Original Research Article

DOI: http://dx.doi.org/10.18203/2394-6040.ijcmph20173313

A study of awareness and factors affecting acceptance of PPIUCD in South-East Rajasthan

Ashutosh Sharma¹*, Vinita Gupta²

¹Department of Community Medicine, ²Department of Obstetrics and Gynecology, Govt. Medical College, Kota, Rajasthan, India

Received: 04 July 2017 Accepted: 19 July 2017

*Correspondence: Dr. Ashutosh Sharma,

E-mail: drashutosh.sharma@hotmail.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Background: In spite of widely available choices for contraceptive method there is poor acceptance for the same because of less knowledge and ignorance. PPIUCD is one of best available contraceptive method which has potential to play a pivot role in country's family planning programme. Present study is planned to find out awareness level and various factors affecting its acceptance among women in South-east Rajasthan.

Methods: This was an observational study conducted in the department of Obstetrics and Gynaecology, Government Medical College and Jay Kay Lon Hospital, Kota between March 2013 and August 2014. Subjects were 18550 women visiting the centre for antenatal care and child birth. A preformed and predesigned semi structured questionnaire was applied to determine if these women were aware of the PPIUCD. Acceptability was defined as the number of antenatal women who agreed to undergo insertion of PPIUCD. Data was analyzed in Microsoft Excel 2010 & SPSS ver16.

Results: Out Of 18550 women, only 480 (2.58%) were aware of the PPIUCD. The overall acceptability was found to be 2.94%. Safe and effective long term method makes PPIUCD a choice for acceptance.

Conclusions: Level of awareness for PPIUCD was poor among women of south-east Rajasthan region. PPIUCD can play a pivot role in country's family planning programme.

Keywords: PPIUCD, South-East Rajasthan, Awareness for PPIUCD, Acceptance for PPIUCD

INTRODUCTION

India's population of over 1.2 billion is slated to overtake China as the world's most populous country, in <1 and half decade. Family planning could bring more benefits to more people at less cost than any other single technology now available to the human race (UNICEF). Family planning can avert nearly one-third of maternal death and 10% of childhood mortality if couples space their pregnancies more than 2 years apart.¹

In the last few decades there has been a great progress in the understanding and armamentarium of contraception; many new ones have been developed. Some of the contraceptives are suitable at an individual level but at community level still the ideal contraceptive is elusive, the one which would cater to most of the couples. Couples need contraception throughout their reproductive years; initially it is required for delaying first pregnancy and later on for spacing and finally permanent methods when the family is completed. The choice and decision of contraception should be left to them; popularly called 'Cafeteria Approach'. The couples should have adequate information about all the options available and they reach the informed decision on their own. Lack of adequate knowledge or wrong information and beliefs are common hurdles in acceptance of contraception.^{2,3} Fear of side effects and misconceptions is wide spread and has been the most important explanation for non-use of contraception.⁴

Postpartum period is one of the important and crucial times when women and couples are highly motivated and more receptive to family planning methods. If a contraceptive is provided prior to discharge from the hospital then the woman or couple need not to return specially for contraception. The couple has been protected before they assume sexual activity.⁵

Delay in practice of contraception by couples during postpartum period can result in many unwanted/unintended or mistimed pregnancies. Delaying the next pregnancy and spacing are important as this affects the health of mother and child. It is well known that if the woman conceives within/less than 24 months of delivery then there are higher chances of complications like abortions, pre-term labor, postpartum haemorrhage, low birth weight babies, neonatal morbidity and mortality. There is not enough time for the mother to recuperate and build up her iron stores resulting in chronic ill health among women.

