Original Article

EPIDEMIOLOGICAL CORRELATES OF CONTRACEPTIVE PREVALENCE IN MARRIED WOMEN OF REPRODUCTIVE AGE GROUP IN RURAL AREA

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ABSTRACT

In spite of availability of a wide range of contraceptives and mass media campaigns population control is a distant dream to achieve. It is pertinent to identify the factors responsible for poor contraceptive acceptance. The study was conducted to find out contraceptive prevalence in married women of reproductive age group and to study epidemiological correlates affecting contraceptive practices. A cross-sectional population based study covered 512 married women in reproductive age group in the village Chanai, Taluka- Ambajogai, Dist.-Breed. They were interviewed by predesigned and pretested questionnaire. Out of 512 married women 48.63% were contraceptive acceptors. Contraceptive acceptance was more in women who are graduate and above(82.76%), women from nuclear family (58.79%), Upper middle socioeconomic class (79.62%).Contraceptive acceptance was lowest in agricultural laborer(38.87%) .A significant association was found between contraceptive acceptance and literacy status, occupation, type of family, socioeconomic status and age at marriage.

Keywords: Contraceptive acceptance, literacy status, type of family, age at marriage

INTRODUCTION

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 of the extent necessary to stabilize the population at a level consistent with requirement of national economy'.[1]

India adds about 10 lakh persons to its population every fortnight and adds about one Australia every eight month. By 2045 or earlier, India would overtake China as the world's most populous Nation.[2]

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 root in the socioeconomic and cultural milieu of Indian society.[1]In spite of availability of a wide range of contraceptives and mass media campaigns and information, education and communication programmes, the population control remains a distant dream to achieve. It is pertinent to identify the factors responsible for poor acceptance of family planning programme in different socio-cultural and socioeconomic groups.[3]

Women need the ability to decide when to start and finish childbearing, how long to wait after the birth of one child before becoming pregnant with the next and how many children to have.[4]

Considering the above facts, the present study was conducted with the objectives to find out contraceptive prevalence in married women of reproductive age group and to study epidemiological correlates affecting contraceptive practices at Chanai, a field practice area of S. R. T. R. Medical College, Ambajogai.

MATERIAL AND METHODS

A Cross sectional study was conducted in rural area to find out the epidemiological correlates of contraceptive prevalence in married women of reproductive age group i.e. 15 to 49 years.

Study Period: The study was conducted from September 2005 to August 2006.

Study area: Village chanai was selected by random sampling method from the field practice area of Department of Preventive and Social Medicine, Swami Ramanand Teerth Rural Medical College and Hospital, Ambajogai in district Beed.

Study participants: All the married women in the age group of 15-49 years at the time of interview were included in the study. Pregnant, widowed, divorced and non cooperative women were excluded from the study.

Data collection and analysis:

All married women in the reproductive age group were interviewed by house to house visits with the help of predesigned and pretested proforma. Association between selected epidemiological correlates was tested for significance by using Chi-square test

Some definitions used in the present study:

1. **Literacy status[5]:**

   a) **Illiterate:** A person who could not read or write. This category also includes those who could only sign or reproduce same writing mechanically without meaning.

   b) **Primary:** Those who had studied up to 4th standard.

   c) **Secondary:** Those who had studied from 5th to 10th standard.

   d) **Higher secondary:** A person who had obtained higher secondary school certificate from any educational board.

   e) **Graduate:** A person who had obtained graduate degree from any university.

2. **Occupation definitions:**

   a) **Housewives:** All elderly women who were engaged in household duties s were considered as housewives.

   b) **Agricultural laborer:** A person involved in the agriculture, working in her own land or in somebody else's land, for cash kind or share of crop.

   c) **Business:** Any well or semi established organized business owned by an individual irrespective of its size and category, if it was meant for profit.

   d) **Employed:** All salaried class persons employed in Government, semi government or private organization were considered as employed.

   e) **Others:** Persons having other occupational activities not covered under that mentioned above were accounted under this column.

RESULTS AND DISCUSSION

Out of 512 married women, nearly half of women were contraceptive acceptors i.e. 249(48.63%) and remaining half were non acceptors of contraceptives i.e. 263(51.37%). Maximum contraceptive acceptance (i.e. 65%) was observed in 35-39 and 40-44 years of age group followed by 30-34 and 25-29 years of age group i.e. 60% and 48.58% respectively.

Table1: Distribution of married women in reproductive age group according to contraceptive use

Age group (in yrs.)	Acceptors (%)	Non-acceptors (%)	Total (%)
15 – 19	5 (23.80)	16 (76.20)	21 (100)
20 – 24	23 (24.41)	71 (75.53)	94 (100)
25 – 29	51 (48.58)	54 (51.42)	105 (100)
30 – 34	51 (60)	34 (40)	85 (100)
35 – 39	66 (65.34)	35 (34.66)	101 (100)
40 – 44	41 (65.08)	22 (34.92)	63 (100)
45 – 49	12 (27.90)	31 (72.10)	43 (100)
Total	**249 (48.63)**	**263 (51.37)**	**512 (100)**

Out of 512 married women, 205(40.03%) were illiterate and 307(59.97%) were literates. Among illiterate women; contraceptive acceptors were less i.e.71 (34.63%) as compared to 134(65.37%) non acceptors.

In contrast, contraceptive acceptors were more among literate women and the prevalence of acceptors rises with level of educational status i.e. from 48.83% at primary level of education to 82.76% at graduation and above level.

