

**Original Research Article** 

## CONTRACEPTIVE PRACTICES AND UNMET NEED FOR FAMILY PLANNING IN CURRENTLY MARRIED WOMEN OF 15-49 YEARS OF AGE IN A RURAL AREA OF THRISSUR DISTRICT

Sona Dayan. K<sup>1</sup>, Nileena Koshy<sup>2</sup>, Jaya .K.V<sup>3</sup>

<sup>1</sup>Junior Resident, Department of Community Medicine, Govt. Medical College, Thrissur, Kerala, India. <sup>2</sup>Additional Professor, Department of Community Medicine, Govt. Medical College, Thrissur, Kerala, India. <sup>3</sup>Associate Professor (CAP), Department of Community Medicine, Govt. Medical College, Thrissur, Kerala, India.

 Received
 : 05/09/2024

 Received in revised form : 25/10/2024

 Accepted
 : 09/11/2024

#### **Corresponding Author:**

Dr. Jaya .K.V, Associate Professor (CAP), Department of Community Medicine, Govt. Medical College, Thrissur, Kerala, India. Email: 2.

**DOI:** 10.70034/ijmedph.2024.4.83

Source of Support: Nil, Conflict of Interest: None declared

**Int J Med Pub Health** 2024; 14 (4); 428-436

#### ABSTRACT

**Background:** To study the prevalence and pattern of current use of contraceptives among currently married women of 15-49 years of age in a rural area of Thrissur district and to study the unmet need for family planning among these females and to identify the reasons.

**Material and Methods:** A community based cross sectional study was conducted among 240 currently married women of 15-49 years of age in Tholur Community Health Centre area, which is the rural field practicing area of Dept of Community Medicine, Govt Medical college, Thrissur district. Cluster sampling technique with probability proportionate to size was used taking subcentres as cluster. 40 study participants were selected from the updated eligible couple register of each of the six subcentres by simple random sampling and the investigator went to each of the participant's house.

**Results:** A total of 240 patients participated in this study. The mean age of the study was  $30.6 \pm 5.78$  years. 62.1% were Hindus followed by 36.7% Christians. Majority (72.1%) had received education of higher secondary level or above and 204 (85.8%) were house wives. 109(45.4%) belonged to upper middle class and 88 (36.7%) belonged to middle class. More than half (57.5%) belonged to nuclear family. The mean age at marriage was 21.41± 2.9 years, which was higher than the legal age for marriage in India. Majority (50.4%) were with two living children. The contraceptive prevalence was 62.9% (95% CI: 56.5,69.0). The most commonly used contraceptive method was tubectomy (32.9%) which was similar to that of India and Kerala NFHS-4 data. Among those who were using contraception, 9.3% reported side effects during use. Among this 50% reported menorrhagia during IUCD use. The unmet need for family planning was17.5%, which includes 10.4% for spacing and 7.1% for limiting. The reasons for unmet need were don't feel it necessary (38.1%), fear of side effects (33.3%), Religious reasons (16.7%). Age group, religion, type of family, socioeconomic status were found to have statistically significant association with contraceptive use. While the contraceptive use was highest among those with 2 children (78.9%) it was lowest among those (39.5%) with one or no children. The difference was statistically significant (p=0.001). Contraceptive use was higher among those with male children (68.6%) than those without a male child (49.3%). The difference was statistically significant (p=0.005). Women who desired to have more children was found to have significantly lower contraceptive use than who didn't want to have children (P=0.001).