Approximately 27% births in India occur within 24 months of delivery. Intrauterine contraceptive device (IUCD) is most effective and one of the good opinion for spacing pregnancies as it is convenient, long acting and rapidly reversible. It can be removed whenever the individual desires and fertility returns immediately. IUCD is usually inserted as an interval procedure that is six weeks after delivery or along with induced abortion. It was not commonly inserted immediate postpartum; within 48 h of delivery before discharge of woman from the hospital. The initial clinical experience of intrauterine device inserted in the immediate postpartum has prompted its wide spread use. ¹⁰

It is not only advantageous to the women and couples; even the service provider's benefit from PPIUCD insertion as pregnancy is definitely ruled out, time is saved as it is performed on the same delivery table. Additional evaluation and separate clinical procedure is not required. A special instrument may be required for its insertion. Under the new program being implemented by the Government of India in some states in collaboration with Jhpiego, pregnant women are counseled for the use of IUCDs during antenatal period itself and the IUCD is inserted soon after the woman delivers the baby, following proper consent. 11 It should not be inserted after 48 h of delivery up to six weeks as the chances of infection may increase. So far the acceptance of PPIUCD is low; probably due to lack of awareness among the clients and staff. 12 Acceptance and continuation of IUCD can be increased by education and counselling. Awareness has been highlighted by many as a key indicator of success in a range of performance. First step of any contraceptive implementation at the community level is to make the public aware and informed about the contraceptive. In populations with family planning

policies designed to increase contraceptive use; measuring the level contraceptive awareness also provides useful measure of success of information, education and communication activities and may help to identify program areas that need to be strengthened. Despite making contraception widely available, there is poor acceptance of contraceptive methods either due to ignorance or fear of complications using them. Inadequate knowledge about contraceptive methods and incomplete or erroneous information about their use or where to procure them are the main reasons for not accepting family planning. ¹³ Present study was conducted to find out the level of awareness and factors affecting acceptance of PPIUCD insertion at tertiary care institute level.

Aims

- To study the level of awareness for PPIUCD (Post partum intrauterine contraceptive device).
- To study the factors affecting acceptance of PPIUCD among women in South-East Rajasthan.

METHODS

This was an observational study conducted in the department of Obstetrics & Gynaecology, Government Medical College and Jay Kay Lon Hospital, Kota between January 2013 and August 2014. As this institute is catering health needs of major part of population in South-East Rajasthan this study will provide fair information on factors affecting PPIUCD acceptance in South-East Rajasthan. Eligible subjects were pregnant women attending institute for the antenatal care and for labour. This study was approved by the Institution Ethics Committee of Government Medical College and Jay Kay Lon Hospital, Kota. Women in active labor with a known medical disorder, with uterine anomaly, haemoglobin <8 g, as well as woman planning to undergo delivery at another health facility were excluded from the study.

Written informed consent was obtained from all participants in the study. Confidentiality was maintained during data collection and compilation. Characteristics such as medical history, age, parity, religion, and socioeconomic status along with interval from last childbirth and desired interval for future pregnancy, were noted in a predesigned and pretested semi structured questionnaire. It included questions regarding awareness and sources of information. The reasons for the acceptance or reluctance to the PPIUCD insertion were inquired and noted in the case sheet. Subsequently, counselling was done by health care personnel with information, education, and counselling (IEC) material regarding PPIUCD insertion and its benefits, associated complications and required follow up during antenatal clinic and early postpartum period. Acceptability was defined as those antenatal women who agreed to undergo insertion of the intrauterine contraceptive device within 10 minutes of expulsion of the placenta. Women who were not willing for PPIUCD were counselled regarding other methods of family planning. Data was analyzed in Microsoft Excel 2010 and SPSS ver. 16.

RESULTS

A total 18550 women recruited in study during study period in our centre. Out of 18550 only 480 were aware about PPIUCD, of these 480 women, 97 accepted PPIUCD (20.20%). Out of 18070 women who were unaware of PPIUCD only 448 (2.47%) accepted PPIUCD insertion. Agreement with PPIUCD insertion was higher in women who were aware about the PPIUCD (p<0.05). Health care provider/health centre were source of information in majority (82.5%) of aware women rest of women got awareness by means of different way of media. In present study overall acceptance for PPIUCD insertion was only 2.94%.

Table 1: Awareness about PPIUCD.

Awareness	Acceptor (%)	Reluctant (%)	Total
Yes	97 (20.2)	383 (79.8)	480
No	448 (2.47)	17621 (97.52)	18070

Table 2: Source of information on PPIUCD.

Source of information about PPIUCD	n=480	%
Health worker/health centre	396	82.5
Media	84	17.5

Table 3: Acceptance of PPIUCD.

Variable	n=18850	%
Acceptance	546	2.94%
Refusal	18004	97.06%

Table 4: Factors affecting Acceptance of PPIUCD.

