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Original Research Article

## Study of knowledge, attitude and practices of contraception among the married women of reproductive age group in rural area

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### ABSTRACT

**Background:** More than 40% of pregnancies worldwide are unintended leading to either an unplanned birth or unsafe abortions and maternal morbidity. India, being the most populous country, have an inherent requirement of knowing KAP of contraception among women of reproductive age to prevent unplanned pregnancies, so as to achieve optimal pregnancy outcome.

**Methods:** A descriptive type of observational cross sectional study, involving 400 women within 18-45 year age group, were interviewed regarding KAP for various contraceptive methods.

**Results:** Statistical analysis of data was done by using chi-square technique. Majority (82.5%) in our study had heard of contraception. In our group, 66.36% had fair knowledge, 31.21% had poor knowledge and 2.42% had good knowledge. Age, education, parity, age at marriage, association of these factors were statistically not significant. Majority (86.06%) had a negative attitude towards contraception because of rural background. Only Age (>20) was found to statistically significant for attitude towards contraception. Our study showed 43.25 % women were currently using contraceptive method, where tubal ligation was most common. Socio-demographic factors like age, education status, age at marriage were found to be statistically significant with practice or usage of contraception.

**Conclusions:** Our study reveals that despite of fair knowledge, majority of women had negative attitude towards contraception, mainly due to rural setup, ignorance, shy nature and family pressure. Despite of fair knowledge about contraceptive methods, there usage is low. Thus, there is need for aggressive advocacy about female reproductive health with dissemination of information about family planning methods among reproductive female.

**Keywords:** Attitude, Contraception, Family planning, Knowledge, Practice

### INTRODUCTION

Uncontrolled population explosion is single threat to country economical, social, and political development. India is expecting to surpass and being the most populous country in the world with increasing growth rate. The government of India has shown commitment in reducing the growth rate of India and increasing the use of contraception by implementing National Family Planning program and by continually upgrading the services and spreading the knowledge of family planning. Since the

inception of the program, several knowledge, attitude and practice studies have been conducted (KAP survey) for contraception.<sup>1</sup> Family planning through contraception tries to achieve two main objectives, firstly, to have the desired number of children and secondary to have these children by proper spacing of pregnancy thus preventing the consequences of unwanted pregnancies like septic abortions, maternal morbidity and mortality.<sup>2</sup>

Contraception advice is a good component of preventive health care. Despite the fact that contraceptive usage has

increases over a period of time, there exists a knowledge or attitude or practice gap regarding contraception. These are strongly related to lack of knowledge or education, variations at community, family and individual level, fertility, parity, socioeconomic status, beliefs, misconceptions.<sup>3</sup>

## METHODS

TA descriptive type of cross sectional study was used for the study. A total of 400 married women of reproductive age group (18-45) mothers were selected from attending outpatient department of obstetrics gynecology at NIMS Medical College Jaipur over a period of 1 year (from July 2014-June 2015). Data was collected, using a predesigned questionnaire regarding knowledge, attitude and practices of contraception with reasons for using and reasons for not using contraception, by using direct interview technique. There were 31 questions regarding knowledge about contraceptives. Correct response was given score 1, incorrect/no response was given score 0. therefore possible score was ranging between 0-31 which was divided equally into three categories and labelled as poor (0-10); fair (11-20) and good knowledge (21-31). Similarly there were 20 questions for attitude towards contraception. And the respondents who positively responded >10 questions were labelled as having positive attitude while rest were labelled as having negative attitude. Continuous variables were summarized as Mean and standard deviation while nominal/categorical variables as proportion. Chi square test was used for analysis of nominal/categorical variable. P value <0.05 was taken as significant.

## RESULTS

Table 1 depicts that most of the participants belong to age group 21-30 years. Mean age of participant was 26.67±7.5 years. 45.75% women had 2 or 3 parity. Most of the participant have completed their primary education (63.50%). Regarding the education, majority of the female were housewives (75%). 45.75% of the participants was from nuclear family. It was observed that 71% of women got married at or after 20 years of age. Most of the participants (77.75%) had active married life of 1-3 years.

