ORIGINAL ARTICLE

SOCIO-DEMOGRAPHIC FACTORS AND PREVALENCE OF UNMET NEED FOR FAMILY PLANNING IN URBAN AND RURAL FIELD PRACTICE AREAS OF M. R. MEDICAL COLLEGE, KALABURAGI

Mohammad Waseem Faraz Ansari[1], Kapate Rajashekhar [2], Shri Shrinivas Reddy[3]

ABSTRACT: Millions of women in developing countries would prefer to avoid a pregnancy by not using any form of contraception. Hence unmet need can be powerful concept for family planning programmes. Today, more than 220 million women in developing countries report having an unmet need for family planning at different stages of their reproductive lives. "Unmet need can be powerful concept for family planning programmes. First, it is based on women's own statements, an answer to survey question. Second, it identifies the group most likely to be interested in contraception. Third, it poses a clear challenge to reach and serve these women". **OBJECTIVES:** 1) To assess the magnitude of Unmet need for family planning among married women of reproductive age group (15–44 years). 2) To identify the socio-demographic factors associated with unmet need for family planning. **MATERIALS AND METHODS:** A cross-sectional study was carried out in the Urban and Rural health training Centers of Department of Community Medicine. The study population included 563 married women from rural and 924 married women from urban area aged 15-44 years. The data was collected using pre tested proforma and was analyzed using percentages and Chi-Square test. **RESULTS:** The unmet need for family planning was 28.9% in urban and 40.5% in rural study populations. The overall unmet need is low at the beginning of reproductive age, but it increased and reached a peak in the mid-twenties & then declined. **CONCLUSION:** Despite a fair knowledge about the family planning methods, various socio-cultural and problems were responsible for the gap between a woman's expressed need and utilization of contraceptives. Addressing these problems and barriers would help in the long run to reduce the unmet need.

KEYWORDS: Unmet needs; Contraception; Spacing; Limiting.

INTRODUCTION: Family planning is a "way of thinking and living that 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 the family group and thus contribute effectively to the social development of a country".[1]

Today, more than 220 million women in developing countries report having an unmet need for family planning at different stages of their reproductive lives. These are women, either married or unmarried, who are sexually active and say that they desire to postpone their next birth by at least two years, or not have any more children at all, but they are not using any type of contraceptive method. Unmet need can be powerful concept for family planning programmes. First, it is based on women's own statements, an answer to survey question. Second, it identifies the group most likely to be interested in contraception. Third, it poses a clear challenge to reach and serve these women.[2]

ORIGINAL ARTICLE

Millions of women in developing countries would prefer to avoid a pregnancy by not using any form of contraception. This concept of "UNMET NEED FOR FAMILY PLANNING" has influenced the development of Family planning programmes over the years. Over the past decade, the rising rates of contraceptive use have reduced the unmet need for family planning in most countries. However the unmet need remains persistently high or is increasing in developing countries like India, indicating that greater efforts are needed to understand and address the causes of unmet need.[3]

India was the first country in the world to formulate the National Family Planning Programme in the year 1952 with the objective of "reducing the birth rate to the extent necessary to stabilize the population at a level consistent with requirement of National Economy".[4]

OBJECTIVES:
1. To assess the magnitude of Unmet need for family planning among married women of reproductive age group (15 – 44 years).
2. To identify certain socio-demographic factors associated with unmet need for family planning.

MATERIAL AND METHOD:
- **Study Area:** The study areas were the urban health training centre Rajapur and rural health training centre Hebbal, attached to the Department of Community Medicine, MR Medical College, Kalaburagi.
- **Study Design:** This was a cross-sectional survey.
- **Study Period:** The study was conducted from December 2010 to November 2011.
- **Study population:**
  A. All women who are married and presumed to be sexually active;
     - Who are not using any method of contraception and/or,
     - Who either do not want to have any more children (limiting) and/or,
     - Who want to postpone their next birth for at least two years (spacing).
  B. Pregnant women whose pregnancy was unintended or mistimed.
  C. Amenorrhoeic postpartum mothers whose recent birth was unintended or mistimed.

Exclusion Criteria:
a. Pregnant women whose current pregnancy is intended.
b. Amenorrhoeic postpartum mothers whose recent birth is intended
c. Females <15 years and >44 years of age.

