

A Cross Sectional Study on Knowledge, Attitude and Practices of Contraceptives Methods and Unmet Needs among Reproductive Age Group Women in a Tertiary Care Health Institute

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ABSTRACT

Background: India was the first country in world to launch - The National Family Welfare Programme in 1952 but even today the couple protection rate (CPR) is still not achieved as desired. The concept of "unmet need" points to the gap between some women's reproductive intentions and their contraceptive behavior. Bridging the gap can lead to a great success in the family planning programme and realization of the dream of stable population.

Aim & objective: To assess the knowledge, attitude regarding family planning methods and contraceptive practices among reproductive age group women and unmet need.

Materials and Methods: A cross sectional study among 1308 women in the reproductive age group 15-45 years attending Mathura Das Mathur Hospital attached to Dr. S. N. Medical College, Jodhpur (Rajasthan) was carried out by interviewing them with predesigned and pre-tested questionnaire.

Results: Out of 1308 women, 1298 (99.23%) were aware of family planning methods (permanent/temporary). Out of 1308 women interviewed, 748 (57.18%) were practicing different contraceptive methods. Among the contraceptive users, 370 (49.46%) women resort to tubal ligation as a contraceptive method of choice. Preferred spacing methods were condom (26.73%), OCP (12.96%), and Cu-T (5.21%). Maximum utilization of family planning methods were seen among Hindu women, women of age group 30 or more, parity four and more, and those of higher socioeconomic class. Total unmet need for contraception was found to be 15.67%. Unmet need for

spacing and limiting was 8.48% and 7.18% respectively. Most common reason for not using contraceptive methods were desire for more children (36.78%) followed by fear of side effects (17.67%), no need (16.07%) and un-acceptance by husband/family/religion (13.57%). Unmet need was seen highest in women in 15-20 year age group, of lowest wealth index, having single child, and in primary educated women.

Conclusion: There is need for more intense efforts towards promotion of contraceptive methods and counseling to increase the acceptance of contraceptive methods.

Key words: Contraceptive Methods, Knowledge, Attitude, Practice, Unmet Need, Family Planning.

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Article History:

Received: 07-02-2017, Revised: 01-03-2017, Accepted: 05-03-2017

Access this article online

Website: www.ijmrp.com	Quick Response code 
DOI: 10.21276/ijmrp.2017.3.2.068	

INTRODUCTION

India is the second populous country in the world with the current population 1.33 billion (2016). Contraceptive advice is a component of good preventive health care. It is very much necessary to stabilize the population and to conserve the natural resources to future generations.

Socio-economic factors, education are few of the factors that play vital role in family planning acceptance.¹ To provide this, understanding the attitude and knowledge of the patient towards contraception is very necessary. There are nearly

40 million women in India who would prefer to avoid becoming pregnant but not practicing contraception.² Family planning can reduce maternal mortality by reducing the number of pregnancies, the number of abortions, and the proportion of births at high risk. Globally, the prevalence of contraceptive use has been increasing, but the unmet need for contraception still remains a problem.³ The contraceptive and non-contraceptive benefits of modern contraceptives outweigh the risks.⁴ According to the (NFHS)-3 (2005-06)⁴, the national figure for unmet need is

13 per cent. According to the District Level Household and Facility Survey (DLHS)-3 (2007-08)⁵, unmet need of contraception in India is 21.3%, with 7.9% for spacing and 13.4% for limiting. Unmet need for contraception in Rajasthan is about 17.7%, of which 10% for limiting and 7.7% for spacing.⁵

In Jodhpur, total unmet need has increased from 16.3% (DLHS-2) 2002-03 to 25% (DLHS-3). Important reasons for unmet need are desire for more children, fear of side effects, un-acceptance by family or husband etc.

The extent of acceptance of contraceptive methods still varies within societies and also among different castes and religious groups. The factors responsible for such varied picture operate at the individual, family and community level with their roots in the socio-economic and cultural milieu of Indian Society.

MATERIALS AND METHODS

A cross sectional observational study of 6 months duration (July 2016 to December 2016) was conducted among married women in reproductive age group (15 – 45 years) attending the department of Obstetrics and Gynecology, MDM Hospital, attached to the Dr. S. N. Medical College, Jodhpur. All married women in reproductive age group (15 – 49 years) who have attended the gynecology OPD during the study period were selected as study subjects.

Exclusion Criteria

- Unmarried women.
- Women who have undergone hysterectomy.
- All women in ante-natal period.
- Women in post-partum period.
- Women in menopause.
- Women not willing to participate.

Total 1308 women were selected by using the formula $N = Z^2p(1-p)/d^2$ for sample size calculation. Women who fulfilled the inclusion criteria were interviewed face to face with predesigned and pretested questionnaire after taking informed consent.

