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Challenges Faced by Obstetricians in Counselling of Patients for PPIUCD Insertion

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ABSTRACT

Background: Post-partum intrauterine contraceptive device insertion is one contraceptive method highly recommended by healthcare providers, but there are still challenges with its acceptance. Knowledge on factors driving decisions not to use PPIUCD after counseling would contribute to enhanced counseling techniques and contraceptive uptake. **Objective:** To determine the frequency of factors for not adopting PPIUCD insertion during counseling by obstetricians. **Study Design:** Cross-sectional observational study. **Duration and Place of Study:** The study was conducted from November 2024 to April 2025 at the Department of Obstetrics and Gynecology, SKBZ CMH Muzaffarabad. **Methodology:** A total of 462 women between 25–40 years with more than three parities, who were counselled regarding PPIUCD within six weeks of delivery, were enrolled. Participants were chosen from non-probability consecutive sampling. Information on refusal reasons, such as fear of side effects, opposition from spouse, religion, and preference for tubal ligation, was collected from structured binary responses. **Results:** The mean age of participants of the study was 32.21±4.14 years, with a mean parity of 5.12±1.10. Factors such as fear of side effects (61.30%), preference for tubal ligation (52.20%), and spousal opposition (27.90%) were major barriers to PPIUCD adoption. Demographic variables such as age, socioeconomic status, and education were significantly associated with these barriers. **Conclusion:** Our research has determined that there are serious barriers in counseling women towards acceptance and uptake of postpartum intrauterine contraceptive devices.

INTRODUCTION

Contraception is a key part of family planning and supports women's overall health.[1] By using family planning, families can limit and space out their children, decreasing any dangerous effects and ensuring a better quality of life for all.[2] The majority of areas around the globe provide oral contraceptives, intrauterine devices (IUDs), hormonal injections and sterilization.[3] When choosing a contraception method, factors such as her health, future plans for pregnancy and what contraception is available are important.[4] When talking to patients, healthcare's make sure to outline the various options and discuss the good and bad points of each technique. Even so, some cultural beliefs and myths still keep individuals from using contraception.[5] PPIUCD insertion is easy, works well and is not expensive for people who use contraception.[6] It can be done by inserting an IUD after delivery, through the vagina or with a cesarean operation.[7] Currently, long-term contraception for women who want to avoid pregnancy for up to 10 years is offered by a specific type of PPIUCD.[8] If managed well by skilled clinicians, PPIUCD is a safe procedure with few side effects. Due to many women's lack of awareness about PPIUCD, it is not used as widely as it could be.[9] Many women are worried about any side effects or difficulties that might occur.[10]

The procedure must be discussed and described to patients prior to PPIUCD insertion so that they are in a position to make informed decisions and understand fully.[10] Patient counselling clarifies the benefits and simplicity of PPIUCD. It is necessary to clarify the side effects and dangers such as pain, slight bleeding or expulsion of the device.[11] It is vital to ensure that the patient is put at ease and assured that any issues can be raised. Counselling either during pregnancy or immediately after the baby is born is proper since PPIUCD insertion is carried out shortly after giving birth.[12] It allows women to choose the most suitable approach and comfortably begin the postpartum period. Obstetricians often face many difficulties when counseling patients who want to insert PPIUCD.[13] A number of women decide to get their tubes ligated after having children, making it a frequent health issue.[14] The reason for this lies in the opinion that permanent birth control is more effective or can be controlled for a longer period. Possible side effects of PPIUCD, including uneven menstruation and pelvic pain,

make some women wary and hesitate to use this method.[15] Husbands not agreeing because they prefer no contraception or feel unsure about going through PPIUCD is another reason woman use it less.[16]

A study conducted by Najan A. et al. identified several challenges faced by obstetricians when counseling patients about postpartum intrauterine contraceptive device (PPIUCD) insertion. The most commonly reported barriers were patient preference for tubal ligation (43.55%) and fear of side effects (43.55%). Additional factors included opposition from the husband (5.37%) and religious concerns (3.22%).[11]

There is an urgent need to carry out this study in order to learn more about barriers to postpartum intrauterine contraceptive device use in Azad Jammu and Kashmir, a place with special socio-cultural dynamics and few reproductive health resources. Even with national efforts to expand family planning services, AJK is still grappling with low rates of contraceptive use and unmet need. It is important to learn about the particular challenges of the health care providers and patients here in order to provide targeted interventions that are region-specific and appropriate to the local culture.

