

Prevalence and factors related to the unmet need for family planning among married women in the rural community of South India

Sindhu L, Praveen Kumar B A, Subramaniyan P, Prasad D V, Avinash R, Janakiraman P

Department of Community Medicine, PES Institute of Medical Sciences and Research, Kuppam, Andhra Pradesh, India

Correspondence to: Praveen Kumar B A, E-mail: drpraveenba@gmail.com

Received: February 15, 2019; Accepted: March 12, 2019

ABSTRACT

Background: Family planning program was implemented in India since 1952 so that the couples can exercise control over their own fertility. As per NFHS-4, unmet need for family planning in our country was 13%. However, in rural areas, this prevalence might be high. **Objectives:** The objective of this study was to assess the prevalence of unmet need for family planning method and its associated factors among the rural married women. **Materials and Methods:** This cross-sectional study was conducted in the rural community of South India for 1 year. By the cluster sampling method, 1024 married women in the reproductive age group were selected. After written informed consent, each subject was interviewed using a pre-tested questionnaire and the data were collected. **Results:** The mean age of the study subjects was 31.07 ± 4.6 years. Unmet need for the permanent method of family planning was 34%, and for spacing, it was 69.7%. Factors such as age, parity, and education of participant and husband influenced the unmet need for the permanent method; for the temporary method, socioeconomic status was significantly associated. **Conclusion:** Unmet need for family planning was high among the rural women in this community and many factors were related to this. Health education and motivation by community health workers are needed to bring a positive change in this regard.

KEY WORDS: Family Planning; Unmet Need; Rural Women; Contraception

INTRODUCTION

India is the second most populous country in the world having a rapidly growing population at the rate of 16 million each year.^[1] India's population as per 2011 census was 1.21 billion and is estimated to overtake China by 2050.^[2]

This alarming increase in population slows down the socioeconomic development, lowers the quality of life, and degrades our environment, all of which are strains on our resources.^[3]

In 1952, India was the first country to launch a family planning program, and the rationale of this program was to enable the


couples, particularly, women to exercise control over their own fertility.^[4] WHO defines "unmet need" as the number of women who are sexually active and capable of conceiving but they are not using any contraceptive method though they do not want any more child or want delay the next child.^[5]

Although NFHS-4 reported the unmet need for family planning in the country as 13%, the prevalence of unmet need was more among the rural women than urban women, which can be due to various sociocultural reasons.^[6] Hence, this study was conducted with the objective of exploring the prevalence of unmet need for family planning and its associated factors among the rural married women.

MATERIALS AND METHODS

This community-based, cross-sectional study was conducted from June 2016 to May 2017, among married women in the reproductive age group in the rural areas of Kuppam Mandal, Chittoor district, Andhra Pradesh, South India.

Access this article online

Website: http://www.ijmsph.com	Quick Response code
DOI: 10.5455/ijppp.2019.0204512032019	

International Journal of Medical Science and Public Health Online 2019. © 2019 Praveen Kumar B A, *et al.* This is an Open Access article distributed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), allowing third parties to copy and redistribute the material in any medium or format and to remix, transform, and build upon the material for any purpose, even commercially, provided the original work is properly cited and states its license.

The cluster sampling method was used to select the study subjects. Based on the prevalence^[6] of unmet need for family planning as per NHFS-4 as 13%, the sample size was calculated. By applying an allowable error of 20% and a design effect of 1.5, the sample size was estimated as 1004. There are 63 revenue villages in Kuppam Mandal. Among them, each village having a population of 1000 and above was noted and each such village was considered as a cluster. By the simple random method, 20 clusters (villages) were selected. The widowed/divorced/separated women were excluded. If a house in a selected village had a married woman with 2 or more children, that house was noted. By systematic sampling method, 50 such houses in each selected village were visited. However, if a selected house had more than one such woman, all of them were included. Thus, a total of 1024 women were studied.

Ethical clearance was obtained from the Institutional Human Ethics Committee.

Each subject was contacted by a house visit. After obtaining written informed consent, each woman was interviewed using a pre-tested questionnaire and the data were recorded in a separate proforma for each woman. The proforma had two sections. Section-1 was about the sociodemographic factors of the individual subject. Section-2 was regarding the unmet need for family planning. The descriptive data were analyzed using proportion. To find out the association between the unmet need and various factors, the Chi-square test was applied and $P < 0.05$ was considered as statistically significant.