Data entry and statistical analysis was done using SPSS version 16. The data collected were analyzed using frequencies and percentages. Chi square test was used for testing the significance of association at P value of 0.05 and 0.001.

RESULTS

Out of 1308 women interviewed 810 (61.92%) were in the age group of 21-30 years. 162 (12.38%) women were having no child and 679 (51.90%) were having <3 children. Regarding literacy level 419 (32.03%) were illiterate and 1214 (92.81%) were non-working and home makers.

Out of 1308 women interviewed, 1298 (99.23%) were aware of one or more methods of contraception. Regarding contraception 1290 (98.62%) and 1136 (86.85%) were aware of female and male sterilization respectively. 1080 (82.56%) were aware of barrier methods (male condoms), 1069 (81.72%) know about oral contraceptive pills and only 851 (65.06%) know about IUCD. 305 (23.31%) and 130 (9.93%) were aware of ECP and safe period respectively. 10 women didn't know about any method of contraception.

Out of the 1308 women of reproductive age group, 748 (57.18%) women were using contraceptives. Out of 748 contraceptive users, highest no 370 (49.46%) of women had undergone sterilization, condom and OCP users were 200 (26.73%) and 97

(12.96%) respectively. IUD use was very low 39 (5.21%) Practice of other methods was negligible.

Among non-users most common reasons mentioned for not using any contraceptive method were desire for more children 206 (36.78%), fear of side effects 99 (17.67%), un-acceptance by husband/family/religion 76 (13.57%). 90 (16.07%) women felt no need (due to currently not living with husband or infrequent intercourse). Health concern, lack of knowledge, spontaneous cessation of pregnancy/contraception and lactational amenorrhea were other common reasons for non-use.

Practice of contraception was seen highest in who belonged to 31-40 year age group (79.04%), urban (58.87%) area, working women (70.21%), Sikh women (85.71%), highest wealth quintile (70.05%), having children >5 (81.81%) and illiterate women followed by those who were educated up to graduation or above (60%). There was significant association between contraceptive uses and age, caste, religion, education, socio-economic status and no of living children.

Total unmet need in our study was 15.67%. Unmet need of spacing was (8.48%) slightly higher than unmet need of limiting (7.18%).

Unmet need was highest in women who belonged to 15-20 years (19.35%), ST (25%), Hindus (16.54%), educated up to primary (25.94%), women having single child (22.11%), from lowest wealth index (33.96%), in rural women (17.44%) & housewives (16.39%) and lowest in women above 40 years (8.82%), OBC women (14.22%), Sikh women (14.28%), women educated up to graduation or higher (6.04%), women having 5 or more children (9.09%), women from highest wealth index (4.19%), women from urban area (14.93%) and those who were working (6.38%).

Study revealed that there was significant association between unmet need and age of the women ($p=0.00$), education level of women ($p=0.00$) and no of living children ($p=0.00$).

DISCUSSION

In the present study, most of the women (61.92%) belonged to 21-30 year age group. A study conducted by Lavnya kumari et al (2014)⁶ also observed that most of the women fall in the age group of 21-30 years.

In the present study, nearly one third (32.03%) women were illiterate, 18.27% were primary educated, and only 16.43% were graduated or post-graduated. Though this percentage is better than that of NFHS-3 (2005-06)⁷, Rajasthan (61% of females had never attended school, and only 12% had completed 10 or more years of education), DLHS-3 (2007-08)⁸ (Rajasthan-66% non-literate women, Jodhpur-45.5% literate women) and the data of AHS (2012-13)⁹ (Effective female literacy rate of 61.3% and 62.9% for Rajasthan and Jodhpur district respectively) but still there is need for more efforts towards promotion of female literacy as compared to others states.

