

# Utilization of Family Planning Methods among Postpartum Women in Pakistan

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## ABSTRACT

**Objective:** To assess the associated factors with the utilization of family planning services among postpartum women in Pakistan.

**Methodology:** A cross-sectional study was conducted at the Family Medicine Department, [name of the hosp] between January 2019 to December 2019 for a duration of 12 months. All women who had delivered within the last 12 months and presented to the department of family medicine were included in the study. A self-reported questionnaire was used to collect data from the patients. Data regarding socio demographics and the utilization of the family planning services acquired by the clients were recorded. Data was analyzed using SPSS version 24.

**Results:** A total of 1280 women presented to the family medicine clinic during the 10 month long study. Out of these, only 88 (6.8%) were on a follow-up visit. The mean age of women in our study was  $26.54 \pm 12.4$  years. Age between 21-25 years was significantly associated with utilization of contraceptives ( $p=0.01$ ). Education of women and her husband both significantly correlated with her utilization of family planning services in our study ( $p=0.001$ ). Women whose husbands were posted abroad more frequently utilized contraceptives compared to other women ( $p<0.001$ ).

### Conclusion:

Utilization of family planning services by postpartum women with a child of less than 6 months old was not very satisfactory. Age, education level, and occupation were strong indicators of postpartum decisions of women utilizing family planning services in Pakistan.

**Keywords:** Contraceptives, family planning, combined oral contraceptive pills, progesterone only pills, pregnancy, tubal ligation

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## INTRODUCTION

The term family planning is widely used for pre- pregnancy planning and attaining the desired interval between children [1,2]. The favorable period for counselling women to explore the option of family planning is the time right after pregnancy and delivery. Family planning is an effective method for improving the health of women's and children's. In addition, a study demonstrates that closely spaced pregnancies within the first year postnatal are associated with high risk of adverse consequences for mothers and children [2].

Health providers play an essential role by counseling women during the perinatal period. World Health Organization has emphasized upon the importance of integrating postpartum family planning with maternal, newborn and child health (MNCH) interventions during the 12-month period after childbirth [3]. The public administration of Nepal has been promoting postpartum family planning programs and addressing the importance of optimum space between two births among young mothers [4]. Nevertheless, due to several supply barriers and finite knowledge of use of contraceptives in addition to cultural beliefs, the utilization of family planning services in developing countries remains low [5, 6]. Globally, the low uptake of family planning methods depends upon many factors, one of them is because of differences in viewpoint [7,8]. In a study by Asif and Pervaiz, it was revealed that

the most common barrier found in contraceptive use was the fear of side effects [9]. However, the study utilized the retrospective data of 2012-2013. Therefore, there is an evident literature gap between the sociodemographic factors associated with the utilization of family planning services in postpartum women with a child of less than a year. Thus, the current study aimed to evaluate the factors that affect the utilization of family planning methods in postpartum mothers of [city], province. Pakistan.

## METHODS AND MATERIALS

A cross-sectional study was conducted at the Family Medicine Department, [name of the hosp] between January 2019 to December 2019 for a duration of 12 months. All women who had delivered within the last 12 months and presented to the department of family medicine were included in the study. A non-probability convenience sampling technique was applied to enroll participants in the study.

The utilization of family planning service was defined as the method used by women to prevent unintended and narrowly spaced conception following childbirth. WHO sample size calculator was used to calculate sample size by keeping the prevalence of 22% postpartum contraceptive usage, a confidence interval of 95%, and a 5% error margin, a sample size of 263 was obtained.

A self-reported questionnaire was used to collect data from the patients. Data regarding socio demographics including age, education status, occupation, and other parameters were documented. The second portion of the questionnaire explored the family planning services acquired by the clients. Informed verbal consent was obtained from the women before data collection. The study was approved by the ethical committee.

Data was analyzed using SPSS version 24. All continuous variables were presented as mean and standard deviation while all categorical variables were presented as frequency and percentages. Chi square tests and one-way anova were applied to find out correlation between sociodemographic variables and the utilization of family planning. A p value of less than 0.05 was considered as significant.

