


**Research Article**

## A study on influence of education and occupation on family planning practices in rural Shamirpet, R.R. District, T.S., India.

Vijayasree L.

Department of Community Medicine, Apollo Institute of Medical Sciences and Research, Hyderabad, Telangana, India.

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**Abstract:** Family planning is an important pillar for safe motherhood and good reproductive health and is influenced by number of socio-demographic factors. Since fertility in India is primarily marital this study was planned among married women. A community based cross-sectional study was conducted among 402 women of reproductive age group. Details regarding various socio-demographic factors with special emphasis on education and occupation of husband and wife and their socio-economic status and its relation to contraceptive usage were studied. Prevalence of contraception was found to be 61.7%. Contraceptive usage had a significantly positive relation with literacy status of women, socio economic status of the couple. On the other hand husband's educational status, occupation of women, husband's occupation did not have any relation with contraceptive usage.

**Keywords:** Family planning, Contraception, Education, Occupation, Socio-economic status.

### Introduction

India is home for three infamous problems that prefix with letter "P". They are population explosion, poverty and pollution. Population explosion is a problem, the effects of which are worldwide demanding the attention of all nations East & West, large and small, developed and developing. Family planning has been acknowledged as an important intervention towards achieving Millennium Development Goals (MDGs) four (4) and five (5) as it has proven to reduce maternal and child mortality<sup>1,2,3</sup>. Family planning can prevent unwanted pregnancies and unsafe abortions. Some family planning methods such as condom usage can protect individuals from Sexually Transmitted Infections (STIs) including HIV/AIDS<sup>1,2,3</sup>. Family planning has also been found to promote gender equality as well as promote educational and economic empowerment for women<sup>4</sup>. The low uptake of family planning is largely blamed on many factors. It has been observed that the awareness of the availability of family planning services has a great influence on the uptake of family planning services<sup>5</sup>. Additionally, even though some women are aware of the availability of family planning services, they are not properly informed about the various forms of family planning methods and how they work<sup>6</sup>. Some of the women who went for family planning services were not adequately counselled on the side effects of some of the family planning methods<sup>6</sup>. Although most people are aware of the benefits of family planning services, they complained that it was difficult to access family planning services as

such services were provided by health facilities that were far from their homes. Education of husband and wife affects their knowledge levels and decision-making capacity. Occupations of husband and wife also influences their contraceptive practices as occupation is key factor for their socio-economic status. Financial status of family is of paramount importance in deciding family size and uptake of contraceptive method. Thus, decision to investigate these factors that influence the uptake of family planning services in rural Shamir pet is imperative as very little is known about the factors that influence the decision of people to go for family planning services.

### Objectives

1. To estimate prevalence of family planning practices in rural shamirpet
2. To study influence of literacy status of husband and wife, occupation of husband and wife and socio-economic status on acceptance of family planning.

### Materials and Methods

A Cross-sectional study was conducted from October 2013 to October 2015. Sample size was determined adopting the formula  $4PQ/L^2$  in which P is prevalence of any method of Family planning, Q is (1-P) and L is the allowable error i.e., 5% of absolute error. According to DLHS-3 (2007-2008)<sup>7</sup> contraceptive prevalence rate in Ranga Reddy was 64.7%. By taking the prevalence as 64.7%, sample size was obtained. The formula used for sample

### \*Corresponding Author:

**Dr. L. Vijayasree,**

Assistant Professor,

Department of Community Medicine,

Apollo Institute of Medical Sciences and Research,

Hyderabad, Telangana, India.

**E-mail:** [reddy.vijji7@gmail.com](mailto:reddy.vijji7@gmail.com)



size calculation  $4 \times 64.7 \times 35.3 / 5 \times 5$ . Allowing for 10% non-response rate the total sample size was worked out to be 402. As systematic random sampling was planned, sample interval had to be calculated. Number of eligible couples in these 13 villages was 2465; this data was obtained from the ANMs of respective villages. Sample interval (k) was calculated as follows  $k = \text{Number of eligible couples} / 402 = 2465/402 = 6$ . Total Population of villages was 25869 based on census 2011. The Total sample (402) was divided by probability proportional to size (PPS) in which the village with more population required more sample and village/hamlet with less population required fewer samples.