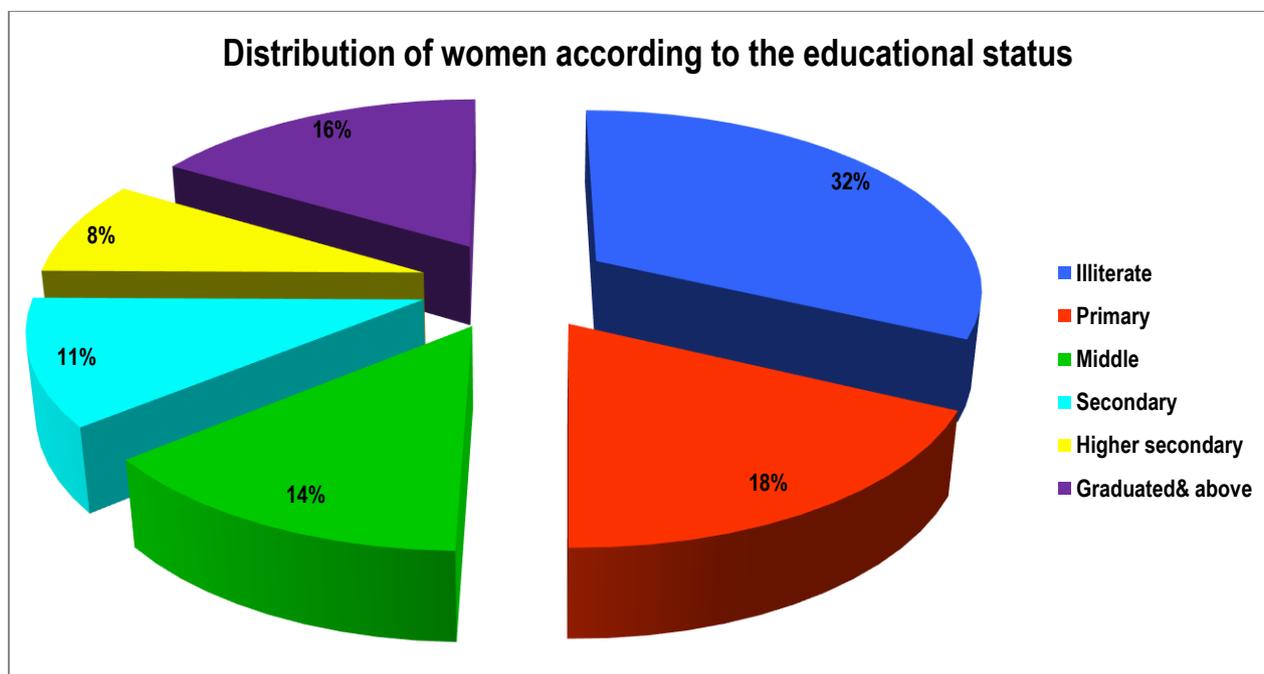
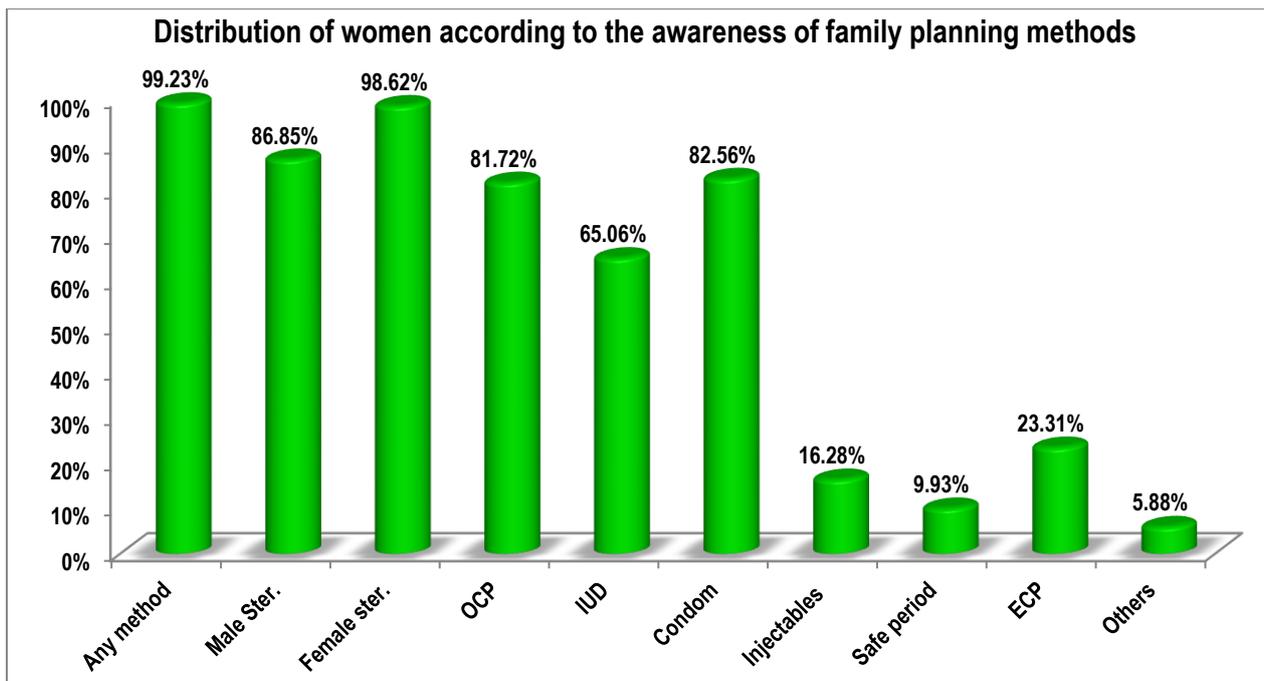
In the present study, awareness about any method of contraception was (99.23%) which was similar to that seen in DLHS-3 (99.9%).⁸ Though, awareness about female sterilization (98.62%) was high as compared to male sterilization (86.85%). Knowledge of female sterilization was almost similar to DLHS-3 (99%) but of male sterilization was less than that seen in DLHS-3 (Rajasthan-92.7%). Knowledge of Condom (82.56%) and OCP (81.72%) was almost similar and less than that shown in DLHS-3 (Rajasthan: OCP-92%, Condom-87%). Knowledge of IUD (65%)

