

ORIGINAL RESEARCH

Knowledge, Attitude and Practice of family planning among postnatal mothers delivering in a tertiary care centre in south India

¹Rose Jay, ²Dr. Nalam Middleton A

¹Dr. Somervell Memorial CSI Medical College, Karakonam, Kerala, India

²Assistant Professor, Department of Community Medicine, Dr. Somervell Memorial CSI Medical College, Karakonam, Kerala, India

Corresponding Author

Dr. Nalam Middleton A

Assistant Professor, Department of Community Medicine, Dr. Somervell Memorial CSI Medical College, Karakonam, Kerala, India

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ABSTRACT

Introduction: Postpartum family planning is the initiation and use of family planning services within one-year post childbirth to prevent accidental and closely spaced pregnancies ¹. Different researches have established that many postpartum women have an unmet need for contraception and that much of these unmet needs fall within the postpartum period ². Women, their children, and the community, benefit from the use of proper family planning. This study aims to assess the knowledge, attitude and practice of family planning among postnatal mothers in a tertiary healthcare centre in South Kerala.

Objectives

- To assess the knowledge, attitude and practice of family planning among postnatal mothers delivering in a tertiary healthcare centre in South India.
- To determine the factors influencing knowledge, attitude and practice of family planning among the subjects in a tertiary healthcare centre in South India.

Methodology: A hospital based cross-sectional study was conducted among 100 postnatal mothers in postnatal OBG department wards of Dr. Somervell Memorial CSI Medical College, Karakonam, Trivandrum, Kerala. Data was collected via face-to-face interviews using a semi structured questionnaire adapted from previous studies and validated with the help of expert in the field and was pilot tested in 5% of the patients. **Result:** 53% of postnatal mothers had good knowledge on family planning. 93% of the study participants had a good attitude towards the use of family planning. However, a vast majority of the study participants (81%) showed poor practice. Most mothers who were graduates or had professional degree had good knowledge. So did the mothers who were working women. Spouses with good education were also seen as having a direct relationship with good knowledge score. **Conclusion:** Majority of the postnatal mothers (53%) have adequate knowledge regarding family planning and can be attributed to good education of mothers, education of spouse/partner and working women. It can also be derived that although the attitude towards use of family planning is good, the practice of good family planning is very poor.

Key words: Postpartum family, postnatal, tertiary care, postnatal mothers, postpartum period

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INTRODUCTION

The period after childbirth, known as the postpartum period, is a crucial time for women to access family planning services to prevent mistimed and closely spaced pregnancies. Closely spaced pregnancies, defined as pregnancies occurring within 24 months of the previous birth, can lead to a higher risk of maternal morbidity and poor infant health outcomes such as preterm birth, low birth weight, and stunted

growth³. Additionally, maternal death rates increase with parity, making proper family planning critical for maternal health. Contraceptives can help prevent unintended pregnancies and avert a significant percentage of maternal mortality⁴.

Proper family planning has numerous benefits for women, their children, and the community. However, women must have access to healthcare services in the postpartum period to avoid unintended pregnancies

using contraceptives. Delayed initiation of contraceptive use in this period can increase the risk of unplanned pregnancies, as pregnancy can occur as early as 45 days after giving birth, before the onset of menses. Therefore, the World Health Organization recommends initiating postpartum contraceptive utilization within six weeks after delivery⁵.

Women need to have a proper understanding of different contraceptive methods, including their choice and initiation time in the postpartum period, to prevent unwanted pregnancies effectively. Several factors, such as literacy levels, religious beliefs, fertility preferences, negative perceptions of modern contraceptive methods, and decreased involvement of the husband in family planning, may influence a woman's decision to use family planning. Low socioeconomic status and religious views that children are "God's gift" and using contraceptives is against religious teachings can create barriers to family planning access⁶. The dynamics of decision-making between a husband and wife can also create barriers to access to family planning. Studies have shown that social and cultural factors, such as the involvement of the mother-in-law and the husband in decision-making regarding family planning, can influence contraceptive use⁷.

Studies have indicated that the lowest utilization of contraceptives is observed in sub-Saharan African countries, mainly due to a low level of knowledge. Lack of knowledge on contraception and accessibility to contraceptive methods are potential barriers in developing nations⁸. India, for instance, launched its family planning program in 1952, but after more than 60 years, the use of modern contraceptives has not changed significantly. In India, around 65% of women have an unmet need for family planning in the postpartum period, with only 26% of them using any contraception in the postnatal period⁹.