METHODOLOGY

This cross-sectional study was carried out over a six-month period, from November 2024 to April 2025, in the Department of Obstetrics and Gynecology at SKBZ CMH Muzaffarabad. The purpose was to identify the frequency of specific reasons women chose not to adopt postpartum intrauterine contraceptive device (PPIUCD) insertion following counseling by obstetricians. A total of 462 women participated, with the sample size calculated using WHO software at a 95% confidence level, a 1.61% margin of error, and an expected frequency of religious objections to PPIUCD of 3.22%.

Participants were selected through non-probability consecutive sampling. Women aged between 25 and 40 years, with parity greater than three, who had received counseling for PPIUCD within six weeks after delivery, were included. Women with a prior history of PPIUCD use, pelvic inflammatory disease, cervical malignancy, or uterine anomalies were excluded.

Following approval from the institutional ethical review committee (Ref No. Ethical Committee/DME–1136, dated 24 June 2024), informed consent was obtained from each participant after explaining the study's aims and potential benefits. Baseline characteristics including age, parity, education level, socioeconomic status, and whether the participant resided in a rural or urban area were recorded. To explore reasons for refusing PPIUCD insertion, participants were asked a structured set of questions with binary responses ("Yes" coded as 1, "No" coded as 0). Women who preferred tubal ligation were identified through their agreement with the statement: "Do you prefer tubal ligation over PPIUCD insertion for contraception?" Fear of adverse effects was measured by asking, "Are you concerned about the possible side effects of PPIUCD?" Partner opposition was assessed by the response to "Is your husband opposed to you getting a PPIUCD inserted?" Religious concerns were evaluated through the statement: "Do your religious beliefs influence your decision about PPIUCD insertion?" Awareness about the method was gauged through the response to, "Are you aware of what PPIUCD is and how it works?" All responses were recorded by the primary investigator using a pre-designed proforma. Data were analyzed using IBM SPSS version 26. Categorical variables were presented as frequencies and percentages. Continuous data reported as means with standard deviations or medians with interquartile ranges, depending on the distribution, which was tested using the Shapiro-Wilk method. Subgroup comparisons were made based on demographic characteristics using chi-square or Fisher's exact tests, with a significance level set at $p \leq 0.05$.

RESULTS

The study population examining challenges faced by obstetricians in counselling patients for postpartum intrauterine contraceptive device (PPIUCD) insertion comprised 462 women with a mean age of 32.21±4.14 years and mean parity of 5.12±1.10 children. The demographic profile revealed that 195 participants (42.2%) belonged to poor socioeconomic backgrounds, 180 (39.0%) to middle class, and 87 (18.8%) to affluent families. Educational distribution showed 122 women (26.4%) were uneducated, 155 (33.5%) had primary education, 98 (21.2%) secondary education, and 87 (18.8%) higher education. Geographic distribution indicated 295 women (63.9%) resided in rural areas while 167 (36.1%) were from urban localities (as shown in Table 1).

Table 1

Patient Demographics

Demographics		Mean ± SD	Frequency n (%)
Age (years)		32.21±4.14	-
Parity		5.12±1.10	-
Socioeconomic Status	Poor n (%)	-	195 (42.2%)
	Middle n (%)	-	180 (39.0%)
	Rich n (%)	-	87 (18.8%)
Educational Level	Uneducated n (%)	-	122 (26.4%)
	Primary n (%)	-	155 (33.5%)
	Secondary n (%)	-	98 (21.2%)
	Higher n (%)	-	87 (18.8%)
Residence Status	Rural n (%)	-	295 (63.9%)
	Urban n (%)	-	167 (36.1%)

The counselling challenges identified included varying patient preferences and concerns that obstetricians encountered during PPIUCD counselling sessions. While 241 women (52.20%) expressed preference for tubal ligation as an alternative contraceptive method, 221 (47.80%) did not favor this permanent option. A significant counselling barrier was patient fear of side effects, reported by 283 participants (61.30%) compared to 179 (38.70%) who did not express such concerns. Spousal opposition emerged as another counselling challenge, affecting 129 women (27.90%) while 333 (72.10%) had supportive partners. Religious objections to contraception created counselling difficulties in 47 cases (10.20%) versus 415 (89.80%) where religious factors were not problematic (as shown in Table 2).