**Conclusion:** The mean age of the study was $30.6 \pm 5.78$  years. Majority (62.1%) were Hindus followed by 36.7% Christians. Majority (72.1%) had received education of higher secondary level or above. 85.8% were house

428

wives. 45.4% belonged to upper middle class and 36.7% belonged to middle class. More than half (57.5%) belonged to nuclear family. The contraceptive prevalence was 62.9% (95% CI : 56.5,69.0).The most commonly used contraceptive method was tubectomy (32.9%). The unmet need for family planning was17.5%, which includes 10.4% for spacing and 7.1% for limiting. The reasons for unmet need were don't feel it necessary (38.1%), fear of side effects (33.3%), Religious reasons (16.7%). Age group, religion, type of family, socioeconomic status were found to have statistically significant association with contraceptive use. Contraceptive use was higher among those who had two children and also among those with a male child. These were statistically significant. Women who desired to have more children was found to have significantly lower contraceptive use than who didn't want to have children.

Key Words: Family planning, Contraceptive practices, Unmet need.

## **INTRODUCTION**

The current world's population is 7.6 billion as per the UN report 2017 and by adding 83 million people to world's population every year, it is expected to reach 8.6 billion in 2030.<sup>[1]</sup> India is the second most populous country with 1.3 billion people accounting for 18 % of the global population. It is predicted that around 2024 or roughly in 7 years India will surpass that of china. As per the 2011 Census, Indian population was 121 crores and with a decadal growth rate of 17.7% it is expected to reach 153 crores by 2050 making India the most populous country in the world.<sup>[2]</sup>

Family planning is defined as a way of thinking and living which is adopted voluntarily upon the basis of knowledge, attitudes and responsible decisions by individuals and couples in order to promote the health and welfare of family group and thus contribute effectively to the social development of a country. Promotion of family planning and ensuring access to preferred contraceptive methods for women and couples is essential to securing the wellbeing and autonomy of women, while supporting the health and development of communities. Family planning was recognised as a basic human right in 1968 by the United Nations Conference on Human Rights.<sup>[3]</sup>

Globally use of modern contraception has risen slightly from 54% in 1990 to 57.4% in 2014. Worldwide 63% of married women of 15-49 years of age uses a method of family planning.<sup>[4]</sup>

According to National Family Health Survey - 4 (NFHS -4) of 2015-16, the prevalence of contraceptive use in India was 53.5% (51.7% for rural and 57.2% for urban) and in Kerala was 53.1% (53.3% for rural and 52.9%% for urban). Tubectomy was the most commonly used contraceptive both in India (36%) and Kerala (45.8%).<sup>[5,6]</sup>

The launch of National Family Welfare Programme in the year 1952,<sup>[7]</sup> with the objective of reducing the birth rate to the extent necessary to stabilise the population at a level consistent with requirement of national economy, had a great impact on the demographic and health profile of India. Adopting "small child norm" to stabilize the population, was the objective of Family welfare programme in India for which the Net Reproduction Rate (NRR) should be 1.

The unmet need for family planning as per NFHS-4 was 12.9% (12.1% for urban and 13.2% for rural) in India and 13.7% (14.3% in urban and 13.7% in rural) in Kerala. The prevalence of contraceptive use is low among rural Kerala. As per the District Level Household Survey – 4 (DLHS - 4) of 2012-13, the prevalence of contraceptive use in Kerala was 60.0% (59.9% for rural and 60.1% for urban ) and unmet need for family planning was 19% (20% for rural and 18% for urban).<sup>[8]</sup>

Also there are not much reported studies from rural Kerala stating the reasons for unmet need for family planning. Women, especially in the rural areas are reportedly reluctant to accept any method of contraception due to various reasons. The district of Thrissur occupies the central part of Kerala and is renowned as the "cultural capital" of the state. Spanning an area of about 3,032 km<sup>2</sup>, Thrissur district is home to over 10% of Kerala's population.

## **MATERIALS AND METHODS**

A community based cross sectional study was conducted among 240 currently married women of 15-49 years of age in Tholur Community Health Centre area, which is the rural field practicing area of Dept of Community Medicine, Govt Medical college, Thrissur district. The study was conducted from January 1st, 2017 to December 31st, 2017 over a period of one year.

**Inclusion Criteria:** Study participants who were permanent residents of Tholur Community Health centre area atleast for the past 1 year and who gave consent to participate in the study.

