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**SOME DEMOGRAPHIC ASPECTS OF IUD ADOPTERS
IN KERALA DURING 1969-70**

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SOME DEMOGRAPHIC ASPECTS OF IUD ADOPTERS IN
MEERALA DISTRICT 1969-70

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SOME DEMOGRAPHIC ASPECTS OF IUD ADOPTERS IN
KERALA DURING 1969-70*

1. Introduction: Government of India is very keen to promote family planning which is an essential element in the strategy of economic development. The fast growing population of the State has proved a serious obstacle to the realization of the fruits of planning for development.

Kerala, with its highest sex-ratio and educational attainment, is the most densely populated State of India. So the welfare of the State through economic development is linked with her efforts in bringing down the birth rate of the State to a possible minimum by adopting various family planning methods. What is important is the attitude of the people towards the various methods of family planning. People may have knowledge of contraceptives and may also know how to use them. But, unless they consider the use of contraceptives desirable, their knowledge may not produce favourable results.

A wide variety of contraceptives are in current use today and they are made available to the masses through family planning clinics and hospitals. Closely allied to the health-orientation of planned parenthood, is the emphasis on the spacing of births. This is an important consideration in the use of contraceptives through out the world. Among the various contraceptives, IUD has become a popular device of both birth spacing and birth control. Facilities for IUD insertions are provided in the hospitals in Kerala since 1965. IUD has many advantages over other methods. Firstly, it is a facile method that can be adopted at will for the prevention or spacing of births. Secondly IUD once inserted, remains in position till it is removed or expelled and the woman is protected from conception as long as the device is in position. Lastly it does not normally demand day to day attention of the user.

2. Purpose of the study: The main object of the study is to examine the socio-demographic characteristics of IUD adopters in Kerala during 1969-70.

3. Previous studies: Two reports on IUD adopters for the periods 1966-67 have already been published by the Demographic Research Centre of this Bureau (Paper No.DRC.No.64 and 69). The present paper is the third in the series.

4. Source of data: Records kept at the hospitals and family planning clinics are made use of for this study. Information on age, education, religion, occupation and monthly income, number of children living etc. in respect of IUD adopters are collected from the registers of the hospitals and family planning clinics for the period 1969-70.

*This report was prepared by Sri G.Surendranathan Nair,
Research Officer of the Demography Division.



During 1969-70 period, 37708 cases of IUD insertions have been reported in the State. Details of 35735 cases have been collected from the hospital records. Thus the present study has a coverage of 95% of the IUD adopters of 1969-70. When compared with previous studies the extent of coverage is the highest in 1969-70. The percentage of coverage of the present previous studies are given in Table I.

TABLE I
The extent of coverage of IUD studies for the period
1966-67 to 1969-70

IUD studies of D.R.C.	Period of study	Total IUD insertions Nos.	IUD Cases covered by the study Nos.	Percentage of coverage.
Paper No. D.R.C. 64	1966-1967	40760	16913	41.5
	1967-1968	37553	31276	83.3
Paper D.R.C. No. 69	1968-1969	36065	30006	83.0
Present Study for the year 1969-70	1969-1970	37708	35735	95.0

5. Limitations: In this connection, it may be well to point out that the present study has certain limitations also. In most of the IUD cases all the individual characteristics such as age, religion, number of children etc. are not available in the hospital records. Many of the items are left blank in the registers. Though it would appear that a good percentage of IUD cases has been covered by this study, the coverage, in respect of many individual characteristics of IUD adopters, is poor and to that extent it would vitiate the results. It is a major limitation of the study. The percentage of not recorded items are given in Table II.

TABLE II

Characteristics of IUD adopters 1 969-70	Percentage of not recorded cases	REMARKS
1. Education Husband	75.29	
Wife	49.79	
2. Occupation Husband	68.01	
Wife	64.96	
3. Income	47.78	
4. Religion	22.46	
5. No. of children living	31.15	



6. Demographic characteristics of IUD adopters: The demographic characteristics of IUD adopters such as age, No. of children, religion, education, income and occupation are examined in the following paragraphs.