In each Village, required total sample was collected by using systematic random sampling. Village gram panchayat office was used as a starting point. Data collection was started from right hand side from that site. First house in each village was selected by lottery method, after that every 6<sup>th</sup> house was visited (Sample interval  $k=6$ ) and data was collected till the sample for that village was achieved. For example, in a village by using lottery method 3<sup>rd</sup> house was selected after that every 6<sup>th</sup> house was approached 3,9,15,21,27,33.....so on till sample in that particular village was covered. Prior to initiation of the study 10% of sample that is 40 married women in

reproductive age group were randomly selected and questionnaire was administered. After the pre-test, required corrections were made to the questionnaire and the study was commenced. After explaining nature and scope of study, informed consent was taken from all the participants. Data was collected done by interviewing the participants. Pre-designed, pre-tested, semi-structured questionnaire was used. The DLHS – III was conducted under Reproductive Health Project. It had many modules of questionnaires. The ever-married women's questionnaire was used as the basis in constructing the study instrument for the current study.

## Results

In the study out of total 402 women 248 were accepting some method of family planning. Thus, prevalence of contraception was found to be 61.7%. Among acceptors majority 79.8% had adopted tubectomy, 8.5% laproscopic tubectomy, 5.2% used OC pills, 4.4% used IUD, 1.6% Condom and one woman followed lactational amenorrhoea method. None of the husbands accepted vasectomy as contraceptive method.

In current study husbands education did not have any statistical significant relation with acceptance of contraception. ( $p = 0.35$ )

**Table 1.** Distribution of women according to literacy status of their husband and family planning acceptance

Husband's Literacy Status	Acceptors	Non-acceptors	Total
Graduates or PG	42 (61.8%)	26 (38.2%)	68
Intermediate	27 (56.25%)	21 (43.75)	48
High school	74 (56.9%)	56 (43.1%)	130
Primary / Middle school	47 (64.4%)	26 (35.6%)	73
Illiterate	58 (69.9%)	25 (30.1%)	83
Total	248 (61.7%)	154 (38.3%)	402 (100%)

Chi square = 4.43  $p=0.35$  Degree of freedom = 4

**Table 2.** Literacy status of women and family planning acceptance

Literacy Status	Acceptors	Non-acceptors	Total
Graduates or PG	26 (50.9%)	25 (49.1%)	51
Intermediate	23 (50.0%)	23 (50.0%)	46
High school	68 (60.2%)	45 (39.8%)	113
Primary / Middle school	70 (64.8%)	38 (35.2%)	108
Illiterate	61 (72.6%)	23 (27.4%)	84
Total	248 (61.7%)	154 (38.3%)	402 (100%)

Chi Square = 9.93  $p \text{ value} = 0.04$  Degree of freedom=4

In the present study 72.6% illiterates, 64.8% women educated till primary/middle school, 60.2% women educated till high school, 50% women educated till intermediate and 50.9% of graduates/post-graduates accepted contraception. It is observed that as education increases acceptance of contraception decreased and this is statistically significant with  $p \text{ value} = 0.04$ .

**Table 3.** Distribution of women by occupation of their husband and family planning acceptance

Occupation of the husband	Acceptors	Non-acceptors	Total
Professional/Semi-professional	18 (58.1%)	13 (41.9%)	31
Skilled/ Semi-skilled	170 (61.6%)	106 (38.4%)	276
Un-skilled	50 (64.9%)	27 (35.1%)	77
Un-employed	10 (55.6%)	8 (44.4%)	18
Total	248 (61.7%)	154 (38.3%)	402

Chi square = 0.803  $p \text{ value} = 0.85$  Degree of freedom = 3

In the current study husbands occupation did not have any statistically significant relation with acceptance of contraception. ( $p = 0.85$ )

