Original Research Article

A study on the association of socio-demographic factors and secondary infertility among mothers with unmet needs of family planning in Sangareddy

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Abstract

Background: The concept that eventually became unmet need of family planning was explored in 1960 when data from surveys of contraceptive KAP shoed a gap between some women's reproductive intention and their contraceptive behavior.
Aim: Objective of study was to estimate the socio economic and demographic patterns associated with the secondary infertility among those eligible couples who are in need of second child i.e. unmet need of family planning and to suggest remedial measures and advice to meet the needs of 2nd child.
Materials and methods: The eligible couples are those, who are married, living together, having marital life and the age of the wife is in between 15 – 49 years. Simple random sampling technique was used to select 20 secondary infertility eligible couples from 450 ECs by making house to house survey.
Results: The study results show that the upper middle and middle socio economic status is associated with the secondary infertility which is an obstacle to meet the needs of second child among the study group of eligible couples.

Conclusion: the upper middle and middle socio economic status is associated with the secondary infertility which is an obstacle to meet the needs of second child among the study group of eligible couples.

Key words

Infertility, Socioeconomic factors, Eligible couples, Unmet needs of family planning.

Introduction

The eligible couples are those, who are married, living together, having marital life and the age of the wife is in between 15 – 49 years. The estimated number of eligible couples in the community are around 150 – 180 per thousand population [1]. The present study is in context with unmet needs of their family planning attitude. The concept that eventually became unmet need of family planning was explored in 1960 when data from surveys of contraceptive KAP shoed a gap between some women's reproductive intention and their contraceptive behaviour [2-5]. One of the first published use of the term unmet need appeared in 1977. In 1978 based on world fertility survey data from 5 Asian countries Charles Westoff published first comparative estimates of unmet need for limiting births [6, 7]. Many women are sexually active will prefer to avoid becoming pregnant but nevertheless are not using any method of contraception including use by their male partner these women are considered to have unmet need of family planning [8]. We two, ours two' is the norm for the demographic goals to achieve in India. There are certain number of eligible couples who are in need of two children either male or female. Due to secondary infertility those couples are unable to conceive 2nd child which becomes an unmet need of family planning. Prevalence of secondary infertility in India was found to vary from 1.8% to 4.8% [5].

To estimate the socio economic and demographic patterns associated with the secondary sterility among those eligible couples who are in need of second child i.e. unmet need of family planning. To suggest remedial measures and advice to meet the needs of 2nd child.

Materials and methods

The present Cross sectional analytical study was conducted in Mar's Nagar Sub center with population of 3000 under RHTC, Department of Social & Preventive Medicine, MNR Medical College and Hospital, Sangareddy during June 2014 to December 2014. Simple random sampling technique was used to select 20 secondary infertility eligible couples from 450 ECs by making house to house survey. Eligible couples who are registered in the EC register are included in this study.

Calculation of sample size

It was done by using formula $n = Z\alpha^2 \, pq/d^2$, where $Z\alpha$ is z value of α error at 5% i.e. 1.96, P is the prevalence, $q = 100 - p$, d is relative precision.

The WHO estimate the overall prevalence of primary infertility in India to be between 3.9 and 16.8 %.Several studies in India states an average prevalence of secondary infertility 5% [3] Hence

P =5, q-95, $Z\alpha^2 = (1.96)^2$, d=10

N = 5x95x1.96x1.96 / 10 x 10 =20

Study Tools

- Pretested pre designed questionnaire.
- Operational definitions of secondary infertility- "when a woman is unable to bear a child, either due to inability to become pregnant or the inability to carry a pregnancy, she is considered as a case of secondary infertility [2].

Study commencement with the approval of institutional ethical committee.

Study Method

Women in the study list were visited at their houses and identified as secondary infertility.

Information of cases regarding socio-demographic characteristics, marital history and obstetrical history from 20 eligible couple who were suffering with secondary infertility and who are unable to meet their need of having second child so as to adopt permanent contraceptive method of family planning.

Data management and analysis

Data tabulated and analyzed. Description of data – as Mean and percentages.

Results

The mean age of women was 33.5 and the mean age for male partners was 38.35 (**Table – 1**). Maximum population was belonging to Hindu religion followed by Muslim and Christian (**Table – 2**, **Figure – 1**). Maximum couples were belonging to Joint family followed by nuclear family (**Table – 3**). According to Modified Kuppuswamy socioeconomic classification, the majority of study population (70%) belonged to upper middle class (**Table – 4**, **Table – 5**).

Table – 1: Age wise distribution of eligible couples under study. (n=20 M, n=20F)

	Age in years		
	Mean	**Minimum age**	**Maximum age**
Men	38.35	27	58
Women	33.50	22	49

Table – 2: Distribution on Eligible Couples on the basis of religion. (n= 20)

Religion	No. of couples	Percentage (%)
Hindu	12	60
Muslim	04	20
Christian	04	20
Total	20	100

Discussion

The study results show that the upper middle and middle socio economic status is associated with the secondary infertility which is an obstacle to meet the needs of second child among the study group of eligible couples. Thus the couples are unable to meet the needs of second child so as to limit their family size to two children which is an unmet need of eligible couple in family planning programme. It is observed in our study that the majority of study population (70%) belongs to upper middle class. Similar findings were found in the survey carried out in Kerala and Mumbai [3].