Methodology: All the married women in the reproductive age group were included in the study without taking any representative sample. The population of females in reproductive age group comprises 17.5 % of the total population. The study population comprises of 563 married women from rural and 924 married women from urban study area totalling 1487 married women aged 15-44 years.

Survey: A house to house visit was made in the study area, the nature, purpose and objectives of the study were explained to the women chosen for the study. The data was collected by interviewing the woman using a pre-designed and pre tested proforma during house to house visit. Information was collected regarding demographic, socioeconomic, marital history etc. as per the proforma.

ORIGINAL ARTICLE

Ethics: The study was cross sectional and does not involve patient intervention methods; hence, ethical issue does not arise.

Analysis and Statistical Method: The data were collected in a pretested Performa, computed in Microsoft Excel and analyzed using percentages and Chi-Square test.

RESULTS: It is seen from the Table no 1 that among the 924 Urban study population, 202(21.86%) belonged to the age group of 35-39 years, 197(21.32%) to 25-29 years, 183(19.80%) to 30-34 years, 159(17.22%) to 40-44 years, 140(15.15%) to 20-24 years and only 43(4.65%) to 15-19 years age group. Among the 563 Rural study population, majority of the women i.e. 140(24.86%) were from the age group 25-29 years followed by 132(23.44%) women between 40-44 years age group. About 112(19.89%) women belonged to the age group 35-39 years, followed by 88(15.63%), 79(14.05%) and 12(2.13%) belonged to the age groups 20-24, 30-34 and 15-19 respectively. From the table 1, it is seen that in the urban study population, 744(80.53%) women belonged to the Nuclear families followed by 97(10.49%) from the Extended families and 83(8.98%) from the Joint families. In the Rural study population about 397(70.51%) women belonged to the Nuclear families followed by 132(23.44%) and 34(6.05%) from the Extended families and Joint families respectively. With regards to occupation, in the Urban study population, 516(55.85%) women were working as labours, 326(35.28%) were housewives, 23(2.49%) were farmers, 11(1.19%) were self-employed whereas about 48(5.19%) women were involved in other professions like teachers, nurses, peons, Anganwadi workers etc. In the Rural study population, 261(46.35%) women were working as labours, 179(31.79%) were housewives, 88(15.60%) were farmers, 22(3.90%) were self-employed whereas about 13(2.31%) women were involved in other professions. In the Urban study population, according to Modified Kuppuswamy's Classification, about half of the women 490(53.04%) belonged to Class IV, while 333(36.04%) and 80(8.65%) women belonged to Class V and Class III respectively. Whereas only 21(2.27%) belonged to Class II. According to Modified B.G. Prasad's Classification in the Rural study population, 286(50.80%) women belonged to Class IV and 136(24.15%) women belonged to Class III, 78(13.85%) were from Class V and a very small percentage of 56(9.95%) and 7(1.24%) women belonged to Class II and Class I respectively.

Table no 2 reveals that, in the urban study population, 657(71.1%) women had their needs met and 267(28.9%) women had unmet need for family planning. In the rural study population, it was observed that, 335(59.5%) had their needs met and 228(40.5%) had unmet need for family planning. The contraceptive practice in the urban population is higher than rural population and is statistically highly significant.

It is seen from the table no 3 that among the 267 women with unmet need for family planning in the urban, 115(43.07%) women belonged to the age group of 20-24 years, 74(27.72%) to 25-29 years, 39(14.61%) to 15-19 years, 21(7.86%) to 30-34 years, 11(4.12%) to 35-39 years and only 7(2.62%) to 40-44 years age group. In the rural study population, out of the 228 women with unmet need for family planning, 76(33.33%) belonged to the age group of 20-24 years, followed by 75(32.90%) to 25-29 years, 25(10.96%) to 35-39 and 22(9.65%) to 30-34 years age group. Few women were in the extremes of the age group. 19(8.34%) belonged to 40-44 years and 11(4.82%) were in between 15-19 years. The women with unmet need for contraception in the urban study population, 184(68.91%) women belonged to nuclear families followed by joint 46(17.23%) and extended families 37(13.86%) and in the rural study population, 160(70.18%) women belonged to nuclear families followed by extended 52(22.81%) and Joint families 16(7.01%).

