

## Postpartum Family Planning Utilization among Mothers attending Maternal and Child Health Clinic of Tertiary Level Hospital

Sharmila Sharma<sup>1\*</sup>, Samjhana Neupane<sup>1</sup>, Yamuna KC<sup>1</sup>

<sup>1</sup>Rapti Academy of Health Sciences, Ghorahi, Dang, Nepal

\*Corresponding Author: sarugautamj29@gmail.com

### ABSTRACT

**Introduction:** The postpartum period is one of the critical phases in terms of initiation of Family Planning. Postpartum family planning can save mothers' and babies' lives by preventing more than one-third of maternal deaths and 1 in 10 deaths among babies. The prevalence of postpartum family planning utilization is low in our Nepal.

Objective:

**Methodology:** A descriptive cross-sectional study was conducted in the MCH clinic of Rapti Academy of Health science after obtaining ethical approval from the Nepal Health Research council (NHRC). The objective of study was to find out the prevalence of postpartum family planning utilization. The convenience sampling method was used to collect data from 103 mothers having children from 6 weeks to 1 year by using a self-structured interview schedule after pretesting. The collected data was analyzed using descriptive and inferential statistics.

**Results:** Less than half of the respondents (46.6%) received family planning counseling and postpartum family planning utilization was only 27.2%. The commonly used current postpartum family planning methods were a condom (39.3%) and depo (32.1%). Age of child, resumption of menstruation, resumption of sex, counseling on family planning method, and previous use of family planning were associated with postpartum family planning method with p value less than 0.05.

**Conclusion:** The prevalence of postpartum family planning utilization is low in Nepal. The counseling regarding postpartum family planning methods during the Antenatal, delivery, and postnatal periods should be improved to increase the use of family planning.

**Keywords:** MCH clinic, postpartum family planning

### INTRODUCTION

The prevention of unwanted pregnancy and closely spaced pregnancies through the first 12 months following childbirth is called postpartum family planning (PPFP).<sup>1</sup> The postpartum period is one of the vital phases in terms of initiation of Family planning.<sup>2</sup> Postpartum contraceptives help in reducing maternal and infant mortality and morbidity by preventing unplanned and unwanted pregnancies and repeated and successive pregnancy.<sup>3</sup>

Worldwide, although 9 out of 10 women want to avoid pregnancy for 2 years after delivering the baby 7 of them are using contraception.<sup>4</sup> The findings from a study done in Berhan Ethiopia revealed that (41.6%) of women started using contraceptives during the postpartum period.<sup>5</sup> In a study conducted in the Kailali district of Nepal study, about one-third (32.8%) of the participants reported using modern family planning methods during the postpartum period.<sup>6</sup>

Findings of the literature suggested that the utilization of postpartum family planning methods is low in worldwide and Nepal. This research aims to find out the prevalence of the postpartum family planning method and its association with sociodemographic variables.

## METHODOLOGY

A cross-sectional descriptive study design was used to assess the utilization of family planning methods among postnatal mothers attending MCH clinic of Rapti Academy of Health Science (Tertiary hospital). The study was conducted from July 2023 to September 2023. The study population were postnatal mothers of children from 6 weeks to 12 months who visited MCH clinics for vaccination of their child. Non-probability convenience sampling technique was used. The sample size was 103 which was calculated by using Cochran's formula. The content validity of the instrument was maintained by reviewing of literature and consulting with advisors, research experts, and research subject teachers. The instrument was formulated in English to Nepali and translated back to English in order to regain its original meaning. The ethical clearance was obtained from the National Health Research Council, Kathmandu. Postnatal mothers whose husbands were abroad were excluded from the study. A structured interview schedule was adopted to assess postpartum family planning utilization by using self-developed questionnaires. Pretesting was done among women visiting Gynae OPD for follow up. The data was collected by face to face interview after obtaining consent from mothers. The collected data was entered and analyzed using SPSS version 16. The frequencies, percentage were calculated by using descriptive statistics and the association was assessed by using chi-square test.

