

# Knowledge Attitude and Practices about Family Planning Methods among Postpartum Mothers and Challenges Faced by the Service Providers at a Tertiary Care Hospital: A Mixed Method Study

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## Abstract

**Background:** According to the fifth National Family Health Survey (NFHS-5), only 66.7% of married women were using family planning methods. In addition, there are numerous obstacles faced by the family planning unit service providers in making beneficiaries utilize these services.

**Objectives:** To assess the Knowledge, Attitude, and Practices about family planning methods among postpartum mothers. To explore the challenges faced by the service providers of family planning unit.

**Methodology:** Study design: Facility-based mixed method study

Quantitative part: A cross-sectional study was conducted in the postpartum ward of KGH, Visakhapatnam among 156 mothers by convenient sampling technique using a pre-tested semi-structured interview schedule.

Qualitative part: The service providers of family planning unit of KGH, Visakhapatnam were interviewed using an in-depth interview guide.

**Results:** The Knowledge and Practices regarding family planning methods among postpartum mothers is 81.4% & 48.7% respectively, the most common reason for non-usage being want for children. Service providers faced challenges related to counselling, service, and infrastructure in the health care facility.

**Conclusion:** This study emphasizes that knowledge regarding family planning methods need not necessarily result in their usage.

**Keywords:** challenges, family planning methods, postpartum mothers.

## Introduction

Family planning is a way of thinking and living that is adopted voluntarily, upon the basis

of knowledge, attitudes, and responsible decisions by individuals and couples, to promote the health and welfare of the family group and thus contribute

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effectively to the social development of a country.<sup>1</sup> In 1952, India became the first nation in the world to introduce a National Programme for Family Planning. The plan is now being realigned to meet population stabilisation targets as well as to enhance reproductive health and reduce maternal, neonatal, and child mortality and morbidity. Over the years, the plan has changed in terms of policy and actual programme execution.<sup>2</sup> The service providers of the family planning unit consider the pregnancy and postpartum periods to be excellent for counselling women on the adoption of family planning methods due to the woman's frequent interaction with the health system over a reasonably lengthy period.<sup>3</sup>

The informed choice and utilization of various family planning methods by postpartum mothers is important. Despite the availability of a variety of family planning methods during the postpartum period, female sterilization remains the most common method used by married women.<sup>4,5</sup> Globally the usage of modern contraceptives among women rose from 35% in 1990 to 45% in 2021, with Eastern and Southeast Asian regions witnessing the highest percentage of usage.<sup>6</sup> According to the Fifth National Family Health Survey (NFHS-5), 66.7% of married women use any type of family planning method with 56.5% using modern methods.<sup>7</sup>

However, the landscape of family planning services is not without its challenges where the healthcare service providers are at the forefront of delivering accurate information and counseling to postpartum mothers. These challenges encompass a range of issues, from limited resources and high patient volumes to the need for specialized expertise and evolving societal norms. Understanding and addressing these challenges is paramount to ensure that individuals and families have access to the quality family planning care they deserve within the complex healthcare ecosystem of a tertiary care hospital. By shedding light on these issues, we hope to contribute to the ongoing efforts to improve family planning services within tertiary care hospitals, ultimately enhancing the overall quality of reproductive healthcare for the communities they serve.

## Objectives:

1. To assess the Knowledge, Attitude, and Practice about family planning methods among postpartum mothers.
2. To explore the challenges faced by the family planning unit service providers.

## Materials and Methods

A facility-based mixed-method study was conducted from August to September 2023 in a government tertiary care hospital in Visakhapatnam.

A cross-sectional study was conducted among postpartum mothers in the postpartum ward of King George Hospital (KGH), Visakhapatnam. According to a previous study, 89%<sup>8</sup> of the participants practised family planning. By using the formula  $4pq/l^2$  [I(absolute error)= 5%] the sample size was calculated as 156. All the mothers who gave consent were included and women who had abortions were excluded. A convenient sampling technique was used to select the mothers. The mothers were interviewed using a pre-tested semi-structured interview schedule, that consisted of information related to sociodemographic characteristics, obstetric history, and questions related to their knowledge, attitudes, and practice about family planning methods. The updated BG Prasad scale for 2023 was used for socioeconomic status. Data was entered into an MS Excel spreadsheet and analysed using IBM SPSS version 25. Frequencies and percentages were done. To study the association of various sociodemographic variables with knowledge and practice Chi-Square test was done. A P-value of <0.05 was considered to be significant.