**RESULTS**

The mean age of women in our study was 26.54 ± 12.4 years. The majority of the women were between the ages of 21-25 i.e. 561 (52.04%). Age between 21-25 years was significantly associated with utilization of contraceptives (p=0.01). Most women by default were muslims. Education of women and her husband both significantly correlated with her utilization of family planning services in our study (p=0.001). Women whose husbands were posted abroad more frequently utilized contraceptives compared to other women (p<0.001). See table 1 for details.

A total of 1280 women presented to the family medicine clinic during the 10 month long study. Out of these, only 88 (6.8%) were on a follow-up visit. A total of 76 women preferred using combined oral contraceptives as compared to zero women who preferred using progesterone only pills. Condoms were the preferred method of contraceptive in only 65 women whereas, injectables were preferred by 148 women. Polypropylene implants were preferred by 208 women while the majority opted for tubal ligation (266). See table 2 for month-wise distribution of utilization of family planning methods by women in our population.

Table 1. Relationship between sociodemographic variables and utilization of family planning services.

Variable	n(%)	p-value
Age (years)		
<20	123 (11.41%)	0.0182
21-25	561 (52.04%)	
25-30	272 (25.23%)	
>31	122 (11.32%)	
Mean age ± SD	26.54 ± 12.4	
Religion		
Muslim	1060 (98.33%)	0.6128
Hindu	10 (0.93%)	
Christian	5 (0.46%)	
Others	3 (0.28%)	
Education of the participant		
Illiterate	389 (36.09%)	0.0015
Primary Education	364 (33.77%)	
Secondary Education	287 (26.62%)	
Higher Education	38 (3.53%)	
Husband's education		
Illiterate	248 (23.01%)	0.0001
Primary Education	343 (31.82%)	
Secondary Education	398 (36.92%)	
Higher Education	89 (8.26%)	
Occupation of the participant		
Housewives	709 (65.77%)	0.12
Self employed	318 (29.50%)	
Working women	51 (4.73%)	
Occupation of the husband		
Posted abroad	386 (35.81%)	<0.001
Agriculture	277 (25.70%)	
Self employed	296 (27.46%)	
Office work	119 (11.04%)	

Table 2. Month-wise distribution of utilization of family planning services by postpartum women in our study

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Total
New FP Clients	190 (15.94%)	254 (21.31%)	91 (7.63%)	106 (8.89%)	99 (8.31%)	15 (1.26%)	35 (2.94%)	97 (8.14%)	136 (11.41%)	169 (14.18%)	1192 (100.00%)
Follow-up FP Clients	17 (19.32%)	33 (37.50%)	10 (11.36%)	4 (4.55%)	4 (4.55%)	0 (0.00%)	9 (10.23%)	5 (5.68%)	0 (0.00%)	6 (6.82%)	88 (100.00%)
Combined Oral Contraceptives	10 (13.16%)	20 (26.32%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	4 (5.26%)	7 (9.21%)	35 (46.05%)	76 (100.00%)
Progesterone only Pills	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
Condoms	4 (6.15%)	23 (35.38%)	7 (10.77%)	3 (4.62%)	4 (6.15%)	0 (0.00%)	7 (10.77%)	1 (1.54%)	4 (6.15%)	12 (18.46%)	65 (100.00%)
Injection Net-En	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
Injection DMPA	14 (9.46%)	19 (12.84%)	17 (11.49%)	20 (13.51%)	15 (10.14%)	9 (6.08%)	9 (6.08%)	16 (10.81%)	10 (6.76%)	19 (12.84%)	148 (100.00%)
IUCDs	2 (25.00%)	4 (50.00%)	1 (12.50%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	1 (12.50%)	8 (100.00%)
PP IUCD	2 (8.70%)	1 (4.35%)	1 (4.35%)	0 (0.00%)	1 (4.35%)	0 (0.00%)	0 (0.00%)	1 (4.35%)	7 (30.43%)	10 (43.48%)	23 (100.00%)
Implant	4 (7.41%)	28 (51.85%)	4 (7.41%)	4 (7.41%)	2 (3.70%)	0 (0.00%)	0 (0.00%)	3 (5.56%)	7 (12.96%)	2 (3.70%)	54 (100.00%)
PP Implant	54 (25.96%)	22 (10.58%)	17 (8.17%)	22 (10.58%)	18 (8.65%)	0 (0.00%)	0 (0.00%)	24 (11.54%)	10 (4.81%)	41 (19.71%)	208 (100.00%)
Tubal Ligation	46 (17.29%)	67 (25.19%)	39 (14.66%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	28 (10.53%)	32 (12.03%)	28 (10.53%)	26 (9.77%)	266 (100.00%)
Vasectomy	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
Counseling	53 (23.04%)	70 (30.43%)	15 (6.52%)	23 (10.00%)	23 (10.00%)	0 (0.00%)	0 (0.00%)	6 (2.61%)	17 (7.39%)	23 (10.00%)	230 (100.00%)