Table – 3: Distribution of study eligible couples on type of family.

Type of Family	Number	%
Nuclear	08	40
Joint	10	50
Three generation	02	10

The mean age of women was 33.5 and the mean age for male partners was 38.35, which is nearer to study done by Kumar D, et al. [7]. Maximum couples were belonging to Joint family followed by nuclear family. Similar findings were found in study done by RC, Shilpa S, et al [5].

In this study maximum couples were Hindu followed by Muslim and christen which is different from study done by RC, Shilpa S. et al this may be due to regional difference in distribution of population. In our study secondary infertility was more in illiterate couples which is nearer to study done by Kumar D, et al. [6].
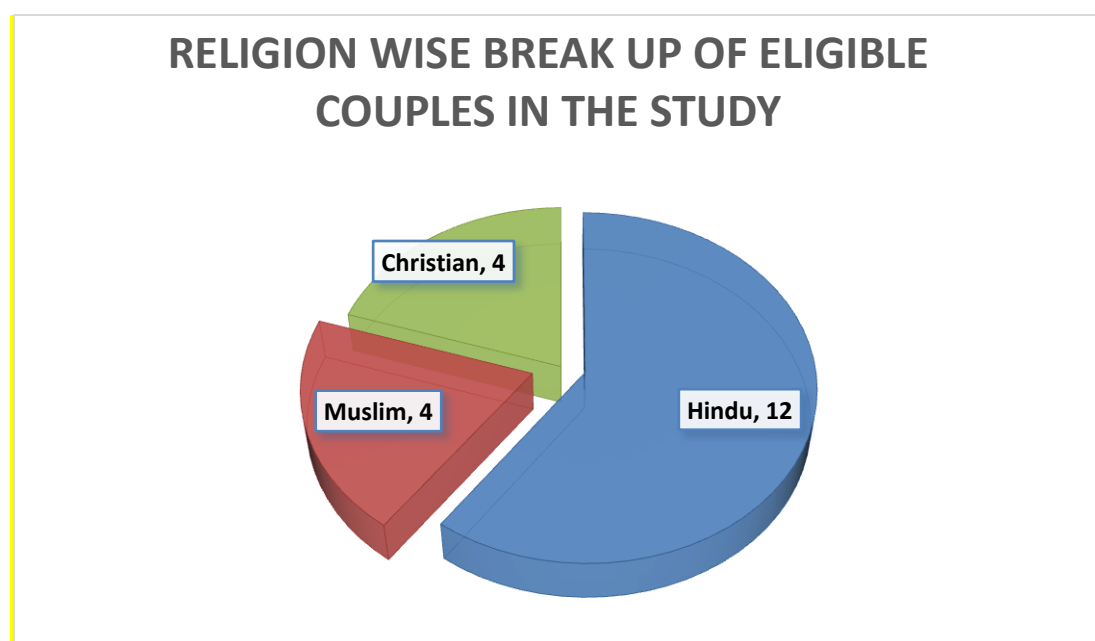
Conclusion

The study results show that the upper middle and middle socio economic status is associated with the secondary infertility which is an obstacle to meet the needs of second child among the study group of eligible couples. Unmet need poses a challenge to the family planning programme to reach and there is a need to improve the socioeconomic status of eligible couples from middle class to upper class by promoting literacy status, employment opportunities and empowerment of women with adequate economic freedom so as to remove the obstacle for family planning achievements.

Table – 4: Socio-economic status of EC according to modified Kuppuswamy Method.

EC No	A Education category	B occupation category	C percapita monthly income	Score of A+B+C	Total score	SE status
1.	Middle school	Semiskilled worker	2000	3+3+12	18	UM
2.	High school	employee	4000	4+4+12	20	UM
3.	Primary school	Unskilled worker	1500	2+2+10	14	M
4.	Graduation	Shopkeeper	5000	6+5+12	23	UM
5.	Illitrate	Skilled worker	3000	1+4+12	17	UM
6.	Illitrate	Unskilleed worker	300	1+2+3	6	UL
7.	Illitrate	Employed in private factory	500	1+3+4	8	UL
8.	Intermediate	Skilled worker	4000	5+4+12	21	UM
9.	Highschool	Business	3500	4+5+12	21	UM
10.	Highschool	Shopkeeper	3000	4+5+12	21	UM
11.	Primary School	Skiled worker	2000	2+4+12	18	UM
12.	Degree	Govt. Employee	5000	6+4+12	22	UM
13.	Intermediate	Skilled worker	3000	5+4+12	21	UM
14.	Illitrate	Unskilled worker	600	1+2+4	7	UL
15.	PG	Professional	7000	7+10+12	29	U
16.	Degree	Govt. employee	5000	6+4+12	22	UM
17.	Primary School	Skilled worker	1600	2+4+10	16	UM
18.	Illitrate	Unskilled worker	700	1+2+4	7	UL
19.	Middle school	Shopkeeper	1500	3+5+10	18	UM
20.	Intermediate	Skilled worker	1200	5+4+10	19	UM

Figure – 1: Religion wise distribution of eligible couple of present study.

Table – 5: Distribution of EC according to Modified Kuppuswamy Classification.

Class	No	Percentage
Upper class	1	5
Upper Middle class	14	70
Middle class	1	5
Upper lower class	4	20
Lower class	0	0
Observation		

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