Table 2 denotes that there was statistically no significant association of knowledge with education, occupation, age in years, parity, family type and age at marriage.

Table 3 reveals that majority of the participants (82.5%) had awareness of method of contraception. while 17.5% did not. Most commonly used methods was OCP (80%) followed by tubectomy (78.18%). Implants were the least known method of contraception (1.21%).

Table 4 shows that most of the participants had got information of contraception through social circle (51.21%) followed by media (20%).

**Table 1: Socio-demographic characteristics of respondents (n=400).**

Characteristics	Category	Frequency	Percentage
Age	18-20	104	26
	21-30	192	48
	31-40	68	17
	41-45	36	9
Parity	P0	32	8
	P1	94	23.5
	P2-P3	183	45.75
	>P4	91	22.75
Education	Illiterate	116	29
	Primary	242	60.50
	Secondary	26	6.50
	Higher secondary	10	2.50
	Graduate	6	1.50
Type of family	Joint	183	45.75
	Nuclear	137	34.25
	Three generation	80	20
Age at marriage	<20	116	29
	>20	284	71
Occupation	Housewife	300	75
	Unskilled	48	12
	Semiskilled	12	3
	Skilled	26	6.50
	Professional	14	3.50
According to years of marriage	1-3 years	311	77.75
	4-10 years	73	18.25
	11-15 years	10	2.50
	>15 years	6	1.50

**Table 2: Association of knowledge of contraception with selected socio-demographic variables.**

Age in years	Poor	Fair	Good	P value
18-20	36.14	62.65	1.20	0.468
21-30	31.71	64.63	3.66	
31-40	21.82	76.36	1.82	
41-45	32.14	67.86	0.00	
<b>Parity</b>				0.124
P0	33.33	62.96	3.70	
P1	32.47	64.94	2.60	

Continued.

Age in years	Poor	Fair	Good	P value
P2-3	23.84	73.51	2.65	
P4	44	54.67	1.33	
<b>Education</b>				
Illiterate	39.13	56.52	4.35	0.153
Primary	30.99	67.77	1.24	
Secondary	19.23	73.08	7.69	
Higher secondary	40	50	10.0	
Graduate	16.67	83.33	0.00	
<b>Family type</b>				0.490
Joint	29.33	67.33	3.33	
Nuclear	36.52	61.74	1.74	
Three generations	26.15	72.31	1.54	
<b>Age at marriage</b>				0.413
<20	35.11	63.83	1.06	
>20	29.66	67.37	2.97	

**Table 3: Distribution of cases according to knowledge of various contraceptive methods.**

Knowledge of various contraceptive method	Number of cases	Percentage
Heard/ aware of contraception	330	82.5
Condoms	239	72.42
IUCD	211	63.93
oral pills	264	80
Safe period	72	21.81
Coitus interruptus	99	30
Abstinence	172	52.12
Tubectomy	258	78.18
Vasectomy	192	58.18
Injectables	101	30.60
Implants	4	1.21

**Table 4: Knowledge about contraceptives with distribution of cases according to source of information of various contraceptive methods.**

Source of information	Number of cases	Percentage
Health professionals	54	16.36
Media	66	20
Family	41	12.4
Social circle	169	51.21

**Table 5: Attitude toward contraception.**

Attitude	Number of cases	Percentage
Negative (<10)	284	86.06
Positive (>10)	46	13.94

Table 5 revealed that despite of fair knowledge, majority of the women (86.06%) had negative attitude towards contraception. Only 13.94% had positive attitude towards contraception uses.

Table 6 reveals that participant having positive attitude towards contraception were more among the age group of 21-30 years. And the association was found to be statistically significant. Other socio-demographic factors were not found to be significant.