was low as compared to DLHS-3 (Rajasthan-77%). Knowledge of ECP (23.31%), hormone injectable, safe period and other traditional method was also low. 10 women (0.76%) had never heard about any method. Awareness of contraceptive methods in studies conducted by Shrivastava Reena et al (2005)¹⁰, Lavnya Kumari et al (2014)⁶ and Anupama Shrivastava (2014)¹¹ was

82.2%, 96.8% and 71.22% respectively. Dr. Ambareen Khan et al (2011)¹² mentioned that 81% had awareness regarding any method of contraception. The finding is different in study done by Renjhen et al (2008)¹³ as maximum awareness was seen for oral contraceptive pills (95.8%) followed by condom (74.2%) and IUCD (72.0%).

Table 1: Distribution of women according to age group

S. No.	Age Gp. (yrs)	Number	Percentage
1	15-20	124	9.48%
2	21-30	810	61.92%
3	31-40	272	20.79%
4	41-45	102	7.79%
	Total	1308	100



In this study awareness of different contraceptive methods varied among different age groups. Awareness about male sterilization (8.06%) and IUD (27.41%) was low in younger age group 15-20year. Awareness about the spacing methods is important from the point of view of increasing birth space. Awareness about IUD was highest in 21-30 year age group (74.32%) but comparatively low in other age groups. Awareness about condom was high in 21-30 year age group (90.98%) and 15-20 year age group (83.87%) as compared to the women above 30 years (around 64%). Awareness about OCPs was highest in 21-30 year age group (88.14%). Awareness about ECP, injectables, rhythm and withdrawal methods was high in 21-30 year age group. According to Park et al (1975), the older the women and lower their educational level, the more frequently they were exposed to family planning messages through meeting, home visits and neighborhood communication.¹⁴

In the present study, 57.18% women were currently practicing contraceptive methods. This was higher than data shown for Jodhpur (51.7%) in DLHS-3 (Jodhpur- 51.7%) and data of Rajasthan (47.2%) in NFHS-3 (2005-06)⁷, similar to that of Rajasthan (57%) in DLHS-3 (2007-08)⁸ but less than AHS (2012-13)⁹ (Rajasthan - 70.2%, Jodhpur-74%).

Out of those, highest no (49.46%) of women had undergone sterilization which was higher than data shown in DLHS-3 (Rajasthan-40.5%, Jodhpur-39.8%) and AHS 2012-13 (Rajasthan-47.6%, Jodhpur-42.6%), condom and OCP users were 26.73% and 12.96% respectively which was higher than data shown in AHS 2012-13 (Rajasthan-10.5%, Jodhpur-11.6% for Condom; Rajasthan-2.3%, Jodhpur-4.3% for OCP). IUD use was very low (5.21%) but still higher than that in DLHS-3 (Rajasthan-1.4%, Jodhpur-0.9%) and AHS 2012-13 (Rajasthan-1.3%, Jodhpur-1.5%). Practice of other methods was very low.

Table 2: Distribution of women according to their current status of practicing FPM (N=748)

S. No.	Contraceptive Method Used	Number	Percentage
1	OCPs	97	12.96%
2	IUD	39	5.21%
3	Condom	200	26.73%
4	Sterilization	370	49.46%
5	Injectables	4	0.53%
6	Safe Period	21	2.80%
7	Others	17	2.27%
	Total	748	100

Lanya Kumari et al (2014)⁶ and Saima Nazir et al (2015)¹⁵ also reported the female sterilization as the most widely used method. Contrary to this study, Kanchan Lata et al (2012)¹⁶ observed the IUCD as most widely used method. Use of contraceptives was reported 55.2% by NFHS-3 India⁷ 56.3% by Renjhen *et al* (2008)¹³ and 44.2% by Shrivastava R et al.¹⁰ Similar results for prevalence of contraception were found in studies conducted by Anupama shrivastava et al-(2014)¹¹ (51.71%) and Hajira Saba et al-(2014)¹⁷ (58.6%). While in a study done by Kiran G Makade et al (2012)¹⁸ and P V Shrinivasa Kumar (2014);¹⁹ contraceptive prevalence was found to be 68.4% and 69.6% respectively.

On the contrary, Prateek SS et al (2012)²⁰ and Sujata K Murarkar et al (2011)²¹ observed in their study that only 32.2% and 48.63% of subjects were using contraceptive methods respectively.

