

# The Use of Immediate Postpartum Family Planning at Kacyiru Hospital, Rwanda

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## ABSTRACT

**INTRODUCTION:** Immediate PostPartum Family Planning (PPFP) is the initiation of Family Planning (FP) methods within 48 hours after delivery. Its uptake remains low in sub-Saharan Africa, including Rwanda. This study aimed at analyzing use and identifying motivators and barriers leading to immediate PPFP acceptance among Rwandan women at Kacyiru Hospital (KH), Kigali, Rwanda.

**METHODS:** This was a qualitative study conducted on postpartum mothers from 1st September to 31st October 2018. The participants were selected by purposive and convenience sampling with respected ethical considerations. In-depth interviews were used to identify themes.

**RESULTS:** A total of 28 women were enrolled for in-depth 45-minute interviews. Among them, 19 participants accepted and nine refused immediate PPFP. Motivators identified were: Socio-economic reasons, awareness of complications to closely spaced pregnancies, time to breastfeed, peer motivation, prevention of multiple hospital visits, cesarean delivery, freedom to unprotected sex, avoidance of family conflicts, being responsible, confidence in stopping contraception at any time and old age. Barriers were: Perceived poor efficacy and side effects of contraceptive methods, belief of inability of getting pregnant after delivery before resuming menses, religious belief, husband/partner's opinion, fresh cesarean wound, peer demotivation, and first pregnancy.

**CONCLUSION:** Immediate PPFP uptake is affected with intrinsic and extrinsic factors. Partners and the community (peers) play a role in process of making decision among women who deliver at Kacyiru hospital. Accelerating male participation and engaging with the wider community through innovative strategies that compete with misinformation would improve partnerships with religious leaders.

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## INTRODUCTION

Immediate PostPartum Family Planning (PPFP) is the initiation of Family Planning (FP) methods within 48 hours after delivery. It focuses on preventing unintended births and short inter-birth

intervals through the first 24 months. This is a main public health concern, as 20 % of obstetrical deaths are related to short inter-birth intervals [1,10,16]. Immediate postpartum period is the ideal time for FP given that women are still under hospital observation [10,16]. FP is considered a lifesaving

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intervention for mothers and their children because when birth intervals are too short, there might be risks of prematurity, low birth weight, stillbirth, and probable newborn death. In addition, mothers are also exposed to anemia, risks of miscarriage, abortion, puerperal endometritis, premature rupture of membranes, and possible maternal death [6].

Worldwide, 222 million women didn't have access to modern contraception in the first year post-delivery in 2012 [9]. In low- and middle-income countries (LMIC), about one-quarter of inter-birth intervals are less than 24 months [2,7]

In developing countries, studies indicated that availing women with immediate PPFp prevented an additional 54 million unintended pregnancies [4].

In a study conducted in Jabalpur, India, they found that the commonest factors contributing to the acceptance of immediate PPFp were: literacy, number of living children, length time it took to conceive after marriage, antenatal visits, and use of contraceptives especially IUD [2]. In Nigeria and Kenya, the spouse approval, being a single mother, knowledge of FP, age at first pregnancy and sexual activity after child delivery were found to influence the use of immediate PPFp [11, 12].

In Rwanda, 91% of women give birth in health facilities and 87% of married women are considered potential users of FP [5, 8]. Rwandan DHS 2010 estimated that 51% of women had an unmet need for postpartum (within two years of delivery) family planning [20]. A study that integrated postpartum intrauterine device services into maternal care facilities in six LMIC found that in Rwanda, there is the lowest proportion of insertion timings of immediate PPFp [18,19]. There are no data about what influences the use of immediate PPFp in Rwandan women and this study aims at analyzing the use of immediate PPFp, identifying motivators and barriers and their relationship in influencing the use of immediate PPFp among Rwandan women at Kacyiru Hospital (KH), Kigali, Rwanda.

## METHODS

**Study site:** This study was conducted at Kacyiru Hospital (KH) which is the second maternity hospital in Rwanda. KH collaborates with Project SAN FRANCISCO to provide immediate PPFp methods such as intrauterine device (IUD), implants, etc.