**Table 6: Association of attitude with selected sociodemographic variable.**

	Attitude		P value
Age	Negative	Positive	
18-20	92.77	7.23	0.015
21-30	80.49	19.51	
31-40	94.55	5.45	
41-45	82.14	17.86	
<b>Age at marriage</b>			0.048
<20 years	92.55	7.45	
>20 years	83.47	16.53	
<b>Family type</b>			0.562
Joint	84	16	
Nuclear	86.96	13.04	
Three generations	89.23	10.77	

**Table 7: Contraceptive practice among the participants.**

Contraceptive practices	No. of cases	Percentage
Contraceptive users	173	43.25
Contraceptive non users	227	56.75
<b>Type of contraceptive(n=173)</b>		
Condoms	46	26.6
Tubal ligation	53	30.63
Natural method	20	11.56
IUCD	28	16.18
Oral pills	24	13.87
Injectables	2	1.1

Table 7 shows that 43.25% women are currently using any contraceptive method while 56.75% were unprotected against conception. Among 43.25% who were currently using contraception in our study, tubal ligation/ females sterilization (30.63%) was the commonly used one followed by barrier method (26.6%), IUCD s (16.18%) and oral pills (13.87%). Injectable and natural methods were the least used ones.

**Table 8: Association of practice with selected sociodemographic variables.**

	Currently not using	Currently using	P value
<b>Age</b>			
18-20	68.27	31.73	<0.001
21-30	44.27	55.73	
31-40	72.06	27.94	
41-45	61.11	38.89	
<b>Education</b>			
Illiterate	79.31	20.69	<0.001
Primary	48.76	51.24	
Secondary	26.92	73.08	
Higher secondary	50	50	
Graduate	83.33	16.67	
<b>Age at marriage</b>			
<20	66.38	33.62	0.018
>20	52.82	47.18	

Table 8 reveal that out of 43.25% women currently using contraception, the percentage of contraception usage was highest (55.73%) in the women of 21-30 years of age. Participants with secondary level of education have highest contraception usage (73.08%). And the women who had married at or after 20 years of age, 47.25% were currently using contraceptive. These above results and association were statistically significant.

**Table 9: Distribution of cases according to reasons for using contraception.**

Reasons	No. of cases	Percentage
<b>Completed family</b>	110	63.58
<b>Spacing</b>	47	27.17
<b>Financial problems</b>	11	6.36
<b>Improvement of health/ physicians advise</b>	5	2.89

Table 9 on assessing reason for using contraceptive method, it reveals that most of them had completed family (63.58%) followed by consideration as method of spacing (27.17%) followed by financial problems (6.36%).

Table 10 reveals that for 38.77% women, fear of side effects was most common reasons for not using contraception followed by lack of knowledge (35.24%). 11.45 % were willing to have more children.

**Table 10: Distribution of cases according to reasons for not using contraception.**

Reasons for not using contraception	No. of cases	Percentage
<b>Willing to have more children</b>	26	11.45
<b>Partner opposition</b>	12	5.29
<b>Fear of side effects</b>	88	38.77
<b>Lack of knowledge</b>	80	35.24
<b>Not reliable</b>	11	4.85
<b>Interference with sexual pleasure</b>	10	4.41

## DISCUSSION

Analysis of socio demographic characteristics in our study reveal that out of 400 subjects, 48% belongs to 21-30 year of age group. Large number of these women (45.75%) had parity 2-3. It was also observed that majority women (60.50%) had primary education and 27% of female were illiterate. Most of the women (75%) were housewives. 45% of the women belonged to joint family. 34.25% belonged to nuclear family. 71% women were married when they were above 20 years of age. Large number of women (77.75%) were within three years of active married life. Similar results were found in the study done by Sunitha et al.<sup>4</sup> About 40% were in the age group of 20-25 years. 35.5% had parity of more than 2, 44.5% has primary education. Another study conducted by Prachi et al at al.<sup>5</sup> among 443 women in the study group studied was in the age group of 15-34 and majority (80.1) were housewives. Study conducted by Aarella et al shows that 172 (34.4%) were primipara and 302(60.4%) women having three children.<sup>6</sup>

