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EVALUATION OF POSTPARTUM INTRAUTERINE DEVICE IN IMMEDIATE POSTPARTUM PERIOD: AN AUDIT

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ABSTRACT

Objective To study the demographic profile and awareness of PPIUCD acceptors and analysis of reasons for refusal.
Material and Methods An observational study was conducted in Obstetrics and Gynaecology department of Dr BSA Medical college where women in early labour were counselled for acceptance of intrauterine device. Awareness of PPIUCD, demographic characteristic like age, parity, religion, education and socioeconomic status were noted. Reason for refusal was noted in non acceptors.
Result 44.4% PPIUCD acceptors were in the age group of 21-30 years. Only 8.4% of illiterate women accepted IUCD while acceptance rate was 29.6% in graduates Overall acceptance rate was low at 16.5%. Awareness of PPIUCD was also low at 18%. Myths associated with IUCD were the major reason for refusal with most common being the fear of perforation/migration of the device (27.7%). Family plays a major role in decision for future fertility of the postpartum women.
Conclusion The postpartum period is an important, yet underutilized, time to initiate contraception. PPIUCD is a promising contraceptive for this period. However acceptance of PPIUCD needs to be increased by strengthening antenatal counseling of couple.

KEYWORDS : Contraception, Intrauterine device, Family planning, Postpartum

INTRODUCTION

Reproductive health is an important issue for every country, and increasing contraceptive utilization is one of the Millennium Development Goals. Despite the increase in contraceptive prevalence, 65% of women in India have an unmet need of contraception in the first year postpartum.[1] Postpartum contraception is required for prevention of unintended and closely spaced pregnancies which are associated with adverse pregnancy outcomes such as preterm, low birth weight and small for gestational age infants.[2] Postpartum period is an important time to initiate contraception as women are highly motivated and receptive to accept family planning methods. Demographic and health surveys show that 40% of women in the first year postpartum intend to use family planning method but are not doing so(unmet need).[1] Contraception in immediate postpartum period eliminates the need for a return visit to start contraception. Thus initiation of long acting reversible contraceptive device (IUCD) in immediate postpartum period is important for postpartum women who wish to retain fertility but avoid early repeat pregnancy.

Globally 14.3% of women aged 15-49 years use IUCD,[3] in India less than 2% women use it.[4] According to the WHO Medical eligibility criteria, postpartum IUCD (PPIUCD) can be inserted postplacental (within 10 minutes of delivery of placenta), within 48 hours postpartum and intracesarean. The postpartum period is still underutilized and postpartum IUCD insertion would certainly improve the utilization rate. Government of India has taken an initiative step to strengthen the post-partum family planning and have made IUCD (Cu 380 A /375) free of cost in government hospital to provide IUCD services in immediate postpartum period. PPIUCD is thus emerging as relatively new contraceptive choice in India so we conducted the study was to find out the demographic profile and awareness of PPIUCD acceptors and analysis of reasons for refusal.

STUDY DESIGN

An observational study was conducted in a government tertiary care centre in Delhi for six months from January 2017 to June 2017 where women in early labour were counselled verbally by health personnel using a standardized counselling approach on a one to one basis, at the time of admission in labour room for acceptance of intrauterine device (Cu380A/Cu375) in immediate postpartum period. All myths and misconception related to IUCD were discussed. . The exclusion criteria were, women who had chorioamnionitis, postpartum haemorrhage or rupture of membranes for more than 24 hours duration.

Women who agreed for PPIUCD in early labour or before cesarean section, IUCD was inserted within 10 minutes of delivery of placenta. Vaginally delivered women who arrived in active labour, and also those who had refused previously in early labour were counseled in postnatal ward within 48 hours of delivery for IUCD insertion. Women who agreed, IUCD was inserted. Those women who did not accept IUCD and willing to give the reason for non acceptance and intention to use any contraceptive measure in future was recorded. Awareness of PPIUCD, demographic characteristic like age, parity, religion, education and socioeconomic status were noted.