RESULTS

The mean age of 1024 study subjects was 31.07 ± 4.6 years. Most subjects (94.1%) belonged to the Hindu religion. About 63.4% belonged to the nuclear family. Each of the 1024 subjects was having two or more children. Among them, 371 (36.2%) subjects had three or more children. The literacy rates of the subjects and their husbands were 65.6% and 71.4%, respectively. Most of them (76.4%) were working women, i.e., they were doing some work and earning some income, along with being housewives. About 64.9% belonged to the socioeconomic class of IV and V combined [Table 1].

Of the total 1024 subjects, 120 subjects never wished for any family planning method and the remaining 904 subjects wished for any of the family planning methods. Among them, most subjects wished for both temporary and permanent family methods at different stages of their life. Thus, on the whole, 716 subjects wished for temporary family method (79.2%) and 781 subjects wished for a permanent family method (86.4%) [Table 2].

The social causes for unmet need were as follows: Unacceptable to the spouse or other family members, wishing for a male

child, and cultural reasons. The client-related causes were lack of awareness, fear of surgery, fear of not able to conceive in future, and other health concerns. Provider-related causes were non-accessibility of service or information. Figures 1 and 2 shows that social causes was the main reason for unmet need in permanent family planning method whereas client-related causes in temporary family planning method.

Factors Related to Unmet and Met Need

Among the total 1024 subjects, only 781 of them wished for a permanent family planning method. Hence, these 781 subjects were considered for further analysis regarding their unmet need. Accordingly, the women were classified into two categories: Those with unmet need ($n = 265$) and those with met need ($n = 516$).

Table 3 shows the factors which were significantly associated with unmet need and met need for family planning.

Among the subjects in the age group of <30 years, unmet need was 45.3% and met need was 54.7%. However, among

Table 1: Sociodemographic details of the study subjects

Sociodemographic factors	Frequency (n=1024)	Percentage
Age group (years)		
<30	483	47.20
30-44	541	52.80
Religion		
Hindu	964	94.10
Muslim	60	5.90
Family type		
Nuclear family	656	63.40
Three-generation and joint family (combined)	368	36.60
Education		
Illiterate	356	34.40
Literate	668	65.60
Occupation		
Housewife	242	23.60
Working woman	782	76.40
Husband's education		
Illiterate	293	28.60
Literate	731	71.40
Socioeconomic status		
Class I, II, and III (combined)	359	35.10
Class IV and V (combined)	665	64.90
Parity		
2	653	63.80
3 and above	371	36.20

Table 2: Unmet need among the subjects, who wished for a family planning method

Family planning method	Unmet need frequency (%)	Met need frequency (%)	Total wished for family planning method (<i>n</i> =904) frequency (%)
Permanent family planning method	265 (34)	516 (66)	781 (86.4)*
Temporary family planning method	501 (70)	215 (30)	716 (79.2)*

*Subjects were represented in both temporary and permanent methods of unmet need for family planning

Table 3: Factors associated with unmet need and met need for permanent family planning method

Factors	Subjects wished for permanent family planning method (<i>n</i> =781)		<i>P</i> value
	Subjects with unmet need (<i>n</i> =265)	Subjects with met need (<i>n</i> =516)	
Age (years)			<0.001*
<30 years	158 (45.3%)	191 (54.7%)	
30–44 years	107 (24.8%)	325 (75.2%)	
Literacy of the subject			<0.001*
Illiterate	162 (57.2%)	121 (42.8%)	
Literate	103 (20.7%)	395 (79.3%)	
Education of the husband			<0.001*
Illiterate	126 (54.6%)	105 (45.4%)	
Literate	139 (25.3%)	411 (74.7%)	
Parity			0.007*
2	146 (26.9%)	348 (73.1%)	
3 and above	119 (54.1%)	168 (45.9%)	

**P*<0.05 is statistically significant

the subjects in the age group of 30–44 years, unmet need was 24.8% and met need was 75.2%. This difference was statistically significant.

