospital, Assam (36.6%), Faridabad district, (39%), Cuttack medical college, Odisha (25.32%).¹¹⁻¹⁵

Present study findings are also supported by Kathpalia SK, Mustafa MS who reported that knowledge and acceptance of postpartum insertion is low among antenatal women.¹⁶ Present study was also supported by Nigem et al who showed overall contraceptive knowledge of 94%, although 48.4% women were aware of IUCD and only 21.9% were aware of PPIUCD.¹⁷

CONCLUSION

The study concludes that the antenatal women had poor knowledge regarding PPIUCD. Practices were even worse. This might be attributed to low education, refusal by family especially male partner, and religious beliefs. But once appropriate knowledge and information is provided, attitude gradually changes. Antenatal period and childbirth are definitely a good opportunity for a woman to acquire knowledge regarding contraceptives as they are very receptive towards contraceptives during this period. So, for increasing contraceptive usage people should adopt various kinds of educational and motivational activities. Due attention should be given for enhancing educational level of women and effective PPIUCD counselling should be given during ANC visits to correct misconceptions and wrong beliefs of women regarding PPIUCD insertion.

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Ethical approval: The study was approved by the Institutional Ethics Committee

REFERENCES

- Lopez. Farfan JA, Maclel. Martinez M, Velez. Machrro IJ. Vazquez. Estrada L. Application of Mirena during caesarean section. *Europe J Contracep, Reproduct Health Care* 2010;15(1):165.
- National Rural Health Mission Ministry of Health and Family Welfare Government of India.JSY. Available at http://www.mohfw.nic.in/layout_09 06;.pdf.
- WHO Medical eligibility criteria for contraceptive use. Geneva. WHO, 2010.
- Byrd JE, Hyde JS, DeLamater JD, Plant EA. Sexuality during pregnancy and the year postpartum. *J Fam Pract.*1998; 47(4):305-8.
- Kappa N, Curtis KM. Review Article Intrauterine Device insertion during the postpartum period: a systemic review. *Contraception.* 2009;80(4):327-36.
- Safwat AM, Momen AK, Omar MS, Hossam TS. Acceptability for the Use of Postpartum Intrauterine Contraceptive Devices: Assiut Experience. *Med Princ Pract.* 2003;12(3):170-5.
- Mao J. Knowledge, Attitude and Practice of Family Planning. A Study of Tezu Village, Manipur (India). *Int J Biological Anthropol.* 2006;1(1):5-10.
- Thomas D, Maluccio J. Fertility, contraceptive choice, and public policy in Zimbabwe. *World Bank Econom Rev* 1996;10(1):189-222.
- Choudhary RH. The influence of female education, labour force participation and age at marriage on fertility behavior in Bangladesh. *Social Biol* 1984;31(1-2):59-74.
- Bhasin SK, Pant M, Metha M, Kumar S. Prevalence of usages of different contraceptive methods in East Delhi A cross sectional study. *IJCM.* 2005;30(3):53-5.
- Doley RPB. A retrospective study on acceptability and complications of PPIUCD insertion. *J Evol Med Dent Sci.* 2016;5(31):1631-4.
- Saroj K, Neha G. Acceptability for the use of postpartum intrauterine contraceptive devices, Zenana Hospital, Jaipur. *Int J Sci Res.* 2016;5(5):401-9.
- Kant S, Archana S, Singh AK, Ahamed F, Haldar P. Acceptance rate, probability of follow-up, and expulsion of postpartum intrauterine contraceptive device offered at two primary health centers, North India. *J Fam Med Prim Care.* 2016;5(4):770-6.
- Yadav S, Joshi R, Solanki M. Knowledge attitude practice and acceptance of postpartum intrauterine devices among postpartum women in a tertiary care center. *Int J Reprod Contracept Obs Gynecol.* 2017;6(4):1507-10.
- Nayak AK, Jain MK. Experience on Awareness, Acceptability, Safety, Efficacy. Complications and expulsion of postpartum intrauterine contraceptive device insertion. *Int J Sci Study.* 2017;5(1):207-12.
- Kathpalia SK, Mustafa MS. Awareness about postpartum insertion of intrauterine device among antenatal cases. *Med J Armed Forces India.* 2015; 71(3):221-4
- Nigam A, Ahmad A, Sharma A, Saith P, Batra S. Postpartum Intrauterine Device Refusal in Delhi: Reasons Analyzed. *J Obstet Gynecol India.* 2018;68(3):208-13.

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