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ORIGINAL RESEARCH

Attitudes and Perceptions of Health Workers Towards Immediate Postpartum Family Planning at Soroti Regional Referral Hospital: A Qualitative Study

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Introduction: Unintended pregnancy among married women remains a great health burden in LMICs. Having successfully completed child birth, the World health organization guides that woman wait for not less than two to three years before attempting another pregnancy to reduce health risks for the mother and the baby. Whereas much is known about client related factors contributing to the low uptake of immediate postpartum family planning (IPPFP), little is known about health care workers (HCWs). This study sought to explore health workers' attitudes and perceptions toward IPPFP at Soroti Regional Referral Hospital (SRRH).

Methods: Sixteen (16) HCWs from the Department of Obstetrics and Gynecology at SRRH participated in this exploratory qualitative study. Purposive sampling was employed for recruitment. Data were collected through in-depth interviews and analyzed using hybrid thematic analysis to generate codes and themes.

Results: Thematic analysis involving 16 study participants revealed that attitudes toward IPPFP were shaped by four major themes: willingness to provide services, professional experience, client influences, and provider Fears. Whereas many healthcare workers expressed willingness to offer IPPFP a majority reported conditional readiness dependent on training, availability of equipment, and adequate skills. Providers with prior exposure demonstrated greater confidence. The study is reported in accordance with Consolidated Criteria for Reporting Qualitative Research (COREQ). Perceptions were driven by three major themes: Perceived benefits, Barriers and Mutual aid. Participants highlighted several benefits of IPPFP, including prevention of unintended pregnancies, improved birth spacing, reduced missed opportunities for family planning, and enhanced maternal and child wellbeing. However, this study reveals previously undocumented system-level barriers such as only a few HCWs being trained, stock-outs, workload, and limited policy support, alongside sociocultural challenges including myths, misconceptions, religious beliefs, and the need for partner approval. Limited social support was also reported, although organizations such as JHPIEGO and Marie Stopes were recognized for supporting training and service delivery.

Conclusion: Although linked to several considerations, most HCWs demonstrated positive attitudes toward IPPFP. This study reveals previously undocumented system-level barriers which must be addressed to enhance HCWs' knowledge, confidence, and attitudes toward providing IPPFP services.

Plain Language Summary: This study explored the attitudes and perceptions of health workers toward family planning services provision to women immediately (within two days) after delivery at Soroti Regional Referral Hospital. The study aimed to understand how health workers feel about offering these services and the challenges they face.

Researchers conducted detailed interviews with 16 health workers, including doctors, nurses, and midwives working in the maternity department. Most participants had positive attitudes toward immediate family planning post-delivery and believed it helps prevent unwanted pregnancies, improves child spacing, supports mother's recovery, and promotes better family wellbeing. Many health workers also felt that providing family planning immediately after delivery reduces missed opportunities because some mothers may not return later for the service.

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However, several barriers were identified. Some health workers lacked training and confidence in providing immediate post-delivery birth control methods, especially post-delivery IUD insertion. Other challenges included heavy workload, shortage of supplies, limited staffing, and stock-outs of family planning methods. Cultural beliefs, myths, religious concerns, fear of side effects, and the need for husbands' consent also affected acceptance of immediate post-delivery family planning among mothers.

The study concluded that although most health workers support this method, more training, equipment, staffing, and community education are needed to improve service delivery and increase uptake of post-delivery birth control services.

Keywords: immediate postpartum family planning, postpartum contraception, health care workers, attitudes, perception

Introduction

Immediate postpartum family planning refers to the provision of family planning counseling and services as part of care to postpartum women within 48 hours after child birth.[1] With successful childbirth, the World Health Organization (WHO) stipulates that women need to wait for not less than two to three years before attempting another pregnancy to reduce health risks for the mother and the baby.[2] Furthermore, WHO guides that women ought to be given a contraceptive method before the sixth week postpartum.[3]

Approximately 64% of pregnancies worldwide are unintended, with 68% of these ending in abortion.[4,5] Estimates for low- and middle-income countries (LMICs) indicate that approximately 218 million pregnancies in women of reproductive age are unwanted.[6] Across Sub-Saharan Africa, 65% of women in the first 12 months postpartum have their need for contraception not met, 10% of which rely on natural methods.[7]

Although healthcare providers recognize the importance of immediate postpartum long-acting reversible contraceptive (LARC), inadequate training and limited confidence in counselling and device insertion hinders its provision.[8,9] Other barriers to provision of long acting IPPFP services include provider-imposed restrictions based on age, parity, and HIV status potentially limiting access to immediate postpartum family planning.[9] In addition, inadequate staffing, shortages of trained personnel and supplies, and provider-related practices prohibit to postpartum family planning service provision.[10]

In Uganda, a study investigating the determinants of unintentional pregnancies among married women revealed that 37% of pregnancies were unintended, with the major contributing factor being the non-use of contraceptives.[4] The modern contraceptive prevalence rate in Uganda is 38% with the unmet demand of 22%, moreover the fertility rate is high at an average 5.2 with Teso sub-region having 5.4.[11]

However, if Uganda is to realize the vision 2040, the total fertility rate should be reduced to 2.2, and the modern contraceptive prevalence rate should increase to at least 67%.[12]

Ugandan government with support from development partners, USAID and UNFPA have provided fair coverage in advocating for accessibility and uptake of postpartum contraception in the country.[12,13] This has been through the integration of IPPFP into routine post-natal services, community post-natal care, task shifting and task-sharing of IPPFP service provisions to the lower cadres including midwives, and community health extension workers.[14] Even with its implementation, there is persistent low utilization of postpartum contraception methods, at 41.2% in Uganda.[15]

Whereas Most studies focus on client-related factors such as religion, counseling and knowledge about IPPFP,[16] this study focuses on system-related factors as HCWs' attitudes and perceptions, a field which has not been profoundly explored. Exploring these attributes could identify potential limitations and enhancers to the adoption and utilization of postpartum contraception methods. This study therefore sought to explore the attitudes and perceptions of HCWs toward IPPFP at SRRH.

This study employed the Theory of Planned Behavior (TPB) (Figure 1). This is a psychological construct that connects beliefs to behavior by Icek Ajzen,[17] in attempt to predict human behavior. It enumerates three components, attitudes, subjective norms, and perceived behavioral control, these guide individuals' behavioral intentions. It was applied to explain the association between the attitude and perceptions of health workers and their provision of the immediate postpartum family planning.

