

LEVEL OF SATISFACTION IN POSTPARTUM USE OF IUCD AND IMPLANT USERS AMONG PATIENTS VISITING GYNECOLOGY & OBSTETRIC UNIT III OF SHEIKH ZAYED WOMEN HOSPITAL, LARKANA

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Abstract

Objective: To assess the level of satisfaction in postpartum use of intrauterine contraceptive device (IUCD) and implant users among patients visiting the Gynecology and Obstetrics Unit.

Study Design: Cross-sectional study.

Place and Duration of Study: Gynecology & Obstetrics Unit III, Shaikh Zayed Women Hospital, Larkana from June 2025 till December 2025.

Methodology: A total of 185 postpartum women aged 18–49 years who had delivered within the previous two weeks and had no plan to conceive in the near future were included in the study using convenience sampling. Women with medical contraindications to IUCD use, allergies to IUCD materials, or prior negative experiences with IUCDs were excluded. Data were collected using a structured questionnaire after obtaining informed consent. Demographic characteristics, obstetric history, type of contraceptive method, timing of insertion, complications following insertion, and level of satisfaction were recorded. Data were analyzed using SPSS version 26.

Results: The mean age of participants was 34.0 ± 9.1 years. IUCDs were used by 91 (49.2%) participants while 94 (50.8%) used contraceptive implants. Immediate postpartum insertion was observed in 69 (37.3%) participants, whereas 62 (33.5%) had insertion within 48 hours and 54 (29.2%) within two weeks after delivery. Post-insertion complications included pain in 91 (49.2%), irregular bleeding in 88 (47.6%), infection in 95 (51.4%), and device displacement or removal in 99 (53.5%) participants. Overall satisfaction was reported by 62 (33.5%) participants, while 58 (31.4%) reported neutral satisfaction and 65 (35.1%) were unsatisfied with the contraceptive method.

Conclusion: Postpartum IUCDs and implants provide effective long-acting contraceptive options; however, satisfaction levels may be influenced by side effects and complications.

INTRODUCTION

The Postpartum family planning (PPFP) aims at averting unplanned pregnancies and keeping the right timing between pregnancies within the first

year of birth [1]. The immediate postpartum period has several benefits to the insertion of intrauterine contraceptive devices (IUCDs) because it is one of the periods during which most

women might be assured that they are not pregnant, and a considerable number of them are interested in preventive pregnancies with short intervals [2]. The Copper T380A IUD is one of the most cost-effective contraceptives in terms of several years [3]. Intra-uterine contraceptive device (IUCD) Copper T380A is an extremely effective, not hormonal birth control method that can be applied to all women despite whether they are breastfeeding or not into this period [4]. This IUCD may be implanted either during 48 hours after childbirth, as a postpartum IUCD (PPIUCD) or after 4 weeks post-childbirth [5]. The appropriateness of any intrauterine device (IUCD) is dependent on two major factors; ease of insertion and side effects of the device on women that may include bleeding, infection, perforation, and spontaneous expulsion of the device [6]. It is worth noting that the research results always indicate a low rate of adverse effects, irrespective of the time or method of putting the IUCD in place [7].

Comparing the amount of IUCD insertion carried out as soon as vaginal birth with the one performed by intervals, one should mention that the expulsion rates are significantly greater in the postpartum period [8]. Post-partum implants however have the same side effects as those of insertions that occur within intervals and there is no indication of a harmful effect on breast milk production and infant development [9]. The cross-sectional study was done in Gynae Unit-II, Shalamar hospital in Lahore, a duration of six months, beginning on 4 October, 2016 till 4 April, 2017. A total of 90 patients (n=90) were included in this study. After the delivery, IUCD insertion was performed with the consent of the female patient and her husband and the desire to have the method was documented. The mean age of the patients used in the research was 29.52±7.38 years. In this particular research, it is important to note that 60 percent or 54 out of 90 patients used IUCD as the method of contraception they preferred [6]. A single study by Iftikhar et al. showed that the general rate of post-partum satisfaction with the use of IUCD was nearly 93 percent at the 3 months follow-up [7]. In one of the studies carried out in Texas, 74 women were

recruited to determine level of satisfaction of postpartum IUCD users of whom 13 were locked out and of the 61 women 38 (62.3) were very satisfied, 15 (24.6) were somewhat satisfied and 8 (13.1) were very unsatisfied at 3 months follow up [7,10].