### **Exclusion Criteria**

- 1. Women not willing to give consent for participating in the study
- 2. Women who are on treatment for infertility
- 3. Women who attained menopause, or never menstruated.
- 4. Women who are postpartum amenorrheic for 5 years or more.
- 5. Women who underwent hysterectomy.

#### Sample size

Sample size was calculated using the formula  $(Z\alpha)^2 PQ/d2$ 

where P = 59.9% (Prevalence of contraceptive practices in Kerala)

O = 100 - P = 40.1%

Žα=1.96

Allowable error (d) = 15% of P = 8.9

With Significance level of 0.05 and power of 80% :  $(1.96)2(59.9 \times 40.1)/(8.9)2 = 116$ 

As the sampling method employed was cluster sampling technique, design effect, i.e. D = 2 was taken into account.

**Design effect:** this is the extra requirement of sample size due to sampling technique, calculated using the formula  $D=1+(b-1)\rho$ 

B= number of responses (subjects) in a cluster

P(rho)=Intra-cluster correlation coefficient(rate of homogeneity)

Hence, the final sample size was calculated as  $(Z\alpha)2pq/d2 \ \times D$ 

N=  $116 \times 2 = 232$ .

#### RESULTS

The results of the study are discussed as Sociodemographic profile of the study participants, marital profile, Obstetric profile, Family planning which includes details of contraception and unmet need for family planning and Factors associated with Contraceptive use.

Socio-demographic profile of the study participants Sociodemographic profile is discussed as age of the participants, religion, educational status, occupation, socioeconomic status, and monthly family income. Age of the participants

The mean age of the study participants was  $30.60 \pm 5.78$  years. While 91 (37.9%) of the study participants were of the age between 26 - 30 years, 54 (22.5%) of them were of the age between 31 - 35 years.

Educational status

Among the 240 study participants, majority of them (72.1%) had received education of higher secondary level or above, while majority of their husbands (66.7%) had received education below higher secondary level The educational status of study participants & their husbands is given in Figure.

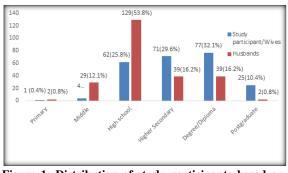


Figure 1: Distribution of study participants based on educational status of participants and their husbands

#### **Occupational status**

Majority of study participants (85.8%) were house wives. Among those who were employed,10 (4.2%) of them were unskilled labourer, 11 (4.6%) were semiskilled and 3(1.2%) were skilled labourer. The distribution of study participants according to their occupation is shown in the Figure.

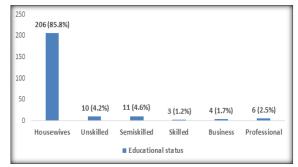


Figure 2: Distribution of study participants according to their occupational status

When the occupational status of spouses of study participants were studied, it was seen that majority (99.2%) of them were employed and 2 (0.8%) were unemployed.

Socioeconomic status: The socio-economic status of the participants was assessed using the Modified Udai Pareek Socio-economic scale.

While 109 (45.4%) of study participants belongs to upper middle class, 88 (36.7%) belongs to middle class. Distribution of study participants according to the socioeconomic class is given in figure.

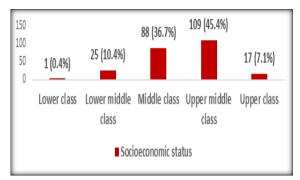


Figure 3: Distribution of study participants according to Socioeconomic status

#### Type of family

More than half of the study population (57.5%) belonged to nuclear family, followed by 47.6% who belongs to joint family.

Monthly family income

The mean monthly family income of the study participants was  $8133.75 \pm 3.83$  Rupees. Maximum monthly family income was 35,500 Rupees and minimum monthly family income was 3500 Rupees. Median family monthly income was 7500 Rupees.