**Study design:** This study used qualitative methods grounded in modern qualitative theory. Purposive and convenience sampling was used to select women admitted in the postnatal ward at KH. Women were recruited into the study after taking decision about the immediate PPFp.

**Study population:** Participants were selected from all women admitted in the postnatal ward during the study period, from September 1st to October 31st, 2018. As per the study design, two categories of participants were recruited: 1) The first category comprised of women who have delivered during the study period and who accepted immediate PPFp.

2) The second category comprised of women who delivered at the hospital, but declined immediate PPFp.

**Inclusion criteria:** Rwandan national women who gave birth at KH during the study period, women who were educated on immediate PPFp before or immediately after delivery at KH, and women who were admitted to the postnatal ward within 4 to 8 hours.

**Exclusion criteria:** women who gave birth in other health facilities or at home who were admitted to KH for postpartum follow-up and post-abortion women who were admitted in postnatal ward.

**Data collection:** Data were collected by conducting in-depth 45-minute interviews with participants, using an interview guide. A tape recorder was also used by Principal investigator (PI) and an additional interviewer in each interview to capture all information provided by the participant. This study used a seven-page questionnaire to explore the reasons behind the acceptance or refusal of immediate PPFp. Two pages covered ten closed-ended questions on demographic characteristics. Two pages covered eight open-ended questions pertaining to family and relationships. Three pages covered three closed-ended and seven open-ended questions related to the immediate PPFp. The questionnaires were translated into Kinyarwanda, which was the preferred language of all participants.

**Data Analysis:** Participant statements during the in-depth interviews were audio-recorded, translated, and transcribed. Through discussion, the investigators applied an approach for analyzing qualitative data known as Thematic analysis (Maxwell 2012) method was used to identify major themes pertaining to immediate PPFp motivators and barriers.

Using Maxwell's (2012) interactive approach for

analysis, the themes could be altered or refined as the coding proceeded. This entailed reconsidering the statements that had already been coded related to a theme to determine whether they fit the theme's refined version. During evaluating the statements, the research team revised and refined the definitions of the themes to best fit with similar statements.

The data were analyzed at the individual level to identify general themes in the interviewed group of women, as the purpose of this study was to understand general motivators and barriers that may be linked with decisions to accept or refuse PFP.

To evaluate the coding system's inter-rater reliability, a second person recoded the discourse units without knowing the themes to which they had been assigned. The number of agreements was then recorded. The two raters obtained a high level of agreement throughout coding each of the twelve themes (95%). Within the eight themes describing types of barriers or stressors, the level of agreement was 94%. After conducting these checks for inter-rater reliability, the discrepancies were resolved through discussion to yield a final coding for each statement that was satisfactory to both coders and the research team.

**Ethical consideration:** Before conducting this study, ethical approval was sought from the Rwanda National Ethics Committee. The study team ensured that every interview was preceded by a consenting process whereby Participants were given enough information about the study and consented. They had the right to withdraw from the study any time they wanted. Data recorded were kept confidential in a password coded database, no identifications recorded and no disclosure to other parties outside the study investigators.

## RESULTS

A total of 28 women were enrolled for in-depth interviews that took 45 minutes each on average.

### Socio-demographic characteristics of the respondents

All of the 28 women included were in the reproductive category (21 to 49 years). Half of the interviewed women were in the age group between 21 and 29 years of age. It was found that > 80% of the interviewed women were giving birth to their 2nd child or more. All women that were included

**Table1:** Socio-Demographic characteristics of the respondents

Demographic variable	n	%
<b>Age range</b>		
21–29	14	50
30–39	11	39.3
40–49	3	10.7
50–59	0	0
60–69	0	0
70+	0	0
<b>Marital status</b>		
Single	2	7.1
Married	17	60.7
Living with a partner	9	32.1
<b>Number of pregnancies</b>		
First pregnancy	5	17.9
second pregnancy or more	23	82.1
<b>Lost pregnancies</b>		
Living boys	24	85.7
Living girls	21	75
Stillbirth	3	10.7
Total children living	28	100
<b>Education level</b>		
None	0	0
Primary	12	42.9
Secondary	10	35.7
tertiary and above	6	21.4
<b>Religion</b>		
Islam	1	3.6
Catholic	4	14.3
SDA	3	10.7
ADEPR	14	50
Zion temple	1	3.6
Other protestants	1	3.6
Anglican	1	3.6
others(specify)	1	3.6
None	2	7.1
<b>UBUDEHE Category</b>		
Cat 1	0	0
Cat 2	12	42.9
Cat 3	15	53.6
Cat 4	0	0
None	1	3.6

