

FACTORS INFLUENCING FAMILY PLANNING PRACTICES AMONG REPRODUCTIVE AGE GROUP WOMEN IN RURAL AREA OF KURNOOL DISTRICT, ANDHRA PRADESH.

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Abstract :

Background: Even though family planning programs are now more widely available in all sections of society, adoption of family planning methods is still heavily influenced by prevailing characteristics such as age at marriage, education, economic status, religion, and number of living children.

Objectives: 1. To study the sociodemographic characteristics of reproductive age women (15–49 years).

2. To study the family planning practices of these women.

3. To find out the association between sociodemographic variants and adoption of family planning practices.

Materials and Methods: A community-based cross-sectional study was conducted in Parla, the rural field practice area of Kurnool Medical College. A house-to-house survey was conducted and in each house, married females of reproductive age group were interviewed. 190 females were interviewed with a pre-tested, semi-structured questionnaire. The association between the variables was assessed by using χ^2 -test.

Results: The majority of the women (95.3%) were aware of contraceptive methods. The majority (81.1%) were using contraceptives. The acceptance rate of contraceptives was higher among women aged 25-34 years, Hindus, and the high literacy status of women, while the nonacceptance rate of contraceptives was found much higher among women who had a low socioeconomic status and < 2 children. Most of the women gave reasons for unwillingness to use contraception as wanting more children (33.3%), wanting a male children (30.6%), and inconvenience (22.2%). Major sources of information about family planning were health workers (62.4%), television (46.9%), and doctors (34.3%).

Conclusion: To improve the family planning program, health professionals must constantly communicate with the eligible couple. Every attempt should be made to improve female literacy, including stepping up behavior change communication (BCC) activities in both health and non-health departments.

Keywords: Contraceptives, Factors, Family planning practices, Reproductive age group women, Rural area.

INTRODUCTION

India was one of the first countries to launch a national program on Family Planning. However, today, India is the second most populous country in the world, ranking next only to China, with a population of 1.21 billion according to the year 2011 census. The population of India is estimated to overtake that of China by the year 2050. Even though India has nearly

2.4% of the world's surface, it is home to more than 17.5% of the world's population. Family planning is the main strategy for the prevention of unwanted pregnancies and thousands of maternal deaths and also offers a host of additional health, social, and economic benefits. If these services were more widely available, up to 42 percent of maternal deaths could be prevented in developing countries.¹

The current use of family planning methods in our country is 66.7% (NFHS 5) which is an enhancement from 53.5% (NFHS 4). In urban areas of India it is 69.3% and in rural areas 65.6%.² In Andhra Pradesh 71.1% of currently married women aged 15-49 years were using any family planning method. 70.8% of eligible couples were using family planning methods in urban areas, and 71.2% in rural areas.³

However, rural areas often present unique challenges that necessitate a nuanced understanding of the specific factors at play. Issues related to geographical remoteness, limited healthcare infrastructure, traditional norms, and economic constraints create a distinctive landscape that shapes family planning practices differently compared to urban settings. This study seeks to contribute to the existing body of knowledge by comprehensively exploring the array of factors influencing family planning practices among reproductive age group women in rural areas.

OBJECTIVES

1. To study the socio-demographic characteristics of reproductive age women (15–49 years).
2. To study the family planning practices of these women.
3. To find out the association between socio-demographic variants and adoption of family planning practices.

MATERIALS AND METHODS

It is a community-based cross-sectional study conducted in the rural field practice area of Kurnool Medical College among married women in the reproductive age group of 15-49 years for a duration of 3 months from April 2023 to June 2023.

Inclusion Criteria:

-Women who are married, aged 15-49 years and presumed to be sexually active.

Exclusion Criteria:

- Those who are not willing to participate.
- Unmarried women.

Considering the 71.2% prevalence of family planning practices followed in Andhra Pradesh among the rural population according to NFHS-5³. Applying a non-response rate of 10%, the sample size was calculated to be 171 using the formula $n = (Z\alpha 2pq)/d^2$ where n = estimated sample size

$Z\alpha = 1.96$; $p = 71.2\%$; $d =$ relative precision 10% of p ; $q = (1 - p) = 28.8\%$. The sample size of 171 has been rounded off to 190. The study was approved by the institutional ethics committee of the college. Parla, the rural field practice area of Kurnool Medical College, covers a population of 5587, of which females were 2730 as per Population Census 2011⁴.

