

Demographic Study of Gujjars of Delhi: IV. KAP of Family Planning

Shweta Dabral and S.L. Malik

Department of Anthropology, University of Delhi, Delhi 110 007, India

KEYWORDS Family Planning, KAP, Contraceptive Methods, Social Development.

ABSTRACT The family planning programmes have been in operation in India for more than five decades. Family Planning refers to the practices that help individuals or couples to avoid unwanted births, bring about wanted births, regulate the intervals between pregnancies; control the time at which births occurs in relation to the age of parents and determines the number of children in the family. To assess the family planning programme, KAP of family planning among various populations is evaluated from time to time by various agencies. Keeping this in mind the present study was conducted among Gujjars of Delhi. The data for the present study was collected by interviewing ever-married Gujar women aged 15-49 years from a sample of 558 households. Among Gujjars the knowledge of family planning methods is widespread. Also, majority of women have favourable attitude towards family planning. However, there is a gap between the knowledge and the practice of contraception among Gujjars. Female sterilization is far the most popular contraceptive method.

INTRODUCTION

The family planning programmes have been in operation in India for more than five decades. There has been a considerable increase in the governmental and non-governmental activities for promoting the adoption of family planning through widespread and intensified efforts as well as clinical services being made available to the users of family planning methods. Family planning is essential to address problems as it is associated with increasing population in developing country like India. Family planning is a way of thinking and living that is adopted voluntarily, upon the basis of knowledge, attitude and responsible decisions by individual and couples, in order to promote the health and welfare of the family group and thus, contribute effectively to the social development of the country (WHO, 1971). Family planning through contraception tries to achieve two main objectives; firstly, to have only the desired number of children and secondly, to have these children by proper spacing of pregnancies. The contraceptive methods are broadly categorized into barrier, chemical, natural or surgical (Weeks, 2002). Surgical method that includes sterilization (vasectomy and tubectomy) is a permanent method of birth control while others are temporary methods. Induced abortion is the post-

conception method of family planning and is performed if there is a need to terminate an unwanted pregnancy because of failed contraception. Attitudes towards fertility regulation, knowledge of birth control methods, access to the means of fertility regulation and communication between husband and wife about desired family size are essential for effective family planning.

Acceptance of contraception by a couple is governed by various socio-cultural factors, such as religion (NFHS: 1998-99, 2002) and education of husband and wife (Coale, 1965; Berelson, 1976; Chachra and Bhasin, 1998; Bhasin and Nag, 2002). In India, the states with greater contraceptive use have generally achieved a more advanced state of socioeconomic modernization (Srinivasan et al., 1984). This achievement has generated the observed higher levels of motivation. Mass media also plays an important role in promotion and acceptability of contraception (Bhat, 1996; Ramesh et al., 1996). While, spousal communication increases the likelihood of contraceptive use (Lasee and Becker, 1997; Kamal, 1999; Ghosh, 2001). Son preference, women's age, literacy, number of living children, number of living sons also influences contraceptive use (Gandotra and Das, 1990; Levine et al., 1992; Bora and Jha, 2001). Couples with fewer sons are more likely to continue having more children, besides, have shorter birth intervals and are also less probable to use contraception (Das Gupta, 1987; Nag, 1991; Raju and Bhat, 1995). Acceptance of

Address Correspondence to: Professor S. L. Malik,
Department of Anthropology, University of Delhi,
Delhi 110 007, India
E-mail: slmalik@rediffmail.com

sterilization, which is a terminal birth control method, is influenced by the number of living children in addition to the number of sons and is usually accepted when the couples are sure that they have competed with their family size and gender preference (Khan, 1980; Bhasin, V., 1991; Rajaram, 1998; Chachra and Bhasin, 1998; Das and Acharya, 1999; Rajaretnam, 2000; Bhasin and Nag, 2002). Studies indicate that higher educated women have a better knowledge to use non-terminal method more effectively (Bumpass, 1987). Religious affiliation also affects the acceptance of sterilization due to behaviour related to childbearing (Chacko, 1988; Goldscheider and Mosher, 1988; Reddy, 1996). Contraceptive prevalence rate is lower among the Muslim and lower caste Hindu women (Gulati, 1996; Bora et al., 1998).

In India, the new approach with regards to family planning (which is now integrated into Reproductive and Child Health Programme, 1997) emphasizes the target-free promotion of contraceptive use among eligible couples, the provision to couples of a choice of contraceptive methods and encouragement of adequate spacing of births (at least three years birth interval). The National Population Policy (2000) has set the task of addressing unmet need for contraception as its immediate objective. Assessing people's perceptions particularly that of women and level of adoption of family planning may be helpful in getting an insight of the problem. Couple protection rate is an indicator of the prevalence of contraceptive practice in a population. It is defined as the percent of eligible couples effectively protected against childbirth by one or the other approved methods of family planning.