Data entry was done using statistical package for the social sciences (SPSS) version 17.0 for statistical analysis. Continuous variables were reported using mean (standard deviation), and categorical variables were reported using percentages.

RESULT

A total of 5865 women were recruited for the study out of which 973 accepted IUCD with an acceptance rate of 16.5%. Table-1 depicts the sociodemographic profile of the study population. The age of study population varied from 17-39 years with most of women in the age group of 21 -30 years. Only 8.4% of illiterate women accepted IUCD while acceptance rate was 29.6% in graduates. Maximum acceptance rate was 19% in women with parity of two closely followed by primi para with acceptance of 15%. Acceptance of PPIUCD was low in the muslim population (6.1%) probably because of religious beliefs. According to modified Kuppuswamy scale most of the women in the study population belonged to lower or upper lower socioeconomic class (74.6%).

Majority of women (61.6%) delivered within 4 years of marriage showing unmet need for contraception. The acceptance rate was 15.5% in women counseled in early labor. Women who came in active labor were counseled after delivery and the acceptance rate was 14.1%. Women who refused PPIUCD in early labor were again given detailed information about PPIUCD and counseled. However, in spite of the counselor's best efforts the acceptance rate in these women was low (2.1%).

Table 1: Demographic Profile of study population who accepted PPIUCD

AGE (Years)	N(5865)	%	Accepted IUCD(N=973)	%
15-20	586	10	108	18.4
21-25	2452	41.8	534	21.7
26-30	2125	36.2	270	12.7
31-35	527	9	56	10.6
36-40	175	3	5	2.8
Education				
Illiterate	1843	31.4	156	8.4
Primary Education	1488	25.3	238	15.9
Secondary Education	1964	33.5	417	21.2
Graduate	486	8.3	144	29.6
Post Graduate	84	1.4	18	21.4
PARITY				
P1	2339	39.8%	352	15%
P2	2358	40.2%	466	19%
>P2	1168	19.9%	155	13%
Religion				
Hindu	4650	79.3%	851	18.3%
Muslim	686	11.7%	42	6.1%
Others	529	9.0%	80	15.1%
Socioeconomic class(Modified Kuppuswamy scale 2017)				
Upper	45	.8%	5	11.1%
Upper Middle	220	3.8%	30	13.6%
Lower middle	1220	20.8%	210	17.2%
Upper lower	2680	45.6%	420	15.6%
Lower	1700	29.0%	308	18.1%
Duration of Marriage				
<2 years	1550	26.4%	356	23.0%
2-4 years	2065	35.2.%	370	17.9%
4-6 years	1175	20.0%	130	11.0%
6-8 years	488	8.3%	74	15.1%
>8 years	587	10.1%	43	7.3%
Counselling				
Only in Early Labour	4515	77.0%	704	15.5%
Only in Postnatal period*	1350	23.0%	190	14.1%
Counselling both in early labour and Postnatal period**	3811	64.9%	79	2.1%

women who arrived in active labour*
refused in early labour**

TABLE 2: Profile of PPIUCD insertion

	N	%
Vaginal Delivery	4367	74.5%
Post Placental (PPIUCD)	321	7.3% (321/4367)
Within 48 Hours (PPIUCD)	269	6.1% (269/4367)
Caesarean Section	1498	25.5%
Intra-caesarean (PPIUCD)	383	25.5% (383/1498)
Total PPIUCD (Acceptance)	973	16.5% (973/5865)

Table 3: Awareness of PPIUCD

Are you aware of Cu T	Yes	1877	32%
	No	3988	68%
Have you ever used Cu-T	Yes	704	12%
	No	5161	88%
Are you aware of PPIUCD	Yes	1056	18%
	No	4809	82%
Have you ever used PPIUCD	Yes	411	7%
	No	5454	93%

The awareness of IUCD was low at 32% in our study population and only 18% were of the postpartum use of IUCD as shown in table 3.

