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## **Pattern of Contraceptive Use by Residents of a Village in South Delhi**

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### **Summary**

This study was carried out to identify the factors, which influence acceptance of contraception in a rural population of South Delhi. A total of 518 eligible couples were studied in the village. The couple protection rate was 43.4%. Economic status & level of education of the couples were found to affect the, family planning practices significantly. Similarly, the sex of the last child and total number of male children per couple had significant impact on the family planning practice of the couples. Among other studied factors, the type of family (joint/nuclear) and number of female children per couple were not found to have any significant

### **Introduction**

The single most important problem that India is facing now is the uncontrolled growth of population. In spite of availability of a wide range of contraceptives and mass media campaigns and IEC programs, the population control remains a distant dream to achieve. Numerous studies have been carried out in different parts of the country to identify the poor acceptance of the program [1] [2] [3] [4]. It is pertinent to identify the factors responsible for poor acceptance of family planning program in different socio-cultural and socio-economic groups. Keeping this in mind, this study was carried out in a village in South Delhi to identify the factors Influencing the contraceptive acceptance pattern in the study area.

### **Materials & Methods**

The study was carried out in Kishangarh, a village in South Delhi. It has an approximate population of 3500. The department was providing family planning and other health care services to the village through a team of doctors, interns and social workers. A record of demographic profile of each family was maintained and records of different, aspects of health care delivery and family welfare services was also maintained at the center. All information was periodically updated. The analysis of the records of family welfare services were

carried out by studying the contraceptive acceptance pattern of eligible couples during a period of six months (January to June) in the year 1993.

## Results

In the study, 518 eligible couples were identified in the whole village. Of these, 173 (33.4%) had accepted a permanent method of contraception and 79 (15.2%) were, using temporary methods viz. Intrauterine device (IUD) 29 (5.5%) and condoms 50 (9.7%). The effective couple protection rate was 43.4%. The effective couple protection rate (CPR) has been calculated as per the criteria given by Jolly (1986) [5], where the effectivity of each method has been calculated by assigning different weights e.g. tubectomy/vasectomy as 100%, and IUD as 95% and condoms as equivalent to 50%.

Influence of various probable factors on contraceptive acceptance was studied. To study the impact of economic status, the families were grouped in different income groups (Table 1). Majority of the couples (41.3%) belonged to middle income group and 36.7% were from higher income group. It was seen that the contraceptive acceptance was directly proportional to the economic status. Acceptance rate was 58.9% in the higher Income groups. The difference, being statistically significant.

**Table 1:**Family planning acceptance with respect to Income.

<b>Monthly Income of Family in Rs</b>				
<b>Acceptance</b>	<b>&lt;1200</b>	<b>1200-1999</b>	<b>&gt;2000</b>	<b>Total</b>
<b>Temporary method</b>	14(12.3)	28(13.1)	37(19.5)	79(15.2)
<b>Permanent Method</b>	35(30.7)	63(29.4)	75(38.5)	173(33.4)
<b>Total</b>	49(42.9)	91(42.5)	112(58.9)	252(48.5)
<b>No method</b>	65(57.0)	123(57.5)	78(41.1)	266(51.4)
<b>Grand Total</b>	114(22.0)	214(41.3)	190(36.7)	518(100.0)

Table 2 shows the acceptance of family planning among educated and illiterate couples. Contraceptive acceptance was higher among women with professional education (72%) and college level education (46.9%), but linear relationship was not observed between level of education and acceptance of contraception.

**Table 2:** Family Planning Acceptance and Education of the Couples

<b>Level of Education of Couples</b>				
<b>F.P. acceptance</b>	<b>Both Illiterate</b>	<b>Both College educated</b>	<b>Others</b>	<b>Total</b>
<b>Temporary</b>	06(10.7)	05(41.6)	68(15.2)	79(15.2)
<b>Permanent</b>	13(23.2)	05(41.6)	155(34.4)	173(33.4)
<b>Total</b>	19(33.9)	10(83.2)	223(49.5)	252(48.6)
<b>No Method</b>	37(66.1)	02(16.8)	227(50.4)	266(51.4)
<b>Grand Total</b>	56(10.8)	12(2.3)	450(86.9)	518(100.0)

Chi Square = 13.63 df = 4 P<0.005

Figures in Parentheses indicate percentage

Contraceptive acceptance among illiterate couples was only 33.9%, as compared to acceptance of 83.2% amongst the couple who had at least 12 years of formal education and the difference was statistically significant ( $p < 0.009$ ). Acceptance of family planning methods was similar in both joint (48.97%) and nuclear (48.46%) families.