Majority of women in our study (82.5%) were aware of contraception. Out of 330 women, who were aware of contraception, 264 (80%) were aware of oral pills, 258 (78.18%) were aware of tubectomy, 239 (72.42%) had heard of barrier methods, 211 (63.93%) were aware of IUDS and 58.18% knew about vasectomy and 30.60% were aware of injectables. Implants were the least known method (1.21%). Among the 330 respondent who were aware of contraceptives, 219 (66.36%) had fair knowledge, 103 (31.21%) had poor knowledge and 8 (2.42%) has good knowledge. Similar results were found in the studies done by Prachi et al (2008), Salsa et al (2009), Sharma et al (2012), Prateek et al (2012), Sunitha et al (2013), Srivastava et al (2014), Sarella et al (2014), Thapa et al (2018).<sup>5,21,24,17,4,8,6,25</sup>

Education is the prime influencing factor of knowledge and practice of contraception. It was observed in our study that as education of women increased to higher secondary and graduate levels, the awareness also increased to 83.33%. Another study conducted by Tuladhar et al, also concluded that women education was of secondary or higher level, awareness was 100%.<sup>7</sup> Srivastava et al also

found statistically significant results that as the literacy increased, awareness of contraceptive also increased. Similar results were obtained in the study conducted by Brahmhatt et al.<sup>8,9</sup>

When 80.5% respondents of our study were asked about source of information, they indicated that social circle (51.21%) was there major source followed by media (20%). Two recent studies, one by Bamniya et al (2021) and other by Thapa et al (2018), has shown health workers to be the major source of information.<sup>13,25</sup> Various earlier studies have also shown mass media as a major source of information.

Provide with being aware from people's attitude, their behavior could be predicted and be controlled. However, there are certain attitudes and trends in the human being (such as superstitions, delusions and prejudices) which could be identified as based on distantness from the reality, because these attitudes and trend frequently counterpart social measures and analyzing the cause of difference between beliefs and facts is of high priority.

Our study revealed that despite of fair knowledge, majority of women 86.06% had negative attitude towards contraception, this is mainly attributed to rural setup, ignorance, shy nature of our study population and family. Similar results were observed in the study conducted by Aslicayan et al.<sup>10</sup> They found negative relationship between the lowest period of rural life and the use of conventional method which could be associated with the fact that women living in rural areas have lower education status and they benefit less frequently from the counselling services about family planning methods. Rana and Mansur et al mentioned in their study that 27% has positive attitude compared to 73% had negative attitude towards contraception, similar results were observed by Bhabani et al.<sup>11,12</sup> As per Baniya et al there was positive attitude toward contraception (70.5%).<sup>13</sup>

Significant results was noted in our study between positive attitude and age group. The proportion of respondent having positive attitude towards contraception was more among the age group of 21-30 years and association was found to be statistically significant ( $p=0.015$ ). Similar results were shown by Varma and Arohini in their studies.<sup>14</sup> Age at marriage has a significant influence on the positive attitude towards contraception in our study. A higher positive attitude was noted among the women married at/after 20 years of age and this difference was found statically significant ( $p=0.048\%$ ).

Only 43.25% women were currently practicing any one form of family planning methods. 130 (32.5%) women had used one or more form of family planning methods in the past. Our findings of contraceptive usage were similar to the study conducted by Sunitha et al.<sup>4</sup> 48% of the women in their study were using any one form of contraception while 52% were not using any methods of contraception, the most common method chosen was female sterilization

followed by IUCD. Among 43.25% women who were currently using contraception in our study, tubal ligation/female sterilization (30.63%) was the most commonly used one followed by various methods/condom, IUCD (16.18%) and oral pills (13.87%). Natural methods (11.56%) and injectable (1.1%) were the least used ones. Most of the previous studies have also shown tubal ligation/female sterilization as the most commonly used contraceptive method. However, injection Depo Provera was the most common method in study done by Thapa et al and barrier method in study done by Bamniya et al.<sup>25,13</sup>

