

# Family Planning Methods Utilization in Women of Reproductive Age

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## Abstract

**Objectives:** This study aimed to assess the level of knowledge and practices concerning Family planning (FP) utilization and its determinants among women within the reproductive age group in the population under study. **Study design:** Analytical cross-sectional study. **Place and Duration:** This study was conducted in Muhammad Medical College / Ibn-E-Sina University Mirpurkhas from May 2022 to 2023. Data was gathered from 250 participants who visited the outpatient department of the hospital. **Methodology:** A structured questionnaire was employed, and a nonprobability convenient sampling method was used for participant selection. Sociodemographic information, primarily pertaining to age, religion, educational status, occupation, and family income, was collected from participants. Data analysis was carried out using the Statistical Package of Social Sciences, version 26. **Results:** The study found that 182 (72.8%) women in the reproductive age group possessed knowledge about FP, while 137 (54.8%) practiced contraceptive methods. Among the participants, 142 (56.8%) acknowledged the effectiveness of contraceptive methods. The study revealed statistically significant associations between FP utilization practices and factors such as educational status, duration of marriage, knowledge, suitability, availability, number of children, husband support, and effectiveness of FP methods. The commonest sources of information on FP were FP centers and hospitals (40.8%), and the desire to conceive was the primary motivation (54%) for seeking FP services. **Conclusion:** The study concluded that there is a satisfactory level of knowledge about FP, but relatively low utilization of contraceptive methods among women in the reproductive age group. It is recommended that qualitative research approaches be utilized to gain deeper insights into women's perspectives and feelings regarding FP. Furthermore, further investigation into the reasons for the underutilization of FP services is warranted.

**Keywords:** FP, Contraceptive methods, Reproductive age group, Knowledge, Practices, Influencing factors

## 1. Introduction

FP represents a conscientious approach towards regulating childbirth intervals, contingent upon the awareness, knowledge, and individual attitudes conducive to making responsible decisions [1]. FP, within the sphere of sexual and reproductive health, concerns the capacity of women and men to select secure, efficacious, affordable, and socially acceptable fertility control methods through suitable healthcare services [2]. It stands as an efficacious primary preventive measure, mitigating maternal and infant morbidity and mortality [3]. Furthermore,

it aids in averting undesired pregnancies, abortions, and the spread of sexually transmitted diseases, thereby fostering security and socio-economic development [4].

The unmet demand for FP assumes critical importance in developing nations due to its significant prevalence [5]. Despite its substantial ramifications for economic advancement, there remains a pervasive need for access to contemporary FP techniques [6]. The proportion of reproductive-age women who refrain from using family planning services for the purpose of spacing or controlling childbirth continues to be notably high in developing nations [7].

Pakistan is among the countries facing the challenge of a 2 percent population growth rate [8]. The Ministry of Health in Pakistan has implemented several initiatives aimed at tackling unchecked population growth by improving the availability of family planning services within the country while simultaneously working to reduce mortality rates in mothers [9]. However, the efforts of the government are less effective in dispelling apprehensions among the population regarding the potential side effects of FP techniques [10].

Literature recognizes a number of factors, such as worries about complications, family support, service availability, ease of access, and knowledge of FP services, that contribute to people not using FP methods [11]. Underutilization of FP methods is often observed among younger women, those with limited educational attainment, and those possessing minimal knowledge of FP services [12]. Nonetheless, possessing a thorough understanding of family planning, which includes knowledge of contraceptive methods, does not automatically translate into their utilization [13]. Even though people are more aware of them, not many people use family planning services and birth control methods. This is a big problem for the public health progress of developing countries [14].

The purpose of this study is to find out how common and widely used FP methods and services are, how much people know and feel about using FP services, and what factors affect married women's use of contraception.

## 2. Methodology

This study is a descriptive and analytical cross-sectional investigation. This healthcare institution offers an array of maternity care services, encompassing FP consultations, childbirth services, pre- and postnatal care, malnutrition management, and Expanded Program of Immunization (EPI), among others.

A total of 400 individuals were initially enrolled in the survey, with some forms subsequently excluded due to insufficient or incomplete information. This exclusion led to a final sample size of 250 participants. The sampling methodology employed non-probability convenient (purposive) sampling to select reproductive-age women aged 19 or above.