The present paper is an effort to assess knowledge, attitude and practice of family planning (KAP) among Hindu Gujjars of Delhi.

MATERIAL AND METHODS

The present study was conducted among Hindu Gujjars residing in Delhi. Gujjars of Delhi do not come under Scheduled tribe category. A majority of the Gujjars in Delhi are concentrated in the rural areas. Five Gujjar predominated villages selected at random, were visited during different months of the year 2002. They were Fatehpur Beri, Dera, Molarband, Madanpur Khadar and Asola. The data was collected from ever-married Gujjar women aged 15-49 years from a sample of 558 households using interview schedule (For details see Dabral and Malik, 2004a). The data collected was statistically treated, using descriptive statistics.

RESULTS AND DISCUSSION

Knowledge of Family Planning Methods: Knowledge about contraceptive methods plays a major role in their use. The knowledge of contraceptive methods is nearly widespread among ever married Gujjar women (Table 1). Spacing methods namely Pills, Intra Uterine Devices (IUD) and condom, are each known to cent percent women. Terminal method of sterilization particularly female sterilization is also known to all women. One-fifth of the women are aware of injections. Traditional methods of contraception are lesser known. Over half of the women know about abstinence. Lack of knowledge, about proper use of traditional methods, results in their ineffectiveness.

In Delhi, mass media and interpersonal communications are utilized to explain the various methods of contraception. The relative importance of various sources of family planning information when assessed indicates that primary source of information is electronic mass media (Table 2). Nearly three-fifth of the women

Table 1: Distribution of ever-married women aged 15-49 years, having knowledge of any contraceptives, by age and specific method

Contraceptive methods	Age (in years)							Total	
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	Number	Percent
Pills	27	113	132	122	80	41	43	558	100.0
IUD	27	113	132	122	80	41	43	558	100.0
Condom	27	113	132	122	80	41	43	558	100.0
Injection	5	13	19	24	20	15	16	112	20.1
Sterilization	27	113	132	122	80	41	43	558	100.0
Abstinence	8	42	68	65	41	30	34	288	51.6

came to know about family planning methods through various mass media particularly television (Table 2). One in four state that the source of information is health professionals like doctor, etc. Less than one-fifth comes to know about family planning methods from relatives and friends.

Attitude towards Family Planning: The analysis of attitude of ever married women towards acceptability of family planning messages on radio or television reflects that media messages are acceptable to four-fifth of the women (Table 3). Relatively larger proportion of older women (over 44 years) and women who are illiterate, don't consider broadcasting of family planning messages acceptable. On the other hand,

Table 2: Percent distribution of ever-married women aged 15-49 years, by main source of family planning (F.P.) information

Sources of F.P. information	Number	Percent
Relatives /Friends	103	18.5
Doctors /Nurses /F.P. workers	136	24.4
T.V. /Radio /other Mass media	319	57.1
Total	558	100.0

Table 3: Percent distribution of ever-married women aged 15-49 years, by their attitudes towards the acceptability of family planning messages on the electronic media and selected background characteristics

Characteristics	Acceptability of media messages		Total percent	Number of women
	Yes	No		
<i>Age (in years)</i>				
15-19	92.6	7.4	100.0	27
20-24	90.3	9.7	100.0	113
25-29	88.6	11.4	100.0	132
30-34	74.6	25.4	100.0	122
35-39	68.8	31.3	100.0	80
40-44	73.2	26.8	100.0	41
45-49	55.8	44.2	100.0	43
Total	79.6	20.4	100.0	558
<i>Education</i>				
Illiterate	66.8	33.2	100.0	205
< Primary school	73.7	26.3	100.0	19
Primary school	87.1	12.9	100.0	124
Middle school	82.6	17.4	100.0	109
High school	93.1	6.9	100.0	58
Higher secondary	92.6	7.4	100.0	27
Graduation	100.0	-	100.0	12
Post graduation and above	100.0	-	100.0	4
Total	79.6	20.4	100.0	558

attitudes towards the acceptability of media messages, are highly favourable among women who have completed primary school and above, as well as those below 30 years of age. Thus, education is one of the significant parameter that influences the attitude and abilities of the women. Also, family planning is more acceptable to younger women.