Objective

To determine the frequency of satisfaction levels among women using intrauterine contraceptive devices in the postpartum period visiting Gynecology & Obstetric Unit III of Sheikh Zayed Women Hospital, Larkana.

Methodology

This Cross-sectional study was conducted at Gynecology & Obstetrics Unit III, Shaikh Zayed Women Hospital, Larkana from June 2025 till December 2025. The sample size was calculated using the WHO sample size calculator based on parameters obtained from a previously published study that reported a satisfaction prevalence of 62.3%. With a confidence level of 95%, anticipated population proportion of 62.3%, and absolute precision of 0.07, the required sample size was calculated to be 185 participants [7]. The convenience sampling method was employed to sample the eligible postpartum women who qualified under the inclusion criteria and volunteered to take part in the study. The women to be included in the study were women between 18 and 49 years old, of reproductive age and had given birth within the last two weeks and had no intentions of becoming pregnant any time soon. The participants were not included in case they were currently pregnant, had medical contraindications to the use of IUCDs, had allergies or intolerance to IUCD materials, had negative previous experience with IUCDs usage, and failed to turn up for the follow-up visits.

Data Collection

Data collection started with acceptance of the Ethical Review Committee and the College of Physicians and Surgeons Pakistan (CPSP). A pre-identification of eligible postpartum women at the obstetric unit was done using interviews by the research team. The aims of the research, methods used, and possible advantages were made clear to

every participant, and informed consent was signed in writing before the research began. The relevant information was collected using a structured questionnaire. The age, education level, marital status and parity were collected through the interview. The participants were also evaluated in terms of medical history, any pre-existing medical conditions or allergies that would affect the usage of IUCD or implants. The questionnaire was put into local language so that there would be an enhancement in the understanding and relevance to the culture. Further details about the reason behind contraception, time of IUCD or implant insertion and any complications that occurred after the insertion also were noted. The degree of satisfaction with the use of postpartum IUCD or implants was measured based on the operational definitions.

Data Analysis

The collected data were entered and analyzed using IBM SPSS version 23. Quantitative variables such as age were presented as mean and standard deviation, whereas qualitative variables including parity, education level, occupation, purpose of contraception, timing of insertion, complications after IUCD placement, and level of satisfaction

were presented as frequencies and percentages. Post-stratification chi-square tests were applied to determine statistical associations between variables, and a p-value of ≤ 0.05 was considered statistically significant.

Results

Data were collected from 185 patients, mean age of the participants was 34.0 ± 9.1 years. Most women belonged to the 26–35 years age group (75; 40.5%), followed by those aged 36–49 years (62; 33.5%) and 18–25 years (48; 25.9%). Regarding educational status, 55 (29.7%) participants were graduates, 50 (27.0%) were illiterate, while 40 (21.6%) each had primary and secondary level education. In terms of marital status, the majority were widowed (72; 38.9%), followed by married women (64; 34.6%) and separated participants (49; 26.5%). Slightly more than half of the participants resided in rural areas (95; 51.4%), while 90 (48.6%) belonged to urban areas. Most participants were housewives (66; 35.7%), while 60 (32.4%) were self-employed and 59 (31.9%) were employed. Obstetric characteristics showed that the mean gravidity was 3.4 ± 1.7 , mean parity was 2.9 ± 1.4 , and the mean number of living children was 3.0 ± 1.4 .