Table 2

Frequency of Factors Influencing Family Planning Decisions

Factors		Frequency	% age
Preference for Tubal Ligation	Yes	241	52.20%
	No	221	47.80%
Fear of Side Effects	Yes	283	61.30%
	No	179	38.70%
Opposition from Husband	Yes	129	27.90%
	No	333	72.10%
Religious Reasons	Yes	47	10.20%
	No	415	89.80%

The stratified analysis revealed significant demographic patterns that influenced counselling challenges for PPIUCD acceptance. Age significantly affected contraceptive counselling outcomes (p<0.001), with younger women (≤30 years) showing complete resistance to permanent contraception (0.0% preference for tubal ligation) while older women (>30 years) demonstrated higher acceptance (82.8%). Socioeconomic status created distinct counselling challenges (p<0.001), with poor women showing greater preference for permanent methods (62.1%) compared to middle-class (49.4%) and affluent women (35.6%). Educational background significantly influenced counselling success (p=0.004), with primary educated women showing highest preference for tubal ligation (60.0%) while highly educated women were more open to reversible methods (35.6% tubal preference). Rural residence posed greater counselling challenges with higher permanent method preference (60.0%) compared to urban women (38.3%) (p<0.001). Fear-based counselling challenges were significantly associated with lower socioeconomic status (84.6% among poor vs 4.6% among rich, p<0.001), limited education (84.4% among uneducated vs 4.6% among highly educated, p<0.001), and rural residence (73.9% vs 38.9% urban, p<0.001). Spousal opposition complicated counselling efforts particularly among poor (57.4%), uneducated (77.9%), and rural women (41.0%) with significant associations across all demographic factors (p<0.001). Religious barriers to contraceptive counselling were more prevalent among disadvantaged groups including poor (17.4%), uneducated (24.6%), and rural women (13.6%) with significant demographic associations (p<0.001 for socioeconomic status, education, and residence) (as shown in Table 3).