This difference in contraceptive prevalence from different studies in different areas may be due to difference in composition of population/sample selected for study.

Among 389 never users, common reasons for never use of contraceptives were desire of having child in near future 185 (47.55%), un-acceptance by family/husband/religion 112 (28.79%), perceived fear of side effects 81 (20.82%) and lack of knowledge 56 (14.39%).

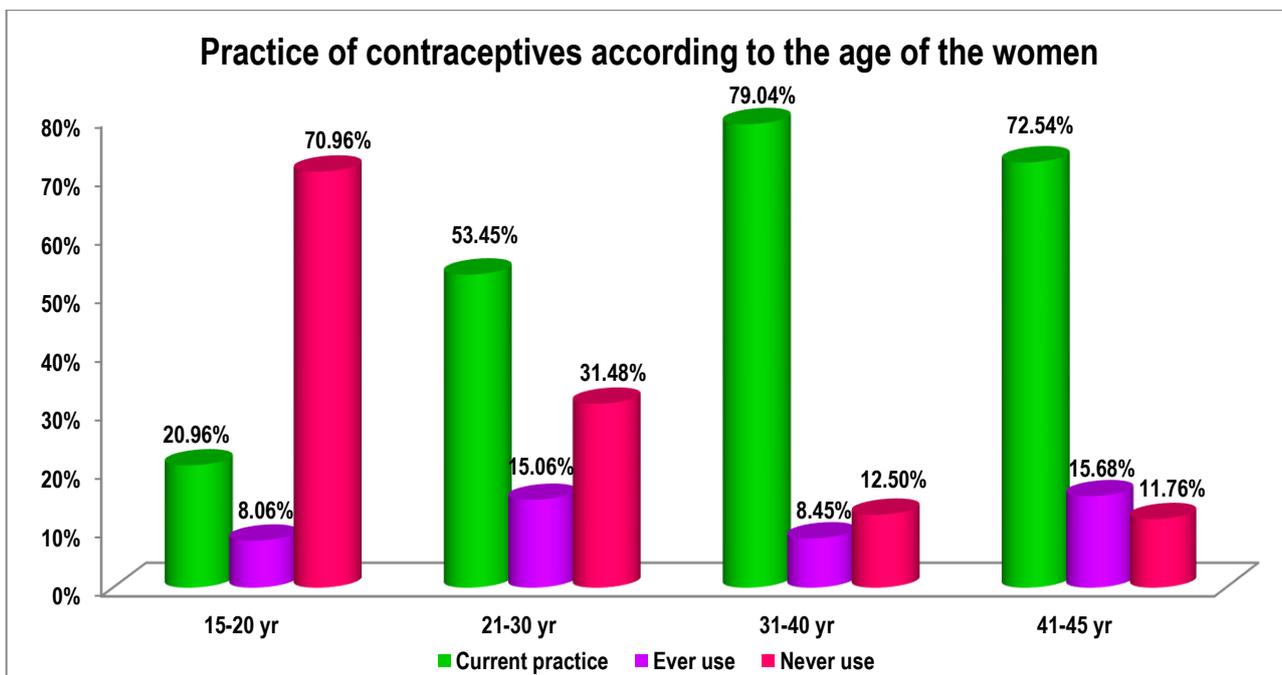
Table 3: Distribution of women according to the reason for never use of contraceptive methods (N=389)*

S.No.	Reason	Number	Percentage
1	Desire for more children	185	47.55%
2	Fear of side effect	81	20.82%
3	Fear of failure of method	12	3.08%
4	Unacceptance by husband/family/religion	112	28.79%
5	Health doesn't permit	6	1.54%
6	Lack of knowledge	56	14.39%
7	No need	30	7.71%
8	No reason	36	9.25%

*Multiple responses, total not summative

It was seen in the study that most of the women don't use any method of contraception before first child birth due to fertility related issues or fear of side effects. Highest no of never users were in age group 15-20 years (70.96%), women with no living children (76.54%), ST women (64.28%), Hindu women (31.29%), women belonging to lowest quintile index (39.62%) and primary