To determine the sample size, we utilized the open Epi.com online sample size calculator, taking into account a 95% confidence level, an absolute precision of  $\pm 3\%$ , and an expected frequency of FP method utilization at 53.3%.

The Department assigned a staff member who had received specialized training in data collection procedures to collect and organize the data. The data collection process entailed approaching patients in the outpatient department (OPD) once they had completed their checkups. Those who granted informed consent and successfully completed the entire questionnaire were enrolled in the study. To evaluate family planning practices

among the participants, a questionnaire developed in-house was employed, informed by a comprehensive review of pertinent literature. Sociodemographic information, primarily pertaining to age, religion, educational status, occupation, and family income, was collected from participants. Data analysis was carried out utilizing the Statistical Package of Social Sciences (SPSS), Version 26.

## 3. Results

The study encompassed a sample size of 250 participants. The socio-demographic profile of these participants revealed that approximately 48.8% of them were aged between 26 to 32 years. The majority identified as housewives (90%) and reported a monthly household income of 30,000 PKR or more (74%). In terms of education, 34% were illiterate, 38% had completed primary education, 20% had reached the secondary school level, and 8% held higher qualifications. The participants' marriage durations predominantly fell within the 6 to 15-year range (64%), and 54.8% reported having 1-3 children, with 70% having no history of abortion or miscarriage.

Attribute	Data	Percentage
Age Group (years)	26-32	48.8
Occupation	Housewife	90
Monthly Income (PKR)	30,000 or more	74
Education Level	Illiterate	34
Marriage Duration (Years)	6-15	64
Number of Children	1-3	54.8
Abortion/Miscarriage History	No History	70

When it comes to FP knowledge and practices, the study found that 72.8% of participants possessed knowledge related to FP and contraceptive methods. Among the participants, 54.8% reported utilizing FP/contraceptive methods, with 56.8% acknowledging their effectiveness and 54% expressing a willingness to recommend them to others. 32% of the participants preferred barrier methods in terms of convenience, such as condoms, diaphragms, and cervical caps. Furthermore, 58% of the women reported spousal support for FP and contraceptive use. Accessibility (60.8%) and the availability of FP services with female consultation (44%) were also notable factors.

Aspect	Percentage
Knowledge of FP/Contraceptives	72.8
Utilization of FP/Contraceptives	54.8
Acknowledge Effectiveness	56.8
Willingness to Recommend	54
Preferred FP Methods (Barrier method)	32
Spousal Support	58
Accessibility	60.8
Availability with Female Consultation	44

Participants with good FP knowledge were more likely to practice FP ( $p$ -value  $< 0.001$ ). FP practice was associated with acknowledging method effectiveness, spousal support, and accessible

female consultation services ( $p$ -value  $<0.001$ ). Educational status and the number of children also influenced FP practices and method effectiveness.

**Table 3: Factors Influencing FP Practices**

Factors	Association with FP Practice (p-value)
Good Knowledge of FP	$<0.001$
Acknowledgment of Effectiveness	$<0.001$
Spousal Support	$<0.001$
Availability with Female Consultation	$<0.001$
Accessibility	$<0.001$

Concerns about assurance (18.8%) came in second place when it came to factors that discourage family planning practices, with a desire to have more children (54%). Additionally, participants reported factors such as objections raised by the family (8%), intolerance of side effects (10%), economic constraints (4.4%), and fear of complications (4.8%) as contributing to discouraging family planning practices.

**Table 4: Factors Discouraging FP Practices**

Factors	Percentage
Planning to have more conceptions	54
Lack of guarantee	18.8
Intolerance to Side Effects	10
Objection raised by the Family	8
Fear of Complications	4.8
Unaffordability	4.4

Primary sources: FP centers/hospitals (40.8%), followed by media (24%), friends/relatives (16%), lady health visitors (12%), and brochures/pamphlets (7.2%).