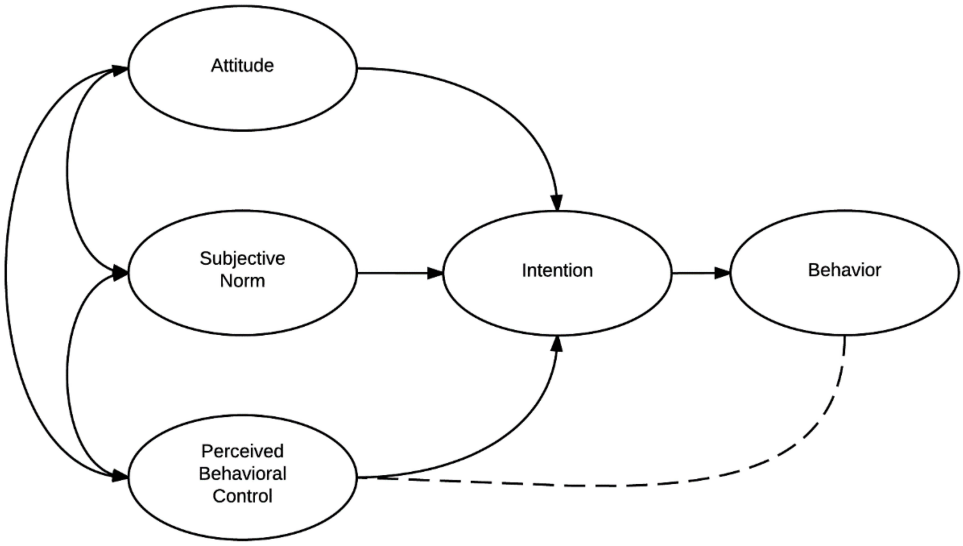


Figure 1 Theory of planned behavior.[17] The framework illustrates the relationships among attitude, subjective norm, perceived behavioral control, intention, and behavior. Solid arrows represent hypothesized pathways through which attitude, subjective norm, and perceived behavioral control influence intention and behavior. The dashed arrow represents the direct effect of perceived behavioral control on behavior, independent of intention.

Materials and Methods

Aim

This study aimed to explore the attitudes and perceptions of health workers toward the provision of immediate postpartum family planning services at Soroti Regional Referral Hospital.

Study Design

The study employed an exploratory qualitative design. This design was ideal for exploring healthcare workers' attitudes and perceptions toward IPPFP because it allowed for in-depth exploration of the topic, generating rich data. This approach was particularly suitable given the limited existing research in this area and enabled researchers to uncover unforeseen themes and insights through open-ended inquiry.

Study Setting

This study was conducted at Soroti Regional Referral Hospital (SRRH), Department of Obstetrics and Gynecology. This health facility is located in Soroti city, approximately 321 km from Kampala, Uganda, has a bed capacity of 250, and serves a population of approximately 3 million people from 10 districts of the Teso sub region and one city (ref, UBOS 2024 census report). The major economic activity of the population is mixed subsistence farming. The population is mostly young.[18]

The facility has a total of 21 midwives all of which are female, 2 medical officers of opposite sex and 3 consultant obstetricians, 2 of which are male. It operates in three different sections: Antenatal, Family Planning Unit, and Obstetrics and Gynecology. The obstetric ward operates 24 hours daily and conducts approximately 4200–4800 deliveries per Year. The department of gynecology is also open 24 hours daily and has an examination room with one bed, one nurse room and one section where pregnant mothers are younger than six months of gestation. Antenatal care (ANC) is busy during the daytime and is run by 5 midwives. Antenatal care is offered for pregnant mothers at this unit. The family planning unit is yet another section within the obstetrics and gynecology department, consisting of three major rooms, one room for counseling and administration of the methods, another room for cervical cancer screening and a changing room and store where family planning methods and other equipment are kept. The main modern contraception methods available at the facility include; combined oral contraceptive pills, progestin-only pills,

injectable contraceptives (Depo-Provera/DMPA-IM and Sayana Press/DMPA-SC), Contraceptive implants (Jadelle and Implanon NXT), copper intrauterine device (Cu-IUD/Copper T 380A), male condoms and emergency contraceptive pills (levonorgestrel).

Study Population

The study participants were healthcare workers, including medical doctors, nurses and midwives working in the obstetrics and gynecology departments, who were participating in the care of pregnant women and in delivering those in labor.

Inclusion Criteria

All midwives, nurses and doctors licensed and employed to work at Soroti Regional referral hospital and who were providing maternal services at ANC, the maternity ward, and PNC during the period of data collection were included.

Exclusion Criteria

Midwives, Doctors and nurses licensed to practice who were sick or were on leave during the time of study were excluded.

Sample Size Determination

The sample size was determined by the principle of data saturation, which was reached at the 14th participant when subsequent interviews yielded no new codes, categories, or themes beyond those already identified, Indicating sufficient depth and redundancy of information relevant to the study. 2 additional interviews were conducted to rule out any saturation biases.

Sampling Criteria

A purposive sampling method was employed in the recruitment of participants for the study. Healthcare workers who were involved in the provision of IPPFP services were intentionally selected because of their direct experience on the phenomenon under investigation. While conducting purposive sampling of participants, care was taken to ensure that all cadres were represented. For example, the doctors and nursing assistants who were few in number were all considered for the interviews, while the midwives who were the majority were grouped together and sampled using simple random approach.

Data Collection Tools and Procedure

Administrative clearance was obtained from the hospital director and the in charge of obstetrics and gynecology. Data was collected from January 2025 to March 2025, using in-depth interview (IDI) guide with three sections; demographic characteristics, perceptions and attitudes of healthcare workers Participants were recruited through verbal invitation to participate in the study and appointments for the interviews made at the convenient of those who accepted to participate (Figure 2). IDI were conducted with 16 health care workers from the Obstetrics and Gynecology Department. The interviews were scheduled at the convenience of the participants and conducted in a private and comfortable setting. Active listening techniques were employed, probing for detailed responses and allowing participants to share their experiences and perspectives freely. The interviews were audio-recorded with the consent of the participants, and explicit field notes were jotted to include nonverbal cues and contextual data. The interviewer followed a semi structured interview guide that contained a core set of questions and suggested prompts. All the IDIs were conducted by the principal investigator, an undergraduate health sciences researcher with formal training in qualitative research methods and in-depth interviewing as part of their academic preparation. Before data collection, the investigator further refined interviewing skills through training on probing techniques, neutrality, rapport building, and practice sessions using the interview guide. Data saturation was reached at the 14th participant when subsequent interviews yielded no new codes, categories, or themes beyond those already identified, indicating sufficient depth and redundancy of information relevant to the study objectives.