#### Marital profile

Age at marriage: The mean age of study participants at marriage was  $21.41 \pm 2.9$  years. The minimum age at marriage was 18 years and maximum age at

430

marriage was 37 years. Majority of the participants, ie 224 (93.3%) had married before 25 years of age. Of the remaining 16 (6.7%) participants, 11(4.6%) of them had married before 30 years of age.

## Obstetric profile

## **Details of Conception**

Number of conceptions- Minimum number of conception was 1 and maximum number was 5. Majority (50.4%) of the participants were those with two conceptions.

Age at conception- The mean age at first conception was  $22.60 \pm 3.12$  years, and second conception was  $25.41 \pm 3.64$  years. Table 5.3 shows the mean age of participants at various order of conception. [Table 5] The difference in mean age at conception between first and second conception was 2.8 years and between second and third conception was 2.1 years. Majority had atleast one-year difference in the mean age of conception between consecutive conceptions. **Details of children** 

Number of children - The mean number of children was  $1.79 \pm 0.69$ , with a range of 1 - 4. [Table 6]

Number of female and male children - The mean number of female children was  $1.37 \pm 0.59$ . The mean number of male children was found to be 1.30  $\pm 0.46$ . While 71 (21.6%) of the participants had no male children, 119 (49.6%) had only one male children and 50 (21.8%) of them had two male children, 65 (27.1%) had no boy child. [Table 7]

**Family Planning-** Family planning is discussed as Details of contraception and unmet need for family planning.

**Details of Contraception-** Contraceptive details include contraceptive prevalence, methods used for contraception, awareness of contraceptive methods,

**Contraceptive Prevalence-** Contraceptive prevalence among the study participants was 62.9% with a 95% CI (56.5 - 69.0). Among the 240 participants, 151 (62.9%) of them were currently using a method of contraception.

**Method used for contraception-** While 79 (32.9%) uses tubectomy, 27 (11.3) of them uses intrauterine devices as the method of contraception. None of the participant's husband used vasectomy as a method.

Awareness of contraceptive methods- Among the 240 participants, awareness was highest for Condoms (96.1%), followed by safe period (94.6%), intrauterine devices (94.2%) and female sterilisation (92.1%). Awareness of injectables was only 46.2%.

Distribution of study participants based on Side effect of contraceptive use

# Side effect of contraceptive use among contraceptive users

Among the 14 who had self reported side effect during contraceptive use, (50%) of them experienced menorrhagia, and 2 each had complaints of low back ache and irregular periods.

#### Unmet need for family planning

Out of the 240, 151 were currently using a method for family planning. Among 89 contraceptive nonusers, 15 were pregnant women and the pregnancy was intended. Of the remaining 74 contraceptive nonusers who were not pregnant,17 didn't want to conceive again (unmet need for limiting).

Also, among the remaining 57 (74 - 17) non users who wanted to conceive again,32 of them wanted to conceive within a duration of less than 2 years and 25 wanted to conceive after a duration of 2 years or more (unmet need for spacing).

Thus unmet need for family planning was 42 out of the 240 participants, ie 17.5%, which includes 17 (7.1%) with unmet need for limiting and 25 (10.4%) with unmet need for spacing.

#### Reasons for unmet need of family planning

Among the 42 study participants with unmet need for family planning, 16 (38.1%) didn't feel it necessary to use family planning method and 14 (33.3%) didn't use a family planning method due to the fear of side effects. Distribution of study subjects based on reasons for unmet need for family planning.

Association of Contraceptive use with Selected factors- Association of Contraceptive use was studied with selected factors which included sociodemographic variables, marital factors and obstetric factors.

**Sociodemographic variables-** Sociodemographic factors studied were age of the study participants, religion, socio-economic status, family type, education and occupation of the study subjects, education of study subject's husband, monthly family income.

Contraceptive use was highest among those above 35 yrs (80%), followed by those between 31-35 years of age (68.5%) and was lowest (53.3%) among those of 25yrs of age or below. The difference was found to be statistically significant (p=0.01).