## RESULTS

A total of 103 mothers were interviewed for data collection. The mean age of mothers and children were  $26.74 \pm 4.9$  years and  $8.4 \pm 3$  months respectively. The majority of respondents (81.5%) were from the age group 20-35 years and

81.6% from the sub-metropolitan. Likewise, nearly half of respondents (41.7%) studied up to secondary level education and three fourth of respondents (79.6%) were homemakers. Almost all respondents (94.2%) were following Hindu religion. About 86.4% of respondents have one child and 70.9% of respondents have children six months and more (Table 1). More than half (56.3%) had delivered child vaginally. Nearly three fourth (70.9%) and 75.7% of respondents had resumption of menstruation and sex respectively (Table 2). Nearly one-fourth (27.2%) had utilized the postpartum family planning method (Figure 1). Less than half of the respondents (46.6%) received family planning counseling, among them 41.7% received counseling on the ANC period. One-third of respondents (35.9%) had used the family planning method before. The commonly used current postpartum family planning method was a condom (39.3%). Half of the respondents (57.3%) cited not necessary as the reason for not using the family planning method (Table 3). Table 4 shows that age of the child, resumption of menstruation, resumption of sex, counseling on family planning method and previous use of family planning were associated with postpartum family planning utilization with  $p$  value  $< 0.05$  (Table 4).

**Table 1: Demographic Characteristics of Respondents (n=103)**

Characteristics	Frequency	Percentage
Age of mother		
<20	14	13.6
20-35	84	81.5
>35	5	4.9
Residence		
Sub-metropolitan	84	81.6
Village municipality	19	18.4
Educational status		
Primary	24	23.3
Secondary	43	41.7
Higher Secondary	23	22.3
Bachelor and above	13	12.6
Occupation		
Homemaker	83	79.6
Farmer	3	2.9
Service	12	11.7
Business	5	4.9
Husband's occupation		
Farmer	16	15.5
Service	37	35.9
Business	31	30.1
Daily wages	19	18.4
Religion		
Hindu	97	94.2
Muslim	4	3.9
Christian	2	1.9
Age of child		
Less than six months	30	29.1
Six months and more	73	70.9
Number of children		
One	89	86.4
One to four	13	12.6
More than four	1	1

**Table 2: Reproductive Characteristics of Respondents (n=103)**

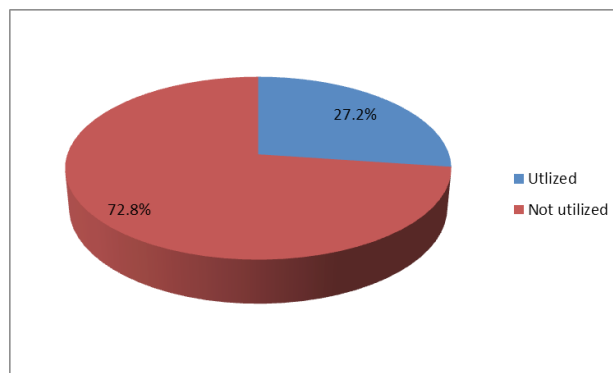
Characteristics	Frequency	Percentage
Type of delivery		
Vaginal delivery	58	56.3
CS	45	43.7
Resumption of mensuration	73	70.9
Resumption of sex	78	75.7

**Table 3: Postpartum Family Planning Utilization (n=103)**

Characteristics	Frequency	Percentage
Counseling on Family planning		
Yes	48	46.6
No	55	53.4
Timing of counseling(n=48)		
Antenatal period	20	41.7
During delivery	18	37.5
Postnatal period	10	20.8
Previous use of Family Planning method	37	35.9
Current method of Family Planning(n=28)		
Depo- Provera	9	32.1
Condom	11	39.3
Pills	3	10.8
Copper T	1	3.6
Implant	2	7.1
Permanent Family planning	2	7.1
Side effect of family planning(n=4)		14.2
Bleeding	2	50
weight gain	2	50
Reason for not using family planning method(n=75)		
Ignorance	4	5.4
Fear	15	20.0
Not necessary	43	57.3
Natural Family planning method	13	17.3