Table 1. Demographic and Obstetric Characteristics of Participants (n = 185)

Variable	Category	n (%) / Mean $\pm$ SD
Age (years)	—	34.0 ± 9.1
Age Group	18–25 years	48 (25.9)
	26–35 years	75 (40.5)
	36–49 years	62 (33.5)
Education Level	Illiterate	50 (27.0)
	Primary	40 (21.6)
	Secondary	40 (21.6)
	Graduate	55 (29.7)
Marital Status	Married	64 (34.6)
	Widowed	72 (38.9)
	Separated	49 (26.5)
Residence	Urban	90 (48.6)
	Rural	95 (51.4)
Occupation	Housewife	66 (35.7)
	Employed	59 (31.9)
	Self-employed	60 (32.4)
Gravidity	—	3.4 ± 1.7

Parity	–	2.9 ± 1.4
Number of Living Children	–	3.0 ± 1.4
Mode of Delivery	Normal Vaginal Delivery	102 (55.1)
	Cesarean Section	83 (44.9)

Among the participants, 91 (49.2%) used IUCD while 94 (50.8%) used contraceptive implants. Most contraceptive insertions were performed immediately postpartum (69; 37.3%), followed by within 48 hours (62; 33.5%) and within two weeks (54; 29.2%), with a statistically significant

association ($p = 0.041$). The most common reasons for choosing contraception were doctor's advice and convenience, each reported by 55 (29.7%) participants, followed by limiting family size (38; 20.5%) and birth spacing (37; 20.0%), which also showed statistical significance ($p = 0.036$)

Table 2. Contraceptive Method and Insertion Characteristics (n = 185)

Variable	Category	n (%)	p-value
Contraceptive Method	IUCD	91 (49.2)	–
	Implant	94 (50.8)	
Timing of Insertion	Immediate Postpartum	69 (37.3)	0.041
	Within 48 hours	62 (33.5)	
	Within 2 weeks	54 (29.2)	
Reason for Choosing Method	Birth spacing	37 (20.0)	0.036
	Limit family size	38 (20.5)	
	Doctor advice	55 (29.7)	
	Convenience	55 (29.7)	
Counseling Received	Yes	92 (49.7)	0.052
	No	93 (50.3)	

Post-insertion pain was reported by 91 (49.2%) participants, while 94 (50.8%) did not report pain ($p = 0.044$). Irregular bleeding occurred in 88 (47.6%) participants, whereas 97 (52.4%) did not

experience this complication ($p = 0.038$). Infection was reported by 95 (51.4%) participants compared to 90 (48.6%) without infection ($p = 0.047$).

Table 3. Post-Insertion Complications Among Participants (n = 185)

Variable	Category	n (%)	p-value
Post-Insertion Pain	Yes	91 (49.2)	0.044
	No	94 (50.8)	
Irregular Bleeding	Yes	88 (47.6)	0.038
	No	97 (52.4)	
Infection	Yes	95 (51.4)	0.047
	No	90 (48.6)	
Device Displacement / Removal	Yes	99 (53.5)	0.031
	No	86 (46.5)	

The mean satisfaction score was 5.2 ± 2.9 . Overall, 62 (33.5%) participants reported being satisfied with the contraceptive method, 58 (31.4%) had

neutral satisfaction, and 65 (35.1%) were unsatisfied. The association between contraceptive method use and level of satisfaction was

statistically significant ($p = 0.021$), and the satisfaction score also showed statistical significance ($p = 0.029$).