**Table 4.** Distribution of women by their occupation and family planning acceptance

Occupation of the woman	Acceptors	Non-acceptors	Total
Professional/ Professional	6 (54.5%)	5 (45.5%)	11
Semi-Skilled / Semi-skilled worker	20 (68.9%)	9 (31.1%)	29
Un-Skilled worker	12 (63.2%)	7 (36.8%)	19
Un-employed	210 (61.2%)	133 (38.8%)	343
Total	248 (61.7%)	154 (38.3%)	402 (100%)

Chi square = 0.936 p value = 0.82 Degree of freedom = 3

This study shows 61.2% unemployed and 54.5% of professionals were accepting contraception. Occupation of women had no significant relation with contraception acceptance. (p value = 0.82)

In this study 29.2% women belonging to lower class used contraception and 78.1% women from upper class used contraception. As Socio-economic status improved usage of contraception also improved and this was statistically significant. p < 0.00001

**Table 5.** Distribution of women by socio-economic status and family planning acceptance

Socio-Economic Status	Acceptors	Non-Acceptors	Total
Upper-I	25 (78.1%)	7 (21.9%)	32
Upper middle -II	49 (70.0%)	20 (30.0%)	69
Lower middle-III	80 (66.1%)	41 (33.9%)	121
Upper lower - IV	80 (60.6%)	52 (39.4%)	132
Lower -V	14 (29.2%)	34 (70.8%)	48
Total	248 (61.7%)	154 (38.3%)	402 (100%)

Chi square = 28.74 p value < 0.00001 Degree of freedom = 4

In this study 29.2% women belonging to lower class used contraception and 78.1% women from upper class used contraception. As Socio-economic status improved usage of contraception also improved and this was statistically significant. p < 0.00001

## Discussion

This study shows out of 402 women, 248 women adopted contraceptive methods. Thus present study has shown 61.7% contraceptive usage.

According to DLHS-4<sup>8</sup> conducted during 2012-13, the contraceptive prevalence rate in state was 61.8%. In rural areas of Ranga Reddy district it was 54.6%. It is clear that the prevalence rate found in this study are on par with the state figures, and are more than the district statistics. In a study conducted in Mumbai by Kiran G Makade, *et al.*,<sup>9</sup> it was found that contraceptive prevalence was 68.4% which was more than the prevalence found in the current study. A study done by Swati Khan *et al.*,<sup>10</sup> in Bareilly, Uttar Pradesh showed that 62.9% females were currently using family planning methods. In a study done at Uttar Pradesh by Shweta *et al.*,<sup>11</sup> it was found that 61.5% respondents adopted family planning methods. These two studies showed prevalence of contraception almost equal to that found in the present study.

In the current study husbands education did not have any statistically significant relation with acceptance of contraception. Similar findings were found in studies done by S.P.Pushpa *et al.*,<sup>12</sup> in rural Karnataka, another study done by Mohanan *et al.*,<sup>13</sup> which was also conducted in Karnataka reported there was no significance between husbands education and contraceptive usage. Contrasting findings were observed in a study on knowledge, perceptions and practice of family planning methods in mothers visiting an immunization clinic of rural Bengal, done by Sanghamitra Maulik *et al.*,<sup>14</sup>. In this

study education of husband was found to be significant determinant of current use of contraceptives. In another study conducted by Laxmi Manjeera M *et al.*,<sup>15</sup> study in Mangalore showed that husband's education increased the contraceptive usage increased which was found to be statistically significant.

In current study 50.9% of graduates/ post-graduates used contraception and 72.6% of illiterates used contraception. Acceptance of contraception was more among illiterates than literates and this was found to be statistically significant. This trend could be because illiterates get married early, complete their family early and get sterilized at young age. This could be the reason for high acceptance of family planning by illiterate women. Similar findings were observed in a study conducted by Chandra Kansal A *et al.*,<sup>16</sup> in Dehradun district of Uttarakhand, showed acceptance of contraceptives was high among illiterates than in literates. This difference was found to be statistically significant. In contrast a study done by S. M. Pandey<sup>17</sup>, in Haryana and in another study by Giridher S *et al.*,<sup>18</sup> in Ludhiana observed acceptance of contraception increases as the education level of women increased and this was statistically significant.