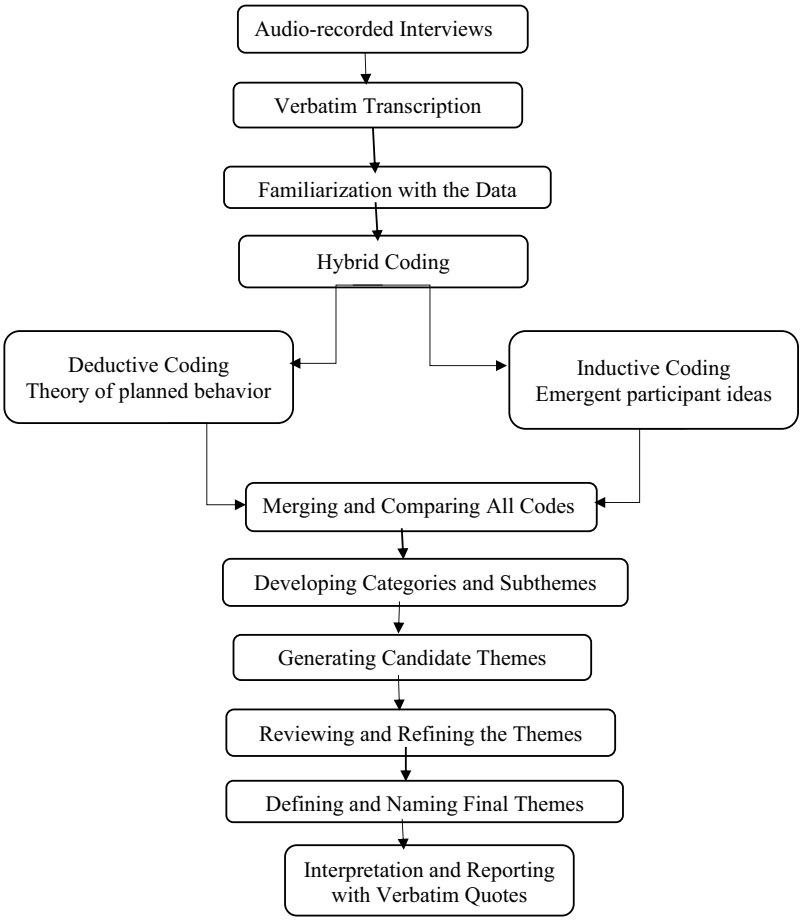


Figure 2 The Data analysis process. Audio-recorded interviews were transcribed verbatim, followed by data familiarization and hybrid coding using deductive (Theory of Planned Behavior) and inductive approaches. Codes were merged and compared, categories and subthemes developed, and candidate themes reviewed, refined, defined, and interpreted using verbatim participant quotations.

Quality Control

Rigors were ensured through the following procedures:

Clear Research Design

A meticulously crafted exploratory qualitative research design was employed. This design provided a comprehensive framework outlining the study's objectives, methods, and data analysis procedures. The clarity and specificity of the research design ensured consistency in data collection and interpretation.

Pilot Testing

A pilot test of the in-depth interview guide and data collection procedures was conducted at Mbale Regional Referral Hospital, with two midwives working in the labor suite. This pretesting phase helped to identify and address any ambiguities or inconsistencies in the interview guide, contributing to the validity of the study. Additionally, the pilot test helped refine the questions, ensuring that they accurately captured the intended information and supported the content validity of the research tools.

Standardized Procedures

To maintain consistency across all IDIs, standardized procedures were employed. This included the consistent use of the same interview guide, adherence to uniform interview settings, and the application of standardized methods for recording and transcribing.

Member Checking

The analyzed results were returned to all the 16 participants for review, feedback, and verification of the accuracy and completeness of the interpretations. No disagreements or major concerns were identified by participants during this process, and therefore, no modifications to the findings were required. Member checking ensured the accuracy and completeness of the interpretation.

Reflexivity

Researchers actively engaged in reflexivity throughout the research process. The principal researcher was a male Bachelor of Nursing Science finalist at Soroti University who had previously undertaken a clinical rotation in the department but had no ongoing personal or professional relationship with the participants. The prior rotation could have introduced familiarity and confirmation biases and may have encouraged socially desirable responses from participants. To minimize these risks, the researcher maintained a neutral interviewer–participant relationship, used open-ended questions, and continually reflected on personal assumptions during data collection and analysis.

Triangulation

Triangulation was employed by incorporating multiple data sources. A comparison of in-depth interviews with literature and documents provided a more comprehensive understanding of the research topic.

Audit Trail

A rich audit trail was kept, taking note of all steps of the research process from data collection to analysis. This transparent documentation contributed to the reproducibility of the study by enabling others to scrutinize and reproduce the research process. Moreover, it supported the external validity of the research study, allowing for an ascertainment of the credibility and transferability of the research results.

Data Management

With participant consent, interviews were meticulously recorded, and comprehensive field notes were maintained to include nuanced insights, including nonverbal signals and contextual data. Data security measures were implemented to safeguard participant confidentiality and privacy. Access to electronic files was restricted to authorized members. The original audio recordings and transcripts were securely stored on password-protected and encrypted devices. For systematic coding and categorization, established manual coding strategies were employed during the data analysis phase.

Data Analysis Process

The qualitative data were analyzed using a hybrid thematic analysis approach that integrated deductive and inductive coding within Braun and Clarke's six-phase reflexive thematic analysis framework[19] (Figure 2). This approach enabled the analysis to be guided by the Theory of Planned Behavior (TPB) while remaining open to new concepts emerging from participants' experiences.

All interviews were transcribed verbatim and verified against the audio recordings for accuracy, anonymized using participant codes (P1–P16), and manually coded in printed copies. Data familiarization involved repeated reading of transcripts and listening to audio recordings while documenting reflective notes.

Hybrid coding was then conducted by two separate researchers after which codes were compared and irregularities homogenized. Deductive codes were generated using TPB constructs (attitudes, subjective norms, perceived behavioral control, and behavioral intentions), while inductive line-by-line coding identified context-specific concepts not captured by the theoretical framework. Similar codes were compared, merged, and organized into subcategories and preliminary categories based on conceptual similarities.

The categories were subsequently clustered into broader themes that reflected meaningful patterns across the dataset. Both theory-driven and emergent concepts informed theme development. Candidate themes were reviewed against the coded extracts and original transcripts, and were refined, merged, separated, or discarded until a homogenous thematic

Table 1 Distribution of Demographic Characteristics of Participants

Variable	Category/Statistic	n	%	Years of Experience (Range, Mean)
Sex	Female	14	87.5%	0.75–17; mean 7.55
	Male	2	12.5%	0.75–17; mean 7.55
Current professional role	Midwives (registered/enrolled)	9	56.25%	0.75–13; mean 7.00
	Nurses/assistant nursing officer	3	18.75%	5–17; mean 11.00
	Doctors (medical officers + consultant)	4	25.00%	4–10; mean 6.75
Marital status	Married	14	87.5%	0.75–17; mean 7.55
	Single	2	12.5%	4–17; mean 10.5
Level of education	Certificate	9	56.25%	0.75–12; mean 6.33
	Diploma	2	12.5%	5–13; mean 9.00
	Bachelor's degree	3	18.75%	4–4; mean 4.00
	Master's degree	2	12.5%	9–10; mean 9.50
Age (summary)	Mean (years)	—	—	Mean age 31.31; range 25–48

structure with clear distinctions and strong internal consistency was achieved. Themes were then defined and named according to their central organizing concepts. Representative verbatim quotations were selected to illustrate each subtheme, and the findings were interpreted in relation to the Theory of Planned Behavior, the study objectives, and existing literature. The study is reported in accordance with Consolidated Criteria for Reporting Qualitative Research (COREQ).