Majority of women have a favourable attitude towards family planning (Table 4). Over ninety percent of currently married non-sterilized women approve of family planning use. Similar proportion of women are of the opinion that parents can take proper care of their children, only when the children are few in number i.e., family size is limited. Information on whether women talk about family planning at all, and with whom, reflects their interest in family planning and other sources of information. More than half of the women reported that they have not discussed about family planning methods with their husbands (Table 4) reflecting lack of spousal communication regarding family planning. Spousal communication increases the likelihood of contraceptive use and thus, with regards to family planning it is an important parameter for determining the family size (Ramkumar and Gopal, 1972; Lasee and Becker, 1997; Ghosh, 2001). Discussion of family planning with health facilitator or family planning worker is by one in every four women. **Use of Family Planning Methods:** In Delhi, as in whole of the country, the family welfare programme is voluntary, leaving the choice of the method also to the individual couple (cafeteria approach). The programme in Delhi

Table 4: Percent distribution of currently married non-sterilized women aged 15 – 49 years, by their attitude towards family planning

Attitude towards family planning	Yes	No	Total percent
Whether the ego approves couples using family planning methods?	94.9	5.1	100.0
Can parents give proper care to children only when number of children is less?	93.8	6.2	100.0
Whether ever discussed about family planning methods with following?			
(i) Husband	45.1	54.9	100.0
(ii) Health facilitator or FP worker	24.0	76.0	100.0

has relied principally on sterilization. The temporary contraceptive methods, such as the IUDs, condoms and pills are also offered under the cafeteria approach. Not only is the knowledge of contraceptive methods high among Gujar women, the ever use is also high, though it agrees with universal pattern that knowledge of any thing is usually greater than its practice. Three in every four ever-married women have ever used a method (Table 5a).

Maximum proportion of women in the age group 30-34 years, have used a method at any time of their life. Ever use of any method increases with woman's age up to 30-34 years reflecting that, as with age, their fertility goals are fulfilled, the women increasingly adopt contraception. Decline in ever use of contraceptive methods at older ages indicates lower contraceptive prevalence in the past.

The most commonly ever-used methods are Intra Uterine Devices (about one-sixth), condom (nearly one-eighth) and female sterilization (two-third) (Table 5b). No male sterilization is reported.

Current contraceptive prevalence, like that of ever use, is high among Gujjars. Three out of every five currently married women are using some or the other method of contraception (Table 6a). Most of the currently married women (80 percent), who have ever used a contraceptive, are presently using a method. Female sterilization dominates all the contraceptive methods, with four-fifth women being sterilized (Table 6b). The number of living children and the number of sons are the most crucial factors influencing the acceptance of sterilization (Khan, 1980; Bhasin, V., 1991; Rajaram, 1998; Chachra and

Table 5b: Percent distribution of ever-married women aged 15-49 years, who have ever used any contraceptive method, by specific method and age

Age (in years)	Num-ber of ever-users	Contraceptive methods					
		Pills	IUD*	Con- do- ms-	In- jec- tions	Fe- male sterili- zation	Absti- nence
15-19	-	-	-	-	-	-	-
20-24	53	20.8	15.1	30.2	-	9.4	32.1
25-29	109	14.7	17.4	21.1	-	52.3	12.8
30-34	114	4.4	19.3	8.8	-	78.1	5.3
35-39	73	5.5	17.8	5.5	-	83.6	9.6
40-44	37	-	10.8	8.1	-	91.9	10.8
45-49	33	-	-	3.0	3.0	72.7	27.3
Total	419	8.6	15.8	13.6	0.2	64.4	13.6

Note: There is no case of male sterilization

* IUD denotes Intra Uterine Devices

Bhasin, 1998; Bhasin and Nag, 2002). Gujjars, as most of the Indian societies are male dominated. There is a feeling that by getting sterilized, masculinity is lost, which is associated with male infertility. Also, there is a dominance of males in the community. So, women are forced to go for sterilization despite the knowledge that sterilization of a female is more difficult than that of a male.

The rest of the contraceptive methods, including abstinence, accounts for one-fifth of the total contraceptive prevalence (Table 6b). The choice of temporary contraceptives is low, possibly because about 80 percent of the women have educational level below High school. Higher educated women have a better knowledge to use non-terminal method more effectively (Bumpass, 1987). Among Gujjars, the level of contraceptive

Table 5a: Percent distribution of ever-married women aged 15-49 years, by contraceptive use and age

Age (in years)	Ever users*		Non-users		Total	
	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent
15-19	-	-	27	100.0	27	100.0
20-24	53	46.9	60	53.1	113	100.0
25-29	109	82.6	23	17.4	132	100.0
30-34	114	93.4	8	6.6	122	100.0
35-39	73	91.3	7	8.8	80	100.0
40-44	37	90.2	4	9.8	41	100.0
45-49	33	76.7	10	23.3	43	100.0
Total	419	75.1	139	24.9	558	100.0

* are those who have used any family planning method at any time of their life

Table 6a: Percent distribution of currently married women aged 15-49 years, by whether currently using any contraceptive method or not, according to age

Age (in years)	Users*		Non-users		Total	
	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent
15-19	-	-	27	100.0	27	100.0
20-24	21	18.6	92	81.4	113	100.0
25-29	86	66.7	43	33.3	129	100.0
30-34	101	84.9	18	15.1	119	100.0
35-39	69	88.5	9	11.5	78	100.0
40-44	34	89.5	4	10.5	38	100.0
45-49	23	60.5	15	39.5	38	100.0
Total	334	61.6	208	38.4	542	100.0

* are those who are currently using any family planning method.