Data collection

After conducting a pilot study in 50 subjects, necessary modifications were made in the proforma, and the present study was undertaken. Informed consent was taken from the participants. A house-to-house survey was conducted and in each house, married females of reproductive age group were interviewed. The data was collected by interviewing the woman using a pre-designed and pretested proforma in their local language. Information was

collected regarding her age, education, occupation, religion, income, present parity status, and use of contraception. The reasons for the non use of contraceptives and sources of information about family planning methods were enquired. At the end of the questionnaire, any misconceptions or queries regarding family planning practices were clarified and the respondents were thanked for extending their co-operation.

Data analysis

Data collected is compiled in MS excel sheet; subsequently it was analyzed using SPSS version 26. Microsoft word and Excel have been used to generate graphs and tables. The descriptive statistics comprising of frequency, percentage was used. Chi-square test was used to test the association between the factors influencing and family planning practices.

RESULTS

Table 1: Sociodemographic characteristics of the study population ($N = 190$)

| Characteristics | Number | Percentage |
|-------------------------------|---------------|-------------------|
| Age (years) | | |
| 15–24 | 58 | 30.5 |
| 25–34 | 96 | 50.5 |
| 35- 45 | 36 | 18.9 |
| Religion | | |
| Hindu | 131 | 68.9 |
| Muslim | 32 | 16.8 |
| Christian | 27 | 14.2 |
| Caste | | |
| OC | 53 | 27.9 |
| OBC | 99 | 52.1 |
| SC/ST | 38 | 20 |
| Education | | |
| Illiterate | 48 | 25.3 |
| Primary | 72 | 37.9 |
| Secondary | 41 | 21.6 |
| Higher secondary and above | 29 | 15.2 |
| Socioeconomic status | | |
| I | 16 | 8.4 |
| II | 35 | 18.4 |
| III | 74 | 38.9 |
| IV | 52 | 27.4 |
| V | 13 | 6.8 |
| Type of family | | |
| Nuclear | 131 | 68.9 |
| Joint | 59 | 31.1 |
| No. of living children | | |
| 0 | 6 | 3.2% |
| 1 | 54 | 28.4% |
| 2 | 86 | 45.3% |
| 3 | 40 | 21.1% |
| >3 | 4 | 2.1% |

In this study consisting of 190 women in total, almost half (50.5%) of them belonged to the age group of 25–34 years. The majority of them (68.9%) belonged to the Hindu religion. The majority of women (52.1%) were from OBC and only 20% of women were from SC/ST caste. Of the 190 women, 25.3% of women were illiterate, 37.9% of women possessed primary education and only 15.2 % of women possessed education up to a higher secondary level and above. Of the total women, 31.1% women belonged to joint families, 68.9% of women belonged to nuclear families, more than one-third (38.9%) of women belonged to class III, followed by 27.4% of women who belonged to class IV, and only 8.4 % of women belonged to class I. The majority of women had 2 living children (45.3%) followed by 1 living child (28.4%) and only 2.1 % of women had >3 children [Table 1].

Table 2: Distribution of women according to the awareness of various family planning methods

| Awareness of family planning method | Number | Percentage |
|-------------------------------------|--|------------|
| Aware | 181 | 95.3% |
| Not aware | 9 | 4.7% |
| Type of family planning method | Distribution of women (N = 181) Number | Percentage |
| Condom | 134 | 74% |
| Pills | 129 | 71.2% |
| IUD | 120 | 66.3% |
| Tubectomy | 143 | 79% |
| Vasectomy | 87 | 48.1% |
| Hormonal injections | 43 | 23.8% |

Table 2 shows that a majority of the women (95.3%) were aware of family planning methods, and only 4.7% of women were not aware of it. Multiple answers were given to them about the awareness about family planning methods. Out of 181 women who were aware about family planning methods, more than two-thirds of women were aware of tubectomy (79%), condoms (74%), and pills (71.2%). 66.3% were aware of IUD. 48.1% and 23.8% of women were aware of vasectomy and hormonal injections respectively.

Table 3: Distribution of women according to the present use of various family planning methods (N = 190)

| Present use of family planning methods | Distribution of women Number | Percentage |
|--|------------------------------|------------|
| Using no method | 36 | 18.9% |
| Using any method | 154 | 81.1% |

| | | |
|--------------------------------|-----|-------|
| Total | 190 | 100% |
| Using approved methods such as | | |
| Condom | 32 | 20.8% |
| Oral contraceptive pills | 28 | 18.2% |
| IUD | 39 | 25.3% |
| Harmonal Injections | 4 | 2.6% |
| Tubectomy | | 33.1% |
| | 51 | |
| Total | 154 | 100% |

Table 3 shows that, among the 190 subjects of study, 154 (81.1%) were using some form of contraception, while women (18.9%) were nonacceptors of any form. Among the contraceptive methods, tubectomy was used by most of the acceptors (33.1%), followed by spacing methods namely, intrauterine contraceptive devices (IUCD) (25.3%) and condoms (20.8%). Oral contraceptive pills (OCPs) were used by (18.2%) and Hormonal Injections by 2.6% of them. No male subjects had undergone vasectomy.