in this study had at least a primary level of education. Around 60% of them had secondary level education. Fifty percent of the interviewed

women belonged to the Pentecostal Church in Rwanda (ADEPR). Of the 28 interviewed mothers, 17 (61%) were married, and around 40% were unmarried. Of those unmarried, about 7% were single, and 32% were cohabitating with a male partner. With this study, marriage was defined as having signed a marriage license in front of a legal representative or sworn in by a church leader (Table 1).

### Acceptance versus refusal of immediate post-partum family planning

Women were asked different questions pertaining to how many children they wish to have and relationship in their family to probe reasons that might influence their family planning choices (Table 2)

### Motivators and barriers to acceptance of immediate PPF

Twelve motivators and eight barriers were identified and linked with choices related to immediate PPF.

Socio-economic reasons: worries about providing for children in the future were reported by 92.9% of women (Table 3).

### Motivators to accept immediate PPF

The study authors aimed to identify possible themes described by study participants as motivators to accept the immediate PPF and barriers. Around 12 themes were identified from the responses as the major factors that would motivate women. Three of these appeared to be

**Table 2:** Acceptance versus refusal of immediate PPF according to different participant characteristics (n=28)

Characteristics	ACCEPTED	REFUSED
Number of living children	n (%)	n (%)
0-2	14 (73.7)	4 (44.4)
3-4	6 (31.6)	4 (44.4)
5+	2 (10.5)	1 (11.1)
Children wished by the mother in life		
0-2	2 (10.5)	2 (22.2)
3-4	14 (73.7)	5 (55.6)
5+	4 (21.1)	2 (22.2)
Children wished by the partner		
0-2	7 (36.8)	3(33.3)
3-4	8 (42.1)	4(44.4)
5+	4 (21.1)	2 (22.2)
Awareness about immediate PPF before delivery		
Yes	13 (68.4)	8 (88.9)
No	6 (31.6)	1 (11.1)
Mode of delivery		
Normal	11 (57.89)	4 (44.4)
Cesarean	8 (42.10)	5 (55.6)
Partner contributes to responding to family needs		
Yes	16 (84.21)	9 (100)
NO	3 (15.78)	0

the most convincing reasons for the women to accept immediate family planning after delivery: worries about providing for children in the future, awareness of complications related to closely spaced pregnancies, and concern about the neonate

(i.e.: Enough time for breastfeeding). Other women reported that the motivation to get immediate PPF was related to the fact that they had already birthed their preferred number of children. Among other rare reasons, one respondent who was not married

**Table 3:** Main themes identified as motivators and stressors or barriers to accepting Immediate PFP after delivery (n=28)

Themes	n	(%)
<b>Motivators</b>		
• Having an old age	2	7.14
• Socio-economic reasons: worries about providing for children in the future	26	92.9
• Awareness of complications related to closely spaced pregnancies	22	78.6
• Need to get enough time to breastfeed	10	35.7
• Get the freedom to have unprotected sex	1	3.57
• To avoid family conflicts	1	3.57
• The woman feels responsible because the husband doesn't care	1	3.57
• Having all children wished in life	5	17.9
• Being confident that they can easily stop contraception any time	1	3.57
• Peer motivation	3	10.7
• Prevent multiple subsequent visits to the hospital	3	10.7
• Mode of delivery: cesarean	3	10.7
<b>Barriers/stressors</b>		
• The belief that a woman cannot get pregnant after delivery before they get their first menses	2	7.14
• Religious belief: we have to bear as many children as we can	6	21.4
• Perceived poor efficacy and side effects related to contraceptive methods	21	75
• Fear of losing husband: Not knowing the husband's opinion	6	21.4
• Fear of losing husband: Husband doesn't accept any contraceptive method use	2	7.14
• First pregnancy	2	7.14
• Mode of delivery: fresh cesarean wound	1	3.57
• Peer demotivation	4	14.3

and was giving birth to her 3rd child stated that she was willing to accept immediate PFP because she felt she needed to have the freedom to have unprotected sex.