For the qualitative part, the service providers of the family planning unit of KGH, Visakhapatnam were interviewed. Service providers, involved in health care and counselling services were included whereas technical staff were excluded. After informing the participants about the study's objective and obtaining their consent, interviews were performed using an interview guide<sup>9</sup>. Each interview lasted between 15 and 20 minutes. Every interview was conducted in Telugu or English language, depending on the participant's preference, and was audio recorded using a recorder. A total of eight key informant interviews were done till data saturation

was reached. The interviews were done directly by the principal investigator, who had training in conducting interviews. A manual thematic analysis was done. Data obtained was first transcribed into Telugu and English language and then translated into English from which codes were identified. Following that categories and themes were derived.

Written informed consent was taken from all the study participants. Ethical clearance was obtained from the Institutional Ethics Committee, Andhra Medical College, Visakhapatnam. (Serial no:196/IEC AMC/AUG 2023).

### Results

A total of 156 postpartum mothers have participated in the study. The mean age of the study population is  $23.81 \pm 2.89$  years. Majority (52.6%) of the women were married after the age of 20 years and 84 (53.8%) mothers were primi.

**Table 1: Sociodemographic characteristics of the study participants (n=156)**

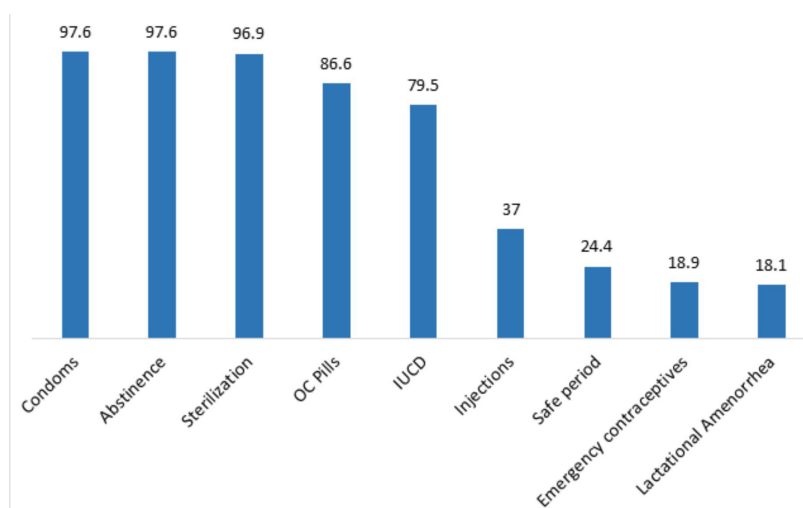
Variables	n (%)
<b>Age (Years)</b>	
≤20	29 (34.5)
≥21	127(65.5)
<b>Religion</b>	
Hindu	123 (78.8)
Christian/ Muslim	33 (21.2)

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<b>Education</b>	
Educated	143 (91.7)
Uneducated	13 (8.3)
<b>Occupation</b>	
Employed	39 (25)
Unemployed	117 (75)
<b>Place of residence</b>	
Rural	67 (42.9)
Urban	79 (50.6)
Tribal	10 (6.5)
<b>Type of family</b>	
Nuclear	62 (39.7)
Three generation/Joint	94 (60.3)
<b>Socio economic status</b>	
Upper	21 (13.5)
Upper middle	33 (21.1)
Middle	76 (48.8)
Lower middle	16 (10.2)
Lower	10 (6.4)

### Knowledge regarding family planning methods:

Out of 156 study participants 127 have heard about family planning methods. The source of information for 84.3% among study participants was family/friends followed by 81.9% from healthcare workers, 77.2% from doctors, and 22.8% from social media.



**Fig 1: Knowledge regarding various family planning methods [(n=127)%] (multiple response answers)**

The majority of the study participants knew (98.4%) they could access these services from tertiary care hospitals, followed by private hospitals (97.6%), subcentres/PHCs (88.2%), CHCs (72.4) and medical shops (29.1%).

**Attitudes regarding family planning methods:**

In this study, 88% of women agreed that contraceptives should be used to limit the number

of children while 3.8% of women agreed it is a sin to use family planning. 37.9% of women disagreed when asked if they would encourage their friends to use family planning methods. 58.9% of the study participants agreed that usage of contraceptives causes infertility in the future which is in line with the reason for not using family planning methods as side effects.