In depth analysis of our study it was revealed that current practice of contraception was significantly associated with age of women, literacy, socioeconomic status and age at marriage. Out of 43.25% women, currently using contraception, the percentage of contraceptive usage was highest (55.73%) in the women of 21-30 years which is the most crucial period in the reproductive span. This association was statistically significant ( $p<0.001$ ) and matches well with studies by Pandey, Manna et al, Prateek et al and Baler et al.<sup>15-18</sup>

The education status of the women in our study was found to be significantly associated with contraceptive uses suggesting that literacy status can definitely have an impact on motivation to adapt any contraceptive method. The contraceptive use rate was only 69% among women who were illiterate, while it was 73.08% in those having secondary level of education. This difference was found to be statistically significant ( $p<0.01$ ). These findings are comparable with the studies conducted by Singh et al, Pandey, Manna et al, and Prateek et al.<sup>19,15-17</sup> Significant association was found in our study between age at marriage and contraceptive usage ( $p<0.018$ ), the use of contraceptive was less among those who had married early (<20 year), then among those who had married late (>20 years). Out of 284 women who had married at or after 20 years of age, 47.25% were currently using contraceptive. Whereas it was only 33.62% among women who had married early (<20). Sandhya et al also found similar result.<sup>20</sup> However there was no association observed between age at marriage and contraceptive uses by Prateek et al.<sup>17</sup>

On assessing the reason for using contraceptive method in 173 women, our study revealed that most of them had completed family (63.58%) while 27.1 % women were using contraceptive method for spacing. Sunitha et al mentioned in their study 44% women were using contraception for economic reason, followed by motivation (22%) and incentives (22%).<sup>4</sup> Saluja et al 79 found in their study, major reason of using contraceptive were completed families (81.1%) followed by spacing (14.9%). The similar results were found by Sraella et al.<sup>6</sup>

Fear of side effects of contraception is one significant reason for no compliance. This can be decreased by proper education and proper selection of contraception before

starting its use. 38.77% women revealed that fear of side effect was the most common reason for not using contraception in our study followed by lack of knowledge (35.24%) willing to have more child (11.45%), partner opposition (5.29%). Results of various other studies have also shown lack of knowledge or desire to have a child to be the main reasons for not using contraception. In study done by Shendge et al, fear of side effects was the main reason for not using contraception.<sup>22</sup>

Despite fair knowledge about contraceptive methods in the study group, contraceptive usage is low. There is need of aggressive advocacy about female reproductive health and dissemination of information on family planning methods among the reproductive females.

The limitation of our study was smaller study group that too belonging to the catchment area of our hospital only. The study requires larger population group belonging to a wider region.

## CONCLUSION

As far as family planning is concerned, conversion of knowledge into practice is a big challenge in India. Increasing the role of women in decision making in family planning matters will help us in achieving our family planning goals. We should assess the level of awareness and practices in the community before implementing family planning programme. Newly married couples and young women in reproductive age group needs to be educated and motivated along with improvement in family planning services to promote the use of contraception.