Table: 4 Acceptance/Intention to use of various contraceptive methods

Contraceptive method	N=5865	%
PPIUCD (Accepted)	973	16.5%
PPS(Accepted)	36	0.61%
Not yet decided	1642	28.o%
Lactational amenorrhoea	1345	22.9%
Coitus Interruptus method	369	6.2%
Barrier method	452	7.7%
Oral pill	393	6.7%
Injectable	423	7.2%
IUCD(interval)	136	2.3%
Sterilization Interval	86	1.4%
Male Sterilization	10	0.17%

As seen in Table 4 most of the women were either undecided about future contraception (28%), or preferred natural methods like Lactational Amenorrhea Method (22.9%) or coitus interruptus (6.2%).

Table: 5 Decision for Non acceptance of PPIUCD (N=4856)

Women herself not willing	2252	46.4%
Others:		
Husband not willing	2032	41.8%
Mother in law not willing	572	11.8%

As seen from Table 5, husband plays an important role in decision making about future fertility of the women with 41.8% of the refusals for PPIUCD being due to unwillingness of the husband.

Table: 6 Reasons for Non acceptance of PPIUCD

	N	%
Previous IUCD experience not satisfactory	56	2.2%
Satisfied with other method of contraception	330	12.7%
Apprehension about Perforation/ Migration of IUCD	720	27.7%
Pain	394	15.2%
Discharge	446	17.1%
Menorhagia	406	15.6%
Sexual discomfort	112	4.3%
Religious belief	136	5.2%

Table 6, The commonest myth and misconception associated with PPIUCD use in our study was apprehension about perforation or migration of IUCD(27.7%).

Discussion

PPIUCD has an important place within the basket of post partum family planning methods, as it prevents return visit for contraception and clinician is sure that women is using contraception before discharge from hospital. It is the only long acting, reversible, safe contraceptive method that can be initiated in immediate post partum period having efficacy similar to that of tubal ligation.

Education plays an important role in the acceptance of IUCD as seen in our study where acceptance was more than 20% among educated while less than 10% in illiterate. Similar results were seen in the study done be Singh S et al.[5]

Acceptance in different studies varied from 7% to 46.2%. In our

study acceptance of PPIUCD was 16.5% comparable to the study done by Misra S et al[6] where the acceptance rate was 17.6%. Reason for low acceptance was lack of awareness of IUCD and its insertion in immediate postpartum period, as only 7% of the women had used PPIUCD previously. This implies that vast majority of clients accepting PPIUCD services are first time users of IUCD. This needs to be enhanced by health education and counseling. In a systematic review by Lopez et al found that postpartum education led to more contraception use and fewer unplanned pregnancies.[7]

Another reason for low acceptance of PPIUCD was the prevalence of myths and misconception. The most common myth which accounted for refusal was perforation/migration of IUCD, discharge, menorrhagia 27.7%, 17.1%, 15.6% respectively comparable to study done by Michie et al in which myths about pain (34%), misplaced IUCD (23.6%) were the major reasons for refusal.[8] One of the main reasons that IUCD is under-utilized in India is that the advantages are understated, the disadvantages tend to be exaggerated and many misconceptions are prevalent in the community and among the providers.[1] To increase the acceptance of PPIUCD , health education and counseling needs to be enhanced and training programs to be conducted to increase the knowledge and skills of service providers in post partum IUCD services .

In our study we found that attitude of husband plays the important role for contraceptiveacceptance. Involving men in family planning is important and helps couples reach healthy decision jointly. Similar results reported by study done by Nigam et al[9] and Agrarwal et al.[10]

In our study large number of women had not decided the contraception in postpartum period and many women preferred natural methods of contraception. Hereby lies the role of antenatal counseling at the time of ante natal check-ups encouraging women for PPIUCD insertion.

CONCLUSION

The postpartum period is important, yet underutilized, time to initiate contraception. PPIUCD can remove the void in the unmet need for postpartum contraception. Health professional should utilize every opportunity in antenatal as well as postnatal period to increase the knowledge and dispel myths and misconception associated with IUCD.

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