Results

Demographic Characteristics of the Participants

A total of 16 participants with an average age of 31.31 years were interviewed. The demographic data also revealed that among the 16 participants, 87.5% were female and 12.5% were male. Additionally, a majority of the participants were midwives (56.25%), followed by doctors (25%) and nurses (18.75%). The average years of experience in practice were 7.55 years (Table 1).

Attitudes of Healthcare Workers Toward IPPFP

Healthcare workers' attitudes toward IPPFP was nested on four major themes, including willingness to provide IPPFP, existing experience in practice, client-dependent attitudes, and fears as major drivers influencing their perspectives (Table 2).

Summary of Major Themes of Participants

Theme 1: Willingness to Provide IPPFP

Throughout the interviews, HCWs expressed varying levels of willingness to provide IPPFP services. However, much as the HCWs were willing, there was notable resistance towards provision of IPPFP tied to a number of conditions as described under each theme.

Subtheme 1: Strong Unconditional Willingness

A few providers demonstrated a strong unconditional commitment to offering IPPFP as part of comprehensive postpartum care, citing its potential to improve maternal and child health outcomes. These providers viewed the IPPFP as an essential component of their professional responsibilities and emphasized the importance of integrating contraceptive counseling and services into routine postpartum care.

> I am always willing to provide immediate postpartum family planning. Whoever comes to me with the need and the methods available, I strive to ensure that they get in the stipulated time. (P-14)

Table 2 Major Themes of the Study Participants on Attitudes

Themes	Categories	Subcategories	Frequency
Willingness to provide IPPFP	Strongly unconditionally willing	Very willing	3
		100% willing	1
	Conditional willing	Willing on training	8
		Willing on equipment provision'	3
	Unwillingness to provide	Not willing at all	1
Existing experience and exposure	No experience	I have never inserted	6
	Experienced	I have the knowledge but I have never done	8
		Always insert especially IUD	2
Influence by client attitudes	Negative client attitude	Myths and misconceptions	
		-IUD enters the ovary and is picked from the back	1
		-Method goes to the brain	1
		-Religious affiliation- Catholics	3
		-Clients are negative about the method	2
	Client attitudes uncertain	Never interacted with clients on IPPFP	4
	Positive attitude clients	Based on the attitude of healthcare workers	3
		If provided with clear information	
Attitudes based on fears	Personal fears	Threats from husbands	4
		Fear of negative attitude from mothers	3
		Fear of further trauma to the mother	2
		Fear of complications	7
	No significant fears	Participants declining any fears	5
	Institutional fears	Only specific people are trained	2
		Lack of knowledge and skill	6
		Fear of lack of sterile equipment	3

Subtheme 2: Conditional Willingness to Provide IPPFP

A number of healthcare workers expressed their willingness to be trained and equipment provided. One of them, a midwife, stated:

> Aaaah! When I am trained, that's when I can provide but not right now when I have the knowledge gap. I need to first be trained. (P-12)

Another health care worker, in a similar accord, stated her willingness to provide services on the condition that she was informed, trained and provided equipment.

> I am willing if they train me, give me the information and provide me with the necessary equipment and methods. (P-7)

Subtheme 3: Unwillingness to Provide IPPFP

Conversely, one health care worker, a midwife, expressed reservations and reluctance to provide IPPFP, citing concerns about time constraints and highlighting that it is the role of the family planning unit to provide those methods, she highlighted:

> I am not willing, it consumes my time; they are in the family planning unit; then, again, I have to offer family planning, what then will be the work of the family planning unit? (P-9)

Theme 2: Experiences in Provision of IPPFP Services

Healthcare workers' existing experience with IPPFP varied widely, with some providers reporting previous training and exposure to IPPFP practices, whereas the majority had limited or no experience in offering immediate postpartum contraception.

Subtheme 1: Experienced Health Care Workers

Providers who had received specialized training in IPPFP expressed greater confidence and readiness to provide these services, citing increased knowledge and skills in counseling, insertion techniques, and management of postpartum contraception. One of the doctors stated,

> I have offered more than 20 clients, and they all report a good experience with it. No complaints have been reported with respect to the IPPPFP methods used. (P-14)

Another said,

> I always do, the one I do most is the IUD after a caesarian delivery; I have done it too much, after spontaneous vaginal delivery, that one I have not inserted myself, but I encourage the nurses to do that. (P-16)

Subtheme 2: Limited Experience and Exposure

In contrast, providers with limited experience in IPPFP expressed uncertainty and hesitation in offering these services, citing a lack of training or opportunities for hands-on practice. Some providers highlighted the need for additional training and mentorship to build competence and confidence in providing IPPFP, particularly in settings where resources and infrastructure for postpartum care were limited. A nurse proposed the following:

> They train only specific people, for example, in the hospital here; they train one person, and one person cannot go all over. (P-8)

In general, doctors reported having more experience and therefore were more ready to provide services than nurses and midwives were.

Theme 3: Influence by Client Attitudes

Healthcare workers' attitudes toward IPPFP are also influenced by client attitudes and preferences toward immediate postpartum contraception. Providers described encountering a range of client attitudes toward IPPFP, including both positive and negative perceptions.

Subtheme 1: Positive Influence

Positive attitudes toward IPPFP were characterized by a willingness to consider immediate postpartum contraception as a viable option for preventing unintended pregnancies and spacing births.

> Most of them are positive, especially those who are undergoing caesarian delivery and then grand multipara, at least they are positive about it. (P-10)

Subtheme 2: Negative Influence

Conversely, negative client attitudes toward IPPFP are often rooted in misconceptions, cultural beliefs, or fears about the safety and effectiveness of immediate postpartum contraception. For example, one of the participants exclaimed:

> Wohoo! They totally don't like, majority of them don't like, they talk about the myths and misconceptions, but mainly they say, "I will come back". And they never come back. (P-13)

Another added:

> Some of them perceive that the government is trying to reduce the population of Uganda by forcing them to take up the family planning methods, In addition, the churches they come from, do not support family planning. (P-5)

Subtheme 3: Client Attitudes Uncertainty

In contrast, one health care worker expressed her uncertainty about her clients' attitudes toward immediate postpartum family planning. Saying;

I am not sure of their attitude; I have never even talked to them about it (IPPFP). (P-12)

Theme 4: Attitudes Based on Fears and Concerns

Whereas some of the healthcare workers reported having no fears or concerns in the provision of IPPFP, fears emerged as significant drivers influencing healthcare workers' attitudes toward providing IPPFP services. Providers expressed personal fears of potential complications, adverse outcomes and institutional fears, such as a lack of sterile equipment and concerns of only specific people being trained.