Sex of the last live birth was found to affect the acceptance of permanent method of family planning. Acceptance of terminal method was higher after the birth of a male child as compared to after that of a female child. Among the 173 women who accepted terminal methods of family planning, 63.6% did so after delivery of a male child and remaining 36.4% after that of a female child.

Acceptance of family planning methods was also analyzed in relation to number of live born children per couple (Table 3). Contraception acceptance after delivery of upto two children was only 43.7% out of which 24.9% went for permanent method. The acceptance rate was 50% after the delivery of third child but only 56.4% accepted family planning methods after the delivery of four or more children.

**Table 3:** Family Planning Acceptance with Respect to Total Number of Children Per Couple

Number of Children				
F.P.Acceptance	<2	3	>4	Total
Temporary Method	47(18.9)	19(13.9)	13(9.8)	79(15.2)
Permanent Method	62(24.8)	49(36.0)	62(46.6)	173(33.4)
Total	109(43.7)	68(50.0)	75(56.4)	252(48.6)
None	140(56.2)	68(50.0)	58(43.6)	266(51.4)
Grand Total	249(48.1)	136(26.3)	133(25.7)	518(100.0)

Chi Square = 20.28 df = 4 p<0.0004

Figures in parentheses indicate percentage

Influence of number of male children per couple on contraception practice behavior was also analyzed. Acceptance Of permanent method of family planning 19 increased in a linear fashion with number of male children (Table 4). Only 12.5% couple accepted sterilization without having a male child. Of those having one male child, 26.7% went for sterilization with two male children 43.4% and, with three or more male children 53.4% accepted sterilization.

**Table 4:** Family Planning Acceptance Versus Number of Male Children per Couple

Number of male Children per Couple					
F.P. Acceptance	0	1	2	>3	Total
Temporary Method	24(2.0)	25(14.2)	23(13.3)	7(9.6)	79(15.2)
Permanent Method	12(12.5)	47(26.7)	75(43.4)	39(53.4)	173(33.4)
Total	36(37.5)	72(40.9)	98(56.7)	46(63.0)	252(48.6)
None	60(62.5)	104(59.1)	75(43.3)	27(37.0)	266(51.4)
Grand Total	96(18.5)	176(33.8)	173(31.3)	85(16.4)	518(100.0)

Chi Square = 46.35 df = 6 p<0.0001

Figures in parentheses indicate percentage

Number of female children born to a couple was also found to influence the contraception practice. About 30% of the couples accepted sterilization without having a female child, 37.4% accepted after one female child and the rate of acceptance after two or three female children was around 31%. However, acceptance was more than 64% among the couples having four or more female children.

## **Discussion**

The couple protection rate in the studied sample was found to be 43.4%, which is same as the national couple protection rate of 43.5%<sup>1</sup>. Acceptance of contraception shows wide variation across the country. The variation in different parts of the country is wide and need to be investigated locally.

Family income is at best a proxy indicator of the community. However it has been found in this and supported by other studies [4] also that improved economic status of the families promote acceptance of family planning methods. The family structure, i.e. joint or nuclear type is a significant variable. In this study, no such impact was observed.

'Male child syndrome' is still a widely prevalent concept. It was evident from the fact that acceptance of family planning methods after delivery of a male child (63.6%) is significantly higher than that of a female child (36.4%). However, there may be bias in this finding, as the analysis is not adjusted for total number of children.

Two children, family is the recommended norm, but only 24.9% of the couples accepted sterilization after two or less number of children. However, sterilization after three children was 36% and 46.6% after four or more children. In spite of a linear increase in sterilization, rate performance in this regard does not seem to be satisfactory. It was found to be even lower in the studies conducted in Gujarat [3]. Thus, to drive home the point, more emphasis should be placed on restricting the family size.

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