In this study husband's occupation did not have any statistically significant relation with acceptance of contraception. Similar findings were observed in Laxmi Manjeera M *et al.*,<sup>15</sup> in study in Mangalore where occupation had no relation with contraceptive usage. In contrast, Singh N *et al.*,<sup>19</sup> in rural area of Patiala, Punjab revealed that 81% of women whose husbands were in service used a family planning method, while it was 73.0% among females whose husbands were laborers. In another study done by Chandra Kansal A *et al.*,<sup>16</sup> in Dehradun it was observed that 61.27% women, whose husbands were in Government service used a

family planning method while this rate was only 43.34% among those whose husbands were laborers. Husband's occupation showed significant relation with contraceptive acceptance.

This study showed 61.2% of unemployed and 54.5% of professional were accepting contraception. Occupation of the women had not significant relation with contraception acceptance. In a study done by Laxmi Manjeera M *et al.*,<sup>15</sup> study in Mangalore occupation of the women had no influence on contraceptive usage. Contrasting findings were observed in a study done by SP Pushpa *et al.*,<sup>12</sup> in Karnataka acceptance of contraception was more among employed which accounted (68.40%) compared to unemployed (41.46%) and this difference was found to be statistically significant. In another study conducted by Divya S *et al.*,<sup>20</sup> in Rewa (Raipur), where they observed better acceptance of contraceptives among housewives (52.3%) than in working women (47.7%). In study done by Banerjee B.<sup>21</sup> in Hooghly, West Bengal revealing that the acceptance rate of tubectomy was significantly higher among non-working women (42.0%) than working (27.0%) women.

This study shows 29.2% women belonging to lower class used contraception and 78.1% women from upper class used contraception. As Socio-economic status improved usage of contraception also improved and this was statistically significant. Chattopadhyay T. *et al.*,<sup>22</sup> reported similar findings stating that contraceptive acceptance is better among women from higher SES. In study conducted by Shweta *et al.*,<sup>11</sup> at Kashi Vidyapeeth Block, Uttar Pradesh it was observed that as the socio-economic status increases, adoption of family planning also improved. Similarly, study done by Andurkar S.P. *et al.*,<sup>23</sup> in Aurangabad, Maharashtra reported that contraceptive use was significantly lower among couples from lower socio-economic status. Study done by Banerjee B.<sup>21</sup> revealed acceptance of permanent methods of contraception was higher among couples from higher SES.

## Conclusion

From the present study it can be concluded that prevalence of contraception was 61.7%. Tubectomy was the most commonly practiced method of family planning. OCPs are most commonly used temporary methods of contraception. Contraceptive usage had a significantly positive relation with literacy status of women and socio-economic status. On the other hand husband's educational status, occupation of women, husband's occupation did not have any relation with contraceptive usage.

It is therefore essential to organize educational campaigns on the awareness of family planning services by emphasizing on the benefits of the services as it will help reduce misconceptions, and increase access and utilization of family planning services. Improving literacy status of these rural women their awareness can be created and acceptance can be increased. Measures should be taken to enhance the socio-economic status so that the subjects which will increase their health seeking behavior and they will be in a better position to afford the temporary methods of family planning.

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## References

1. Eliason S, Baiden F, Quansah-Asare G, Graham-Hayfron Y, Bonsu D, Phillips J, Awusabo-Asare K. Factors influencing the intention of women in rural Ghana to adopt postpartum family planning. *Reprod Health* [Online]. 2013. Available from: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3724747>.
2. Cates W J, Abdool Karim Q, El-Sadr W, Haffner DW, Kalema-Zikusoka G, et al: Global development. Family planning and the millennium development goals. *Science*. 2010; 329:1603.
3. Sachs JD, McArthur JW. The millennium project: a plan for meeting the millennium development goals. *Lancet*. 2005; 365(9456):347-353.
4. Yue K, O'Donnell C, Sparks PL. The effect of spousal communication on contraceptive use in Central Terai, Nepal. *Patient Educ Couns*. 2010;81(3):402-408.
5. Lauria L, Donati S, Spinelli A, Bonciani M, Grandolfo ME. The effect of contraceptive counselling in the pre- and post-natal period on contraceptive use at three months after delivery among Italian and immigrant women. *Ann Ist Super Sanita*. 2014;50(1):54-61.
6. Malini B, Narayanan E. Unmet need for family planning among married women of reproductive age group in urban Tamil Nadu. *Journal of Family & Community Medicine*. 2014; 21(1): 53-5.
7. District Level Household and Facility Survey-3 (2007-08), Ministry of Health and Family Welfare. Key Indicators India, States, Union Territories, Districts.
8. DLHS-4 District Level Household and Facility Survey-3 (2012-13), Ministry of Health and Family Welfare. Key Indicators States, Districts Fact Sheet. International Institute for Population Sciences. Mumbai.
9. Kiran G Makade, Manasi Padhyegurjar, Shekhar B Padhyegurjar, R N Kulkarni. Study of contraceptive