Subtheme 1: Personal Fears

Health care workers expressed their fears toward providing IPPFP in relation to the fear of complications, fear of threats from their husbands, fear of negative attitudes from their mothers and fear of further trauma to their mothers, as quoted below:

Depending on the group of people you are giving, because to my understanding IUD can predispose you to developing infections if you are not hygienic. So in these village women, who only bathe once daily, those ones are prone to getting infection and yet you truly want to help a mother. (P-7)

You will either put and it changes position because at this time the uterus is a bit large, it changes position and then it comes out by itself of this mother once the spouse realizes will harass her. (P-8)

The fear of the negative attitudes of the clients was generally related to their negative evaluation of family planning. For example, one participant said,

If you have been sent to look for clients, that's when you find ahhh…the attitude of the community, people are a little bit not willing, and people are negative. People have some bad experiences because these are hormones that we inject into the body, so the reactions of these hormones make people like hmmm! (While shaking the head sideways), these things are not good. (P-3)

The major husband-related fears involved the harassment of health care workers by the husbands of the clients and the fear of inciting domestic violence.

So you find that you give the method and then later the husband comes attacking you, "why did you give this". If he didn't come. (P-6.)

Subtheme 2: Institutional Fears

With respect to concerns about lack of knowledge and skill, only specific people being trained were commonly cited as reasons for hesitancy or reluctance to offer IPPFP, as stated;

You see these things, as long as you are trained, you will be confident, I am well knowledgeable, I can provide other methods apart from the IUD, because I have never been trained on that; if I am trained on that, I can. (P-10)

If I am trained and I get the knowledge, I don't think I will have many fears. However, since I am not trained, I can have fears that I may do it wrongly, especially the IUD. P-4

Subtheme 3: No Fears at All

Some participants strongly expressed themselves as having no fears of providing immediate postpartum family planning services.

To my side, I don't have any fears. (P-15)

Overall, fears emerged as a significant predictor of negative attitudes toward the provision of IPPFP services, highlighting the need for comprehensive training, supportive policies, and institutional mechanisms to address provider concerns and promote confidence in offering immediate postpartum contraception.

This comprehensive analysis of healthcare workers' attitudes toward IPPFP underscores the complex interplay of individual willingness, professional experiences, client preferences, and systemic factors shaping provider perspectives on immediate postpartum contraception.

Perceptions of Health Care Workers Toward IPPFP

Perceived Benefits

The major themes emerging from the analysis of data pertaining perceptions included perceived advantages of IPPFP, Perceived hindrances to the provision and uptake of IPPFP and perceived mutual aid (Table 3).

Theme 1: Perceived Benefits of IPPFP

Healthcare workers identified numerous perceived benefits associated with IPPFP, emphasizing its role in enhancing maternal health, child health, socioeconomic enhancement, technical benefits and health care worker benefits.

Subtheme 1: Maternal Health Enhancement

The potential impact of the IPPFP on improving health outcomes for women and children was among the recurring themes of the interviews, reflecting a shared commitment among healthcare providers to prioritize reproductive health services. Health care workers underscored the importance of IPPFP in promoting psychological rest for mothers, preventing unwanted pregnancies, providing momentary relief of the burden of parenting, promoting uterine contraction, allowing the mother's uterus to rest, preventing missed opportunities to promote maternal healing and stopping delivery for high-risk mothers. For example, two participants stated,

> To the mother, it can help her prevent unwanted pregnancies because there are these mothers who are too fertile. (P-7)

> To the mother, she will not be disturbed, going home and coming back for family planning again; by the time she leaves the hospital, she is already with the method. P-9

Two healthcare workers alluded to the importance of IPPFP in preventing missed opportunities in the provision of family planning. The midwife gave her a view stating that,

> Sometimes, when they go home, most of them change their minds. They rarely come back, so it is always important to give them immediately. (P-10)

A doctor strengthened the saying:

> The most specific one for immediate postpartum family planning is that the missed opportunities of mothers are reduced. Like most of the mothers giving birth most likely all of them need family planning, do if we talk to all of them, we shall not have what we call missed opportunity, like where the mother needed a family planning and missed an opportunity. (P-13)

Subtheme 2: Child Health Benefits

In this subtheme, the main benefits captured were encouraging prolonged breastfeeding and promoting child spacing.

> It also benefits the baby to grow well because the baby will have ample time to breastfeed for a period of at least two years continuously even if it is mixed feeding, that baby will grow well and the frequency of falling sick will be low. (P-13)

Subtheme 3: Socioeconomic Benefits

The participants elucidated the positive impact of immediate postpartum family planning in promoting improved socioeconomic status through promoting financial stability and improving the standard of living:

> Child spacing encourages the family to develop through small and innovative income activities. (P-7)

> To the country, it promotes a good economy because the mother is able to take care of her family. (P-9)

Table 3 Major Themes of the Study Participant on Perceptions

Themes	Categories	Subcategories	Frequency
Perceived advantages of IPPFP	Maternal health benefits	Psychological rest for the mother	3
		Prevent unwanted pregnancies	7
		Momentary relief from the burden of parenting	5
		Promotes uterine involution	4
		Allows mother's uterus to rest	7
		Easy acceptability of the methods by the mothers	2
		Prevents missed opportunities for family planning	4
		Promotes mother's healing	2
		Stopping the delivery in high-risk mothers	3
	Child health	Encourages prolonged breastfeeding	7
		Promotes child spacing	9
	Socioeconomic benefits	Financial stability	5
		Improved quality of life	4
	Technical benefits	Bleeding of IUD insertion obscured by post-delivery bleeding	2
		Side effects of the methods are unrealized	3
		Provides long term contraception	6
		Saving mothers time of going back home and coming back for family planning later	4
	Benefits to the health care workers	Saves the health care worker's time if services are delivered at once	3
		Reduced work load in a long run	2
Perceived hindrances to the provision and uptake of IPPFP	Institutional barriers	Stock outs	9
		Lack of training	5
		Health care workers negative attitude	2
		Work load	11
		Lack of implementing partners	2
		Lack of supportive policies	4
	Cultural barriers	Myths and miss-conceptions	9
		Religious constraints	7
		Unsupportive families	10
		Fear of complications	13
		Low socioeconomic status	6
	Individual	Knowledge gap on the mother's side	7
		Multiple partners	3
		Risk for infection	13
		Lack of empowerment	3
		Mothers' negativity	12
		Decision discord between partners	6
	Spouse related barriers	Aggressive partners	4
		Need for husbands to consent	3
Perceived mutual aid	Government support	Provision of methods	12
		No support at all	3
		Government doing its best to support IPPFP	8
	Other organizations	Training of health care workers	4
		Jhpiego and Mariestops	5