**Table 5: Sources of FP Information**

Information Source	Percentage
FP Centers and Hospitals	40.8
Friends and Relatives	16
Media	24
Home Visits by Health Visitors	12
Brochures and Pamphlets	7.2

The findings of this study contribute to our understanding of the complex factors that influence FP practices among married women, with a sample size of 250, providing crucial insights for public health.

## 4. Discussion

FP knowledge of contraceptive methods serves as a fundamental indicator for assessing the status and effectiveness of FP programmes [15]. In Pakistan, considerable efforts have been made at the primary healthcare level to enhance the availability and accessibility of FP programmes on a national scale. However, these efforts face challenges due to insufficient knowledge, unfavourable attitudes, and suboptimal contraceptive practices [16].

In this study, sociodemographic factors, such as age, educational status, number of children, and duration of marriage, were significantly associated with FP practice scores. Additionally, the study highlighted the significant influence of suitability, knowledge,

effectiveness, availability of FP methods, and spousal support on FP practices.

Nearly half of the enrolled women in this study fell within the age group of 26–32 years, which closely aligns with findings from an Iraq-based study. Nevertheless, variations in research findings have been observed in relation to different age groups, reflecting methodological and regional differences. A substantial majority of the participants in this study had received no formal education or had education up to the primary level. However, the study revealed a lower level of educational attainment among the participants. Generally, it is recognised that women's educational status significantly influences awareness, information about FP methods, and their availability [17]. The current study found that, regardless of their lower educational status, a significant proportion of participants possessed knowledge about FP methods, with half of them utilizing FP practices. This may be attributed to the realization among those with lower education that FP services can be beneficial for financial control and building confidence in marital relationships, including discussions about family size and contraceptive use. The study revealed a significant association between FP practices and the effectiveness of services. Cultural factors and availability were the main determinants of contraceptive method choice. In this study, intrauterine devices and hormonal methods were the next most frequently used contraceptive methods after barrier methods. This prevalence was comparable to studies in Cameroon and Iraq [18].

The duration of marriage and the number of children were also found to be associated with FP practices. Participants who had been married for a shorter duration and had at least one child were more likely to use FP practices. This is likely because those with longer marriage durations and existing children may have a better understanding of FP services related to women and child health and find them economically useful.

While the majority of participants acknowledged the advantages of contraceptive use, several factors emerged as reasons for non-use. These factors included the desire to have more children, a lack of assurance, intolerance of side effects, objections from family members, concerns about potential side effects, and economic constraints. Notably, these findings align with similar observations in other studies.

The most prevalent factor leading to the non-use of family planning services was the desire to conceive for the purpose of expanding the family, consistent with previous research findings. Although concerns about side effects and post-use complications were identified as significant determinants, fewer participants mentioned fear of side effects in this particular study. Economic barriers were reported less frequently, possibly attributed to the fact that a majority of women in the study had a monthly household income of 30 thousand PKR or more.

The primary sources of information for FP in this study were FP centres and hospitals, followed by the media, friends, and relatives. This aligns with

research indicating that the media plays a significant role in women's decision-making regarding FP methods for contraception. Overall, the study revealed a positive and favourable attitude towards FP, consistent with previous research, which may be attributed to the urban setting with adequate availability and accessibility of FP services, even among participants with lower educational levels.

## 5. Conclusion

The study revealed satisfactory FP knowledge but low utilization rates among participants. Factors influencing FP practices included education, number of children, marriage duration, knowledge, method availability, spousal support, effectiveness, and suitability. To promote FP, well-planned strategies should be implemented at all healthcare levels, addressing awareness and access. Additionally, qualitative research can provide deeper insights into women's attitudes and perceptions, aiding in the development of more effective programmes and policies.

## 6. Funding Statement

This study was conducted without financial support or funding from any external sources.

### Conflict of Interest

There was no conflict among the interests of the authors.

## 7. Ethical Approval

The study obtained approval from the ethical committee before its initiation, ensuring adherence to ethical standards and principles.

## References

Maghsoudi LH, Pak H, Pourkazem K, Tajik A, Jamalpour Z, Bagherpour JZ. Investigation of various therapeutic approaches and advertisement of their applications in patients with granulomatosis with polyangiitis.