\* Since number of Muslims were less, Muslim and Christians were taken as one group for calculating  $\chi^2$  test.

Religion was found to have statistically significant association with contraceptive use (p=0.01).

\* Since number of participants with extended family were less, extended and joint family were taken as one group for calculating  $\chi^2$  test. Statistically significant association was found between type of family and contraceptive use of the study participants (p = 0.03).

\*Since number of participants in lower class & upper class were very less, lower and lower middle class were taken as one group and upper, upper middle class were taken as one group for doing  $\chi^2$  test

Contraceptive use was highest (71.6%) among middle class, followed by lower / lower middle class (69.2%) and lowest (55.6%) among upper / upper middle class. The difference was found to be statistically significant (p=0.04).

Contraceptive use was highest among those with an education level of high school and below (73.1%), and lowest (55.9%)among those with education level above higher secondary level. The difference was not statistically significant.

431

Contraceptive use was highest (67.5%) among participant's whose husband had studied upto high school or below and lowest among those whose husbands had studied upto higher secondary level. The difference was statistically not significant.

Contraceptive use was higher (64.3%) in those with monthly income less than 10,000 rupees compared to those with more than 10,000 rupees. Association was not statistically significant.

Contraceptive use was highest (63.6%) among those who had got married by 20 years of age compared to those (62.4%) married after 20 years. Association was not statistically significant.

Contraceptive use was higher (67.7%) among those with age at first conception within 20 years, compared to those above 20 years. Association was not statistically significant.

While the contraceptive use was highest among those with 2 children (78.9%) it was lowest among those (39.5%) with one or no children. The difference was statistically significant (p=0.001).

Contraceptive use was significantly decreased among those who didn't have a male child compared to those who had a male child.

Women who desired to have more children was found to have statistically lower contraceptive use than who didn't want to have children (P=0.001).

Table 1: Distribution of study participants based on monthly family income       Munthly family income       Frequency       Burnettle			
Monthly family income (in Rupees)	N =240	Percentage	
Less than 10,000 10001 - 20000	216	90.0 9.6	
20001 and above	1	0.4	

Table 2: Distribution of study participants based on number of conceptions

Number of conceptions	Frequency (N = 240)	Percentage
1	57 (23.8)	23.8
2	121 (50.4)	50.4
3	46 (19.2)	19.2
4	12 (5.0)	5.0
5	4 (1.7)	1.7

Table 3: Distribution of study participants according to order and mean age of conception

Order of conception (N)	Mean age at conception (in years )	Range (in years)
First (240)	$22.60 \pm 3.12$	18 - 37
Second (184)	$25.41 \pm 3.64$	18 - 42
Third (61)	$27.51 \pm 4.19$	21 - 44
Fourth (15)	$28.53 \pm 3.42$	23 - 35
Fifth (4)	$31.50 \pm 4.50$	25 - 35

#### Table 4: Distribution of study participants based on number of children

Number of children	Frequency (N= 240)	Percentage
No child	6*	2.5
1	81	33.8
2	123	51.2
3 and above	30	12.5

#### Table 5: Distribution of study participants based on number of male children

Number of male child	Frequency (N = 240)	Percentage
No male child*	71*	29.6
1	119	49.6
2	50	20.8

able 6: Distribution of study participants based on method used for contraception			
Contraceptive method	Frequency (N=240)	Percentage	
Condoms	32	13.3	
Tubectomy	79	32.9	
Intrauterine Devices	27	11.3	
Oral pills	1	0.4	
Safe period	12	5.0	
Non users	89	37.1	

### Table 7: Distribution of study participants based on awareness of contraceptive methods

	Awa	Total	
Contraceptive method	Present n(%)	Absent n(%)	N N
Condoms	233 (97.1)	7 (2.9)	240
Emergency contraceptives	164 (68.3)	76 (31.7)	240
Tubectomy	221 (92.1)	19 (7.9)	240
Injectables	111 (46.2)	129 (53.8)	240
Intrauterine Contraceptive Devices (IUCD)	226 (94.2)	14 (5.8)	240
Vasectomy	148 (61.7)	92 (38.3)	240
Oral pills	209 (87.1)	31 (12.9)	240
Safe period	227 (94.6)	13 (5.4)	240