Subtheme 4: Technical Benefits

The key specific benefits to the IPPFP cited included easy engagement of mothers before discharge, saving the mothers' time of going home and coming back later for a family planning method, saving health care workers time when the services are delivered at once and providing long-term contraception. For example, one participant stated,

> Actually, sometimes the mothers go back home and they forget about it, sometimes they go back home and say, my husband does not want to use family planning, but once you talk to her immediately after birth, she accepts, gives you the consent and you can insert. (P-2)

> Sometimes, when they go home, most of them change their minds. They rarely come back, so it is always important to give them immediately. (P-10)

Health care workers also underscored the fact that, with IPPFP, the side effects of family planning methods are unrealized. One of the doctors strengthened this notion as follows:

> Immediate postpartum family planning has been associated with reduced early discomforting experience of family planning methods such as unusual uterine bleeding. Like when the IUD is inserted, most recipients experience uterine bleeding disturbances in the first three months; this does not occur when it is used as IPPFP. (P-14)

> The side effects of the method are unrealized. For example, the IUD, when you put the IUD, you have the pain that comes. However, this time, she has delivered, the pain is there. When you put the method, the pain will be like it's for delivery. (P-15)

It should be noted that the IUD the clients referred to was the copper intrauterine device (Cu-IUD/Copper T 380A) being the main IUD available in the facility.

Subtheme 5: Benefits to Health Care Workers

A number of participants highlighted the impact of IPPFP on saving health care workers time, as services are provided at once and contribute to the reduced workload in the long run.

> To the health worker, it saves time because you are able to deliver all services at once and the mother leaves at once. (P-9)

> Reduces the workload of the health workers because, when you deliver and put the method, the mother will not come back. (P-15)

The qualitative findings underscore the importance of timely access to IPPFP services in achieving these benefits, with healthcare workers advocating for increased sensitization and health education of communities on the benefits of IPPFP.

Health care workers' perspectives underscore the overall benefits of IPPFP beyond individual health outcomes, including economic empowerment and social well-being.

Perceived Barriers

Theme: Perceived Hindrances to the Provision and Uptake of IPPFP

Despite recognizing the benefits, healthcare workers identified numerous barriers to the provision and utilization of IPPFP services. These barriers encompassed various dimensions, including institutional, cultural, and individual hindrances and husband-related hindrances, which collectively hindered the delivery and uptake of IPPFP services.

Subtheme 1: Institutional Barriers

Stock outs, inadequate training, workload and a lack of supportive policies emerged as significant challenges impeding healthcare providers' ability to offer comprehensive IPPFP counseling and services.

> Sometimes those methods are not even there, like here, I have never seen them yet they talk about it but me I have not seen it. (P-12)

> The other one I have noticed is that even when you train the health providers who provide care at labor suites, they also feel it is too much additional work to deliver the mother, follow up and provide family planning. (P-13)

The shortage of trained personnel and essential supplies, coupled with competing priorities within healthcare settings, posed operational constraints and hindered the integration of IPPFP into routine maternal health care. With respect to knowledge and skills, one of the midwives stated,

> On the side of the health worker, I don't know about it, I don't know how to put it, so there is a knowledge gap. (P-12)

> I was even taught how to put but I have never put, I have the knowledge but when you area to go practical and physical, I have never done it. (P-9)

> As far as I know, not all people have been trained in IPPFP. That's a barrier to me because now, if you don't have the information to give to this mother, it's hard. P-6.

Subtheme 2: Cultural and Societal Beliefs

Cultural and societal beliefs surrounding contraception and fertility also presented formidable barriers to IPPFP uptake, with stigma, misconceptions, and religious beliefs influencing individuals' attitudes and behaviors toward family planning. The interviews revealed deep-rooted cultural perpetuated myths about contraceptive methods. This creates a sense of duty for the continuous education of the public aimed at demystifying these myths and misconceptions.

> Mothers say that those methods will make the baby abnormal, will migrate to the heart or brain, stop you from bleeding (menstruation) or make you bleed a lot. (P-13)

> On the mothers' side, there is a knowledge gap; they lack information about it. Then, they also have myths about them; they believe that when you put immediate postpartum family planning, you will not enjoy sex (laughs). (P-4)

Subtheme 3: Spouse-Related Barriers

This was one of the mostly reported hindrances to the provision of IPPFP services. These included the need by the mothers for the husband to consent before the provision of the IPPFP method. Given that their husbands do not always accompany them for delivery, it presents a barrier in the provision of these services. A nurse in the gynecology ward stated that,

> Mothers do not have consent from their men during that time of birth. They have not yet obtained the consent to use family planning from their men. Therefore, it hinders the service delivery. (P-11)

Subtheme 4: Individual Factors

These included a knowledge gap among mothers, fear of side effects, and religious restrictions.

> Some people's faith don't want, like us Catholics, we don't want family planning. (P-12)

> Then, on the side of the mothers, some mothers come when they are not aware, so when you start talking about IPPFP from here, sometimes some mothers may not have that positive attitude because she lacks the information. (P-6)

Perceived Social Support

The availability of social support was identified as a crucial determinant of healthcare workers' ability to deliver effective IPPFP services and promote contraceptive uptake among postpartum women. Social support encompasses two main sources, the government and other support organizations, which collectively facilitate the implementation and sustainability of IPPFP initiatives. Healthcare workers generally perceived little support from social systems and named it one of the major limiting factors in the provision of IPPFP services.

Subtheme 1: Government Support

Healthcare workers reported various views of government support, with some highlighting the solid support given by the government via methods and others completely declining any serious support from the government.