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## REFERENCES

- Mao J. Knowledge, attitude and practice of family planning (A Study of Churachandpur District, Manipur). In: Indira R, Behera D K, editors. *Gender and society*, Vol .2. New Delhi: Vedams e Books (P) Ltd;1999.
- Dabral S, Malik SL. Demographic Study of Gujjars of Delhi: IV. KAP of Family Planning. *J Hum Ecol.* 2004;16(4):231-7.
- Srinivasan K, Jejeebhoy SJ, Easterlin RA. Factors affecting fertility control in India: a cross sectional study. *Popul Dev Rev.* 1984;10:273-95.
- Sunita TH, Desai RM. Knowledge, attitude and practice of contraception among women attending a tertiary care hospital in India. *Int J Reprod Contracept Obstet Gynecol.* 2013;2:172-6.
- Renjhen P, Gupta SD, Barua A, Jaju S, Khati B. A study of knowledge, attitude and practice of family planning among the women of reproductive age group in Sikkim. *J Obstet Gynecol India.* 2008;58(1):63-7.
- Sarella LK, Prasanna NSL. A study on contraceptive knowledge, attitude, and practice among reproductive age group women in a tertiary institute. *Int J Res Health Sci.* 2014;2(2):577-80.
- Tuladhar H, R Marahatta. Awareness and practice of family Planning methods in women attending Gyne OPD at Nepal Medical College Teaching Hospital. *Nepal Med Coll J.* 2008;10(3):184-91.
- Srivastav A, Khan MS, Chauhan CR. Knowledge, attitude and practices about contraceptive among married reproductive females. *Int J Sci St.* 2014;1(5):2-4.
- Brahmbhatt MM, Sheth JK, Balaramanamma DV. A study of knowledge, attitude & practice towards contraception among married women of reproductive age group having  $\leq 2$  Children residing in Vasna ward, Ahmedabad, Gujarat, India. *Health J Ind Associa Prevent Soci Med.* 2013;4(2):8-12.
- Cayan A, Karacam Z. Factors concerning the attitudes of married women toward family planning in Aydnv, Turkey: A cross -sectional study. *Iran J Nurs Midwifery Res.* 2013;18(4):323-28.
- Al-Mansour R, Sabra AA, Hafez. AS. Contraception: knowledge, attitudes and practice with special emphasis on contraceptive pills among Saudi women at Al-Khobar City, Eastern Saudi Arabia. *Egypt J Commu Med.* 2012;30(2):1-13.
- Pegu B, Gaur BP, Sharma N, Singh AS. Knowledge, attitude and practices of contraception among married women. *Int J Reprod Contracept Obstet Gynecol.* 2014;3(2):385-88.
- Bamniya J, Patel D, Singh P, Chakravarti N. A study of knowledge, awareness, and acceptance of contraception among reproductive age women at tertiary care hospital, Ahmedabad. *Int J Reprod Contracept Obstet Gynecol.* 2022 ;11(1):206-11.
- Varma GR, Rohini A. Attitude of spouse towards family planning: a study among married men and women of a rural community in west godavari District, Andhra Pradesh. *Anthropolo.* 2008;10(1):71-5.
- 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.
- Manna N, Basu G. Contraceptive methods in rural area of West Bengal, India. *Sudanese J Public Health.* 2011;6:164-9.
- Prateek SS, Saurabh RS. Contraceptive practices adopted by women attending an urban health centre. *Afr Health Sci.* 2012;12(4):416-21.
- 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;1(3):115-9.
- Singh N, Kaur G, Singh J. The use of contraceptives and unmet need for family planning in rural area of Patiala district. *J Family Welfare.* 2009;55(2):34-8.
- Santhya KG, Ram U, Acharya R, Jejeebhoy SJ, Faujdar Ram, Singh A. Associations between early

- marriage and young women's marital and reproductive health outcomes: evidence from India. *Int Perspect Sex Reproduct Heal.* 2010;36(3):132-39.
21. Saluja N, Sharma S, Choudhary S, Gaur D, Pandey S. Contraceptive knowledge, attitude and practice among eligible couples of rural Haryana. *Internet J Health.* 2009;12(1).
  22. Shendge HB, Padhi M, Mishra K. Dynamics of contraceptive use in women attending a tertiary care hospital. *IRMS.* 2012;2(4):10-13.
  23. Mahawar P, Anand S, Raghunath D, Dixit S. Contraceptive knowledge, attitude and practices in mothers of infant :A cross-sectional study. *National J Commu Med.* 2011;2(1):105-7.
  24. Sharma V, Mohan U, Das V, Awasthi S. Socio demographic determinants and knowledge, attitude, practice: Survey of family planning. *J Family Med Prim Care.* 2012;1(1):43-7.
  25. Thapa P, Pokharel N, Shrestha M. Knowledge, attitude and practices of contraception among the married women of reproductive age group in selected wards of SS Dharan Sub-Metropolitan City. *J Contracept Stud.* 2018;3(18).

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