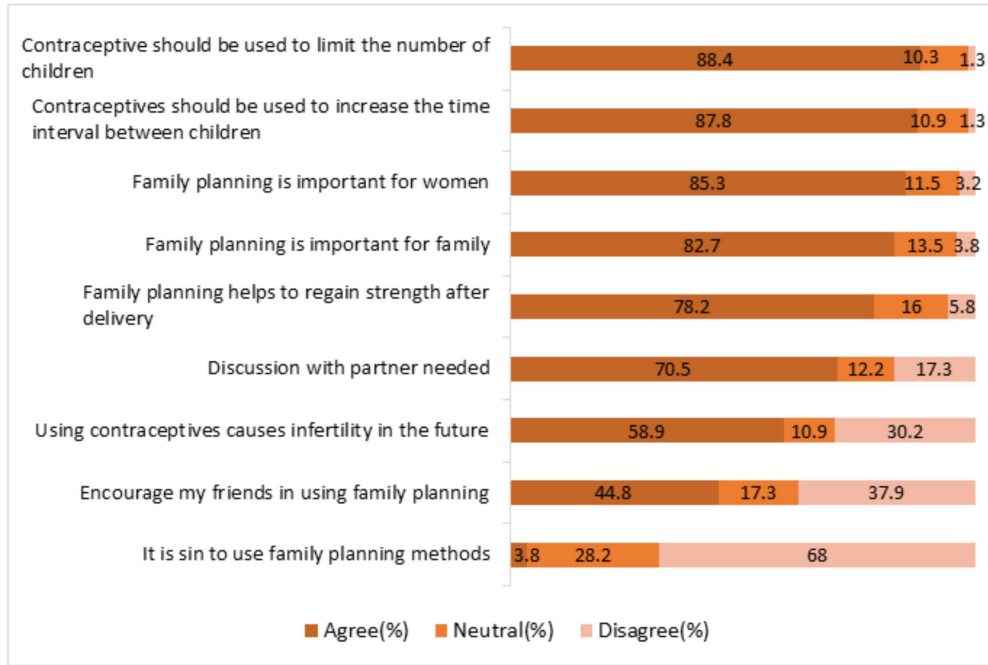


Fig 2: Attitudes regarding Family planning methods among postpartum mothers (n=156)

**Practice of family planning methods:**

Among 156 study participants, only 76 (48.7%) had used family planning methods. The most common method practiced by the study participants was abstinence (76.3%), followed by IUCD (44.7%), condoms (18.4%),

and oral contraceptive pills (1.3%). In this study, 80 (51.3%) study participants have not practiced any family planning method. The reasons for not using family planning methods (Fig 3).

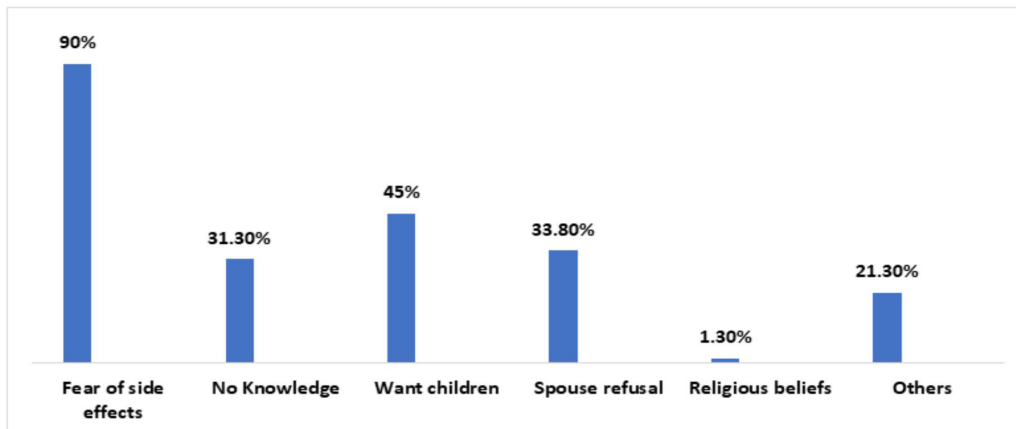


Fig 3: Reasons for not using family planning methods: (n=80) (multiple response answers)