### **Socio-economic reasons like worries about providing for children in the future**

About 93% of respondents were motivated to use immediate PFP because they wanted to provide for their children as desired and only have children they felt they could care for responsibly.

For example, a 43-year-old respondent with six living children who is a fruit seller and married to a construction worker said: "Nowadays, life is so hard that it's so difficult to provide all family needs, especially food and school fees for children."

Another, 23 years old, respondent with three living

children who is a seller said that: "I have accepted to use immediate PFP (imp anon) because I am still young and am satisfied with children I have, so I want to take care of them as I can't afford to raise more than them due to limited economic ability according to what I earn from my job."

A 31-year-old with two children from 2 different husbands said: "Getting pregnant twice without a known husband is a problem. So I immediately accepted to use IUD because I know that I can be tempted to have unprotected sex again".

### **Awareness of complications related to closely spaced pregnancies**

About 79% of respondents accepted the use of immediate PFP because of their experiences with their previous pregnancies or because of fear of

having an early or unwanted pregnancy or failure to raise their baby properly.

For example, a 26-year-old unemployed respondent with two living children said that: *“the experience I had as now my older baby has only one year, and I have another today, so I wish it never happen to me again that is why I have decided to use immediate PPFp to avoid such risk.”*

Another 30-year-old respondent with three children, 1 prior stillbirth, and 1 lost pregnancy said: *“I accepted (IUD) immediately because I was afraid I could get pregnant again as soon as I reach home. And I wanted to take a break”.*

A 21-year-old single mother who was working as a house girl said: *“I accepted to use immediate PPFp (IMPLANON for three years) because this pregnancy was unwanted, it was my first time, I didn't know how someone can get pregnant, and I decided to not make a mistake again.”*

### **Need to get enough time to breastfeed**

About 36% of respondents agreed to use immediate PPFp because they just wanted their children to grow healthy and to have enough time to breastfeed them without any other barrier, like an unwanted pregnancy or closely spaced pregnancies.

For example, a respondent of 36 years with four children said: *“Using this method helps in getting enough time to breastfeed”.*

Also, a 35 years old respondent who has lost three pregnancies with two children said: *“The reason I just want to use immediate PPFp it is just because I want my baby to grow very well and to have a healthy life for my family maybe after like 5 years I can decide to have another or not”.*

### **Peer motivation**

About 11% of respondents agreed to use immediate PPFp due to information from other women who had immediate PPFp or other contraceptives. Most women accepted what other women or friends told them more than what health care providers told them; thus, most participants accepted immediate PPFp due to peer pressure or other women's opinions.

For example, a 42-year-old respondent with four children said: *“The reason I have chosen immediate PPFp because I have got all the children that I always wanted to have and I have used IUD as*

*the contraceptive method is because other I have had influenced from other women who use it and it helped them”.*

Another 33-year-old respondent with two children said: *“The reason I have decided to use immediate PPFp (IUD) is due to life experience I have been seeing with other families in society, and I just don't want an unwanted pregnancy.”*

### **Mode of delivery**

About 11% of respondents accepted immediate PPFp due to their mode of delivery. Those who underwent cesarean delivery were particularly interested in immediate contraception to avoid another pregnancy too close to their recent delivery. For example, a 25-year-old respondent with one child said: *“The fact is that I didn't refuse to use immediate PPFp, but if you explain me very well I could choose and use it after my cesarean wound gets well and also I have some fear that because it is my first time it could give me some risks in the body and with this wound too”.*

A 23-year-old respondent with three children said: *“The reason I accepted immediate PPFp (IUD) is that this is my second time of cesarean delivery, and I have to take time for being strong after that operation instead of getting pregnant again.”*

### **Barriers leading to refusal of immediate PPFp**

In total, eight themes were identified as the major barriers among the interviewed mothers. The most frequently mentioned theme was *“Perceived poor efficacy and side effects related to contraceptive methods”*. Almost all the interviewed women, including those who accepted immediate PPFp, stressed their worries about the efficacy and/or safety of using different contraception methods.