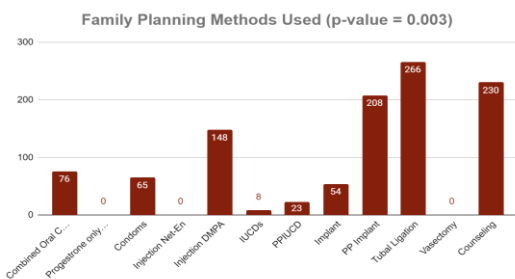


Figure 1. Frequency of Family Planning Methods Utilized by Women in the Postpartum

## DISCUSSION

Utilization of contraception methods is essential in order to reduce the burden of undesired pregnancies and for the promotion of health in women. A study conducted by Mahmood et al showed that only 13.8% of mothers used postpartum contraception. The study reported that the most common barrier in the use of contraception methods was the lack of knowledge, which was the case in 32.5% of the study population [10]. The association between a lack of education with unintended pregnancies was also found in a study by Tappis et al. According to the research, more than half of the women under study never attended school, while 20.9% and 23.6% of the population had a primary and secondary education respectively [11]. These findings were consistent with our study, and implies that there is a significant influence of a women's educational status on the use of contraception, as education instills awareness and understanding of the importance of contraception.

A study by Habib et al found that the most commonly utilized method of contraception was condoms (19%), followed by injectable (9.7%), the pill (9.6%) intrauterine devices (2.9%) and implants (2.5%) [12]. The results of the study were inconsistent with our findings, where the most commonly used method of contraception was tubal ligation. Tubal ligation provides a permanent and long lasting contraception, and has been known to be an effective method. This may be the reason why tubal ligation was the most popular contraceptive method in our study [13]. Our results indicated that the use of condoms was not popular among our study population. This may be associated with religious beliefs, reduced sexual pleasure, undesirable experiences, social stigma and a general fear. [14].

Our findings indicated that very few women visited the family medicine clinic for a follow up after their first consultation. This might be linked to a difficulty in accessing healthcare services. According to a study, easier access to family planning services is associated with a reduction in fertility and improves child spacing [15]. Thus, it is important that ease of access to healthcare is provided to women who desire to seek family planning initiatives.

A study by Casey et al reported that modern methods of sterilization were more popular among the younger women, such as those under 30 years of age [16]. This finding was consistent with our study, which noted that the majority of women from our study population belonged to the under 30 age group, and most of them opted for tubal ligation and modern methods of contraception. This finding

is further supported by Mahmood et al., which claimed that the use of contraception was most common among women under the age of 30 years [10]

The findings show that an economic disadvantage and a lack of education was associated with contraceptive use [11]. Therefore, it is important that efforts are made to improve awareness, especially in the high poverty areas of Pakistan.

## CONCLUSION

Utilization of family planning services by postpartum women with a child of less than 6 months old was not very satisfactory. Age, education level, and occupation were strong indicators of postpartum decisions of women utilizing family planning services in Pakistan. There is a dire need of promoting family planning among new mothers in Pakistan.

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