Around two-thirds of women would like to avoid pregnancy in the first year after delivery but are not on any postpartum contraceptive method, leading to no spacing between pregnancies, abortions, maternal morbidities like abruptio placenta and placenta previa, and infant morbidities such as prematurity, low birth weight, and stunting¹⁰. Spacing pregnancies at least two years apart can avert around 21% of deaths in children aged 1 to 4 years globally¹¹. Hence, good knowledge about family planning methods is indispensable for a healthy community. Good knowledge can promote the uptake and utilization of postpartum modern contraceptives.

Several studies have aimed to assess the knowledge and factors associated with postpartum contraceptive usage among women in the postpartum period. These findings help design appropriate interventional strategies to fight against unsatisfactory demands for family planning services, contributing to the reduction of maternal and infant morbidity and mortality rates. Failure to plan a pregnancy can also adversely affect the health of the family as a whole¹².

Study conducted in Maharashtra has found that contraceptive acceptance is higher among females belonging to the middle socioeconomic class, nuclear families, and those married after 18 years of age⁶. The types of contraceptives used include condoms, intrauterine devices (IUDs) and lactational amenorrhea, with the highest percentage.

Assessment of Knowledge regarding family planning among postnatal mother will help improving maternal health and child survival, reducing the number of abortions, empowering women, promoting social and economic development and security.

AIM AND OBJECTIVES OF THE STUDY

- To assess the knowledge, attitude and practice of family planning among postnatal mothers delivering in a tertiary healthcare centre in South India.
- To determine the factors influencing knowledge, attitude and practice of family planning among the subjects in a tertiary healthcare centre in South India.

METHODOLOGY

This study was designed as a hospital-based cross-sectional study conducted in the postnatal OBG department wards of a tertiary care hospital, Dr. Somervell Memorial CSI Medical College, Karakonam, Trivandrum, Kerala. The study period lasted for 2 months after obtaining approval from the Institutional Ethics Committee, with data collection taking place from September 2022 to November 2022. The study subjects were postnatal mothers who delivered in the hospital. The inclusion criteria were mothers above the age of 18 who delivered in and were admitted to the hospital and individuals who gave consent. The exclusion criteria were mothers who were critically ill and unable to communicate during the data collection period.

The sample size was calculated as 100, using a reference study conducted among mothers attending postnatal clinics in Pokhara to assess knowledge on family planning in postnatal mothers. The sampling technique used was universal sampling, where all patients delivering in the tertiary care hospital were included until the sample size was achieved. It took around 2 months to cover the required sample size.

Data collection was conducted via one-to-one interviews using a pre-designed semi-structured questionnaire after 24 hours and within 3 days post-delivery. The questionnaire was adapted from previous studies and validated with the help of an expert in the field and was pilot tested in 5% of the patients. The questionnaire assessed postpartum family planning knowledge, attitude and practice and had a sociodemographic section and a knowledge, attitude and practice on family planning accessing section. If participants were able to answer 50% of the questions correctly, they were marked as having good family planning knowledge, attitude, and practice

under the respective sections. Patients and their caregivers were educated on the importance of family planning and adequate permissions were taken before data collection. All collected data was entered into Microsoft Excel

2021, Analysis was done using trial version of SPSS Statistical Package, with quantitative data expressed in mean and standard deviation and qualitative data expressed as frequencies and percentages along with appropriate tests of significance.

RESULTS

The mean age of the study population was 26.8years.

Table 1: Sociodemographic profile of the participants

	Frequency	Percent
Rural vs urban		
Rural	77	77.0
Urban	23	23.0
Educational status of the participant		
Graduate	48	48.0
High school	24	24.0
Middle School	1	1.0
Professional degree	27	27.0
Religion		
Christian	66	66
Hindu	28	28
Muslim	6	6
Occupation of the participant		
Clerical/shop/farm	1	1.0
Professional	17	17.0
Semi Professional	10	10.0
Semi-skilled worker	1	1.0
Skilled worker	5	5.0
Unemployed	65	65.0
Unskilled	1	1.0
Educational status of spouse		
Graduate	23	23
High school	32	32
Intermediate/diploma	17	17
Middle school	4	4
Professional degree	24	24
Number of pregnancies		
1	37	37
2	52	52
3	9	9
4	2	2

67% of study participants never used any contraceptives, and the most popular choice was condoms followed by copper T and Oral Contraceptive Pills.