6.1 Age composition: IUD has become popular device of birth control since 1965. The distribution of IUD acceptors of 1969-70, according to age is given in the table III below:

TABLE III
Distribution of IUD acceptors 1969-70 according to age

Age group	Number of IUD acceptors 1969-70	%	Percentage distribution of married females 15-44 years as per 1961 census.
15-19	825	2.45	8.53
20-24	7449	22.09	21.97
25-29	10533	31.23	23.29
30-34	8477	25.13	18.69
35-39	5313	15.75	16.50
40-44	1027	3.04	11.02
45 & above	103	0.31	..
Not recorded	2008	..	..
TOTAL:	35735	100.00	100.00

78% of the IUD adopters belong to age group 20 to 34. 31% of the IUD adopters in 1969-70 come under the age group 25 to 29. Median age of IUD adopters in 1969-70 is about 24.6 years, while it is 28.5 years in the previous year (1968-69) and 30 years in 1967-68 period. A falling trend perceived in the median age of IUD adopters indicates a welcome change. More and more young people are attracted to this device of birth control as years pass by. Besides, the modal age group of IUD adopters for the period 1966 to 1970 is 25-29. This is identical with the modal age group of married females in 15-44 years according to 1961 Census. The above table also reveals that only a small percentage of IUD adopters belong to ages below 20 years and above 39 years.

A comparison of the age composition of the IUD adopters of 1969-70 with that of the previous years will project the age pattern of IUD adopters for the period 1966 to 1970. Those who adopt IUD in 20-24 years form 15.5% in 1966 to 1967 period and in the next year (1967-68) this percentage has increased by 2.5%. Further, in 1968-69, there is again an increase by 2.7% over the previous year. In the present study also the percentage IUD adopters in 20-24 age group has increased by 1.3%. As a matter



of course, a gradual increase of IUD adopters in the age group 20-24 is noticed over all these years from 1966 to 70 (Table IV)

TABLE IV
Trend in the IUD adoption according to age for
the period 1966-70

Age Group	Percentage of IUD acceptors				Percentage of married females 15-14 years (1961 Census)
	P e r i o d				
	1966-67 (1)	1967-68 (1)	1968-69 (2)	1969-70	
15-19	1.20	1.68	1.97	2.45	8.53
20-24	15.51	18.04	20.75	22.09	21.37
25-29	31.83	32.33	33.65	31.23	23.29
30-34	27.46	26.47	24.86	25.13	18.69
35-39	19.18	17.70	15.70	15.75	16.50
40-44	4.40	3.43	2.78	3.04	11.02
45 & above	0.41	0.35	0.29	0.31	..
N.R.	..	..	..	..	..
TOTAL	100.00	100.00	100.00	100.00	100.00

(1) Paper No.D.R.C.-64

(2) Paper No.D.R.C.-69

A point of importance to be noted here is that the percentage of those who adopt IUD at the age of below 25 years is steadily increasing from 16% in 1966-67 to 25% in 1969-70. At the same time those who adopt IUD after the age of 35 years and above is steadily declining from 24% in 1966-67 to 19% in 1969-70. The changes noted above are in favour of IUD adoption by the younger generation. More and more young people are brought under IUD fold of family planning. Percentage distribution of married females 15-44 in the general population of 1961 is also given in Table IV. The percentage of IUD adopters in the age group 20-34 is higher than the percentage of married females in their respective age group of general population. The fact, that the married females of 20-34 age group are attracted in large numbers to IUD, is evident from the above table.

6.2 Number of children: The prime motive of IUD adoption is birth control. So the number of children the females had at the time of IUD adoption is an index of the efficacy of family limitation. It is also an indicator of the timing of making the decision on the part of the IUD adopters. In fact it is a better index than the age characteristics of IUD adopters, for, the age structure of IUD adopters is associated with the age at marriage. The distribution of IUD adopters according to number of children born and living at the time of IUD adoption is given in Table V.



The average number of children born to IUD adopters is 3.7 and the average number of children living to them is 3.58

TABLE V

Distribution of women who have adopted IUD according to
No. of children born & living at the time of IUD adoption
(1969-70)

No. of children	Born		Living	
	No. of children	%	No. of children	%
0	46	0.24	19	0.07
1	1698	8.88	2560	9.04
2	4371	22.85	7248	25.61
3	4672	24.43	7668	27.10
4	3461	18.09	5117	18.08
5	2301	12.03	2863	10.11
6	1331	6.96	1611	5.69
7	698	3.65	757	2.67
8	344	1.80	293	1.04
9	141	0.74	120	0.42
10	40	0.21	37	0.13
Above 10	24	0.12	12	0.04
Not recorded	16608	..	7430	..
TOTAL:	35735	100.00	35735	100.00

61.8% of the IUD adopters have 3 or less than three children living at the time of IUD insertions. 19 females who accepted IUD during 1969-70 have reported that they have no children living at the time of IUD insertion. Postponement of births may be the motive behind this practice 9% of the IUD adopters in 1969-70 have only one child living at the time of IUD insertion.