#### Table 8: Distribution of study participants based on side effect of contraceptive use

Contraceptive used	Side effect of contraceptive	Frequency (Percentage) (N =14)
	Menorrhagia	7 (50)
	Low backache	3 (14.3)
IUCD	Irregular periods	2 (14.3)
юсь	Lower abdominal pain	1 (7.1)
Condoms	Itching	1 (7.1)

Table 9: Distribution of participants based on unmet need for family planning			
Unmet need Frequency Percentage (95% C (N= 240)			
Unmet need for Limiting	17	7.1 (4.2, 11.1)	
Unmet need for Spacing	25	10.4 (6.9, 15.0)	
Unmet need for Family planning	42	17.5 (12.9, 22.9)	

Table 10: Distribution of study subjects based on reasons for unmet need for family planning			
Reasons for unmet need for family planning	Frequency (Percentage )	(N = 42)	Percentage
Don't feel it necessary	16		38.1
Fear of Side effects	14		33.3
Religious reasons	7		16.7
Husband staying away	5		11.9
Total	42		100%

## Table 11: Association between age group and contraceptive use

	Contraceptive use		
Age group in years	Present n (%)	Absent n (%)	Total N
≤ 25	24 (53.3)	21 (46.7)	45
25 - 30	50 (54.9)	41 (45.1)	91
31 - 35	37 (68.5)	17 (31.5)	54
>35	40 (80.0)	10 (20.0)	50
Total	151	89	240

 $\chi^2$  =11.23 df=3 p=0.01

### Table 12: Association between religion and contraceptive use

	Contrace	Total	
Religion	Present n (%)	Absent n (%)	N
Hindu	99 (66.4)	50 (33.6)	149
Christian / Muslim*	52 (57.1)	39 (42.9)	91
Total	151	89	240

 $*_{\chi^2}$  =11.23 df=1 p=0.01

Table 13: Association between type of family and contraceptive	use
--	-----

Type of family	Contrace	Total	
	present n (%)	Absent n (%)	N
Nuclear	95 (68.8)	43 (31.2)	138
Joint / Extended*	56 (54.9)	46 (45.1)	102
Total	151	89	240

	Contraceptive use		
Socioeconomic status	present n (%)	Absent n (%)	Total N
Lower / Lower middle*	18 (69.2)	8 (30.8)	26
Middle	63 (71.6)	25 (28.4)	88
Upper middle/Upper*	70 (55.6)	56 (44.4)	126
Total	151	89	240

 $*_{\chi^2} = 6.21 \text{ df} = 2 \text{ p} = 0.04$ 

#### Table 15: Association between Educational status and contraceptive use

	Contraceptive use		Total
Educational status	present n (%)	Absent n (%)	N
High school and below	49 (73.1)	18 (26.9)	67
Higher secondary	45 (63.4)	26 (36.6)	71
Above higher secondary	57 (55.9)	45 (44.1)	102
Total	151	89	240

 $\chi^2 = 5.17 \text{ df} = 2 \text{ p} = 0.08$ 

Table 16: Association between educational status of spouses of participants and contraceptive use
---

	Contraceptive use		Total	
Educational status	present n (%)	Absent n (%)	N	
High school and below	108 (67.5)	52 (32.5)	160	
Higher secondary	19 (48.7)	20 (51.3)	39	
Above higher secondary	24 (58.5)	17 (41.5)	41	
Total	151	89	240	

 $\chi^2 = 5.12$  df=2 p= 0.08

### Table 17: Association between Monthly family income and contraceptive use

	Contraceptive use		Total
Monthly family income	present n (%)	Absent n (%)	N N
≤10,000 Rupees	135 (64.3)	75 (35.7)	210
>10,000 Rupees	16 (53.3)	14 (46.7)	30
Total	151	89	240