ORIGINAL ARTICLE

With regards to occupation in the urban study population, among the women with unmet needs, 127(47.57%) were housewives followed by labours 118(44.19%) and least were self-employed 4(1.5%) and farmers 4(1.5%) whereas in the rural study population, among the women with unmet needs, 93(40.79%) were labours followed by housewives 88(38.60%) and least were self-employed (2.19%).

Table no 4 shows that, with regards to socio-economic status, in the urban study population, among the women with unmet needs, it was observed that 142(53.18%) women belonged to class IV, 85(31.84%) to Class V, 33(12.36%) to Class III.7(2.62%) to Class II and none of the women belonged to Class I of Modified Kuppuswamy's Classification. In the rural study population, among the women with unmet needs, it was observed that 93(40.79%) women belonged to class IV, 77(33.77%) to Class III. 34(14.91%) to Class II, 19(8.33%) to Class V and 5(2.19%) women belonged to Class I of Modified B. G. Prasad's Classification.

Table no 5 reveals that in the urban study population, among the women with unmet needs, 179(67.04%) women were married by the time they are 18 years of age followed by 77(28.84%) women between 19 and 23 years and the remaining 11(4.12%) were married after 23 years. In the rural study population, among the study with unmet needs, 107(46.93%) were married before 18 years of age followed by 106(46.49%) women who were married between 19-23 years and 15(6.58%) were married after 23 years.

DISCUSSION: The present study is a cross sectional, covering a target population of the study areas which were the urban health training center Rajapur and rural health training center Hebbal, attached to the Department of Community Medicine, MR Medical College, Gulbarga. All women who are married and presumed to be sexually active were included in the study. Majority of the women in the study population were between 20 and 34 years age group which is the most crucial period in the reproductive span. Nuclear families were more in urban areas which is an indicator of urbanization. According to National Family Health Survey-III, the current use of any modern method of family planning for rural India is 45.3% which was lower than our study whereas it was 64.7% for rural Karnataka which was higher than our study.[5] Puri A et al,[6] (2004) in their study in an Urban Slum of Delhi found that, 34.6% of the study subjects were contraceptive users which was lower than our study. Bhasin S K et al,[7] (2005) in their study in East Delhi found that, 59.8% of the eligible couples were currently using a contraceptive method which was lower than our study. In another study by Bhattacharya S.K et al,[8] (2006) in women attending immunization clinics in medical college Kolkata, 45.83% women were contraceptive users which was lower than our study. This shows that there is not just interstate but also intrastate difference in the use of family planning methods. The unmet need for family planning is higher in rural population than urban population and is statistically highly significant. This is due to availability of services more in urban area than in rural area.

According to the NFHS-III, the total unmet need for rural India is 14.6% and for rural Karnataka the total unmet need is 10.1%.[5] This shows that the unmet need in the urban and rural study populations is substantially more as compared to the National and State statistics indicating need for additional services in this area. The highest need in both urban (70.79%) and rural (66.23%) areas is between 20-29 years of age. The difference in the women with unmet need in urban and rural study populations according to their age distribution was statistically highly significant.

In the urban population, the number of women with unmet need for contraception in nuclear and joint families was higher than rural population and was statistically significant. A study by Radha

ORIGINAL ARTICLE

Devi D et al,[9] (1996) in Uttar Pradesh, 29% of women with unmet need belonged to nuclear family which was lower than our study. All these studies were almost a decade old when nuclear families were used to be less compared to joint or extended families. Mohanan P et al,[10] (2003) in their study in rural areas of Dakshina Kannada district found that, 60.2% of the non-users belonged to the nuclear families.

Women in the nuclear families tend to have more privacy to use family planning than do women in non-nuclear families. The literacy status among women with unmet needs in urban population is higher than rural population and is statistically highly significant. Radha Devi D et al,[9] (1996) in their study in urban and rural areas of Uttar Pradesh found that, 30% of the women who had unmet need were illiterates, Bhattacharya S.K et al,[8] (2006) in their study in Kolkata showed that 43.3% of the women with unmet need were illiterates, and Bhupinder Kaur Anand et al,[11] (2010) in their study in an immunization clinic in Patiala found that, unmet need was more in illiterate women (23.26%). In all these studies, unmet need was lower in illiterates.