- use among married women in a slum in Mumbai. National Journal of Community Medicine, Jan-Mar 2012; Vol-3; 40- 43.
10. Swati Khan, Rekhee Verma, Syed Esam Mahmood on Correlates of use of family planning methods among married women of reproductive age group in Bareilly, India. National Journal of Community Medicine, Oct-Dec" 2012; Vol-3 issue 4; 623-626.
  11. Shweta and M.B. Singh, A study on Knowledge and pattern of family planning adoption in Kashi Vidyapeeth Block, Varanasi District (U.P). Indian J. Prev. Soc. Med. 2010; Vol.41: 21-27.
  12. S P Pushpa, R Venkatesh and M S Shivaswamy. Study of fertility pattern and contraceptive practices in rural area. Indian Journal of Science & Technology, Apr 2011; Vol-4: 429-431
  13. Mohanan P, Kamath A, Sajjan BS. Deptt. of Community Medicine, Kasturba Medical College. Manipal Academy of Higher Education, Mangalore - 575 001. 2003; XXVIII(1):16-9.
  14. Sanghamitra Maulik and Aparajita Dasgupta. A study on Knowledge, perceptions and practice of family planning methods in mothers visiting an immunization clinic of rural Bengal. Indian Journal of Medical Specialities, Jan-Jun 2013; Vol-4: 75-80.
  15. Lakshmi Manjeera M, Neetha, Supriya Rai. Contraceptive practices among reproductive age group of women in Justice K.S. Hegde Medical College Hospital, Mangalore. International Journal of Reproduction Contraception Obstetrics Gynaecology 2013; Mar: Volume 2(1):39-46.
  16. Chandra Kansal A, Chandra R, sanghpal SD, Negi KS. Epidemiological correlates of contraceptive prevalence in rural population of Dehradun district. Indian Journal of Community Medicine 2005; 30(2):60-2.
  17. S.M Pandey. A study on correlation of Modern contraceptive practices among married couples in rural area of Hisar (Haryana). Indian J. Prev. Soc. Med. July-Sept 2011; Vol.42: 273-277.
  18. Giridher S, Choudhary A, Gill P, Soni R, Sachar RK. Contraceptive practices, related factors among married women in a rural area of Ludhiana. The Internet Journal of Health 2010; Vol.12.
  19. Singh N, Kaur G, Singh J. The use of contraceptives and unmet need family planning in rural area of Patiala district. The Journal of Family Welfare 2009; 55(2):34-8.
  20. Divya S, Kushwah SS. A comparative study of reproductive health among working women and housewives in Rewa municipal area. Indian Journal of Maternal and Child Health 2010;13(2):2-6.
  21. Banerjee B. Socioeconomic and cultural determinants on acceptance of permanent methods of contraception. The Journal of Family Welfare 2004;50(1):54-8.
  22. T. Chattopadhyay, M. Mundle, P. Shrivastava, D. Chattopadhyay, S.P. Mitra. Limiting factors in contraceptive acceptance in urban slum, Indian journal of community med. July-sep 2004; 29(3):109-110.
  23. Andurkar SP, Yadav VB, Dalvi SD. Study of unmet need for family planning among married women of reproductive age in urban health central field practice area of Govt Medical College, Aurangabad. Indian Journal of Public Health 2006;50(1):45-6.

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