

Frequency of Low Acceptance of Postpartum IUCD and its Contributing Factors among Women in Tertiary Care Hospital

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ABSTRACT

Background: Post-partum intra uterine device insertion is the trend to increase the importance of family planning services immediately after delivery, to enhance motivation and acceptance among women. It has additional advantage to provide best care in terms to escalate health of woman and increasing healthy timing and space among children

Aim: To determine frequency of women accepting immediate PPIUCD insertion and frequency of contributing factors in those refusing insertion of PPIUCD.

Methods: A Cross-sectional study, in setting of Gynaecology Services Hospital, Lahore/SIMS was carried out over a period of six months from 03-10-2019 to 02-04-2020. A total of 215 antenatal women, women admitted in labour room for delivery either vaginal (including vaginal birth after C/section) or caesarean delivery were included in this study. The women refusing insertion of PPIUCD were interviewed by using a predesigned questionnaire.

Results: Mean age of the patients was 26.38±2.91 year. Majority of the patients 130(60.5%) delivered vaginally while in 85 patients (39.5%) caesarean section was carried out. Immediate PPIUCD insertion accepted by 71 patients (33%). Distribution of contributing factors in patients who refused insertion of PPIUCD as follows: Age 18-25 years, 56(38.9%), low educational status 103 (71.5%), misconception 93(64.6%), partner's wish 33(22.9%), Primiparity 16(11.1%), fear of side effects 11(7.6%) and other contraceptive method 41(28.5%). Stratification with regard to age, parity and mode of delivery was carried out.

Conclusion: Our study demonstrated frequency of women accepting immediate PPIUCD insertion 33%.

Keywords: Post-partum IUCD, Low acceptance, Pregnant women

INTRODUCTION

Family planning in postpartum period has a vital role in reducing unintended pregnancies¹. It reduces maternal and newborn morbidity and mortality, as mothers and children face significantly increased risks of adverse health outcomes if women conceive within 18 months after birth of a sibling². In developing countries, it is estimated by experts that if all couples practice family planning and space their pregnancies by two years or more, maternal deaths will decline 32% among the world and children death by 10%³. Initiation of postpartum birth control has been delayed until 6 weeks postpartum visit as done traditionally and women are advised at time of discharge from the hospital with instructions to avoid sexual activity until 6 weeks postpartum. In developing countries, women are vulnerable to unintended pregnancy in postpartum period because no contraceptive method is used in this period. A Health Survey done in 27 countries and data collected which showed that 65% of postpartum women had prospective unmet need for contraception. Among these women 40% expressed an intention to use postpartum contraceptive method but still not met this need⁴.

The contraceptive prevalence in Pakistan is very low, the rate is of 35%⁵. In our country, may be the only time the women come in contact with healthcare is at the time of delivery. Women are at risk of unintended pregnancy due to delay in the initiation of contraceptive methods in postpartum period for more than 6 weeks. Majority of women doesn't come back for follow up after postpartum period. According to WHO, one of the effective, long-acting reversible contraception provided to women at the time of delivery is insertion of immediate PPIUCD. PPIUCDs were declared as a safe and effective contraceptive method in a cochrane review done in 2010⁶. PPIUCDs are offered in health facilities after child birth and is readily available but still the acceptance of PPIUCD among couple is very low.

A prospective interventional analytical study conducted in Tanzania, in this study a great number of women 72.4% refused PPIUCD insertion and only 27.6% women were inserted with

PPIUCD. PPIUCD is more acceptable to those women ($p=0.005$) who had previously used interval IUCD. The use of short acting methods of contraception is commonest reason among women for declining the use of PPIUCD⁷.

Another study shows that the most common reason affecting the willingness for PPIUCD insertion was the lack of counselling of husband in during antenatal period, more than 90% of the younger couples were not aware about family planning. The second most common reason for refusal of insertion of PPIUCD among multiparous women is their wish to have son and the belief that insertion of PPIUCD might hinder their chance of further conception. (65%)⁸. So that will help to remove negative factors by establishing programmes that are dedicated to provide global evidence, increase awareness and educating PPIUCD is an ideal contraceptive method but making a choice of PPIUCD insertion has suffered certain setback because of certain personal predictions, method, availability, cost, social, cultural, economic, demographic and psychological factors which vary from person to person and place to place. The data available about these factors which are considered as barriers of PPIUCD acceptance is scarce thus the rationale of my study is to look for the factors that are affecting the uptake of PPIUCD in our population couples.