73% of the participants said that they had easy availability of contraceptives in their locality, 90% of

study participants spent less than 1000 rupees for contraceptives in a month. 17% of those who had used contraceptives in the past had contraceptive failures at least once. 28% of the participants felt that they were pressurized by the family to have kids which led to abandoning the contraceptive use.

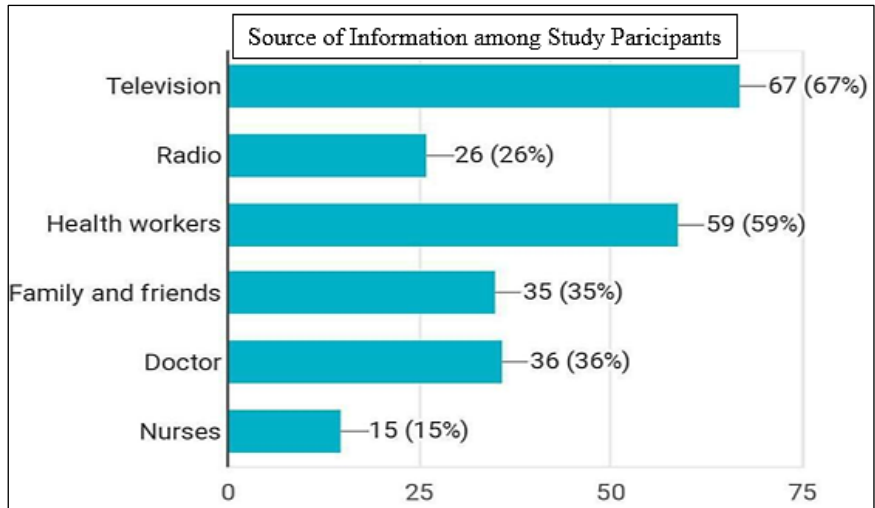


Figure 1

The majority of postnatal mothers prefer a 2-3-year time gap between pregnancies to provide better nursing and care to the child. 80% of postnatal mothers believe that contraceptives are available in government hospitals. Male condoms are the most widely known method of contraception, followed by intrauterine devices (IUDs), particularly Copper T. However, many study participants are unaware of cervical caps as a contraceptive method. A significant number of participants are not aware of possible side effects of IUDs and birth control pills. The majority of study participants are interested in learning more about family planning and are familiar with permanent methods of contraception. Among the permanent methods, Female sterilization is perceived to be safer and easier than male sterilization. The most effective methods of contraception according to the participants are condoms and Copper T, next to the

permanent methods. Many study participants are not aware of lactational amenorrhea. The purpose of family planning is perceived to be to avoid unwanted pregnancies, maintain reproductive health status, and prevent STDs. 91% of study participants believe family planning is important, with 69% showing interest in using it in the future. The majority of participants do not believe religious beliefs affect their opinions on family planning and most are open to discussing it with their spouse (89%). 73% have discussed family planning with their partners and 65% have their support for using contraceptives from their partners. Despite this, 71% of participants have never used contraceptives and 82% did not use any methods to delay pregnancy for two years after marriage.