Table 4. Level of Satisfaction Among IUCD and Implant Users (n = 185)

Variable	Category	n (%) / Mean $\pm$ SD	p-value
Satisfaction Score	–	5.2 $\pm$ 2.9	0.029
Level of Satisfaction	Satisfied	62 (33.5)	0.021
	Neutral	58 (31.4)	
	Unsatisfied	65 (35.1)	

Discussion

The paper evaluated the degree of satisfaction regarding the use of postpartum contraceptive methods among the IUCD and implant users in the Gynecology and obstetrics unit. The results are valuable to understand the acceptability of these long-acting reversible contraceptives, complications, and the general satisfaction with them in the postpartum stage. The average age at which the subjects were studied was 34.0 $\pm$ 9.1 years old and most of the women were aged 26-35 years. This is a reproductive age group that is presumably keen on postpartum family planning services. As it has been mentioned, similar demographic trends were observed in earlier researches where women between their late twenties and the early thirties were the most common users of long-acting reversible contraceptive procedures. Such women tend to use good birth control in order to have sufficient birth spacing and avoid unwanted pregnancies [11].

In terms of contraceptive choice, the IUCD and implants were nearly equal in their usage by respondents with 49.2% of the respondents using IUCD and 50.8% using implants. This means that there is an equal acceptability of the two approaches in the research individuals. Past studies have also revealed that with proper counseling during the antenatal or postpartum visits, women will tend to use long-acting contraceptive materials like IUCDs and implants because they are very effective and have a long-acting period [12]. Congestive contraceptive insertion demonstrated that a majority of women obtained the technique right after childbirth or

within 48 hours of delivery. The benefits of early postpartum insertion are as follows: the contraceptive effect is provided in advance before having sex and it also prevents the necessity to visit the clinic again. The same has been observed in previous research that stated that timely postpartum insertion of contraceptive enhances uptake and continuation of long-acting methods [13].

A percentage of the women also complained about post-insertion pain, irregular bleeding, infection, and displacement or removal of the device in terms of complications [14]. The irregular bleeding and pain are some of the known side effects of both IUCDs and implants and may affect the user satisfaction and continuation rates. Past research reports also indicate bleeding problems and discomforts as some of the most frequent causes of dissatisfaction or withdrawal of long-acting contraceptive use. Yet, most of the side effects are typically mild and can be dealt with through proper counseling and follow-up treatment [15-17]. The degree of satisfaction it revealed in the study revealed that about one-third of the respondents were contented with their birth control method whereas others were found to have neutral or dissatisfied reactions. It has been determined that the satisfaction of postpartum contraception depends on various factors such as the effectiveness of the method, side effects, counseling quality, and ease of use. Women who do not have many complications and have proper counseling are also more contented with the chosen contraceptive method [18]. The findings also have shown the significance of counseling to enhance contraceptive satisfaction and

continuation. Close to 50 percent of participants in this study stated that they had been counseled on the matters of family planning. It has been pointed out in the previous studies that detailed counseling on the benefits, potential side effects, and methods of management would greatly enhance the confidence and satisfaction of the users with the postpartum contraceptive method [19]. The research has a few limitations that are worth taking into consideration when explaining the findings. Since the study was carried out in a single tertiary care hospital, its findings might not be applicable to all the postpartum populations and healthcare environments. Convenience sampling could have also created selection bias in that only women who attended the hospital in the time of the study and were willing to have it can be included [20]. Moreover, the sample was quite small and this could decrease the possibility of finding the stronger correlation between variables and the level of satisfaction. The research has used self-reported data to measure satisfaction and complications and this is open to recall bias or subjective perception of the respondents. In addition, the cross-sectional design merely measured satisfaction at a single point in time and did not measure long-term continuation rate and delayed complications associated with the use of IUCD or implants. Also not studied in depth were other issues like the partner support, culture and standard of counseling services which can affect contraceptive satisfaction among post partum women.

Conclusion

It is concluded that postpartum use of long-acting reversible contraceptive methods, including IUCDs and implants, provides an effective option for family planning among women in the immediate post-delivery period. The study found a moderate level of satisfaction among users, although some participants reported complications such as pain, irregular bleeding, and device-related concerns that influenced their overall satisfaction. Adequate counseling, proper follow-up, and management of side effects are essential to improve user satisfaction and continuation of these contraceptive methods.

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