MATERIALS AND METHODS

A Cross-sectional survey study conducted in Department of Obstetrics and Gynaecology, Services Hospital, Lahore/SIMS over a period of six months from 03-10-2019 to 02-04-2020. Sampling technique was non probability consecutive and Sample size of 215 cases estimated with 95% confidence level, 6% margin of error and taking expected percentage of women accepting immediate PPIUCD insertion in 27.6%⁹ After approval of synopsis and review of ethical committee, all 215 antenatal women fulfilling the inclusion criteria were counseled for PPIUCD in early labour. In early postpartum period, a written informed consent was taken from those who agreed to participate in study. The women refusing insertion of PPIUCD were interviewed by using a predesigned questionnaire collect the information related to contributing factors as per operational definitions¹⁰.

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IUCD placed immediately after delivery of placenta in those who accepted and those who refused, their reasons for non-acceptance were sought. All patients were counseled and interviewed by the same observer to reduce bias in the study. Data was analyzed using SPSS version 22. Qualitative variables like patients age was presented by Mean±SD. Qualitative variables like acceptance of PPIUCD and contributing factors for refusal of PPIUCD was presented by calculating the frequency and percentages. Data was stratified for age, type of delivery (vaginal/C-section), and parity to deal with effect modifiers. Post stratification chi square test was applied keeping a p-value <0.05 as significant. Parity was presented as frequency. Frequency and percentage for contributing factors like age group 18-25, low educational status, preference to some other method, misconceptions, partners wish, primiparity and fear of side effects were calculated.

RESULTS

Two hundred and fifteen women included in this study during the study period of six months from 03-10-2019 to 02-04-2020. Patients ranged between 18-40 years. Mean age of the patients was 26.38±2.91 year. Primiparous were 24(11.2%), multiparous were 135(62.8%) and grand multiparous were 56(26%). Majority of the patients 130(60.5%) delivered vaginally while in 85 patients (39.5%) caesarean section was carried out (Table 1). Immediate PPIUCD insertion accepted by 71 patients (33%) in table 2. Distribution of contributing factors in patients who refused insertion of PPIUCD as follows: Age 18-25 years, 56(38.9%), low educational status 103(71.5%), misconception 93 (64.6%), partner's wish 33(22.9%), Primiparity 16(11.1%), fear of side effects 11(7.6%) and other contraceptive method 41 (28.5%). Stratification with regard to age, parity and mode of delivery was carried out and presented in Tables 3 and 4

Table 1: Distribution of patients by age, parity

Age (Year)	n	%age
18-30	206	95.8
31-40	9	04.2
Total	215	100.0
Mean±SD	26.38±2.9	
Parity	24	11.2
Multiparous	135	62.8
Grand multiparous	56	26.0
Total	215	100.1

Table 2: Immediate PPIUCD insertion accepted

Accepted	n	%age
Yes	71	33.0
No	144	67.0
Total	215	100.0

Table 3: Distribution of contributing factors in patients who refused insertion of PPIUCD (n=144)

Factors	n	%age
Age 18-25 years	56	38.9
Low educational status	103	71.5
Misconception	93	64.6
Partner's wish	33	22.9
Primiparity	16	11.1
Fear of side effects	11	07.6
Other contraceptive method	41	28.5

Total is not 100% as there were multiple responses

Table-4 Stratification with regard to age parity and mode of delivery

Age	PPIUCD insertion accepted		Total	P value
	Yes	No		
18-30	68	138	206	0.984
31-40	3	6	09	
Primiparous	8	16	24	P<0.001
Multiparous	24	111	135	
Vaginal	49	81	130	
C-section	22	63	85	0.072
Total	71	144	215	

DISCUSSION

Most of the women wants to use contraception after delivery but they don't have the knowledge of contraceptive methods. This leads to unwanted pregnancies followed by induced abortion which leads to increased maternal morbidity and mortality¹¹. According to recent study 86% unplanned pregnancies resulted from not using contraception and 88% ended in induced abortions²³. These unplanned pregnancies will to lead to increase complication rate in mothers and neonates. A study conducted in India shows that 65% of women have an unmet need of family planning in 1st postnatal year¹².