 $\chi^2 = 0.13$  df=1 p=0.25

Table 18: Association between Age at marriage and contraceptive use

	Contrace	Total	
Age at marriage	present n (%)	Absent n (%)	N
$\leq 20$ years	63 (63.6)	36 (36.4)	99
> 20 years	88 (62.4)	53 (37.6)	141
Total	151	89	240

<sub>x</sub>2 =0.04 df=1 p=0.85

	Contraceptive use			
Age at first conception	present n (%)	Absent n (%)	Total N	
$\leq 20$ years	42 (67.7)	20 (32.3)	62	
> 20 years	109 (61.2)	69 (38.8)	178	
Total	151	89	240	

 $\chi^2$  =0.83 df=1 p=0.36 Table 20: Association between Number of children and contraceptive use

	Contraceptive use			
Number of children	present n (%)	Absent n (%)	Total N	
$\leq 1$ child	32 (39.5)	49 (60.5)	81	
2 children	97 (78.9)	26 (21.1)	123	
>2children	22 (73.3)	8 (26.7)	30	
Total	151	89	240	

 $\chi^2 = 34.2 \text{ df} = 1 \text{ p} = 0.001 \text{*}$ 

	Contraceptive use		
Number of female children	present n (%)	Absent n (%)	Total N
No child	50 (53.8)	43 (46.2)	93
1 child	68 (68.7)	31 (31.3)	99
≥2 children	33 (66.7)	15 (33.3)	48
Total	151	89	240

 $*_{\chi^2}$  =5.5 df=2 p=0.065

Table 22: Association between presence of male child and contraceptive use

Presence of male children	Contraceptive use		
	present n (%)	Absent n (%)	Total N
Present	116 (68.6)	53 (31.4)	169
Absent	35 (49.3)	36 (50.7)	71
Total	151	89	240

 $\chi^2 = 8.02 \text{ df}=1 \text{ p}=0.005$ 

Table 23: Association between desire to have more children and contraceptive use among non-pregnant participa	ints

	Contraceptive use		Total
Desire to have more children	present n(%)	absent n(%)	N
Yes	40 (41.2)	57 (58.8)	97
No	111 (86.7)	17 (13.3)	128
Total	151 (67.1)	74 (32.9)	225

 $\chi^2 = 51.7$  df=1 p=0.001

## DISCUSSION

In this study, the mean age of the study participants was  $30.60 \pm 5.78$  years. The study done in Mangalore revealed that 55.5% women were in the 26-35 years age, which was comparable to the proportion of female sin the 26-35 years (56.7%) in the present study.

More than half of the study population was Hindus (62.1%), followed by 36.7% Christians and 1.2 % Muslims. As per 2011 Census of India, proportion of different religions in Kerala were Hindu (54.7%), Muslim (26.6%), Christians (18.4%). The religion wise distribution of India in the same census was Hindu (79.8%), Muslim (14.2%), Christian (2.3%). Thrissur district religion distribution as per the 2011 census was Hindu (58.4%), Muslim (17.01%), Christian (24.3%). The higher proportion of Christians in the study may be due to sampling from Christian majority areas.

Majority of the study participants (72.1%), in this study, had received education of higher secondary level or above compared to 33.3% of their husbands. This was higher than that of NFHS-4 Kerala state data, according to which almost half of women age 15-49 (48%) in Kerala have completed 12 or more

years of schooling, compared with 45 percent of men.

In the present study, 14.2% of the study participants were employed. The occupational status of the participants was found to be lower than that of NFHS 4 India data in which 24 percent of women age 15-49 years were employed. This could be probably because the study was conducted in rural area where the proportion of women who are employed is low.

In this study ,109 (45.4%) of study participants belongs to upper middle class, 88 (36.7%) belongs to middle class, the study done in rural area of Patiala district, Punjab revealed that 82.9% of the participants belonged to middle socio-economic class.