Veesar GY, Lashari T, Fida R, Veesar MA. Benefits, anxieties, acceptance, and barriers to the new injectable contraceptive DMPA-SC (Sayana Press): Clients' perceptions in Sindh, Pakistan. *Gates Open Research*. 2023 May 9;7(66):66.

Shams G, Ashraf N, Moon T, Sajjad N, Waseem M. Effectiveness of Antenatal Counselling in Increasing the Acceptability and Insertion of Postpartum IUCD in Postpartum. *Pakistan Journal of Medical & Health Sciences*. 2023 Mar 6;17(02):102-.

Channon MD. Son preference and family limitation in Pakistan: A parity-and contraceptive method-specific analysis. *International perspectives on sexual and reproductive health*. 2017 Sep 1;43(3):99-110.

Azmat SK, Mustafa G, Hameed W, Ali M, Ahmed A, Bilgrami M. Barriers and perceptions regarding different contraceptives and FP practices amongst men and women of reproductive age in rural Pakistan: a qualitative study. *Pakistan Journal of Public Health*. 2012;2(1):17.

Azmat SK, Marleen T, Moazzam A. Accessibility and uptake of modern contraceptive methods in Pakistan—a critical view on what works. *The Journal of the Pakistan Medical Association*. 2021 Nov 1;71(11):20-32.

Nishtar NA, Sami N, Alim S, Pradhan N. Determinants of contraceptives use amongst youth: an exploratory study with FP service providers in Karachi Pakistan. *Global journal of health science*. 2013 May;5(3):1.

Khan A, Shaikh BT. An all time low utilization of intrauterine contraceptive device as a birth spacing method—a qualitative descriptive study in district Rawalpindi, Pakistan. *Reproductive health*. 2013 Dec;10:1-5.

Azmat SK, Ali M, Ishaque M, Mustafa G, Hameed W, Khan OF, Abbas G, Temmerman M, Munroe E. Assessing predictors of contraceptive use and demand for FP services in underserved areas of Punjab province in Pakistan: results of a cross-sectional baseline survey. *Reproductive health*. 2015 Dec;12(1):1-0.

Zaidi B, Hussain S. Reasons for low modern contraceptive use—Insights from Pakistan and neighboring countries.

Maqbool S, Shan H, Qureshi I, Shaheen L. Barriers to use contraceptive methods among post abortion clients in Sargodha, Pakistan: A qualitative study. *Malaysian Journal of Public Health Medicine*. 2022 Apr 28;22(1):220-6.

Fazal ZZ, Zeeshan NU, Moin G, Bachlany A, Shafiq Y, Muhammad A. Client-centered counseling and facilitation in improving modern contraceptive uptake in urban slum of Karachi Pakistan. *PloS one*. 2023 Jul 31;18(7):e0289107.

Khan A, Qureshi M, Daniyal M, Tawiah K. Impact of Sociocultural Factors on Contraceptive Use: A Case Study of Pakistan. *BioMed Research International*. 2022;2022.

Atif K, Afsheen A, Naqvi SA, Niazi SA, Khan HU. Trends of contraception among ladies of local population in Pakistan; why, how, when and what?. *Pakistan journal of medical sciences*. 2016 May;32(3):751.

Marvi K, Howard N. Objects of temporary contraception: an exploratory study of women's perspectives in Karachi, Pakistan. *BMJ open*. 2013 Jul 1;3(8):e003279.

Baqai S, Siraj A, Urooj U, Noor N, Tariq H, Khan S. CONTRACEPTIVE PREFERENCES AND IMPROVED QUALITY OF LIFE. *Pakistan Armed Forces Medical Journal*. 2021 Jun 29;71(3):762-66.

Niaz Hussain Keerio, Nuresh Kumar Valecha, Nasrullah Aamir, Syed Shahid Noor. Knowledge and Awareness of Osteoporosis in Female Population of Hyderabad, Pakistan. *JPOA [Internet]*. 2020 Sep. 22 [cited 2021 Sep. 30];32(02):97-101.

Shah NZ, Ali TS, Jehan I, Gul X. Struggling with long-time low uptake of modern contraceptives in Pakistan. *Eastern Mediterranean Health Journal*. 2020;26(3):297.