According to our study, the overall acceptance rate of postpartum IUCD is 33%. These results are comparable with results of study of Ali where the acceptance rate was 27.6%¹³.

Acceptance of PPIUCD was higher in grand-multiparous as compared to primiparous and multiparous women. Same results were observed in a study conducted in Egypt by Muhammad et al where acceptance of PPIUCD was higher in grand multiparous women. This showed that grand multiparous women required long term contraception¹⁴.

In our study women (71.5%) who refused to accept PPIUCD belong to low educational status. These results were comparable with a study of Muhammad et al 15 where low acceptance of PPIUCD was observed in women with low education²².

A study conducted in Zimbabwe showed positive effect of education on acceptance of contraceptive methods. The use of new contraceptive methods was obviously higher in women with secondary education (twice) as compared to women with primary education¹⁶.

In 2006, WHO report showed that provision of good family planning services resulted in better maternal and neonatal outcome. These birth spacing services in countries with higher birth rate, 32% of maternal deaths and 1 million deaths of children under 5 years could be prevented²⁵. Also, it will lead to good maternal and neonatal outcome (95). These findings in the study lead to a healthy woman¹⁷.

Postpartum IUCD is associated with some distinct advantages as compared to other contraceptive methods. It is a reversible method of contraception which is free from hormonal side effects. It does not require regular use compliance. It is safe in breast feeding. It is placed safely post placentally without pain¹⁸.

Our study showed the importance of husband involvement during decision making of PPIUCD insertion as 22.9% women refused to accept PPIUCD due to partners wish. Unfortunately, in our hospitals women who came to antenatal clinics were not accompanied with their husbands, thus only women were counseled for PPIUCD²¹. Partners usually came in postpartum period which was not a suitable time for counseling. 19FHI conducted a study in Africa which showed that main reason for removal of IUCD was husband's wish. Thus, the husband should be involved in contraception counselling antenatally²⁰.

CONCLUSION

In conclusion, our study showed that frequency of women accepting immediate PPIUCD insertion was 33%. Overall, Immediate PPIUCD appears safe and effective. This study suggests that PPIUCD is a new method of long-acting reversible contraceptive method which is available at the time of delivery make it cost effective for our women who have less opportunities to seek healthcare providers. It will lead to higher birth spacing and less unwanted pregnancies which ultimately leads to good maternal and neonatal outcome.

Author contribution: TN: Concept, Discussion Writing and Data collection, NB: Initial Drafting, Discussion Writing and Final Proof reading, UZ: initial drafting and Data Analysis

Conflict of interest: Nil

Ethical permission: Permission to start this research was granted by Institutional Ethical Review Board.