### **Perceived poor efficacy and side effects related to contraceptive methods**

Among the 28 interviewed, 21 mothers stated that they did not trust PPFp contraceptive methods' efficacy. Among the most questioned methods during the interviews was IUD's, which many believed could fall out without notice. Some thought that these methods' immediate use could prevent them from having enough breast milk for their babies.

For example, a 31-year-old mother with two living

boys from different partners accepted immediate PPFp but stated concerns: *"I'm afraid of the loss of breast-milk, and some people say that the IUD can disappear."*

Another example is a 30-year-old mother with three living children and one prior stillbirth who accepted immediate PPFp. She said *"You can get pregnant even if you have that IUD inside. You can even experience an unexpected removal of that IUD."*

### **Fear of losing her husband**

Many other barriers were related to losing their husbands if they use immediate PPFp. Some (7.14%) stated that their husbands do not like the PPFp, while others (21.4%) said that accepting PPFp could change something big in their sexual relationship with their husbands, leading to separation.

An example is 19 years old, with two living children who refused to use immediate PPFp. She said: *"I did not accept to use immediate PPFp because my husband doesn't accept it, and he told me that when I used those contraceptive methods, we will continue directly separate and that may lead me to complicated life because I am an orphan."*

### **Religious belief**

Another category of women stressed their religious convictions as conflicting with immediate contraception after delivery (21.4%). They stated that they have to bear as many children as they can. A number of these children are from the Protestant religion.

For example, one participant was a 40-year-old Protestant mother with eleven living children (six boys and five girls). A history of one prior abortion, who qualified for is in UBUDEHE category two and did not accept immediate PPFp because she wished to have many children as she could. She said: *"I have refused immediate PPFp due to my personal beliefs, which tells me that it is a sin and as per bible and because my religion does not allow me to use FP."*

### **Peer influence**

Peer influence was identified as both a motivator for some mothers and a barrier for others. Mothers with peers favoring the use of PPFp were more likely to accept PPFp, while mothers with peers

discouraging the use of PPFp were more likely to decline PPFp.

An example is a 33-year-old participant with two living children who accepted immediate PPFp and said that: *"I have heard it from another woman who delivered here, and that is why I was immediately asked for it."*

Another example is a 23-year-old mother with three living children who accepted immediate PPFp and said that: *"I knew it from another woman who advised me to use it without waiting for my first menses."*

## **CONCEPTUAL MODEL**

The conceptual model describing the relationships between identified motivators and barriers influencing the take-up of immediate PPFp was used in this study. The first section covers partner-related factors, the second covers intrinsic characteristics, and the third covers knowledge and attitudes. There were intermediate factors such as socio-economic reasons, health education interventions, and peer/community influence related to all three sections (Figure 1).

## **DISCUSSION**

This qualitative study included 28 female participants who had just delivered live newborns. The key research question was to identify possible motivators and barriers for mothers to accept or decline the use of immediate PPFp.

This study first wanted to explore whether the topic related to family planning was relevant for them based on several characteristics. Interestingly, it was found that both married and unmarried women were giving birth, which means that the family planning topic concerns both categories. This finding was not new compared to previous studies. Ahmed and his group were able to show that even if unmarried women are educated about family planning methods and do not wish to have undesired pregnancies, the use of contraceptive measures was still low [1,3]. This is in total contradiction with much of the African cultural wisdom whereby only the women who are married should be the ones to give birth to children.

The results from this exploratory study, like other previous studies, suggest that even unmarried women are concerned with contraception because,