Table 3

Association of Family Planning Factors with Demographic Variables

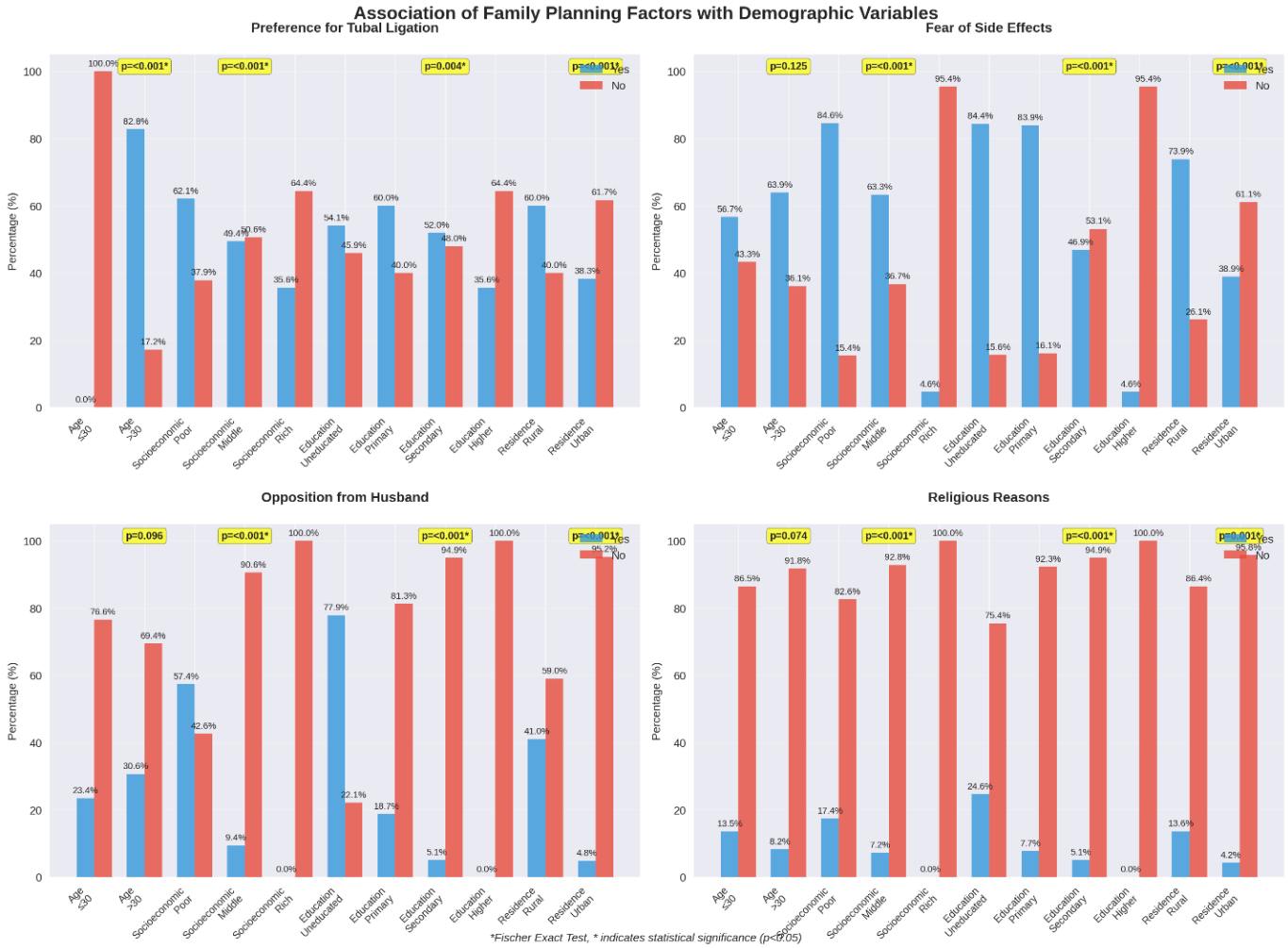
Demographic Factors		Preference for Tubal Ligation		p-value
		Yes n(%)	No n(%)	
Age Group (years)	≤30	0 (0.0%)	171 (100.0%)	<0.001*
	>30	241 (82.8%)	50 (17.2%)	
Socioeconomic Status	Poor	121 (62.1%)	74 (37.9%)	<0.001*
	Middle	89 (49.4%)	91 (50.6%)	
	Rich	31 (35.6%)	56 (64.4%)	
Educational Level	Uneducated	66 (54.1%)	56 (45.9%)	0.004*
	Primary	93 (60.0%)	62 (40.0%)	
	Secondary	51 (52.0%)	47 (48.0%)	
	Higher	31 (35.6%)	56 (64.4%)	
Residence Status	Rural	177 (60.0%)	118 (40.0%)	<0.001*
	Urban	64 (38.3%)	103 (61.7%)	
Demographic Factors		**Fear of Side Effects**		**p-value**
		Yes n(%)	**No n(%)**	
Age Group (years)	≤30	97 (56.7%)	74 (43.3%)	0.125
	>30	186 (63.9%)	105 (36.1%)	
Socioeconomic Status	Poor	165 (84.6%)	30 (15.4%)	<0.001*
	Middle	114 (63.3%)	66 (36.7%)	
	Rich	4 (4.6%)	83 (95.4%)	
Educational Level	Uneducated	103 (84.4%)	19 (15.6%)	<0.001*
	Primary	130 (83.9%)	25 (16.1%)	
	Secondary	46 (46.9%)	52 (53.1%)	
	Higher	4 (4.6%)	83 (95.4%)	
Residence Status	Rural	218 (73.9%)	77 (26.1%)	<0.001*
	Urban	65 (38.9%)	102 (61.1%)	
Demographic Factors		**Opposition from Husband**		**p-value**
		Yes n(%)	**No n(%)**	
Age Group (years)	≤30	40 (23.4%)	131 (76.6%)	0.096
	>30	89 (30.6%)	202 (69.4%)	
Socioeconomic Status	Poor	112 (57.4%)	83 (42.6%)	<0.001*
	Middle	17 (9.4%)	163 (90.6%)	
	Rich	0 (0.0%)	87 (100.0%)	
Educational Level	Uneducated	95 (77.9%)	27 (22.1%)	<0.001*
	Primary	29 (18.7%)	126 (81.3%)	
	Secondary	5 (5.1%)	93 (94.9%)	
	Higher	0 (0.0%)	87 (100.0%)	
Residence Status	Rural	121 (41.0%)	174 (59.0%)	<0.001*
	Urban	8 (4.8%)	159 (95.2%)	
Demographic Factors		**Religious Reasons**		**p-value**
		Yes n(%)	**No n(%)**	
Age Group (years)	≤30	23 (13.5%)	148 (86.5%)	0.074
	>30	24 (8.2%)	267 (91.8%)	
Socioeconomic Status	Poor	34 (17.4%)	161 (82.6%)	<0.001*
	Middle	13 (7.2%)	167 (92.8%)	