In this connection an examination of the trend of IUD adopters for the period 1966-70 according to number of children living at the time of IUD insertion is significant and appropriate.

In 1966-67 period only 44.8% of the IUD adopters have 3 or less than 3 children living at the time of IUD adoption. In the subsequent years, the percentage of these IUD adopters having 3 or less than 3 children living at the time of IUD adoption has steadily increased (Table VI).



TABLE VI

Percentage of IUD adopters having 3 or less than 3 children living at the time of IUD adoption for the period 1966-70 and those having one child living at the time of IUD adoption for the same period

Period of IUD adoption	Percentage of IUD adopters who have 3 or less than 3 children living at the time of IUD adoption.	Percentage of IUD adopters with 1 child living
1966-67*	44.84	5.0
1967-68*	50.31	6.4
1968-69**	60.19	8.0
1969-70	61.82	9.0

*Paper No.D.R.C.64

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Similarly those IUD adopters with one child living at the time of IUD adoption for the above period is also on the increase (Table VI above). The above data indicate a subtle change in favour of early adoption IUD by the women at large.

In the preceding paragraphs the significant characteristics of IUD adopters in respect of age and number of children were examined. In what follows, the popularity of IUD among the different religious groups in Kerala is examined.

6.3 Religion: 73% of the IUD adopters are Hindus 16% are Christians and 5% are Muslims in 1969-70. According to 1961 Census 61% of the population are Hindus, 21% are Christians and 18% are Muslims in the State. The percentage of Hindus among the IUD adopters in 1969-70 is more than their respective proportion in the general population. But, in the case of Christians and Muslims, the percentage of IUD adopters are noticeably lower than their respective proportions in the general population of the State. Hindus have readily accepted family planning from the very out set. They show a favourable attitude towards sterilization as well as IUD. It seems that Hindus are culturalogically conditioned to favour family planning methods without any sentimental objection. The comparative popularity of IUD in 1969-70 among the major religious groups of Kerala is given below in Table VII.



TABLE VII

Distribution of IUD adopters according to religion
1969-70.

Religion	No. of IUD acceptors in 1969-70	% of IUD acceptance.
Hindus	21577	77.89
Christians	4832	13.35
Muslims	1599	5.77
Not recorded	8027	..
TOTAL:	35735	100.00

The trend in the acceptance of IUD among the various religious groups is given in the table VIII below.

TABLE VIII

Trend in IUD adoption according to religion from 1966-70

Religion	Percentage of IUD adopters			
	P e r i o d			
	1966-67 (1)	1967-68 (1)	1968-69 (2)	1969-70
Hindus	73.16	73.73	76.20	77.88
Christians	22.85	18.89	14.84	16.35
Muslims	3.90	7.38	8.87	5.77
Others	3.09	..	..	..
TOTAL:	100.00	100.00	100.00	100.00

(1) Paper No.D.R.C. 64

(2) " " 69

There is an increasing trend in IUD adoption among the Hindus but among Christians and Muslims a decreasing trend is noticed over the years 1966 to 1970. Allied to the IUD adoption, it may be borne in mind that the religious dogmas and sentiments very often act as bar to the realization of the benefits of smaller family size. Compared to the percentage of Muslims in the general population the percentage of Muslims IUD adopters is very very low. In the case of Christians, IUD has not impressed them at all.

6.4 Education: Educational attainment of the couples play a vital role in making the decision on the method of family planning that should be adopted by them. The influence of the male partner in our culture is so strong a factor in the decision making that



it can hardly be ignored in this study. So the educational attainment of the husbands and wives is taken in to account in the study (Table IX). 28% of the IUD adopters and 21.5% of their husbands are illiterate. 57.7% of the husbands and 62% of wives show an educational attainment below middle standard. As a matter of fact, IUD is comparatively more popular among the literates than among illiterates.

TABLE IX.