In our study, unmet need was significantly higher in illiterate women and in women with primary level of education in both rural and urban areas. It decreased gradually with increased literacy level and was less in women who were degree/diploma holders. Hence it is clear that by imparting education unmet need can be brought down much lower. The difference in the women with unmet need in urban and rural study populations according to their socio economic status was highly significant. The unmet need for family planning was maximum in urban (53.18%) and rural (40.79%) study populations among the women who belonged to Class IV of Modified Kuppuswamy's Classification and Modified B. G. Prasad's Classification respectively and decreased with increase in the socio economic status. A study by Ahmadi A,[12] (2004) based on the Demographic Health Survey of Iran, Unmet need showed significant reduction with increase in socio-economic status which is similar to our study. In this study, majority of the women in urban 179(67.04%) and rural 107(46.93%) with unmet need were married much before they reached 18 years which is the legal age of marriage in India and the difference was found to be statistically significant. According to NFHS-III data for rural Karnataka, 49.4% of women aged between 20 and 24 were married by age 18 which was lower than our study.[5]

CONCLUSION: The overall unmet need is low at the beginning of reproductive age, but it increased and reached a peak in the mid-twenties & then declined. Women in the nuclear families tend to have more privacy to use family planning than do women in non-nuclear families. The literacy status among women with unmet needs in urban population is higher than rural population and is statistically highly significant. This indicates that despite a fair knowledge about the family planning methods, various socio-cultural barriers and factors like illiteracy, type of family and socio-economic status were responsible for this gap between a woman's expressed need and utilization of contraceptives.. Addressing these problems and barriers would help us in the long run to reduce the unmet need for family planning further.

REFERENCES:
1. Park K. Park's Text Book of Preventive and Social Medicine. 21st ed, Jabalpur. M/s. Banarsidas Bhanot publisher. 2011: 454.
2. Rhonda Smith. The faces of Unmet Need for Family Planning. Available from URL www.prb.org/articles/2012/faces-unmet-need-familyplanning.aspx

ORIGINAL ARTICLE

3. Lori Ashford. Unmet Need for Family Planning: Recent trends and their implications for Programs. Population Reference Bureau. Available from URL www.prb.org/pdf/unmetneedFam Plan-Eng.pdf.

4. Chandra R, Kandpal S.D, Negi K. S. Meeting Unmet Need: New Strategies, Population Reports, 1997, Series J Number 43. Available from URL www.infoforhealth.org/pr/j43edsum.shtml.

5. National Family Health Survey-3, Fact Sheet Karnataka (Provisional Data), 2005-2006, available from the URL www.nfhsindia.org

6. Puri A, Garg S, Mehra M. Assessment of Unmet Need for Contraception in an Urban Slum of Delhi, Indian Journal of Community Medicine, July-Sept 2004; 29(3): 139-140.

7. Bhasin S K, Pant M, Mehta M, Kumar S. Prevalence of Usage of Different Contraceptive Methods in East Delhi –A Cross Sectional Study. Indian Journal Of Community Medicine, April-June 2005; 30(2): 53-55.

8. Bhattacharya S.K, Ram R, Goswami D.N, Gupta U.D, Bhattacharya K, Ray S. Study of Unmet Need for Family Planning among Women of Reproductive Age Group Attending Immunization Clinic in a Medical College of Kolkata. Indian Journal of Community Medicine, April-June 2006; 31(2): 73-75.

9. Radha Devi D, Rastogi SR and Retherford RD: Unmet need for family planning in Uttar Pradesh. National Family Health Survey Subject Reports No. 1 1996; 2: 25.

10. Mohanan P, Kamath A, Sajjan B.S. Fertility Pattern and Family Planning Practices in a Rural Area in Dakshina Kannada. Indian Journal of Community Medicine, Jan-March 2003; 28(1): 35-38.

11. B. Anand, J. Singh & M. Mohi. Study of Unmet Need for Family Planning In Immunisation Clinic of A Teaching Hospital at Patiala, India. The Internet Journal of Health. 2010; 11(1): 23-24.

12. Ahmadi A. Unmet need for family planning in Iran. International Union for the scientific study of population. XXV International Population Conference Tours, France, Jul 18-23, 2005.