Factor	n=546	%
Reversible	402	73.62
Safe and effective	382	69.96
Allowed by partner/family member	328	60.07
Long life	289	52.93
Previous use of IUCD	144	26.37
Non hormonal	89	16.3
No interference with sex	71	13

In the present study, the highest acceptance was seen in women in the age group ranging from 21-30 years (82.96%), those with having secondary level of education (56.95%), women coming from urban areas (61.72%), Hindus (82.23%) and those with middle socioeconomic status (55.67%). A higher acceptance rate was also observed among multipara (69.59%) and those who had a desire for future pregnancy after an interval of more than 2 years (75.64%).

Table 5: Factors affecting refusal of PPIUCD.

Factor	n=18004	%
Partner and family refusal	13098	72.75
Fear of complications	12765	70.9
Satisfied with previous method	11879	65.97
Want to use another method	9881	54.88
Not ready yet/no reason	6781	37.66

Table 6: Baseline socio-demographic profile of women with acceptability of PPIUCD.

Variable		Number of women (n=546)	%
	<u><</u> 20	56	10.25
Age in years	21-30	453	82.96
	>30	37	6.77
	No formal education	85	15.56
Educational status	Primary	101	18.49
status	Secondary	311	56.95
	Higher	49	8.97
Residence	Rural	209	38.27
	Urban	337	61.72
	Hindu	449	82.23
Religion	Muslim	91	16.66
	Other	6	1.09
	Upper	35	6.41
Socio economic	Upper middle	68	12.45
status	Lower middle	236	43.22
	Lower	207	37.91
	P1	166	30.4
Parity	P2-P4	328	60.07
	>P4	52	9.52
Desire for future pregnancy	Interval >2 years	413	75.64
	Not sure	79	14.46
	No more	54	9.89

The main reason for acceptance (Table 4) was awareness about its reversibility (73.62%) followed by awareness regarding safety and effectiveness of PPIUCD (69.96%). The main reason for non-acceptance (Table 5) was refusal by partner/ family member (72.75%) and fear of complications (70.05%).

DISCUSSION

Out of 18550 women only 480 were aware of PPIUCD which was similar to result obtained by Deshpande et al, Kathpalia et al and Katheit et al. 14-16 The finding suggest that concept of PPIUCD is new in community and there is need to increase in level of awareness in the community by means of health education and counselling.

In the present study, the highest acceptance was seen in women in the age group ranging from 21-30 years (82.96%), those with secondary level of education (56.95%), women coming from urban areas (61.72%), Hindus (82.23%) and those with middle socioeconomic status (55.67%). A higher acceptance rate was also observed among multipara (69.59%) and those who had a desire for future pregnancy after an interval of more than 2 years (75.64%). These findings are similar as results observed by Deshpande et al and Gujju et al. 14,17

Present study revealed that there was higher acceptance rate among multipara (69.59%) and those who had a desire for future pregnancy after an interval of more than 2 years (75.64%) this is similar to finding reported by Deshpande et al but in contrary to study conducted by Mishra and by Gautam et al it was seen that there was a higher acceptance in primigravida. ^{14,18,19} This observation suggests that in present study multi gravida were more receptive to this spacing method of contraception.

Study found that reversibility (73.62%), safety and effectiveness (69.96%) and acceptance by partner/family member were common responses from majority of acceptors. Deshpande et al and Mishra have similar findings. ^{14,18}

Our study reveals that refusal from partner/family member for PPIUCD insertion was most common (72.75%) reason for refusal followed by fear of complications (69.96%) as was found by Sonali Deshpande et al, Mishra and Gautam et al. 14,18,19 This suggests that health care provider should understand the importance of couple counselling for contraception decision making. A gender-sensitive approach should be adopted for couples counselling to achieve better compliance and to met unmet need for contraception.

CONCLUSION

The PPIUCD seems to be a safe effective and long term contraceptive method having utility in spacing pregnancies and limiting family size. Awareness about PPIUCD was poor among women of South-East Rajasthan. Integration of a PPIUCD counseling service at every delivery point with provision of couple counseling will improve the success of this programme. This may play a pivot role to met unmet need of contraception in India.