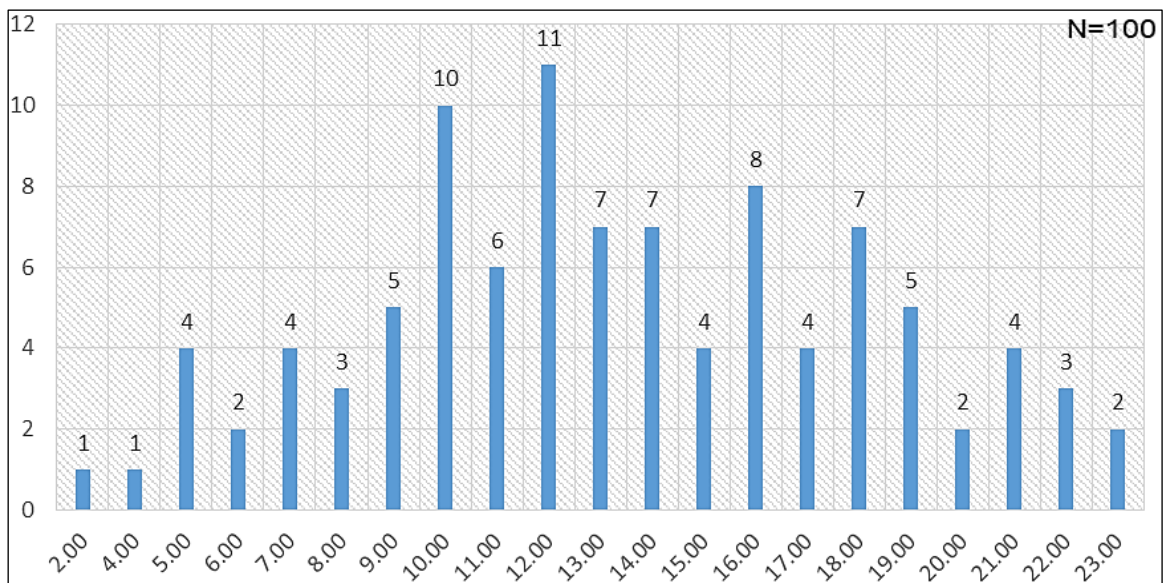


Figure 2: Knowledge score distribution of participants

53% (95% CI: 43% to 62.9%) of the study participants had adequate knowledge about family planning with a mean score of 13.3 (SD:4.79).

Table 2: Factors influencing knowledge on family planning

	Poor Knowledge	Adequate Knowledge	Odds ratio (95% CI)	P value
Rural vs. Urban				
Rural	38(49.4%)	39(50.6%)	1.516 (0.587-3.916)	0.389
Urban	9(39.1%)	14(60.9%)		
Pressure from family/ society				
Present	45(46.9%)	51(53.1%)	0.882 (0.119-6.523)	0.902
Absent	2(50%)	2(50%)		
Education of study participants				
Up to school level or diploma	18(72%)	7(28%)	4.079 (1.517-10.966)	0.004
Graduate or professional	29(38.7%)	46(61.3%)		
Education of Spouse				
Upto school level or diploma	33(62.3%)	20(37.7%)	3.889 (1.685-8.975)	0.001
Graduate or professional	14(29.8%)	33(70.2%)		
Homemakers vs. Working mothers				
Homemakers	37(56.7%)	28(43.1%)	3.304 (1.367-7.985)	0.007
Working Women	10(28.6%)	25(71.4%)		
Experience with Child birth				
First child birth	19 (43.2%)	25 (56.8 %)	0.760 (0.344-1.681)	0.498
Already has a child	28 (50 %)	28 (50 %)		

Being a working women with higher education level and also Participants with Spouses with higher educational qualifications showed statistically significant better knowledge outcomes than their counterparts.

Although 93% of the study participants have good attitude towards use of family planning but only 19% of study participants had good family planning practices.

DISCUSSION

The National Family Planning program in India has been in place since 1952, with the goal of improving access and coverage of family planning services¹³. However, the success of the program is dependent on the knowledge, attitude and practices of eligible women.

The study found that most participants had good knowledge and a positive attitude towards family planning, but the percentage of participants practicing family planning was low. The study also revealed an association between education, occupation, and knowledge scores. Participants who were graduate professionals had a higher odds ratio of having an adequate knowledge score compared to those with a lower education level. Similarly, working women had a higher odds ratio of having an adequate knowledge score compared to homemakers.

The results of the study were consistent with similar studies conducted in various parts of the world. For

instance, a study conducted in Nepal concluded that the relative educational attainment of wives and husbands affects their contraceptive choices. Another study conducted in southern Ethiopia found that unintended pregnancy was associated with being married to the least educated husbands¹⁴. Additionally, studies conducted in Nigeria and Kinshasa, found a positive correlation between education and contraceptive use¹⁵.

The study highlights the need for increased awareness and accessibility to family planning services to ensure that eligible women have access to accurate and comprehensive information about family planning methods. The findings also suggest that education and occupation play a significant role in increasing knowledge and awareness about family planning, which can lead to increased use of family planning methods.

Overall, the study provides valuable insights into the factors that influence the knowledge, attitude, and practice of family planning in postnatal mothers. The results can inform the development of targeted interventions to improve the coverage and accessibility of family planning services, particularly for women with lower education levels and those who are not currently employed or homemakers.

CONCLUSION

Majority of the postnatal mothers (53%) have adequate knowledge regarding family planning and

can be attributed to good education of mothers, education of spouse/partner and working women. It can also be derived that although the attitude towards use of family planning is good, the practice of good family planning is very poor.

Majority of study participants consider family planning important and have shown interest in using family planning in future. Majority of the study participants have not used contraceptives. Mothers were aware of some of family planning methods but they had not practiced it. Female literacy should be improved and more intensive training should be given to community health workers to guide the women.

CONFLICTS OF INTEREST

Nil.

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