REFERENCES

1. Enabling the healthy spacing and limiting of pregnancies: Programmatic approaches to expand postpartum IUD access, Technical brief 2015 [Online]
2. Demographic P. Health Survey 2012-13. Islamabad and Calverton, MA: National Institute of Population Studies and ICF International; 2013.2015.
3. Afshan A, Asim SS. Immediate postpartum IUCD (PPIUCD) insertion: An opportunity not to be missed. *ASH & MCC* 2014; 19:15-20.
4. Ali RAM. Acceptability and safety of postpartum intrauterine contraceptive device among parturients at muhimbili national hospital, Tanzania. Dissertation for Master of Medicine in Obstetrics and Gynecology of the Muhimbili University of Health and Allied Sciences 2012.
5. Sanskriti P, Amita T; Pratima M, Rupali D, Jyotsna S, Anita K. Exploring reasons behind low acceptance for PPIUCD in postnatal women. *New Indian J Surg* 2011;2:246.
6. Akoijam BS, Hanjabam SD, Longjam UD, Thangjam DN. Knowledge and attitude of males regarding birth spacing and contraception. *Indian J Public Health* 2005;49:30-1.
7. de Oliveira EA, Hoga LA. The process of seeking and undergoing surgical contraception: an ethnographic study in a Brazilian community. *J Transcult Nurs* 2005;16:5-14.
8. Hamel R. Thinking ethically about emergency contraception. *Critical judgments require adequate and accurate information. Health Prog* 2010;91:62-7.
9. Johnson R, Nshom M, Nye AM, Cohall AT. There's always Plan B: adolescent knowledge, attitudes and intention to use emergency contraception. *Contraception* 2010;81:128-32.
10. Zhang L, Chen J, Wang Y, Ren F, Yu W, Cheng L. Pregnancy outcome after levonorgestrel-only emergency contraception failure: a prospective cohort study. *Hum Reprod* 2009;24:1605-11.
11. Parolin MB, Coelho JC, Urbanetz AA, Pampuch M. Contraception and pregnancy after liver transplantation: an update overview. *Arq Gastroenterol* 2009;46:154-8.
12. Hughes H. Postpartum contraception. *J Fam Health Care* 2009;19:9-10.
13. Lattakova M, Borovsky M, Payer J, Killinger Z. Oral contraception usage in relation to bone mineral density and bone turnover in adolescent girls. *Eur J Contracept Reprod Health Care* 2009;14:207-14.
14. Bayley J, Brown K, Wallace L. Teenagers and emergency contraception in the UK: a focus group study of salient beliefs using concepts from the Theory of Planned Behaviour. *Eur J Contracept Reprod Health Care* 2009;14:196-206.
15. Curtis KM, Nanda K, Kapp N. Safety of hormonal and intrauterine methods of contraception for women with HIV/AIDS: a systematic review. *AIDS* 2009;23:S55-67.
16. Patel CJ, Kooverjee T. Abortion and contraception: attitudes of South African university students. *Health Care Women Int* 2009;30:550-68.
17. Olsen A, Banwell C, Dance P. Internal or infernal devices: experiences of contraception among Australian women living with hepatitis C. *Health Care Women Int* 2009;30:456-74.
18. Rodriguez MI, Even M, Espey E. Advocating for immediate postpartum LARC: increasing access, improving outcomes, and decreasing cost. *Contraception* 2014;90:468-71.
19. American College of Obstetricians and Gynecologists. ACOG Practice Bulletin No. 121: long-acting reversible contraception: implants and intrauterine devices. *Obstet Gynecol* 2011;118: 184-96.
20. Bujold E, Gauthier RJ. Risk of Uterine Rupture Associated with an Interdelivery Interval Between 18 and 24 Months. *Obstet Gynecol* 2010;115: 1003-6.
21. Kapp N, Curtis KM. Intrauterine device insertion during the postpartum period: a systematic review. *Contraception* 2009;80:327-36.
22. al Short Interpregnancy Interval: Risk of Uterine Rupture and Complications of Vaginal Birth after Cesarean Delivery. *Obstet Gynaecol* 2007;110:1075-82.
23. Dulli LS, Eichleay M, Weaver M, Sortijas S, Nsengiyumva T. Understanding Unmet Contraceptive Need among Postpartum Women in Rwanda: Application of the Health Belief Model. *FHI 360, Kenya; FHI 360, US; University of North Carolina at Chapel Hill; FHI 360, Rwanda* 2011.
24. Ndegwa S, Qureyshi Z, Lubano K. The impact of two levels of counseling on acceptance, uptake, early outcomes of post-placental IUCD, Department Of Obstetrics & Gynecology. 2010, University of Nairobi.
25. Nelson AL, Conell S, Eden R. Intraoperative placement of the Copper T-380-, intrauterine devices in women undergoing elective cesarean delivery: a pilot study. *Contraception* 2009;80:81-3.
26. Statistics, Kenya National Bureau of Statistics, Kenya Demographic Health Survey. 2009.