ACKNOWLEDGEMENTS

Authors are thankful to all faculty members and staff of the department of obstetrics and Gynaecology, Govt, medical college, and Jay kay Lon Hospital, kota for assisting us to make this study possible. Funding: No funding sources Conflict of interest: None declared

Ethical approval: The study was approved by the

Institutional Ethics Committee

REFERENCES

- 1. Cleland J, Bernstein S, Ezeh A, Faundes A, Glasier A, Innis J. Family planning: The unfinished agenda. Lancet. 2006;368:1810-27.
- Orji EO, Onwudiegwu U. Prevalence and determinants of contraceptive practice in a defined Nigerian population. J Obstet Gynaecol. 2002;22:540-3.
- 3. Ashoke S, John S, Jayanti MT. The KAP-gap in Nepal: reasons for non-use of contraception among couples with an unmet need for family planning. Asia Pac Popul J. 2000;6:25-38.
- 4. Srivastava R, Srivastava DK, Jina R, Srivastava K, Sharma N, Saha S. Contraceptive knowledge, attitude and practice (KAP Survey). J Obstet Gynecol. 2005;55:546-50.
- 5. Byrd JE, Hyde JS, DeLamater JD, Plant EA. Sexuality during pregnancy and the year postpartum. J Fam Pract. 1998;47:305-8.
- 6. Okonofua F. Abortion and maternal mortality in developing world. J Obstet Gynecol Can. 2006;28:974-9.
- 7. Majhi AK. Importance of PPIUCD in the perspective of present Indian population scenario. Indian J Perinatol Reproductive Biol. 2012;2:5-7.
- 8. Nelson A. Intrauterine contraceptive. J Obstet Gynecol. 2008;6:219-24.
- 9. Kaneshiro B, Abey T. Long-term safety, efficacy and patient acceptability of the intrauterine copper T-380A contraceptive device. Int J Women's Health. 2010;2:211-20.
- 10. Niazi AK, Bhutani J, Bhutani S, Niazi SK. The revival of postpartum intrauterine contraceptive devices. Arch Gynecol Obstet. 2014;290:7–8.
- 11. Postpartum IUCD Insertion Manual. Nirman Bhavan, New Delhi 110001: Family Planning Division. Ministry of Health and Family welfare. Government of India; 2010.
- 12. Sanskriti P. Post-partum intrauterine device insertion: the unfinished agenda. New Indian J Surg. 2011;2:245-7.
- 13. Bhasin SK, Pant M, Mehta M, Kumar S. Prevalence of usage of different contraceptive methods in East Delhi-a cross sectional study. Indian J Community Med. 2005;30:53-5.
- 14. Deshpande S, Gadappa S, Yelikar K, Wanjare N, Andurkar S. Awareness, acceptability and clinical outcome of post-placental insertion of intrauterine contraceptive device in Marathwada region, India: Indian J Obstetr Gynecol Res. 2017;4(1):77-82.
- 15. Kathpalia SK, Mustafa MS. Awareness about Postpartum insertion of intrauterine device among antenatal cases. Med J Armed Forces India. 2015;71:221-4.

- Katheit G, Agarwal J. Evaluation of post-placental intrauterine device (PPIUCD) in terms of awareness, acceptance, and expulsion in a tertiary care centre. Int J Reproduction Contraception Obstetr Gynecol. 2013;2:539-43,
- 17. Bai Gujju RL, Prasad U, Prasad U. Study on the acceptance, complications, and continuation rate of postpartum family planning using the post placental intrauterine contraceptive device among women delivering at a tertiary care hospital. Int J Reproduction Contraception Obstetr Gynaecol. 2015;4:388-91.
- 18. Mishra S. Evaluation of safety, efficacy, and expulsion of post-placental and intracesarean

- insertion of intrauterine contraceptive device (PPIUCD). J Obstet Gynaecol India. 2014;64:337-43
- Gautam R, Arya KN, Kharakwal S, Singh S, Trivedi M. Overview of immediate PPIUCD application in Bundelkhand Region. J Evol Med Dental Sci. 2014;3:9518-26.

Cite this article as: Sharma A, Gupta V. A study of awareness and factors affecting acceptance of PPIUCD in South-East Rajasthan. Int J Community Med Public Health 2017;4:2706-10.