

Awareness and Acceptance of Post-Partum Intrauterine Contraceptive Device Insertion (PPIUCD) among Patients Attending a Tertiary Care Hospital Karachi

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ABSTRACT

Background: The knowledge, awareness and acceptance regarding contraceptives are variable in different parts of world. Family planning is still considered a stigma in most parts of the world. Contraceptive use for family planning is a key to understand the profound changes in fertility and to improve reproductive health worldwide.

Objective: To evaluate the awareness and acceptance of the post-partum intrauterine contraceptive Device Insertion (PPIUCD) among the pregnant women visiting the Outdoor Department of Obstetrics and Gynecology in a tertiary care Hospital Malir Cantt Karachi.

Study design and setting: A cross sectional study was conducted during the period January 2022- June 2022.

Material and Methods: This cross sectional study was conducted at the Tertiary care Hospital, Malir cantt, Karachi, for six months from (January 2022-June 2022) Data were collected using interviewer administered structured questionnaire was filled after the informed consent. The inclusion criteria: were the women agreed to participate the study and agreed to fill the questionnaires Urdu version, who visited outdoor department. The exclusion criteria were the women who refuse to fill the questionnaire.

Results: This study shows the acceptance rate of PPIUCD is 12% of 200 women who participated this study. The commonest reasons for their denial were the inadequate information or knowledge of PPIUCD. The acceptance rate of PPIUCD was associated with their awareness and the long term effectiveness. Women who have completed their secondary or higher education were more informed and accepted than uneducated women. (AOR = 3, CI = 11.81, 53.91). The age group ranging from 25-30 years showed positive acceptance for PPIUCD.

Conclusion: The rate of acceptance for postpartum intrauterine contraceptive device turns out to be low in this study, though this is an effective and safe method of postpartum family planning. The perceived concerns and fears about the PPIUCD are due to lack of awareness regarding its use among women attending the antenatal clinics.

Keywords: PPIUCD, Contraception, Postpartum FP, awareness.

INTRODUCTION

The rapidly increasing population is not only generating the financial crisis but also adding to the cost of medicos. The percentage of obstetric morbidity and mortality is also increasing due to inadequate spacing between pregnancies. Postpartum intrauterine contraceptive devices (PPIUCD) a post-partum family planning method, which can be provided to a post-partum woman starting from the placental delivery time (within 10 minutes), or within the first 48 hours of postpartum period. PPIUCD is highly effective, acceptable, safe and with fewer side effects.¹⁻² Only a small number of populations from the developing countries is using PPIUCD as an immediate postpartum contraceptive method. Postpartum intrauterine contraceptive device insertion was found to be effective and safe method as compared to interval intrauterine contraceptive device³⁻⁴ the percentage of albeit prophylactic comprehension in Pakistan is observed to be 90%. The percentage accuracy of PPIUCD in preventing pregnancy is about 99%. It is observed that almost 60 million pregnancies per year are halted by using PPIUCD. The Copper T device can persistently work for 5-12 years. In the South Asian countries the PPIUCD is rapidly emerging as a safest contraceptive method. It is required to improve and integrate standard PPIUCD counseling scheme during antenatal care, labor and postpartum period.⁵

The Intrauterine contraceptive devices are used as an immediate postpartum contraceptive protection against unwanted pregnancies apart from their use as interval intrauterine contraceptive devices. The copper containing devices are commonly used as long term postpartum contraceptive are cost effective method of contraception with very few side effects and no major complication and contraindication.⁶⁻⁷

Women residing in remote and rural areas do not have an access to institutional deliveries and PPIUCDs awareness, therefore the provision of an adequate orientation and counseling can improve the acceptance rate.⁸ It is safe and cost-effective

method; it does not affect the breast feeding and or the sexual activity. Despite the many advantages of PPIUCD as a method of family planning, in many parts of world it is not as popular as pills, implants and depo provera.⁹⁻¹⁰

MATERIAL AND METHODS

This cross sectional study was conducted at the tertiary care hospital Malir cantt Karachi and the study period was six months (January 2022 to June 2022). A sample of 200 women who visited outdoor department of Obstetrics and Gynecology were enrolled for interview and filling the questionnaire.

Data were collected using interviewer administered structured questionnaire was filled after the informed consent. The inclusion criteria: were the women agreed to participate the study and agreed to fill the questionnaires Urdu version, who visited outdoor department. The exclusion criteria were the women who refuse to participate the study and fill the questionnaire.

The demographic data such as parity, socioeconomic status, education, awareness, and age of individual woman were recorded. The acceptance rate was dependent on women's actively willingness for the device insertion. Their knowledge and understanding about the PPIUCD use as an effective immediate postpartum contraceptive method. Descriptive statistics included percentages and frequencies were used to find out the significant association between the variables ($P < 0.05$) by using SPSS version 26.

RESULTS

The study conducted on total 200 women the recorded awareness and acceptance for PPIUCD was 12%. The commonest reason for the denial was their inadequate knowledge and awareness about PPIUCD. During the interview-questionnaire session it came to our knowledge that majority of the women had the background

knowledge about the interval intrauterine device, however, only had the core/information regarding its use during immediate postpartum period.