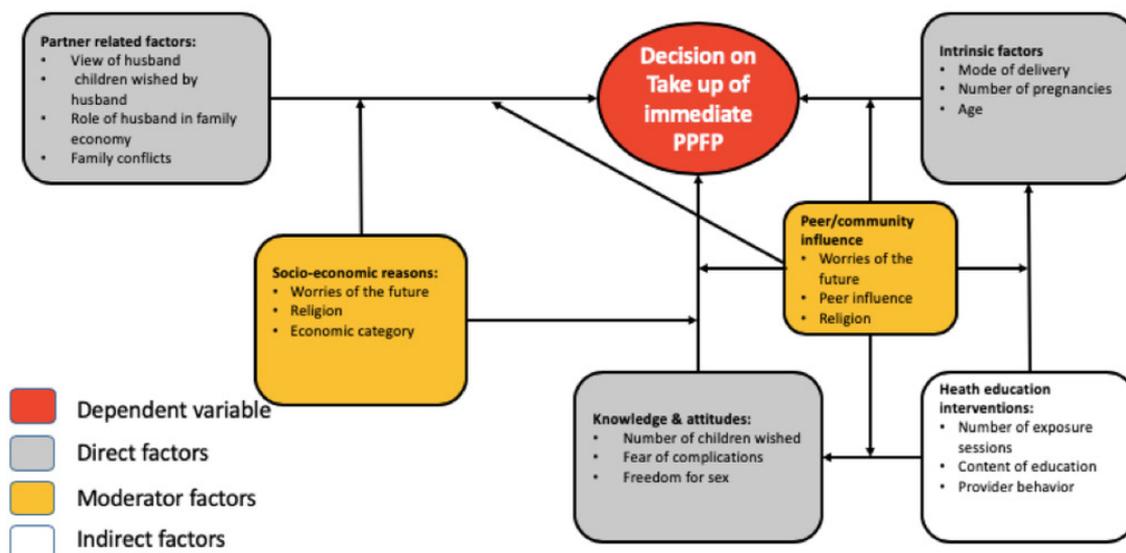


Figure 1: Network analysis and conceptual model drawn from the interview answers

at some point, they have sexual intercourse that leads to bearing children [14].

The study was able to identify different motivators and different barriers successfully. Different quantitative studies had been conducted before whereby the acceptability of PFP among pregnant women, male partner approval, and experience with the use of specific contraception methods were important factors in women's PFP decisions in this population. Antenatal and early postnatal care need to be adapted to consider these factors [10]. This study was in strong agreement with previous studies about socio-economic reasons or worries about providing for children in the future as a factor that motivates many women to engage in family planning [2,16].

In terms of barriers, findings from this research confirm that contraception awareness and knowledge do not necessarily translate to use. The main barriers to modern contraceptive uptake among young women are myths and misconceptions in the community about the efficacy and side effects of available contraceptives. The findings agree with stress the influence of social network approval of the use of family planning beyond the individual's beliefs. Our study shows that peer motivation influences some women's decisions despite what they know or believe about immediate PFP or PFP in general. In settings like these, family planning programming should engage with the broader community through mass

and peer campaign strategies to compete with the lay epidemiology that exists, especially where health professionals cannot correct such myths.

Similarly, like other studies reviewed, this study supports the need to sustain public health education on PFP to gain acceptance among pregnant women. Although many women expressed a desire to practice FP in this study, hesitations about possible disapproval by male partners and the social consequences of unsuccessful covert use continue to hinder the translation of contraceptive awareness and desire into actual use by women. Like other parts of Sub-Saharan Africa, the model of health delivery at Kacyiru Hospital remains female-centered with little or no active male participation. Given the established link between improved reproductive and child health and national development, the government of Rwanda and other sub-Saharan African countries should consider effective strategies to accelerate male participation in reproductive health care.

As demonstrated in other countries, a simple intervention such as a written letter of invitation to a male partner to attend an antenatal clinic with his partner can significantly increase male attendance and promote couples counseling. Previous studies also suggested that legislation can also encourage men to accompany their partners (e.g., requiring employers to provide paid leave for men to accompany spouses to at least one antenatal and early post-natal clinic where FP counseling is

offered). With this study, we find it explicitly paramount since a majority of the interviewed women cannot decide on their own without the involvement of their partners. With economic considerations making many families think carefully about when and how many children they wish to have, it is not surprising that carrying an unwanted or ill-timed pregnancy is an independent predictor of the desire to adopt PFP. Information about pregnancy circumstances is not collected as part of routine antenatal and postnatal care in Ghana. Consideration should be given to asking this information to serve as an entry point into discussions about adopting PFP.

In conclusion, immediate PFP uptake is affected by a variety of factors. Partners and the community (peers) play a role in process of making decision among women who deliver at Kacyiru hospital. Accelerating male participation and engaging with the wider community through innovative strategies that compete with misinformation would improve partnerships with religious leaders.

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