Table 4: Association between the use of family planning methods and characteristics of women

| Characteristics | Yes N(%) | No N(%) | X ² | P |
|----------------------------|-------------|------------|----------------|--------|
| Age (years) | | | | |
| 15-24 | 39(67.2%) | 19(32.8%) | 3.241 | 0.19 |
| 25-34 | 73(76%) | 23(24%) | | |
| >34 | 22(61.1%) | 14(38.9%) | | |
| Religion | | | | |
| Hindu | 95(72.5%) | 36(27.5%) | 2.601 | 0.27 |
| Muslim | 19(59.4%) | 13(40.6%) | | |
| Christian | 17(63%) | 10(37%) | | |
| Caste | | | | |
| OC | 41(77.4%) | 12(22.6%) | 12.190 | 0.0021 |
| OBC | 71(71.7%) | 28(28.3%) | | |
| SC/ST | 17(44.7%) | 21(55.3%) | | |
| Education of women | | | | |
| Illiterate | 21(43.8%) | 27(56.2%) | 19.036 | 0.0001 |
| Primary | 52(72.2%) | 20(27.8%) | | |
| Secondary | 31(75.6%) | 10(24.4%) | | |
| Higher secondary and above | 25(86.2%) | 4(13.8%) | | |
| Socioeconomic status | | | | |
| I | 14(87.5%) | 2(12.5%) | 16.349 | 0.0024 |
| II | 28(80%) | 7(20%) | | |
| III | 53(71.6%) | 21(28.4%) | | |
| IV | 30(57.7%) | 22(42.3%) | | |
| V | 4(30.8%) | 9(69.2%) | | |
| Type of family | | | | |
| Nuclear | 106(80.9%) | 25(19.1%) | 7.240 | 0.007 |
| Joint | 37(62.7%) | 22(37.3%) | | |
| Number of living children | | | | |
| 0 | 1(16.6%) | 5(83.3%) | 8.009 | 0.091 |
| 1 | 36(66.6%) | 18(33.3%) | | |
| 2 | 21(75%) | 7(25%) | | |
| 3 | 28(70%) | 12(30%) | | |
| >3 | 3(75%) | 1(25%) | | |

The total acceptance rate of contraceptives was higher among 25-34 years age group(76%) followed by 15-24 years(67.2%) and >34 years(61.1%), while it was higher among Hindus (i.e., 72.5%) when compared with Christians(63%) and Muslims (i.e.,59.4%), and the same was higher among the OC (77.4%) and OBC (71.7%) than SC/ST caste (44.7%). The nonacceptance rate of contraceptives was much higher among illiterate women (i.e.,56.2 %) when compared with literate women. A significant influence of the SES of women was found on their utilization of family planning methods(i.e., the use of contraceptives was more common among women of higher SES). Only 30.8 % of women of socioeconomic class V and 57.7% of socioeconomic class IV used family planning methods when compared with 71.6%, 80%, and 87.5% of women who belonged to socioeconomic classes III, II, and I, respectively. Contraceptive usage was higher in women from nuclear families (80.9%)when compared to joint families (62.7%). Contraception acceptance after one living child was 66.6%, which increased after two living children (i.e.75 %). Of the total 6 women who had no child, only one woman was using the contraceptive method. The difference between sociodemographic characteristics (caste, education of women, socioeconomic status, and type of family) and the usage of contraceptives was statistically significant [Table 4].

Table 5: Distribution of women according to reason for unwillingness for use of family planning method

| Reason for unwillingness | Distribution of women (N = 36) Number | Percentage |
|--------------------------|---------------------------------------|------------|
| Want more children | 12 | 33.3% |
| Inconvenience | 8 | 22.2% |
| Want male child | 11 | 30.6% |
| Denial from spouse | 7 | 19.4% |
| Fear | 6 | 16.7% |

Table 5 shows that, out of 36 women who did not use any family planning method, an attempt was made to find out the reasons for unwillingness, and multiple answers were given by them. Most of the women gave reasons that they want more children (33.3%) and male children(30.6%). Other reasons for unwillingness to use contraception were inconvenience (22.2%), denial from spouse (19.4%) and fear to use contraceptives (16.7%).