Demographic Variable	Urban		Rural	
	Number	%	Number	%
Age (in years)				
15-19	43	4.65	12	2.13
20-24	140	15.15	88	15.63
25-29	197	21.32	140	24.86
30-34	183	19.80	79	14.05
35-39	202	21.86	112	19.89
40-44	159	17.22	132	23.44
Total	**924**	**100.00**	**563**	**100.00**
Type of Family				
Nuclear	744	80.53	397	70.51
Joint	83	8.98	34	6.05
Extended	97	10.49	132	23.44
Total	**924**	**100**	**563**	**100**
Literacy status				
Illiterate	720	77.92	342	60.74

ORIGINAL ARTICLE

Primary	91	9.84	89	15.80
Secondary	49	5.32	60	10.65
Post SSLC	42	4.54	44	7.84
Diploma/Degree/Post degree	22	2.38	28	4.97
Total	**924**	**100**	**563**	**100**
Occupation				
Housewife	326	35.28	179	31.79
Farmer	23	2.49	88	15.65
Labour	516	55.85	261	46.35
Self-employed	11	1.19	22	3.90
others	48	5.19	13	2.31
Total	**924**	**100**	**563**	**100**
Socio-economic Status (Class)				
	Number	**%**	**Number**	**%**
I	0	0	7	1.24
II	21	2.27	56	9.95
III	80	8.65	136	24.15
IV	490	53.04	286	50.80
V	333	36.04	78	13.85
Total	**924**	**100**	**563**	**100**
Table 1: Distribution of all women according to the Socio demographic Factors				

Women	Urban		Rural	
	Number	**%**	**Number**	**%**
Women with met need	657	71.1	335	59.5
Women with unmet need	267	28.9	228	40.5
Total	**924**	**100**	**563**	**100**
Table 2: Distribution of the women according to the need for Family Planning				

χ^2=21.20 P<0.001 (Highly Significant).

Demographic Variable	Urban		Rural	
	Number	**%**	**Number**	**%**
Age (in years)				
15-19	39	14.61	11	4.82
20-24	115	43.07	76	33.33
25-29	74	27.72	75	32.90
30-34	21	7.86	22	9.65
35-39	11	4.12	25	10.96
40-44	7	2.62	19	8.34
Total	**267**	**100**	**228**	**100**
Type of Family				
Nuclear	184	68.91	160	70.18

ORIGINAL ARTICLE

Joint	46	17.23	16	7.01
Extended	37	13.86	52	22.81
Total	**267**	**100.00**	**228**	**100.00**
Occupation				
Housewife	127	47.57	88	38.60
Farmer	4	1.50	29	12.72
Labour	118	44.19	93	40.79
Self-employed	4	1.50	5	2.19
Others	14	5.24	13	5.70
Total	**267**	**100.00**	**228**	**100.00**
Table 3: Distribution of women with Unmet needs according to the Age, Type of family & Occupation				

Socio-economic Status (Class)	Urban		Rural	
	Number	%	Number	%
I	0	0	5	2.19
II	7	2.62	34	14.91
III	33	12.36	77	33.77
IV	142	53.18	93	40.79
V	85	31.84	19	8.33
Total	**267**	**100**	**228**	**100**
Table 4: Distribution of Women with Unmet needs according to their Socio-economic Status				

χ^2=89.96 P<0.001 (Highly Significant)

Age at marriage (in years)	Urban		Rural	
	Number	%	Number	%
<14	5	1.87	6	2.63
14-18	174	65.17	101	44.30
19-23	77	28.84	106	46.49
>23	11	4.12	15	6.58
Total	267	100	228	100
Table 5: Distribution of Women with Unmet needs according to the age at marriage				

χ^2=21.74 P<0.001 (Highly Significant)

ORIGINAL ARTICLE

AUTHORS:
1. Mohammad Waseem Faraz Ansari
2. Kapate Rajashekhar
3. Shri Shrinivas Reddy

PARTICULARS OF CONTRIBUTORS:
1. Assistant Professor, Department of Community Medicine, M. R. Medical College, Kalaburagi.
2. Professor, Department of Community Medicine, M. N. R. Medical College, Sangareddy.
3. Assistant Professor in Biostatistics, ESIC Medical College, Kalaburagi.

NAME ADDRESS EMAIL ID OF THE CORRESPONDING AUTHOR:
Dr. Mohammad Waseem Faraz Ansari,
Assistant Professor,
Department of Community Medicine,
M. R. Medical College, Kalaburagi.
E-mail: waseem_ansari@rediffmail.com