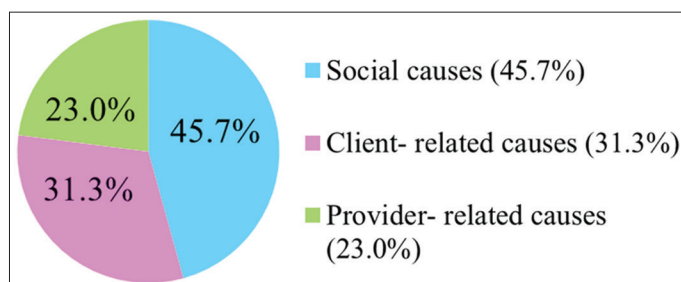
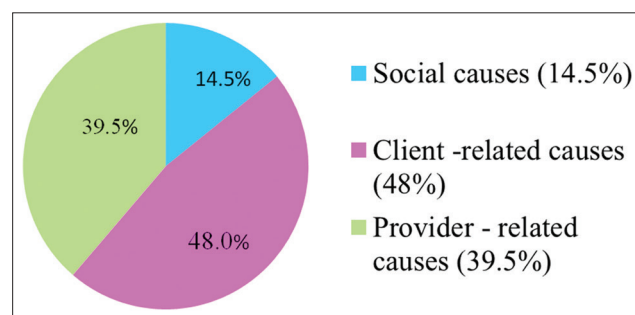
Among the illiterate subjects, unmet need was 57.2%. Among the literate subjects, unmet need was 20.7%. This difference was statistically significant.

Among the subjects having illiterate husbands, the unmet need was 54.6%. Among the subjects having literate husbands, the unmet need was 25.3%. This difference was statistically significant.

Among the women with parity of 3 and above, the unmet need was 54.1%. Among the women with parity of 2, the unmet need was 26.9%. This difference was statistically significant.

Other factors such as religion, family type, occupation, and socioeconomic class were not significantly associated with unmet need.

Regarding the factors influencing the unmet need for temporary family planning method, only the socioeconomic class was found to be significantly associated [Table 4].

**Figure 1:** Causes related to the unmet need for permanent family planning method (*n* = 265)**Figure 2:** Causes related to the unmet need for temporary family planning method (*n* = 501)

DISCUSSION

In the present study, the prevalence of unmet need for permanent family planning method was found to be 34%, and for spacing, the unmet need was 69.7%. This study also identified various social, client-related, and provider-related causes for unmet need. The variables such as age <30 years, illiteracy, and high parity were found to be significantly associated with unmet need for permanent family planning method, whereas, for temporary family planning method, socioeconomic class was identified as a significant determinant.

This prevalence of unmet need was very high when compared with several studies from India.^[7-10] The prevalence of unmet need for permanent family planning method in these studies ranged from 3% to 12.5%. The reasons for this varied prevalence can be attributed to sociodemographics, population dynamics, and methodology adopted as these were small-scale surveys. Prevalence in the present study is still high when compared with the NFHS-4 value at the national level^[6] which was 13%. This further indicates that the unmet needs in rural areas need further exploration and validation with appropriate tools and method.

Table 4: Factors associated with unmet need and met need for temporary family planning

Factors	Subjects wished for temporary family planning method (<i>n</i> =716)		P value
	Subjects with unmet need (<i>n</i> =501)	Subjects with met need (<i>n</i> =215)	
Socioeconomic status			0.01*
Class I, II and III (combined)	166 (64.3%)	92 (35.7%)	
Class IV and V (combined)	335 (73.1%)	123 (26.9%)	

**P*<0.05 is statistically significant

Kerala study^[10] reported that age, religion, education, and number of living children were the main cause of the unmet need for family planning. A study done in Puducherry^[11] found that the major reasons for unmet need were client-related factors such as lack of knowledge and fear. Provider-related factors such as availability, accessibility, affordability, and management of the side effects. This clearly reflects the role of population education, especially female literacy. Similar results were reported by other studies^[8,9,12-16] in India. In contrast, the study carried out in Bengaluru^[17] reported that socioeconomic class was the main cause of the unmet need for family planning.

One of the strengths of the study is that we used an adequate sample size and addressed several factors related to unmet need both for permanent and temporary family planning methods. However, in this study, 120 subjects never wished for any family planning method and the reasons for this were not evaluated. This study recorded the responses given by participants verbatim which may have influenced the results due to social desirability bias.

CONCLUSION

Prevalence of unmet need for the family planning method among the married women in this rural area was found to be high when compared with the national level. Unmet need was associated with social factors, client-related factors, and provider-related factors. Variables such as age, illiteracy, socioeconomic status, and parity were significantly associated with unmet need.