Table 6: Distribution of women according to their source of knowledge about family planning methods

| Source of knowledge about family planning methods | Distribution of women (N =181) Number | Percentage |
|---|--|------------|
| Health worker | 113 | 62.4% |
| Television | 85 | 46.9% |

| | | |
|----------------|----|-------|
| Doctor | 62 | 34.3% |
| Family members | 52 | 28.7% |
| Friends | 43 | 23.8% |

Of the total of 190 women studied, women were aware of contraceptives. Multiple answers were given to them about the sources of information about family planning methods. For the majority of women, the source of information was health workers (62.4%) followed by television (46.9%), doctor (34.3%), family members (28.7%), friends (23.8%), [Table 6]

Discussion

In the present study, most of the women(50.5%) belonged to the age group of 25–34 years, Hindu religion (68.9%), OBC(52.1%), nuclear family(68.9%), socio economic class III(38.9%), possessed primary education (37.9%) and 2 living children (45.3%).

In the present study, 95.3% of women were aware of family planning methods, female sterilization (79%) was the most heard about method followed by male condom (74%), whereas in a study by Jahan et al⁵ knowledge of contraceptive methods was 93.1% and OCP were the most commonly heard methods (74.8%) followed by condoms (68.8%) female sterilization (36.4%).

A similar study was done by Nair⁶ where knowledge of contraceptive methods was 100% and knowledge about female sterilization was 94% followed by knowledge of barrier methods (70.2%), these differences may be due to demographic changes and characteristics of study participants.

The present study showed that 81.1% of participants or their partners were using any form of contraceptive methods. Another study by Jesha⁷ showed a contraceptive prevalence rate of 48.95%. In a study by Gupta et al⁸ contraceptive prevalence 70.6%. Shukla et al⁹ observed that 62.5% were using contraception.

It was seen in the present study that the most preferred type of contraceptive was female sterilization (33.1%) followed by IUCD (25.3%), condoms (20.8%), OCPs (18.2%) male sterilization was 0%. In a study in Jammu, Gupta et al⁸ found that 36.79% of females had chosen tubectomy as a contraceptive method followed by other methods of contraception like oral contraceptive pills and condoms.

In contrast, to study by Balgir et al¹⁰ contraceptive prevalence was 53.84% where temporary methods were mostly used among users i.e.41.6% for condoms, 28.4% for OCPs and 8.0% for IUDs, while permanent methods use was very low tubectomy and vasectomy which accounted for 4.23% and 1% respectively.

In the present study, contraceptive usage was higher among women from the 25-34 years age group(76%), Hindus(72.5%), OC caste(77.4%), nuclear families(80.9%) and women having 2 or more than 2 living children(75 %). The nonacceptance rate of contraceptives was higher among illiterate women (56.2 %), low socioeconomic class (30.8%). The difference between

sociodemographic characteristics (caste, education of women, socioeconomic status, and type of family) and the usage of contraceptives was statistically significant.

Sharma et al.¹¹ mentioned in their study that no family planning method was used by women of age up to 20 years, and religion was also found to have a significant association with the utilization of family planning methods ($P < 0.001$), that is, more Hindu women when compared with Muslim women used family planning methods. Similar to our study, Singh¹² in his study also observed that contraceptive prevalence was higher among the OC caste (51.66%) than OBC (41.06%) and SC (7.28%).

The positive influence of education on contraceptive acceptance found in our study was consistent with another study conducted by Girdhar et al.¹³ in Ludhiana. Pandey¹⁴ in his study noted that there was an increase in the percentage of contraceptive users with the increase in the number of living children, with $P = 0.003$.

In the present study, reasons for not using contraceptives were wanting more children (33.3%), wanting male child (30.6%), inconvenience (22.2%), denial from spouse (19.4%) and fear to use contraceptives (16.7%).

Jahan et al.⁵ observed that reasons precluding women from practicing contraception were desire to have a child (60.5%), lack of knowledge (42.4%), and unbearable side effects (25.5%).

Murugesan et al.¹⁵ found that the major reason of nonuse of contraception were the desire of child (41%) and fear of side effects.

Present study showed that source of knowledge of contraceptive among study participant was health worker among 62.4%, followed by mass media 46.9%, followed by doctors in multiple response answers, similar study was conducted by Nair⁶ where the main source of information was health personnel.

Another study by Upadhyay¹⁶ reported that source of information were health worker (55%), hospital (48%), friends (44%), and newspaper (25%).

Pegu et al Shillong¹⁷ found that knowledge about contraceptive methods was mainly obtained from health workers (58.6%) followed by media (24.1%) and social circle (15.5%).