Highly significant difference was observed between educational status and prevalence of contraceptive acceptors ($\chi2$ =21.15, df= 4, and p<0.001).

Due to education women exposed to the outside world, want to be gainfully employed and don't want to be tied down to household chores. These might be some possible reasons for significant difference and prompt them to look for contraception. Similar high prevalence of contraceptive acceptance was observed by K.C. Bhuyan (1980)[7], M. Bhattacharya et al (1984)[8], A.K. Sharma et al (1997)[3] and A. Kansal et al (2005)[1].

Table 2: Distribution of contraceptive acceptors & non- acceptors as per various epidemiological correlates

Epidemiological correlates	Acceptors (%)	Non-acceptors (%)	Total (%)	χ^2	df	P-value
Literacy status						
Illiterate	71(34.63)	134 (65.37)	205 (100)	21.15	4	< 0.001
Primary	21 (48.83)	22 (51.17)	43(100)			
Secondary	109 (53.97)	93 (46.03)	202 (100)			
Higher secondary	23 (69.70)	10 (30.30)	33 (100)			
Graduate& above	24 (82.76)	5 (17.24)	29 (100)			
Occupation						
Housewife	157 (55.09)	128 (44.91)	285 (100)	14.04	2*	< 0.001
Agricultural laborer	82 (38.87)	129 (61.13)	211 (100)			
Employed	6(75)	2(25)	8(100)			
Business	4 (50)	4 (50)	8(100)			
Type of family						
Nuclear	174 (58.79)	122 (41.2)	296 (100)	31.73	2	< 0.001
Joint	54 (31.77)	116 (68.23)	170 (100)			
Three generation	21(45.66)	25 (54.24)	46(100)			
Socio-economic status[6]						
Upper (≥ 2701)	17(56.67)	13(43.33)	30 (100)	25.28	4	< 0.01
Upper Middle (1350-2700)	43 (79.62)	11(20.38)	54(100)			
Middle (810-1349)	20 (46.51)	23 (53.49)	43(100)			
Upper Lower (405-809)	57 (43.19)	75(56.81)	132 (100)			
Lower (< 405)	112 (44.27)	141(55.73)	253(100)			
Age at marriage (yrs.)						
10 – 15	0(0.00)	46(100)	46(100)	25.90	1**	< 0.001
16 – 20	133(46.02)	156(53.98)	289(100)			
21 – 25	109(65.67)	57(34.33)	166(100)			
26 – 30	7 (63.63)	4(36.37)	11(100)			

* Employed & business put together.
** Figures in the age group of 10-20 & 21-30 were pooled together for application of χ^2 test.

Lowest prevalence of contraceptive acceptance was observed among agricultural labourers (38.87%) as compared to other occupations including housewives.

Statistically significant association was found between occupation of married women and contraceptive acceptance ($\chi2$=14.04, df=2, p<0.001).

In support to present study findings, A. S. Chandra Mouli, Sheila Mouli (1981)[9] in their study found, 26.90% of the respondents accepting family planning were agricultural labourers in a village of Bangalore.

Maximum contraceptive acceptance was seen in women from nuclear family i.e. 174(58.79%) out of 296. Out of 46 women from three generation family and out of 170 women from joint family,

i.e. 21(45.66%) and 54 (31.77%) respectively were contraceptive acceptors.

Statistically significant association was revealed between prevalence of contraceptive acceptance and type of family (χ2=31.73, df=2, p<0.001).

The low acceptance among joint family may be due to the fact that in a joint family couple is not bothered about the economic burden of supporting children because the head of the family is supposed to care for all his dependents and not just his own children. Secondly, the wife in a joint family obtains a higher position in her husband's family only after the birth of child. So in a joint family the women feels encouraged to produce more children. Thirdly, some couples in joint family may not have power to take decision.

Contraceptive acceptance was highest from upper middle class i.e.43 (79.62%) out of 54 women followed by upper class i.e. 17(56.67%) out of 30 women and lowest in women from upper lower class i.e.57 (43.19%) out of 132 women.

In present study contraceptive acceptance was found 46.51% (i.e.20 out of 43) among women in middle socioeconomic status. Similarly A.K. Sharma et al (1997)[3] revealed that 41.3% women were belonged to middle income group in their study on pattern of contraceptive use by residents of village in south Delhi.

The present study found statistically significant difference between socioeconomic status and prevalence of contraceptive acceptance (χ2=25.28, df=4, p<0.01). Percentage of acceptance of contraceptive methods increases steadily with increasing age at marriage, maximum being in the age group of 21–25 years i.e. 109 (65.67%) out of 166, followed by 26-30 years i.e. 7 (63.63%)out of 11 and 133 (46.02%) out of 289 women in 16-20 years of age group .

Statistically significant association was observed between age at marriage and prevalence of contraceptive acceptance (χ2=25.90, df=1, p<0.001).

N. Audinarayana (1986)[10] in his study on the influence of age at marriage on fertility and family planning behavior observed that the percentage of family planning adopters

increased from 33% to 52% as the wives' age at marriage increased from less than 13 years to 18 years and above respectively. It seems that age at marriage plays an important role in acceptance of contraceptive method

CONCLUSIONS

1. Contraceptive prevalence rate in the present study was observed to be 48.63%.
2. The findings indicate that literacy status of female exerted a strong influence on contraceptive acceptance. It could be accelerated by conducting and exposing all segments of the population to educational programmes on family planning.
3. The findings support the contention that there is still a need to intensify information, education and communication activities and motivate the population to practice contraception

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