Women falling in age group 25-35 year were mostly inclined to accept the PPIUCD as an immediate postpartum method of contraception. The acceptance rate was highest for para-2. (79%).

Table 1: Demographic characteristics and relevant percentage

Demographic characteristics	Categories	Number	Percentage%
Age of women	< 20	35	18
	21-25	60	30
	26-30	58	29
	31-35	38	19
	>36	09	4.5
Marital Status	Married	200	100
	Single/ separated	0	0.0
Residence	Urban	114	57
	Rural	86	43

The acceptance rate of PPIUCD was higher in women who have completed secondary education as compared to uneducated women (AOR = 3, CI = 11.81, 53.91).

Table 2: Socio-economic status of the women and education level of the participated women with relevant percentage

Occupation of women	Number	Percentage%
Housewife	100	50
Home based worker	100	50
Education level of the women	Number	Percentage
No formal education	94	47
Primary education	48	24
Secondary education	32	16
College education	26	12

Most of study participants belonged to lower middle class families. The pregnant women who were attending the antenatal clinics were more not inclined towards PPIUCD insertion with their existing fears like missing thread, menstrual irregularities and bleeding irregularities

It was found that the acceptance ratio was significantly higher among women with secondary or higher education. More proportion of women was unaware about the immediate postpartum method and its effectiveness.

The acceptance rate is 12% of 200 pregnant women, and around 2.5% were inclined to accept but not ready to follow it immediately after the current pregnancy. The large number of women around 85% denied the acceptance of PPIUCD insertion as an immediate postpartum contraceptive method due to lack of awareness.

Table 3:

Acceptance and denial percentage	Number	Percentage
Awareness and acceptance	24	12%
Accept but not right now	6	2.5%
Reject/ did not accept	170	85%

DISCUSSION

The study findings show 12% awareness and acceptance rate among 200 women who participated in the study. All women were fully aware of the nature of written questionnaire, 2.5% (06) women were agreed to accept the device as the postpartum contraceptive method but afraid to use it as immediately after the discussion. However, Around 85% (170) women had inadequate awareness of the method and had declined to use as PPIUCD due to no previous knowledge or information The acceptance rate was 12% was similar with some other related studies. In other study it was found that the acceptance rate was not increasing over a long period of time¹²⁻¹³. The age group that showed the higher

acceptance rate was between 25-30 years (35%). A study carried by P. Kotwani et al found the 30% acceptance rate in their study.¹⁴

Another study carried out by Katheit and his fellow found the highest acceptance rate in age group ranged from 21 to 25 years. The higher acceptance was found in young age group. In the present study the maximum acceptance was found in women at the parity of -2, 46% of them in para 1 category and 70% of them decided to undergo IUDS as they told that they have male child at already. Safdar Z et, Arshad F al has found has high compliance with devices and a low complication rate¹⁵⁻¹⁶

As the study was carried out it was found that only small number of the patients 10% knew about the PPIUCD. Abhijit H, Sowmya et al: also found the mothers having more than two living children had much lower acceptance of IUCD (1 %) ¹⁷: more than half of the participant from current study belonged to lower middle class families

It was concluded that socio-economical level of participants plays a vital role in determining their acceptance. The study had more acceptances in case of women that went through cesarean. As per studies by Ketheit and his colleagues the low rate of acceptance might be due to their myths and misconceptions like pain in abdomen, intense irregular post insertion bleeding, infections, and much more.¹⁸ In this study about 85% of the women do not accept the PPIUCD insertions because of such myths and perceived fears.

In the study conducted by Ketheit the trained staff made sure that all safety precautions are met and aseptic procedure is carried out.. The awareness campaigns can change the attitude of the women towards PPIUCD. There is a need for repeated counseling sessions during antenatal outdoor visits, ward admissions; the incidence of bleeding per vaginum (menorrhagia) was 7.5% in PPIUCD ¹⁹⁻²⁰

The insertion of C-T380 within 10 minutes after placental delivery in normal vaginal delivery and after the cesarean is with the lowest risk for expulsion. It is reversible safe and usually with no adverse effect on the breast milk production. The post birth visits in labor room, the meeting with family member, pre and post insertion counseling plays a very important role in long term acceptance and removal of their existing fears. Katheit G. et al also revealed the significantly low awareness about post-placental IUCD insertion ²¹⁻²² There is a need to arrange the orientation seminars, small group discussion in outdoor setups to disseminate the knowledge about the device that would help health care staff learn more in details about the device with the refresher courses so they could improve their knowledge and skills with time.

Some of the strategies can be used to increase the acceptance by reproductive age group women by cash incentives, free supply of devices, public awareness seminars. Yadav V, recommends the trained nurses and midwives who conduct deliveries at public health facilities can perform PPIUCD insertions as safely as physicians.²³ It is important to carry out the whole procedure with full safety and protection so that any additional unnecessary side effects could be avoided and patients can trust and accept the insertion much easily.²⁴

CONCLUSION

The postpartum intrauterine contraceptive device insertion despite being very reliable and effective method, the acceptance rate of PPIUCD turned out 12% of 200 women. The women with parity more than two accepted to follow the advice. This less percentage alarms the need for the extended awareness and counseling sessions.

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