In contrast, to study by Murugesan et al.¹⁵ social circle (49%) and health care providers (42%) played a major role as source of knowledge.

Conclusion

More attention must be paid to the needs of women and their access to woman-centered, socioculturally sensitive reproductive health services. Therefore, improving women's education and girls' school attendance rates is essential to address these problems. The government should work to provide women with social and economic clout so that they may actively participate in family planning decisions. Poverty is a major barrier to population control measures, and it can only be eradicated if the government launches a comprehensive program to end poverty.

This study highlights the need for a constant interaction of health functionaries with the eligible couple to boost family planning program. Every attempt should be made to elevate female literacy, including stepping up behavior change communication (BCC) activities in both health and non-health departments and enhancing community awareness, attitudes, and practices towards family planning.

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References

- 1.Haldar A, Baur, Das P, Misra R, Pal R, Roy PR. Contraceptive practices and associated social covariates: an experience from two districts of West Bengal. India. Nepal J of Epidemiol. 2012;(4):219-25.
- 2.National family Health Survey, International Institute of population studies, Mumbai, India: NFHS5; 2019-2021. Available from: <http://www.rchiips.org/nfhs/index.shtml.pdf>
- 3.National family Health Survey, International Institute of population studies, Mumbai, India: NFHS5; 2019-2021. Available from: http://rchiips.org/NFHS/NFHS-5_FCTS/Andhra_Pradesh.pdf
4. Office of the Registrar General and Census Commissioner, Government of India. Census 2011, Web Edition, Provisional Population totals, Series 1, India. New Delhi: Office of the Registrar General and Census Commissioner, Government of India; 2011. Available from website: [http:// www. Censusindia.gov.in/](http://www.Censusindia.gov.in/).
5. Jahan U, Verma K, Gupta S, Gupta R, Mahour S, Kirti N, et al. Awareness, attitude and practice of family planning methods in a tertiary care hospital, Uttar Pradesh, India. Int J Reprod Contracept Obstet Gynecol. 2017;6:500-6.
6. Nair RV, Ashok VG, Solanke PV. A study on contraceptive use among married women of reproductive age group in a rural area of Tamil nadu, India. International J Reprod Contracept Obstet Gynecol. 2016;5:3147-52.
7. Jesha MM, Sebastian NM, Haveri SP, Nath AS. Unmet needs for family planning in a municipal area in North Kerala, India. Int J Reprod Contracept Obstet Gynecol. 2016;5(7):2322-7.
8. Gupta RK, Verma A, Kumari T, Shora N. Contraceptive prevalence, attitude and choice among women of reproductive age group in a rural area of Jammu, India. Public Health Res. 2013;3(4):92-7.
9. Shukla M, Fonseca M, Deshmukh P. A study on contraceptive knowledge, attitudes and practices among women in the reproductive age group. Int J Reprod Contracept Obstet Gynecol. 2017;6:3560-3.
10. Balgir RS, Singh S, Kaur P, Verma G, Kaur S. Contraceptive practices adopted by women attending an urban health centre in Punjab, India. Int J Res Dev Health. 2013 Aug;1(3):115-9.

11. Sharma V, Mohan U, Das V, Awasthi S. Socio demographic determinants and knowledge, attitude, practice: survey of family planning. *J Fam Med Prim Care* 2012;1(1):43–7.
12. Singh VK. The study of key factors governing the use of contraceptives in rural area of Sonbhadra district, India. *IOSR J Humanities Soc Sci* 2013;8(4):84–91.
13. Girdhar S, Chaudhary A, Gill P, Soni R, Sachar R. Contraceptive practices and related factors among married women in a rural area of Ludhiana. *Internet J Health* 2010;12(1):12(1).
14. Pandey SM. Correlates of modern contraceptive practices among married couples in rural area of Hisar, (Haryana). *Indian J Prev Soc Med* 2011;42(3):274–77.
15. Murugesan A, Sundaram R, Muthusamy M. Awareness, attitude and practice of contraception among antenatal women in a tertiary care hospital- a cross sectional study. *Int J Reprod Contracept Obstet Gynecol.* 2016;5:2507-10.
16. Upadhyay A, Shah SK, Thapa DK, Ts S, Ghimire R, Dahal HR. Knowledge, attitude and practice of family planning method among married women of reproductive age group in earth quake displaced population of Sindupalchok District, Nepal. *Am J Public Health Res.* 2017;5(1):1-5.
17. Pegu B, Gaur BPS, Sharma N, Singh AS. Knowledge, attitude and practices of contraception among married women. *Int J Reprod Contracept Obstet Gynaecol.* 2014;3(2):385-8.