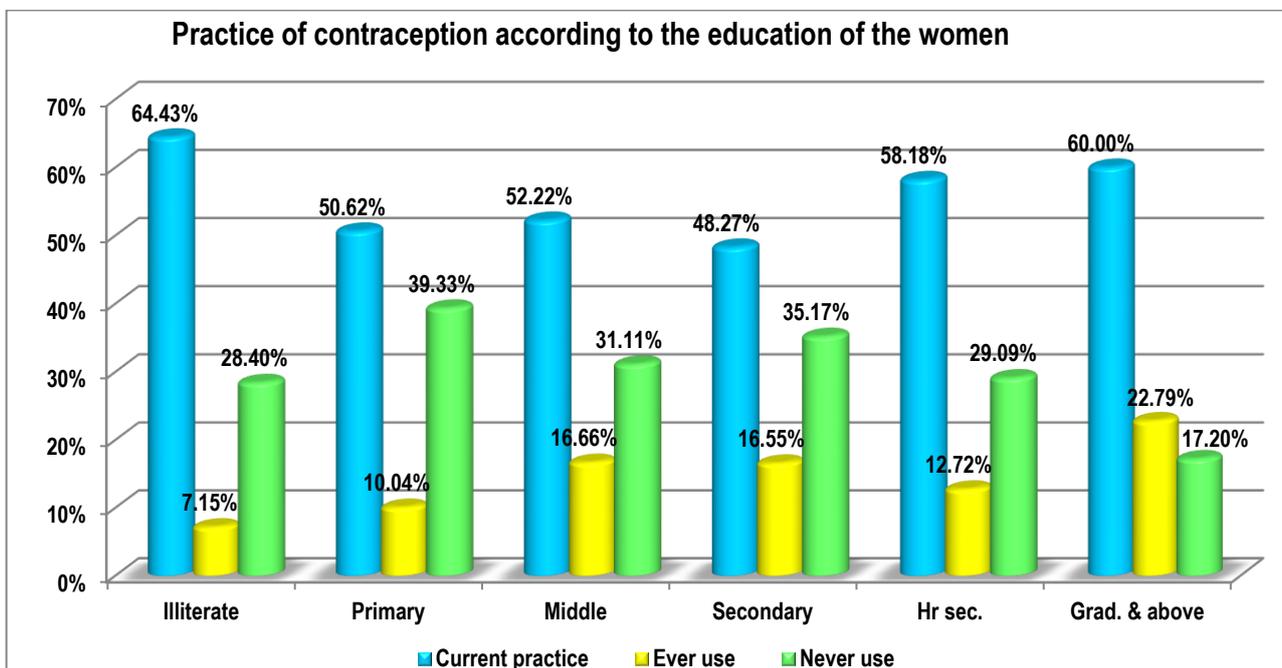
educated women (39.33%). Statistically significant association was seen between never use of contraception and age, no. of living children, education, socio-economic status and caste (p=0.000). Out of 748 contraceptive users, highest no (79.04%) of users belonged to 31-40 year age group and lowest (20.96%) in 15-20 year age group.



Preferred method of choice was sterilization in women above 30 years. Condom was preferred method in 21-30 year age group and 15-20 year age group. Least preferred methods were injectables and other methods. It was observed in the present study that practice of contraceptive methods increased with age of the women and statistically significant association was seen ($p=0.000$). Similar pattern of contraceptive use was seen by P Mahawar et al (2011)²² and P V Srinivasa et al (2014)¹⁹ in their studies.

More working women (70.21%) and urban (58.87%) women were practicing contraception than housewives (56.17%) and rural women (53.12%). Though contraceptive prevalence was slightly high in urban women than rural but statistically it was insignificant ($p=0.06$). Association between working status of women and usage of contraceptive methods was found to be significant ($p=0.01$). Working women are not only empowered because of financial independence and knowledge but also over-burdened by

the increased load of work. This situation works toward a choice of smaller family and effective implementation of fertility preference. Practice of contraception was highest in women who belonged to General (59.74%) and OBC (57.11%) and lowest in ST (35.71%). Similar pattern of use was reported in DLHS-3 (2007-08).⁸ It was also significant ($p=0.03$). This study showed variation in contraceptive uses according to education of women and there was significant association ($p=0.001$). Education-wise, highest no of users were illiterate (64.43%) and those who were graduated or higher educated (60%) and lowest in secondary educated (48.27%) women. In general we do expect that prevalence of contraception use increases as the level of education increases. But in our study, highest percentage was of illiterate women. Reason behind this finding may be that most of the illiterate women were above 30 years old and having their family size completed, so had undergone sterilization and thus contributing to the highest no of users.



Study done by Shah also reported women's education to be a significant variable, as the use increased from 43% in the primary educated women to 70.0% in secondary and higher educated women.²³

Education of women played crucial role in their utilization of family planning methods according to Vasundhara Sharma (2015).²⁴

This study revealed that use of contraceptives decreased with the wealth index (p=0.00). Highest percentage of contraceptive use was seen in women from class I (70.05%) wealth index and lowest in women from class V (49.05%) wealth index. Similar finding

were seen in DLHS-3 and also supported by Vasundhara Sharma et al (2015).²⁴ According to Mohanan et al²⁵ a significant influence of monthly income was found on acceptance of family planning methods but education level of women was not found an influencing factor in acceptance of family planning.

The study revealed that highest no (81.81%) of contraceptive users were those who were having children >5 and lowest in having no living children (14.81%) and it was found to be statistically significant (p=0.00). This shows that prevalence of contraceptive use increases as the no of children increases.