	Rich	0 (0.0%)	87 (100.0%)	
Educational Level	Uneducated	30 (24.6%)	92 (75.4%)	<0.001*
	Primary	12 (7.7%)	143 (92.3%)	
	Secondary	5 (5.1%)	93 (94.9%)	
	Higher	0 (0.0%)	87 (100.0%)	
Residence Status	Rural	40 (13.6%)	255 (86.4%)	0.001*
	Urban	7 (4.2%)	160 (95.8%)	

*Fischer Exact Test

Graph 1

Stratification of Family Planning Factors with Demographic Variables



DISCUSSION

Based on the objective of examining challenges faced by obstetricians in counselling patients for PPIUCD insertion, our findings reveal significant demographic disparities that create distinct counselling barriers requiring tailored approaches. The study demonstrates that patient age, socioeconomic status, educational level, and residence location significantly influence family planning preferences and concerns, presenting obstetricians with multifaceted counselling challenges that must be addressed through culturally sensitive and demographically informed strategies.

The complete absence of tubal ligation preference among women aged ≤30 years (0.0%) compared to overwhelming preference among older women (82.8%) reflects the natural reproductive lifecycle considerations, where younger women prioritize fertility preservation while older women with completed families seek permanent contraception. This age-related preference pattern challenges obstetricians to counsel younger women about reversible long-acting methods like PPIUCD while addressing their concerns about maintaining future fertility options. The significantly higher fear of side effects among economically disadvantaged women (84.6% among poor vs 4.6% among rich, p<0.001) stems from limited healthcare access, previous negative experiences with substandard care, and inadequate health literacy that prevents proper understanding of contraceptive risks versus benefits. This socioeconomic gradient in fear levels requires obstetricians to invest additional time in education and reassurance for disadvantaged populations. Educational disparities in family planning attitudes reflect knowledge gaps and health literacy differences, with uneducated women showing higher rates of husband opposition (77.9%) and religious concerns (24.6%) due to traditional gender roles and conservative belief systems prevalent in lower education groups. These findings indicate that obstetricians must adapt their counselling

strategies to include spousal education sessions and culturally appropriate discussions that address religious misconceptions about contraception. The rural-urban divide in contraceptive attitudes (rural women showing 60.0% tubal ligation preference vs 38.3% urban, p<0.001) reflects differential access to healthcare information, prevailing cultural norms, and varying degrees of women's autonomy in reproductive decision-making typical of traditional rural societies.

The high prevalence of spousal opposition among disadvantaged groups (57.4% among poor women) highlights the patriarchal decision-making structures that obstetricians must navigate, requiring couple-based counselling approaches and male partner engagement strategies. Religious barriers, though affecting only 10.2% overall, disproportionately impact vulnerable populations and necessitate culturally competent counselling that respects religious beliefs while providing evidence-based contraceptive information.