**Table 4: Association of Independent variables with Current use of Family Planning (n=103)**

Socio- demographic Variables	Family planning utilization		$\chi^2$ p value
	Utilized n %	Not utilized n %	
Age	3(21.4)	11(78.6)	0.75
< 20 years	25(28.1)	64(71.5)	
≥ 20 years			
Residence			
Sub-metropolitan	24(28.7)	60(71.3)	0.50
Village municipality	4(21.0)	15(79.0)	
Educational level			
Below Secondary	7(29.2)	17(70.8)	0.49
Secondary and above	21(26.6)	58(73.4)	
Occupation			
Work inside home	18(21.7)	65(78.3)	0.11
Work outside home	10(50)	10(50)	
Age of child			
Less than 6 months	2(6.7)	28(93.3)	0.03
Six months and more	26(35.6)	47(64.4)	
Husband occupation			
Farmer	2(12.5)	14(87.5)	0.15
Other	26(29.9)	61(70.1)	
Number of children			
One child	11(25.6)	32(74.4)	
> 1 child	17(28.3)	43(71.7)	0.75
Resumption of mensuration			
Yes	2(6.7)	28(93.3)	0.003
No	26(35.6)	47(64.4)	
Resumption of sex			
Yes	28(35.9)	50(64.1)	0.00
No	0	25(100)	
Counseling on Family Planning			
Received	18(37.5)	30(62.5)	0.028
Not received	10(18.2)	45(81.8)	
Previous use of Family planning			
Used	17(45.9)	20(54.1)	0.001
Not Used	11(16.7)	55(83.3)	



**Fig 1: Utilization of Postpartum Family Planning Methods.**

## DISCUSSION

The current study found that postpartum family planning utilization was 27.2% which is similar from findings from study done in India where postpartum family planning utilization was 33.4%.<sup>2</sup> The finding is lower than the finding from a study done in Minch Ethiopia where postpartum family planning utilization was 44.4% and Kailali Nepal where 38.2% of respondents had used a method of FP.<sup>6,7</sup> The differences may be due to differences in sample size and heterogeneity in culture and religion. The commonly used family planning methods were condoms (39.3%) Depo-Provera (32.1%), and pills (10.8%) and 14% of total users had side effects, which is similar with the findings from a study done in Chitwan where (33.3%) used condom and 6.6% used Depo-Provera and 20.9% had side effects.<sup>8</sup> The findings varies from finding of study done in Minch Ethiopia where 38% of the respondents used implant as post-partum family planning followed by oral contraceptives.<sup>7</sup> This current study revealed only 46.6% of women received counseling on family planning methods, among them only 20.7% received counseling in the PNC period which is contrast to study done in different tertiary level facility of Nepal where postpartum family planning counseling coverage was (93.9%) also in Delhi where India where half of the respondents received counseling on family planning method in the immediate postpartum period.<sup>2,9</sup>

The reasons for not using family planning methods in this study were not necessary, natural family planning method, ignorance, and fear of side effects, which is similar to findings from Chitwan which shows (16.7%) of respondent's reason of not using PFP were due to husband out of home and using natural method. where (20%) of the respondents had fear of side effects of contraceptives.<sup>8</sup> In this study resumption of menstruation, and resumption of sex are significantly associated with postpartum family planning utilization with p value 0.003 and 0.00 respectively which is consistent to findings from study done in Behran Ethiopia where resumption of menses and the timing of resumption of sexual intercourse were found to be associated with postpartum family planning utilization.<sup>5</sup> In contrast to this study where level of education and residence were not significantly associated, PFP utilization was significantly associated with level of education in Burundi and Rwanda and women from rural areas had a lower chance of early initiation of modern spacing methods in India<sup>10,11</sup>