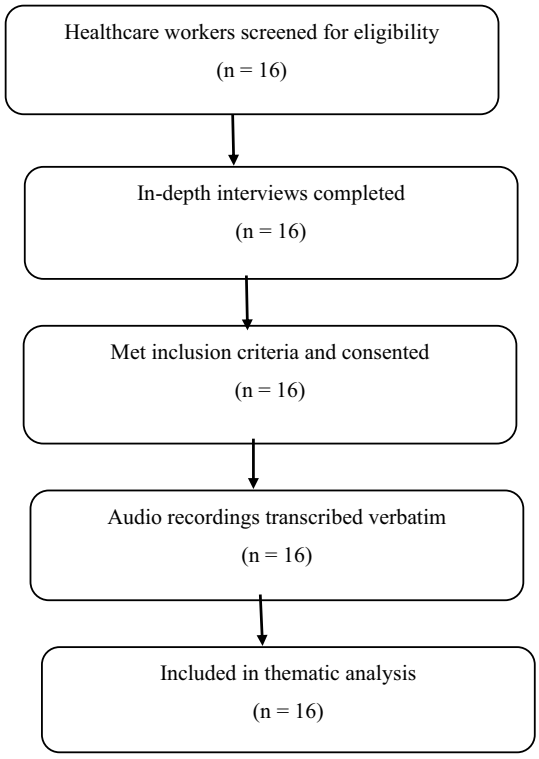


Figure 3 Participant recruitment Flow chart. Sixteen healthcare workers were screened, met the eligibility criteria, provided informed consent, completed in-depth interviews, and had their audio recordings transcribed verbatim and included in the thematic analysis (n = 16).

> The government probably is not serious. They haven't done much, for example, they don't have additional staff; they use already limited staff to do everything. Therefore, there is burn out of staff that they look at family planning as not necessary. (P-13)

However, a few health workers recognized the support of the government in the provision of the methods by stating, "the government is supporting IPPFP by providing the methods".

> The government is working hand in hand with Mariestops to provide these services, the methods for the clients. They are doing their best. Only that the stock-outs most cases is the challenge. (P-11)

Subtheme 2: Nongovernment Organizational Support

The interviews underscore the importance of other nongovernmental organizations in fostering a strong base in the provision of IPPFP within healthcare settings. These mainly included Mariestops and JHPIEGO, which were noted for their impact on training health care workers in the provision of immediate postpartum family planning. A doctor highlighted this saying:

> JHPIEGO I think are leading in IPPFP, we wrote a project proposal and won a training, so we trained some of the elected health care workers though they were few. (P-1)

Discussion

The study found that HCWs generally expressed positive attitudes toward the provision of IPPFP, although the strength of these attitudes varied considerably. While few providers demonstrated an unconditional willingness to offer IPPFP as part of routine postpartum care, many indicated that their willingness depended on receiving adequate training, mentorship, equipment, and institutional support. A few participants were reluctant to provide the service, perceiving it as an

additional workload or as a responsibility that should remain within the family planning unit. These findings suggest that providers' attitudes toward IPPFP were nuanced and influenced by both individual and health system factors.

These findings can be explained by use of TPB.[17] According to the theory, providers with positive beliefs about the benefits of IPPFP, including prevention of unintended pregnancies, reduction of missed opportunities, and improved maternal and child health as found in this study, develop favorable attitudes that strengthen their intention to provide the service. Conversely, perceptions that IPPFP is time-consuming, technically demanding, or associated with adverse outcomes weaken these intentions. Furthermore, the greater enthusiasm among medical officers than nurses and midwives reflects differences in perceived behavioral control, whereby previous training, experience, and confidence enhanced providers' readiness to offer IPPFP, which is in line with the findings from a study on knowledge and practices of nurses towards LARC.[20] Similarly, fears of complications, inadequate skills, limited equipment, and insufficient institutional support reduced providers' confidence and willingness to provide the service. The study also highlights the influence of subjective norms, as providers' attitudes were shaped by anticipated reactions from clients, spouses, religious beliefs, and prevailing community misconceptions regarding family planning. These perceived social pressures might have discouraged some healthcare workers from offering IPPFP despite recognizing its benefits.

Although most healthcare workers recognized the benefits of IPPFP, some remained unwilling to provide it because positive attitudes alone do not guarantee practice. The TPB fronts that inadequate training, low confidence, fear of complications, and social opposition reduce providers' perceived behavioral control and intention to offer the service. Similar findings were reported by a study which found that healthcare providers often acknowledged the importance of postpartum contraception but remained reluctant to provide it because of inadequate training.[21] This could also explain why even the most enthusiastic HCWs face significant hindrance to provision of IPPFP.

The findings of this study are consistent with the findings of a descriptive study performed in Kashmir, India, aimed to explore the attitudes of health care workers toward family planning. In this study, 80.1% of the respondents had a good attitude toward contraception; however, the study population in this research involved medical students, which could limit its transferability to the population of health care workers alone.[22]

However, the findings of limited training and lack of skills influencing the willingness to provide IPPFP contradict with those which found that, despite previous training, many healthcare workers remained reluctant to provide postpartum contraception because of concerns about side effects, inadequate confidence.[23] Research findings revealed the impact of experience on HCWs' attitudes toward and confidence in providing IPPFP. Other studies revealed similar findings. For example, one study reported that an increase in years of professional experience was significantly associated with HCWs' positive attitudes.[24] This could be explained by the fact that as one gains experience in a specific field, they become more confident and ready to face similar tasks. These results contrast with those of a study which cited a negative attitude of health care workers, especially toward the provision of family planning services to young women.[25] With respect to the results above, the fear of complications, threats from husbands, negative attitudes from mothers and fear of further trauma to the mother were among the major reasons contributing to health care workers' hesitancy to provide IPPFP. A study reported fear of side effects as one of the factors limiting the uptake of postpartum family planning which is similar to this current study.[16] Similar findings have been reported in other studies. For example, a study in the southwestern subregion of Uganda revealed that health care workers reported that IPPFP uptake was influenced by the side effects of the methods used.[26] Another cited knowledge and competency barriers in the provision of services in which health care workers lack skills and knowledge.[27] However, existing willingness among health care workers can be leveraged through supportive systems, improved resources, and enabling workplace environments.

Notably, the literature on health care workers' influence on IPPFP uptake is currently deficient.

The perceptions of IPPFP among healthcare workers encompassed perceived benefits, barriers and perceived social support. Providers acknowledge the potential benefits of IPPFP in preventing unwanted pregnancies and improving maternal and child health outcomes. Similar findings were reported a meta-analysis on IPPFP that found IPPFP methods provided more effective protection against unwanted pregnancies than delayed postpartum family planning.[28] HCWs also recognized institutional, cultural, and individual barriers and limited social support systems hindering the provision and utilization of IPPFP services. Notably, health care workers repeatedly cited institutional barriers such as stock outs, lack of training, workload and lack of implementing partners. These can be likened to a study which also cited the limitation