Table 4: Distribution of women who are currently practicing contraception according to the No. of living children

S. No.	No. of children	Number	Percentage	N=
1	0	24	14.81%	162
2	1	114	36.53%	312
3	2	240	65.39%	367
4	3	224	81.75%	274
5	4	92	72.44%	127
6	5+	54	81.81%	66
	Total	748	57.16%	1308

Chi-square = 50.385. df = 5 , P = 0.000 (significant)

Table 5: Age And Unmet Need

S. No.	Age	Spacing	Limiting	Total	N=
1	15-20 yr	22 (17.74%)	2 (1.61%)	24 (19.35%)	124
2	21-30 yr	87 (10.74%)	66 (8.14%)	153 (18.88%)	810
3	31-40 yr	2 (0.73%)	17 (6.25%)	19 (6.98%)	272
4	41-45 yr	0	9 (8.82%)	9 (8.82%)	102
	Total	111 (8.48%)	94 (7.18%)	205 (15.67%)	1308

It was also seen that preferred method was sterilization among women having 2 or more children while Condom among the women having no or single child.

Similar results were also observed in NFHS-3 (2005-06), DLHS-3 (2007-08) and in a study by Shendge HB et al (2012), as that of our study.²⁶

Lasee et al. (1996) had similar results with women 4-5 times more likely to use contraception if they had 3 or more living children than if they had 2 or less.²⁴ These results strongly suggest that the number of children and the women's education are the key determinants in the decision making about contraceptive use.²⁷

Total unmet need in our study was 15.67% which is less than that in DLHS-3 (Rajasthan-17.9%, Jodhpur-25%) but slightly higher than that in AHS 2012-13 (Rajasthan- 13%, Jodhpur- 13.5%) and NFHS-III 2005-06(13.2%, India). Unmet need of spacing was (8.48%) slightly higher than unmet need of limiting (7.18%). This was also less than unmet need shown in DLHS-3 (Jodhpur-spacing: 14.3%, limiting: 10.7%).

Unmet need in our study was low as compared to other studies by Lekshmi A R et al.²⁸ 41.1% of the samples were having unmet need, 67.8% for limiting and 32% for spacing), Bahiya Sultana et al (2015)²⁹observed the unmet need for contraception 27.3%, unmet need for spacing and limiting was 4.9% and 22.5%,respectively. In a study by Prateek SS et al (2012)²⁰, 51.6% had unmet need for contraception. Out of which, 52 (28.9%) subjects had unmet need for spacing and rest 41 (22.7%) had unmet need for limiting. In a study carried out in both rural and

urban area of Gwalior district the unmet need of family planning was found to be 21.70%.

Unmet need was highest in women who belonged to 15-20 years (19.35%), ST (25%), Hindus (16.54%), educated up to primary (25.94%), women having 1 child (22.11%), from lowest wealth index (33.96%), in rural women (17.44%) & housewives (16.39%) and lowest in women above 40 years (6.98%), OBC women (14.22%), Sikh women (14.28%), women educated up to graduation or higher (6.04%), women having 5 or more children (9.09%), women from highest wealth index (4.19%), women from urban area (14.93%) and those who were working (6.38%).

Statistically significant association was found between unmet need and age, education of the women and parity. (p=0.00)