## CONCLUSION

The utilization of postpartum family planning method is low. Among them majority of respondents used condoms as family planning methods. The counseling regarding postpartum family planning methods during the antenatal, delivery and postnatal period is significantly low. Resumption of menses, resumption of sex, age of child, previous use of family planning method, and counseling on family planning methods are associating factors for postpartum family planning utilization. The counseling of postpartum family planning should be given priority during Antenatal visits, delivery and postnatal visits.

## ACKNOWLEDGEMENTS

Participants and staff of MCH clinic of Rapti adacemy of Health science.

**Conflict of Interest:** None

## REFERENCES

1. World Health Organization. Programming strategies for postpartum family planning. 2020;2021. [LINK]
2. Murry L, Dabas S, Thuileiphy T. Knowledge, Attitude and Utilization of Family Planning Methods among Postpartum Women in a Selected Tertiary Care Facility in India. *J Midwifery Reprod Health.* 2021;9(1):2597-604.[GOOGLE SCHOLAR] DOI: 10.22038/jmrh.2020.48982.1604
3. Yemane TT, Bogale GG, Egata G et al. Postpartum Family Planning Use and Its Determinants among Women of the Reproductive Age Group in Low-Income Countries of Sub-Saharan Africa: A Systematic Review and Meta-Analysis. *Int. J. Reprod. Med.* 2021; 2021(1) 5580490 [PUBMED] <https://doi.org/10.1155/2021/5580490>
4. Welsh A. Best practice in postpartum family planning. *Royal College of Obstetricians and Gynaecologists.* 2015;1:1-2. Retrieved from <http://sogp.org> > 1.final\_best\_practice://
5. Demie T, Demissew T, Huluka T et al. Postpartum family planning utilization among postpartum women in public health institutions of DebreBerhan town, Ethiopia. *J Womens Health Care.* 2018;7(426):2167-0420[GOOGLE SCHOLAR] DOI: 10.4172/2167-0420.1000426
6. Joshi AK, Tiwari DP, Poudyal A et al. Utilization of family planning methods among postpartum mothers in Kailali district, Nepal. *Int J Womens Health.* 2020;12:487.[PUBMED] <https://doi.org/10.2147/IJWH.S249044>
7. Wassihun B, Wosen K, Getie A et al. Prevalence of postpartum family planning utilization and associated factors among postpartum mothers in Arba Minch town, South Ethiopia. *Contracept. reprod. med.* 2021 ;6(1):1-8 [PUBMED] <https://doi.org/10.1186/s40834-021-00150-z>
8. Shrestha S, Poudel R, Napit J. Awareness and Practice on Postpartum Family Planning among Postpartum Mothers attending Maternal and Child Health Clinic. *J Coll Med Sci.* 2020 30;16(2):88-92.[GOOGLE SCHOLAR] DOI: 10.3126/jcmsn.v16i2.28143
9. Thapa K, Dhital R, Rajbhandari S et al. Prevalence of postpartum family planning service coverage in selected referral facilities of Nepal. *JNMA: Journal of the Nepal Medical Association.* 2020;58(221):1[PUBMED] doi: 10.31729/jnma.4788
10. Rutaremwa G, Kabagenyi A. Postpartum family planning utilization in Burundi and Rwanda: a comparative analysis of population based cross-sectional data. *Pan Afr. Med. J.* 2018;30(1)[PUBMED] <https://doi.org/10.11604/pamj.2018.30.303.15105>
11. Srivastava U, Pandey A, Singh P et al. A study on initiation of postpartum family planning in India based on NFHS-4: does urban poor differ significantly from rural?. *BMC Women's Health.* 2022;22(1):472[PUBMED]