placed by stock outs on the provision of IPPFP.[26] A lack of training emerged as a significant limiting factor for the provision of IPPFP, and these findings are comparable to those which cited spouse-related hindrances, such as the need to involve the husband, who is not always at the facility at the time of delivery, harassment of health care workers and domestic violence on getting to know that the wife has been given a family planning method was another barrier cited.[29,30] Similar to these findings, a study reported the need by women to consult their husbands as one of the barriers to providing postpartum family planning. Undeniably, male partners play a crucial role in family planning, as they are involved in decision making with women.[31] To address this barrier, the involvement of male partners in accompanying their wives for delivery and thereby participating in IPPFP discussions should be emphasized.[32] Additionally, cultural barriers were identified as some of the impactful limiting factors to the acceptability of IPPFP, and efforts have focused on purging the community's mindset and therefore enhancing their acceptability of the methods.[33] Qualitative research findings also revealed that health care workers do not perceive solid social support from the government, as there are always stock outs and limited trained staff. However, some health care workers recognized the influence of the government together with other support organizations, such as Mariestops and Jhpiego. Nongovernmental organizations play a vital role in training healthcare workers and supporting IPPFP initiatives, by providing them with the contraception methods and training health care team solidifying the importance of collaborative efforts in advancing reproductive health agendas. However, sustainability requires these interventions to be progressively institutionalized within existing government structures through training-of-trainers, integration of IPPFP into routine budgets and in-service training, government-led commodity procurement, supportive supervision, and clear transition mechanisms between NGOs and health facilities. This will enable NGOs to complement rather than substitute government-led service delivery.

Conclusions

Most HCWs expressed positive attitudes, but these were often conditional. The translation of these positive attitudes into practice was therefore limited by several conditions as lack of skill, under staffing and stock-outs hence minimizing their willingness to provide the IPPFP. Important to note was that medical officers were more willing than the other HCWs to provide IPPFP. This study also revealed different perceptions; the perceived benefits included the enhancement of maternal health, child health, socioeconomic benefits, and technical and health care worker benefits. The perceived barriers cited by the participants included cultural and societal barriers, spouse-related barriers and individual barriers. Spouse-related barriers, including harassment and domestic violence, emerged as critical social determinants of IPPFP implementation, solidifying the need for interventions that promote supportive and enabling environments for HCWs.

The participants generally perceived less social support, although they cited the role of the government in providing IPPFP methods and other NGOs as Mariestops and Jhpiego for training health care workers on IPPFP.

Implications

Policymakers should prioritize IPPFP within maternal health services and allocate resources accordingly. This includes integrating IPPFP into national reproductive health policies and ensuring adequate funding for training, staffing, and infrastructure. There is a need for supportive policies that promote spousal involvement, address cultural barriers, and prioritize client-centered care. There is need to engage with communities to raise awareness about IPPFP and dispel myths and misconceptions. Community-based education and outreach initiatives can promote informed decision-making and increase demand for IPPFP services. To the field of education, there is need to emphasize IPPFP in pre-service and in-service training curricula for healthcare providers. Educational programs should cover the latest evidence-based practices, clinical guidelines, and counseling techniques related to IPPFP.

Study Limitations

This study had some limitations, the single-site design which constrains the transferability of findings to other settings. Although efforts were made to promote openness and confidentiality, the possibility of social desirability bias cannot be entirely excluded, as participants may have provided responses they perceived as acceptable Additionally, while telephone interviews facilitated participation, the absence of face-to-face interaction may have limited the observation of non-verbal cues and depth of engagement. The predominance of female participants, reflecting the largely female

midwifery workforce, may have limited the diversity of male healthcare workers' perspectives on IPPFP resulting to a possible selection bias. Purposive sampling may have introduced selection bias by recruiting only healthcare workers directly involved in IPPFP service delivery, potentially limiting the diversity of perspectives captured.

Recommendations

The Ministry of Health (MOH) and hospital management should institutionalize regular competency-based training, mentorship, and supportive supervision for all maternity healthcare workers to strengthen knowledge, practical skills, and confidence in providing IPPFP. Training should be extended to all staff rather than selected individuals to ensure equitable service delivery and reduce provider-related barriers. There is need to incorporate IPPFP indicators into maternity performance monitoring, this would enhance accountability and improve service uptake. Health managers should strengthen equipment security through ensuring a consistent supply of contraceptive methods, insertion equipment, and other essential consumables required for IPPFP. The MOH and implementing partners should strengthen male partner engagement and community sensitization through community dialogue to address spouse-related barriers, myths, and misconceptions surrounding IPPFP. The MOH should develop and enforce policies that protect healthcare workers from harassment, intimidation, and violence arising from family planning service provision. We also recommend that a quasi-experimental study be done to assess the effectiveness of competency-based training and mentorship on healthcare workers' knowledge, attitudes and practices towards provision of IPPFP. A mixed methods study involving multiple sites could also be done to qualify HCWs attitudes and foster generalizability of findings respectively.

Abbreviations

EPPFP, Early Postpartum Family Planning; HCWs, Health Care Workers; HIV, Human Immunodeficiency Virus; IDIs, In-depth Interviews; IPPFP, Immediate Postpartum Family Planning; LMICs, Low- and Middle-income Countries; mCPR, Mean Contraceptive Prevalence Rate; MMRs, Maternal Mortality Ratios; NDP, National Development Plan; PPFP, Postpartum Family Planning; SRRH, Soroti Regional Referral Hospital; TPB, Theory of Planned Behavior; UBOS, Uganda Bureau of Statistics; UDHS, Uganda Demographic Health Survey; UNFPA, United Nations population fund; USAID, United States Agency for International Development; WHO, World Health Organization.

Data Sharing Statement

The datasets used and/or analyzed during the current study are available from the corresponding author upon reasonable request.

Ethics Approval and Informed Consent

This study complies with the Helsinki Declaration, requiring that medical research involving human participants be subjected to ethical standards that promote and ensure respect for all participants and protect their health and rights.

This research proposal was submitted to the nursing department at Soroti University, and approval was sought from the Mbale REC (REC REF: MRRH-2024-375). Administrative clearance was obtained from the hospital director, SRRH, and the unit in charge of the Obstetrics and Gynecology Department at SRRH. Confidentiality was heeded at every stage of data collection, analysis and presentation. Participants were approached by the researcher during routine duty and were invited to participate after receiving adequate information about the study (Figure 3). Participation was entirely voluntary, and no participant declined to take part in the study. To minimize potential power imbalances between the researchers and participants, the voluntary nature of participation, confidentiality, and the right to withdraw at any time were emphasized. Participants provided written informed consent, which included consent for the publication of anonymized responses and direct quotes. Data analysis was conducted with strict adherence to ethical guidelines, ensuring the confidentiality and anonymity of the participants. The rights and well-being of the participants were respected throughout the analysis process.

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Author Contributions

All authors made a significant contribution to the work reported, whether that is in the conception, study design, execution, acquisition of data, analysis and interpretation, or in all these areas; took part in drafting, revising or critically reviewing the article; gave final approval of the version to be published; have agreed on the journal to which the article has been submitted; and agree to be accountable for all aspects of the work.

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The authors declare that they have no competing interests.

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