Distribution of IUD acceptors according to their educational status and that of their husbands - 1969-70

Educational Status	Husbands		Wives	
	Number	%	Number	%
1. Illiterate	1899	21.5	5034	28.05
2. Literate below primary	2901	32.86	7038	39.23
3. Above primary below middle	2195	24.86	4067	22.67
4. Above middle below primary	676	7.65	831	4.63
5. Matric & above	684	7.75	912	5.08
6. Literate but educational status not specified	475	5.38	59	0.33
7. Not recorded	26994	..	17794	..
8. TOTAL:	35735	100.00	35735	100.00

According to 1961 census, 48.03% of women in 15-44 age group are illiterate. 34% are literate without any educational level. 13.7% are primary or junior basic level and 4.1% are matriculate and above. More literate women adopt IUD when compared to 1961 census distribution of women in 15-44 age group. Distribution of IUD adopters according to their educational attainment over the years 1966-1970 is given in the table X below:

TABLE X

Distribution of IUD adopters according to educational attainment for the period 1966-1970.

Educational status	Percentage of IUD adopters			
	P e r i o d s			
	1966-67 *	1967-68*	1968-69**	1969-70
Illiterates	21.9	22.8	31.1	28.0
Literates but below matric	70.8	71.4	63.5	66.6
Matric and above	7.3	5.8	5.4	5.4
Literates but educational status not specified	..	..	..	..
TOTAL	100.0	100.0	100.0	100.0

* DRC Paper No.64

** DRC Paper No.68



Illiterate women are drawn more and more to IUD form of family planning. Only 22% of the IUD adopters were illiterates in 1966-67 period but this percentage grows to 28 in 1969-70. With regard to literates but below matric standard a slight declining trend is observed. But those IUD adopters with matric standard and above are decreasing from 7% in 1966-67 to 5.4% in 1969-70. The fall in the percentage of IUD adopters among the educated people can be attributed to the various socio psychological factors. The study on the evaluation of family planning activities in Perumkadavila Block conducted by the Demographic Research Centre of this Bureau (Paper D.R.C.63) sheds some light on this.

In this study the complaints of IUD adopters before and after IUD insertions are taken into account. Only 8% of the females had complaints of some form at the time of IUD insertion but the remaining 92% have lodged their complaints about menstrual cycle or pain at the back or abdomen after the IUD insertion. Distribution of IUD adopters according to age and complaints are given in Table XI.

TABLE XI

*Percentage distribution of IUD adopters according to age and complaints before and after IUD insertions

Age group	Percentage of IUD adopters who have complaints		
	Before IUD insertion %	After IUD insertion %	Total
15-19	..	..	..
20-24	..	2.0	2
25-29	2.04	26.54	28.58
30-34	..	16.30	16.30
35-39	4.08	34.70	38.78
40-44	..	12.30	12.30
45 & above	2.04	..	2.04
TOTAL	8.16	91.84	100.00

* The source of data "Report on Evaluation of Family Planning activities in Perumkadavila Block" January 1971 (Paper D.R.C.63) Table 5.17 and 5.18 Page 127)

The above table brings to light that only 6% of the IUD adopters in the age group 25-39 had some form of complaints at the time of IUD insertions but 77.5% had complaints about menstrual cycle and pain in abdomen or back etc. after IUD insertions. The fall of IUD adoption among the literates or the educated class may probably have some apprehension on these complaints. Literates are more sensitive to complaints on the after effects of IUD insertion. The falling trend perceived among the literates in



IUD adoption may be net effect of complaints that are being transmitted by the IUD users to non-users. It seems that the enthusiasm generated at the very out set of IUD programme in 1965 has been cooled down with in the short span of 5 years.

6.5 Income: 48% of the IUD cases have not recorded the income data. What is recorded as monthly income is recorded without any probing enquiry and so the data on income are to be accepted with some reservation. However it is to be noted that the couples of very low income are being attracted to IUD in large numbers. 82% of the IUD adopters in 1969-70 had a monthly income of less than Rs.100/-. Distribution of IUD adopters according to income is given in Table XII.

TABLE XII

Distribution of IUD adopters according to monthly income of the couples (1969-70)

Monthly income of the couples	Numbers of IUD adopters.	Percentage of the adopters in 1969-70
Below Rs. 50/-	2948	15.80
Rs. 50-99/-	12311	65.97
Rs. 100-149/-	2094	11.22
Rs. 150-199/-	730	3.91
Rs. 200/- & above	578	3.10
Not recorded	17074	..
TOTAL:	35735	100

Percentage of distribution of IUD adopters for the period 1966-67 to 1969-70 is given in table XIII for the sake of comparison.