Our study results are consistent with previous research on the challenges faced in counseling women for postpartum intrauterine contraceptive device (PPIUCD) insertion. The study population in our research consisted of 462 women, with a mean age of 32.21±4.14 years and a mean parity of 5.12±1.10 children. Demographically, 42.2% were from poor socioeconomic backgrounds, with a majority (63.9%) living in a rural setting. These represent populations utilized in a number of other studies, in which these patterns of socioeconomic disadvantage, poor education, and rurality shaped contraceptive decisions and counseling issues. These results compare with those documented in Rehman et al. [17] as well as Kiattu [18] in which socioeconomic status and educational attainment had a critical impact on family planning method acceptance and utilization, specifically PPIUCD. Our research discovered that major counseling barriers in women considering PPIUCD were mainly focused on spousal opposition, concern over side effects, and religious concerns. These have been extensively documented elsewhere as well in other studies. For example, Parvathaneni and Suneetha [19] also mentioned concerns regarding side effects as well as hesitancy in adopting long-acting methods, although they documented a higher level of satisfaction with PPIUCD after insertion. Likewise, spousal opposition was recognized as a key barrier in Kiattu's study [18] a factor leading to low acceptance of PPIUCD among adolescent women who are more likely to face family pressure. We verified this in our study also, with 27.9% of respondents identifying spousal opposition as a PPIUCD acceptance barrier, consistent with concerns expressed in Parvathaneni and Suneetha's study[19] as well as Andardi et al.'s review.[20] These have been extensively documented elsewhere as well in other studies. For example, Parvathaneni and Suneetha[19] also mentioned concerns regarding side effects as well as hesitancy in adopting long-acting methods, although they documented a higher level of satisfaction with PPIUCD after insertion. Likewise, spousal opposition was recognized as a key barrier in Kiattu's study[18] a factor leading to low acceptance of PPIUCD among adolescent women who are more likely to face family pressure. We verified this in our study also, with 27.9% of respondents identifying spousal opposition as a PPIUCD acceptance barrier, consistent with concerns expressed in Parvathaneni and Suneetha's study [19] as well as Andardi et al.'s review.[20]

While most of the studies examined found that the most significant barrier to PPIUCD uptake was a lack of awareness or misconceptions, our study adds a layer of complexity by showing that demographic factors like age, socioeconomic status, and geographic location distinctly affect the counseling process. Specifically, younger women (≤30 years) in our study were less likely to accept permanent contraception options, with 0% preferring tubal ligation, while older women (>30 years) demonstrated a higher acceptance (82.8%). This demographic pattern was not explicitly observed in other studies, such as Rehman et al.[17] where age-related preferences were not as pronounced. The disparity in preferences could be attributed to the different cultural contexts in which the studies were conducted and the varying levels of access to information on contraceptive options.

Our study found that fear-based counseling challenges were more prevalent among lower socioeconomic groups. Specifically, 84.6% of poor women expressed concerns about side effects, compared to 4.6% of wealthy women. However, the stark contrast in the fear of side effects based on socioeconomic status in our study suggests that the fear may also be linked to a lack of trust in the healthcare system or previous negative experiences with healthcare. This further emphasizes the need for targeted counseling that is culturally sensitive and tailored to the economic realities of women, a point which was also highlighted in Kiattu's study.[18]

Rural residents in our study showed significantly more resistance to family planning methods compared to their urban counterparts, with 60% preferring permanent methods like tubal ligation. This mirrors the findings of Yadav and Koshalya [21] where rural women had a stronger preference for permanent contraception due to limited knowledge and fewer healthcare resources in rural areas. This trend was also discussed by Andardi et al. [20] where rural settings in Asia were found to face more significant barriers to the use of long-acting contraceptive methods. The cultural and logistical challenges in rural areas seem to create an environment where traditional contraceptive methods are preferred, and the lack of healthcare infrastructure exacerbates the resistance to modern, reversible options like PPIUCD.

In spite of this study's positives, there are a number of limitations. Though in this context, the sample size was well-suited, it was a single-center study. Thus, findings from this study might not represent diverse environments with different healthcare and socio-cultural dynamics. There was no consideration given for all potential confounders, including past experiences with contraceptive methods, as well as medical history. Further research involving a multi-center approach would help assess the broader applicability of these findings and provide a deeper understanding of the barriers to PPIUCD acceptance across varied populations.

CONCLUSION

Our research has determined that there are serious

barriers in counseling women towards acceptance and uptake of postpartum intrauterine contraceptive devices. These barriers include spousal resistance, fear of side effects, and unawareness, with demographic factors of age, socioeconomic status, and geographic location playing an influencing role. Our findings highlight the importance of focused counseling, education, and assistance in order to overcome these barriers as well as enhance acceptance of PPIUCD, especially in women in lower socioeconomic environments as well as in rural areas. Specialized interventions aimed at increasing awareness levels coupled with culturally relevant counseling are significant in increasing PPIUCD uptake.

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