The mean age of marriage of the study participants was  $21.41 \pm 2.9$  years and minimum age at marriage was 18 years and maximum age at marriage was 37 years. This was higher than the legal age of marriage in India. The mean age is comparable with the age at marriage of rural Kerala as per DLHS -4 which was 22.4 years and also with the NFHS 4 Kerala data on age at marriage which was 21.5 years. The mean age of the study participants in this study was higher than that of India as per DLHS-3, which was 19.8 years.

In the present study, Contraceptive prevalence among the study participants was 62.9% with a 95% CI (56.5 - 69.0). This was lesser than that of a study done in rural Egypt by El-Masry R et al where the prevalence was 69.5% and was also lower than that of the study done in south-western Nigeria by Olugbenga et al in which the prevalence was 73.7%. The prevalence of contraceptive use in North Kerala, according to study by Pawar et al was 70.3%. The higher prevalence of contraceptive use in this study compared to NFHS-4 and DLHS-4 may be because, of increased awareness due to higher education. Table 6.1 compares the current study with NFHS-4 and DLHS-4 data of contraceptive prevalence.

#### CONCLUSION

The contraceptive prevalence of the present study (62.9%) was higher than that of rural Kerala and India (NFHS - 4), which could be attributed to the high literacy rate of Kerala. The most common contraceptive method used in this study was tubectomy, which was also the most common method used in Kerala. The total unmet need for family planning in the present study was 17.5% and that for spacing was 10.4% and for limiting was7.1%, these were higher than that of Kerala. The reasons for unmet need included : don't feel it necessary (38.1%), fear of side effects (33.3%), and religious reasons (16.7%) and husband staying away (11.9%).Majority of the study participants were Hindus (62.1%) and this was comparable to the 2011 Census proportion of Hindu religion of Kerala and India. The mean age at marriage of the participants was above the legal age for marriage in India. Contraceptive use was highest among those

who had two living children. This shows a favourable attitude towards desirable family size of  $\leq 2$ . Sociodemographic factors like age group, religion, type of family and socioeconomic status and obstetric factors like number of children, desire to have more children and presence of male children were found to have statistically significant association with contraceptive use.

#### REFERENCES

- UN report World Population Prospects The 2017 Revision [Internet]. [cited 2018 Nov 14]. Available from: https://www.affairscloud.com/un-report-world-populationprospects-2017-revision/
- Puri CP. India's needs and priorities in fertility regulation research. Icmr Bull [Internet]. 1999 Feb [cited 2018 Nov 15];29(2):17–27. Available from: http://www.ncbi.nlm.nih.gov/pubmed/12322289
- International Conference on Human Rights | UNFPA -United Nations Population Fund [Internet]. [cited 2018 Nov 15]. Available from: https://www.unfpa.org/events/international-conferencehuman-rights
- Trends in Contraceptive Use Worldwide 2015 United Nations [Internet]. [cited 2018 Nov 14]. Available from: http://www.un.org/en/development/desa/population/publicat ions/pdf/family/trendsContraceptiveUse2015Report.pdf
- International Institute for Population Sciences. National Family Health Survey 4: State Fact Sheet, Kerala. 2015;1– 6. Available from: http://rchiips.org/NFHS/pdf/NFHS4/KL\_FactSheet.pdf
- India-Key Indicators India-Key Indicators INTERNATIONAL INSTITUTE FOR POPULATION SCIENCES [Internet]. Available from: http://www.rchiips.org/nfhshttp://www.iipsindia.org
- NATIONAL FAMILY WELFARE PROGRAMME [Internet]. [cited 2018 Nov 15]. Available from: http://pbhealth.gov.in/pdf/FW.pdf
- State Fact Sheet Kerala District Level Household and Facility survey-4 Ministry of Health and Family Welfare [Internet]. 2012 [cited 2018 Nov 15]. Available from: http://rchiips.org/pdf/dlhs4/report/KE.pdf.