TABLE XIII

Percentage distribution of IUD adopters according to monthly income of couples for the period 1966-67 to 1969-70

Monthly income	Percentage of IUD adopters			
	1966-67 (1)	1967-68 (1)	1968-69 (2)	1969-70
Below Rs. 50/-	33.08	28.74	24.29	15.80
Rs. 50-99	56.06	57.12	61.83	65.97
Rs. 100-149	6.57	8.77	9.79	11.22
Rs. 150-199	2.46	3.06	2.12	3.91
Rs. 200/- & above	1.83	2.31	1.97	3.11
Not recorded	..	..	..	..
TOTAL:	100.00	100.00	100.00	100.00



89% of IUD acceptors in 1966-67 had an income of less than Rs.100/-. A slight fall in the percentage of IUD adopters who have a monthly income of below Rs.100/- is noticed in 1967-68 and 1968-69. In 1969-70 a further fall by 5% over 1968-69 is revealed in the above table.

6.6 Occupation: The differential acceptance rate of IUD adopters and their husbands among the various occupational group is studied in what follows.

TABLE XIV

Distribution of IUD acceptors and their husbands according to occupation, 1969-70

Occupation	Husband		Wife	
	Number	%	Number	%
Agricultural labourers	970	8.49	542	4.33
Other unskilled labourers	7193	62.93	6427	51.33
Skilled labourers	715	6.25	149	1.19
Professional workers	322	2.81	194	1.55
Cultivators & farmers	788	6.89	256	2.04
Traders & businessmen	578	5.06	134	1.07
Clerical workers	171	1.50	71	0.57
Others	522	4.57	1214	0.70
No occupation	172	1.50	3533	28.22
Not recorded	24304	..	23215	..
TOTAL:	35735	100.00	35735	100.00

2/3 of the IUD adopters have not mentioned their occupation as well as the occupation of their husbands. The data on occupation are to be accepted with reservation. The occupation of the husband may have some influence on wife in accepting IUD form of family planning. Most of the IUD adopters and their husbands come under the occupational classification of agricultural labourers and unskilled labourers (i.e. 71% of the husbands and 55% of IUD adopters). 28% of the IUD adopters and 2% of their husbands report that they have no occupation at all.

7. Effects of IUD insertions on birth rate: The effect of IUD on birth rate depends not only on the number of IUD insertions but also on the rates of expulsion, removal, re-insertion of IUD and the accidental pregnancies among IUD acceptors. Reliable data on these factors are not available at present. However, Department of Family Planning, Government of India has estimated that there is an average saving of 0.7 births over 5 years per IUD insertion. Based on this estimate, the 37708 IUD insertions conducted in 1969-70, will save 26395 births over next five years.

8. Summary: 88% of the IUD adopters belong to the age group 20-34. The largest percentage of IUD acceptors come from 25-29 age group.



Median age of IUD adopters is about 24.6 years in 1969-70. A falling trend in the median age at IUD adoption over the years 1966-70 is a fourble change. More and more young people are attracted to IUD in recent years. A gradual increase in the percentage of IUD adopters in 20-24 age group is noticed over all these years from 1966-70.

The percentage of those who adopt IUD at the age of below 25 years is steadily increasing from 16% in 1966 to 25% in 1969-70. At the same time the percentage of those who adopt IUD at age of 35 and above, is steadily declining from 24% in 1966-67 to 19% in 1969-70.

Average number of children born to IUD adopters in 1969-70 at the time of IUD insertion is 3.7 and the average number of children living is 3.58.

62% of the IUD adopters have 3 or less than 3 children living at the time of IUD insertion.

As in the previous studies, the majority of IUD adopters are Hindus. The percentage of Muslims among IUD adopters is found to be very poor.

IUD is more popular among literates than among illiterates. Even among literates most of them are below middle standard. The educated class in general are indifferent to IUD.

Couples of very low income group are being attracted to IUD form of family planning in large numbers. 82% of IUD acceptors had a monthly income of less than Rs.100/-. Unskilled workers form the majority of IUD adopters in 1969-70.

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