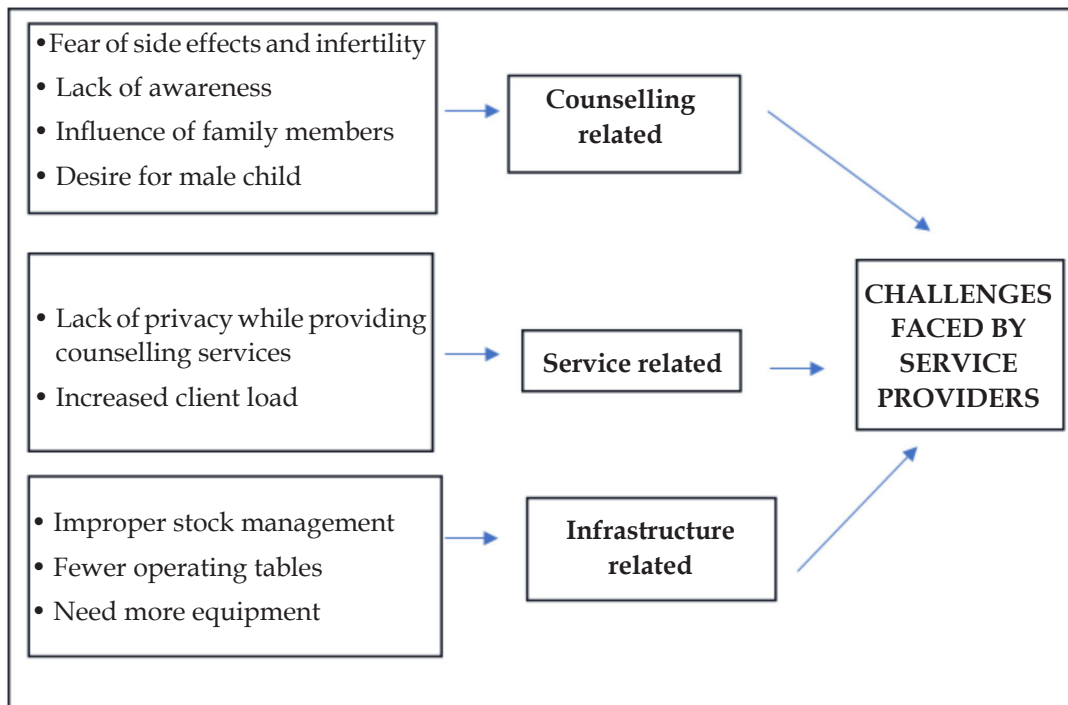
For 77.6% of the study participants the reason for using contraceptives was advice from health care workers followed by child spacing (73.7%) and to improve the health of the mother and child (43.4 %).

**Table 2: Socio-demographic characteristics and their association with knowledge and practices of various family planning methods among the study population (n=156)**

Characteristics (n=156)	Knowledge			Practice		
	Present (%)	Absent (%)	P-value	Used (%)	Not used (%)	P-value
Age (Years)						
≤20	13 (44.8)	16(55.2)	0.001*	2 (6.9)	27(93.1)	0.001*
≥21	114(89.7)	13(10.3)		74(58.2)	53(41.8)	
Religion						
Hindu	99(80.4)	24(19.6)	0.567	62(50.4)	61(49.6)	0.415
Christian/ Muslim	28(84.8)	5(15.2)		14(42.4)	19(57.6)	
Education						
<b>Educated</b>	117(81.8)	26(18.2)	0.710	65 (45.4)	78(54.6)	0.008*
<b>Uneducated</b>	10 (76.9)	3(23.1)		11 (84.6)	2(15.4)	
Occupation						
Employed	34(87.1)	5(12.9)	0.285	23(58.9)	16(41.1)	0.139
<b>Unemployed</b>	93(79.4)	24(20.6)		53(45.2)	64(54.8)	
Place of residence						
Rural	54(80.5)	13(19.5)	0.160	32(47.7)	35(52.3)	0.377
Urban	67(84.8)	12(15.2)		37(46.8)	42(53.2)	
<b>Tribal</b>	6(60)	4(40)		7(70)	3(30)	
Type of family						
<b>Nuclear</b>	50(80.6)	12(19.4)	0.842	28(45.1)	34(54.9)	0.470
<b>Three generation/Joint</b>	77(81.9)	17(18.1)		48(51.1)	46(48.9)	
Socio economic status						
Upper	16(76.1)	5(23.9)	0.842	11(52.3)	10(47.7)	0.885
Upper middle	27(81.8)	6(18.2)		14(42.4)	19(57.6)	
Middle	63(82.8)	13(17.2)		37(48.6)	39(51.4)	
Lower middle	12(75)	4(25)		8(50)	8(50)	
Lower	9(90)	1(10)		6(60)	4(40)	

It was observed that mothers aged above 21 years had higher knowledge regarding family planning methods when compared to those below 20-years

mothers. Age (≥ 21 years) and education of the study participants were significantly associated with the usage of family planning methods.