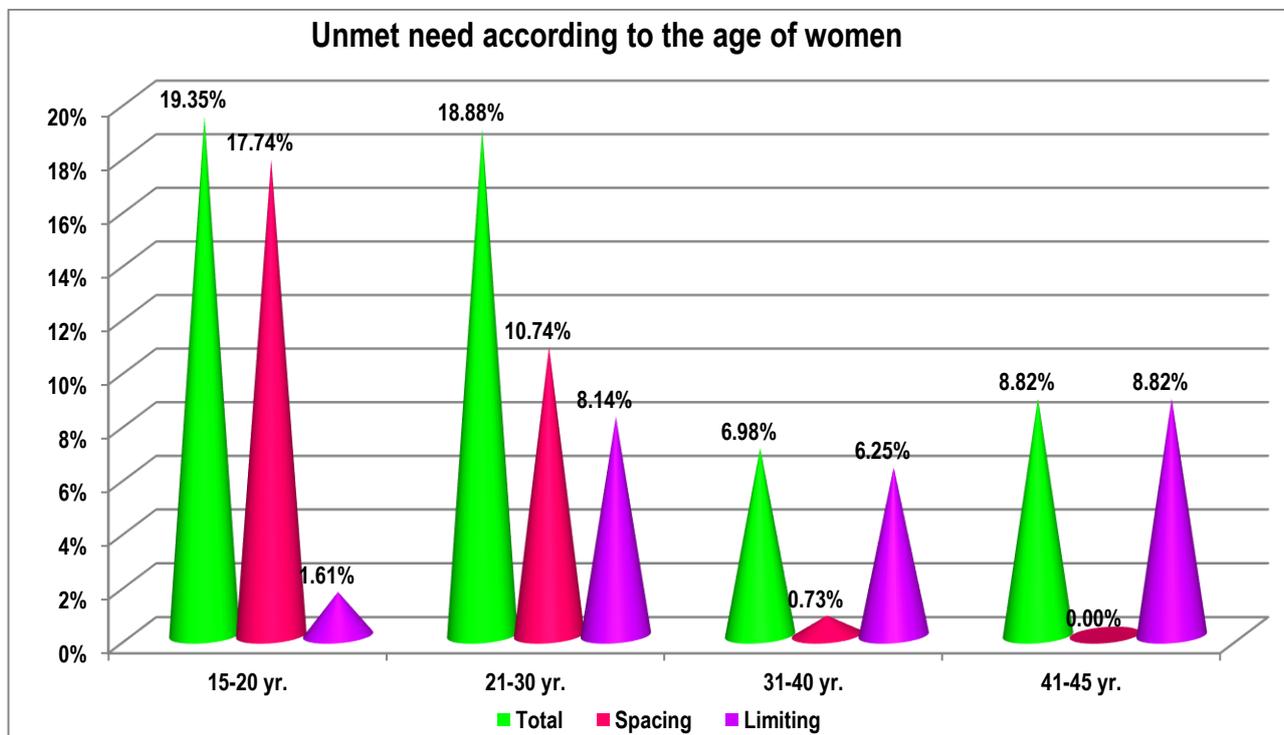
These results shows that unmet need of family planning is largely affected by age, no. of living children, education, socio-economic status and working status of women. Highest unmet need was seen in 15-20 year age group and it decreases with age. Unmet need of spacing was seen highest among women having single child (19.23% for spacing and 22.11% total unmet need) while unmet need of limiting was high among women having 2 or more children. A similar pattern of high unmet need with a large share for spacing can be seen for women with one surviving child, 30.4 percent for total unmet need and 23.5 percent for spacing method of family planning (DLHS-3). Unmet need of spacing decreases with no of children while unmet need of limiting increases with no of children. Total unmet need also decreases with no of children. Education is also an important factor affecting unmet need as the

level of education affects awareness and practice of contraceptives. As the level of education increases prevalence of contraception use increases. In our study, unmet need was high in women educated up to primary than illiterate women. The reason could be that high proportion of illiterate women belonged to older age group and were having their families completed, so had undergone sterilization. This was good thing to note that efforts of health workers towards promotion of contraception acceptance are working. Similarly women from higher wealth index, urban area and working women are more likely to use contraception hence having low unmet need. The reason could be that working

women are more aware and have some level of independence to practice contraception.

Common reasons for unmet were fear of side effects, opposition from husband/family/religion and health concerns.

Saini NK et al (2007) in their study found a linear relationship between the education level of the respondents and the unmet need for family planning which was also significantly higher among those with a per capita monthly income of less than thousand.³⁰ Patil SS et al (2010) also reported a significant association of unmet need with low educational status of the married women.³¹



CONCLUSION

Though awareness about contraceptive methods was found good in this study but practice was not as desired to achieve the TFR level of 2.1. Converting this knowledge into practice is the real challenge to achieve the desired goal. Unmet need was also found to be decreased as compared to previous years. But early marriages and unplanned pregnancies are still common in India. There is no doubt that we can reduce maternal mortality and morbidity by creating awareness regarding temporary contraception among younger age group and primipara. There is need for more intense and sincere efforts towards promotion and to increase acceptance of contraceptive use. IEC activities can play a significant role in increasing awareness about contraceptives, particularly about temporary modern methods of contraception. There is need for thorough counseling about contraceptive methods and every effort should be made to correct all myths and misconceptions regarding contraceptives. Best opportunities for this are when a women visits to hospital for anti-natal/post-natal check-up or for vaccination of child. Besides this, counseling of spouse is also important because husbands play a significant role in planning family. And all health care workers should be involved in these activities including ASHA in rural areas to doctors in big hospitals. In fact counseling about contraception should be an integral part of ANC/PNC visit and a

separate space should be provided to maintain the privacy and make the people more familiar to share all the concerns with counselor/consultant.

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Source of Support: Nil.

Conflict of Interest: None Declared.

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Cite this article as: Afzal Hakim, Anita Bakoliya, Rizwana Shaheen. A Cross Sectional Study on Knowledge, Attitude and Practices of Contraceptives Methods and Unmet Needs among Reproductive Age Group Women in a Tertiary Care Health Institute. *Int J Med Res Prof*. 2017; 3(2):321-28.
DOI:10.21276/ijmrp.2017.3.2.068