Creating awareness to the couples by health education regarding the benefits and availability of family planning services is needed in rural areas, especially regarding the effective utilization of available resources. For this purpose, voluntary organizations and community health workers must be utilized. Incorporating the family planning component in the curriculum across all streams of education at appropriate stage must be looked into by the government. Provider-related causes that are non-accessibility of services and information are a matter of great concern even after these many years of independence and fast-growing digital world. Appropriate policy at the national level need to be developed to address this issue. For this purpose, understanding the factors related to unmet need will be helpful.

ACKNOWLEDGMENTS

We sincerely thank Mr. Murali and Mr. Kiran, Health workers of the rural centers, PESIMSR, Kuppam, for their support during the filed activity.

REFERENCES

1. Census 2011. Population Distribution and Change: 2000 to 2010 Census Bureau. Available from: <https://www.census.gov>. [Last cited on 2017 Nov 12].
2. Park K. Park's Textbook of Preventive and Social Medicine. 24th ed. Jabalpur: M/s Banarasidas Bhanot Publishers; 2017. p. 514.
3. Ministry of Health and Family Welfare. National Population Policy; 2000. Available from: <http://www.mohfw.gov.in>. [Last cited on 2017 Oct 23].
4. Ranajit S, Arpita D. Contraceptive practices and unmet need among young currently married rural women in empowered action group (EAG) states of India. *J Fam Welf* 2012;58:1-14.
5. WHO. Unmet Need for Family Planning. Available from: http://www.who.int/reproductivehealth/topics/family_planning/unmet_need_fp/en. [Last cited on 2017 Mar 26].
6. NFHS-4. India Fact Sheet 2015-2016. Available from: <http://www.rchiips.org/NFHS/pdf/NFHS4/India.pdf>. [Last cited on 2017 Jan 27].
7. Kaushik A, Kiran K, Jain PK, Shukla SK, Chandra A, Yadav R. Prevalence of unmet need for family planning and its sociodemographic co-relates in a rural area of Etawah. *Natl J Community Med* 2017;8:198-202.
8. Sachadeva A, Gupta A, Kumar D, Singh H, Sharma S. Unmet need for family planning among married women of reproductive age group in rural and urban area of Shimla, India. *Int J Med Sci Public Health* 2017;6:1372-7.
9. Tapare VS, Parande M, Borle PS. Unmet need for family planning among married women of reproductive age group in rural Maharashtra. *Int J Med Sci Public Health* 2017;4:3365-71.
10. Mathew AA, Saju CR, Catherin N. Family planning practices among married women of reproductive age group in a rural area in Thrissur district, Kerala, India. *Int J Curr Res Aca Rev* 2015;3:36-41.
11. Sulthana B, Deepak HS, Sunderamurthy B, Manoharan K, Subramanian M. Unmet need for contraception among married women in an urban area of Puducherry, India. *Indian J Med Res* 2015;141:115-8.
12. Jesha MM, Sebastian NM, Haveri SP, Nath AS. Unmet needs for family planning in a municipal area in North Kerala, India. *Int J Reprod Contracept Obstet Gynecol* 2016;5:2322-7.
13. Pal A, Mohan U, Idris MZ, Masood J. Factors affecting unmet need for family planning in married women of reproductive

- age group in urban slums of Lucknow. *Indian J Community Health* 2014;26:44-9.
14. Bandhi G, Bhawnani D, Verma N, Soni GP. Assessment of contraceptive knowledge and practices among reproductive age group of women in urban slums of Raipur city, Chhattisgarh, India. *Natl J Community Med* 2014;5:349-54.
 15. Pachauri S. Priority strategies for India's family planning programme. *Indian J Med Res* 2014;140:S137-46.
 16. Kumar D, Kalia M, Goel NK, Sharma MK. Impact of health education on unmet needs of contraception in urban slums of Chandigarh, India. *Int J Reprod Contracept Obstet Gynecol* 2016;5:2317-21.
 17. Veena V, Holla R, Parasuramalu BG, Balaji R. Unmet need for family planning: A challenge to public health. *Natl J Community Med* 2014;5:401-5.

How to cite this article: Sindhu L, Kumar BAP, Subramaniyan P, Prasad DV, Avinash R, Janakiraman P. Prevalence and factors related to the unmet need for family planning among married women in the rural community of South India. *Int J Med Sci Public Health* 2019;8(5):355-359.

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