**Qualitative part:****Challenges faced by the service providers****Fig 4: Challenges faced by family planning unit service providers**

Service Providers described various challenges related to counselling, services, and infrastructure (Fig 4). Lack of awareness about family planning methods among the mothers was one of the service-related challenges as described in Fig 4. This finding is in line with the knowledge of the mothers about various family planning methods (18.6%) in the present study. Fear of side effects is another challenge. This study shows that, among the 81.1% of mothers who had never used any family planning method in the past, 90% of them cited fear of side effects as their main reason. In a statement given by one of the service providers, it was said that:

*“They have fears. They say that IUCD will go somewhere in the body, it will reach the heart. They have also the fear of not getting pregnant after the stoppage of these methods.”*

**Discussion**

The mean age of the postpartum mothers in the present study was  $23.81 \pm 2.89$  years. In a study conducted by Singh et al.,<sup>10</sup> the mean age was 30.5 years.

In our study, 81.4% of the study participants have knowledge regarding family planning methods. The study conducted by Sah et al. in Nepal showed that it was 83.5%<sup>11</sup> in Qazi M et al. it is 94%<sup>12</sup> and 98% in a study conducted by Prachi et al.<sup>13</sup> This low level of knowledge in comparison to other studies could be attributed to cultural barriers, and inadequate education during the antenatal period. The hesitancy of the mothers to talk about family planning methods could also be one of the reasons. Educating mothers from initial stages of their antenatal period about the significance of usage of family planning methods can help achieve a better understanding and acceptance of various methods as it is the most receptive period by both mothers and their families.

In the present study majority of them knew about condoms (97.6%) and abstinence (97.6%), followed by sterilization (96.9%), oral contraceptive pills (86.6%), and Intrauterine contraceptive devices (79.5%) with the least known being Injectables (37%). The practice observed was 18.4% for condoms, 76.3% for abstinence 1.3% for OC pills and 44.7% for IUCDs. High knowledge was found for condoms and least for Injectables in similar studies done by Singh et al.,<sup>10</sup>

and Qazi et al.<sup>12</sup>. In the present study, 48.7% of the study participants have practiced family planning methods compared to 32.8%, 33.4%, 37.5%, and 60% in Joshi et al., Murry et al., Singh A. et al., and Quazi M et al. respectively.<sup>10,12,14,15</sup>

Knowledge among the study participants regarding various family planning methods is good but it has not been translated into practice. This is impeded by several variables, including fear of adverse effects, ignorance, refusal by spouses and family members, and religious beliefs.

In the present study around 88% of the study participants felt that contraceptives are useful to limit the number of children, to increase the time interval between pregnancies and 78% agreed that it helps to regain strength after delivery. In a study conducted by Prachi et al.,<sup>13</sup> 98% agreed that it is beneficial to use contraceptives and 93.2% have said that they would encourage their friends and relatives in using family planning methods where as it was only 44.8% in the present study. 70.5% of the postpartum mothers felt that partner discussion is needed compared to only 15.4% in a study done by Singh A et al.<sup>10</sup> 3.8% of study participants believed that using family planning was sinful. In a study conducted by Murry et al.,<sup>15</sup> the median response to the question "My religion forbids me from using family planning" was 2. We can offer effective counselling services and achieve favourable outcomes provided that there is a less negative attitude towards family planning options.

Our study identified challenges such as lack of knowledge, and fear of side effects which were similar to a study done by Akers et al.<sup>16</sup>. Lack of appropriate knowledge related to various family planning methods leads to fear of side effects, which make them think that they cause harm to the mother or at sometimes make it difficult to become pregnant again or may make them infertile.

### Conclusion

Present study concludes that 81% of postpartum mothers were knowledgeable and majority had a positive attitude. 48.3% used family planning methods, citing fear of side effects and desire for more children as barriers to usage. Our study highlights

that knowledge and awareness don't always lead to the use of contraceptives. Various challenges identified by the service providers were related to infrastructure, services, and counselling.

### Recommendations:

Health care workers such as ASHAs and Auxiliary Nurse Midwives, are crucial in advancing community knowledge and practice of family planning techniques. Enhance health literacy by addressing fear of side effects and promoting planned pregnancy spacing, especially on specific days like the village health and nutrition day or during their home visits to educate both the family members and the mother. Family planning methods should be fully explored to ensure the commitment of the spouse, family, and community. In the postpartum period, diverse requirements for family planning can be met and misconceptions can be dispelled with the support of prompt and specific behaviour change communication and counselling approaches. Conduct periodic training programs for the service providers in various already existing and new techniques and evaluations of existing infrastructure and facilities will help increase the utilization rates.

**Conflict of interest:** Nil

**Funds:** Nil

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