Table 6b: Percent distribution of currently married women aged 15-49 years, by contraceptive method currently using and age

Age (in years)	Number of current users	Contraceptive methods					Total percent
		Pills	IUD	Con-do-ms-	Fe-male sterilization	Abstinence	
15-19	-	-	-	-	-	-	-
20-24	21	19.0	23.8	14.3	23.8	19.0	100.0
25-29	86	9.3	9.3	8.1	66.3	7.0	100.0
30-34	101	1.0	5.9	2.0	88.1	3.0	100.0
35-39	69	-	2.9	1.4	88.4	7.2	100.0
40-44	34	-	-	2.9	94.1	2.9	100.0
45-49	23	-	-	-	100.0	-	100.0
Total	334	3.9	6.3	4.2	79.9	5.7	100.0

Note: There is no case of women currently using injections

There is no case of male sterilization

IUD denotes Intra Uterine Devices

use increases with age of the women but decreases for older women (aged 45-49 years). The use of three officially-sponsored spacing methods is the highest among women aged 20-24 years, whereas female sterilization is the highest among women aged 45-49 years indicating that fertility goals are already met with by this age. Contraceptive prevalence rate (i.e., Couple protection rate) is 61.62 percent for Gujjars.

Number of Living Children at the First Use of Contraception: Only small proportions of ever married women, who have ever used any contraceptive method, begin using contraception when they did not have any living child. Although the use of contraception before the birth of the first child is relatively uncommon, however, majority of ever-users (three-fifth) initiate the use of contraception when they have three or fewer living children (Table 7).

The younger women have begun to use contraception at an earlier stage in the life cycle than the older women. The percentage of ever users who begin using contraception when they have one child; is nearly seven times higher for women aged 20-24 years than for women aged 40-44 years. Percentage users and parity at first use both influences the demographic impact of contraception. Among Gujjars it is reflected that women appear to be more willing to use contraception when they have relatively few children (particularly the women of younger age groups) though they have admitted to avoid sterilization until at least they have a male child

Table 7: Percent distribution of ever-married women aged 15-49 years, who have ever used any contraceptive method, by number of living children at the time of first use of contraception and age

Age (in years)	Number of ever-users	Number of living children at the time of first use					Total percent
		0	1	2	3	4+	
15-19	-	-	-	-	-	-	-
20-24	53	26.4	35.8	32.1	1.9	3.8	100.0
25-29	109	5.5	28.4	28.4	24.8	12.8	100.0
30-34	114	3.5	10.5	19.3	30.7	36.0	100.0
35-39	73	2.7	8.2	16.4	23.3	49.3	100.0
40-44	37	-	5.4	18.9	16.2	59.5	100.0
45-49	33	-	-	3.0	15.2	81.8	100.0
Total	419	6.2	16.7	21.5	21.7	33.9	100.0

and desired family size.

Sources of Contraceptive Methods: The knowledge of various sources of contraceptive methods is necessary to assess their relative importance. Family planning methods and services in India are provided primarily through a network of Primary Health Centres and sub-centres in rural areas and government hospitals and family welfare centres in urban areas. Besides these family planning services are also provided by private hospitals and clinics as well as non-governmental organizations. The public medical sector, consisting of government hospitals and primary health centres are the major source (four-fifth) of contraception for current users (Table 8). While remaining one-fifth of current users have acquired contraceptives from private medical sector consisting of private hospitals, private doctors and drugstores. Government hospitals are the chief source for female sterilization followed by the private hospitals. By contrast, drugstores are the foremost source (cent percent) for acquisition of condoms. The public sector is however, the main source for pills and IUDs.

Reasons for non-use of Contraceptives: Among women who have never used contraceptives, the most commonly mentioned reason (over two-fifth) for not using a method is the desire to have more children (Table 9). Over ten percent report that they are not using contraceptives because they are menopausal. One in six women mentions that opposition of their husband for the use of contraception. Other minor reasons that are cited for not using contraceptives are health related problems, afraid of sterilization and

Table 8: Percent distribution of currently married women aged 15-49 years, who are current users of modern contraceptive methods, by specific method and most recent source of contraceptive acquisition

Contraceptive methods	Sources of acquisition					Total	
	Govt. hospitals	Primary health centres	Private hospitals	Private doctors	Drugstores	Percent	Number
Pills	61.5	23.1	-	15.4	-	100.0	13
IUD	76.2	9.5	14.3	-	-	100.0	21
Condoms	-	-	-	-	100.0	100.0	14
Female sterilization	79.0	3.7	17.2	-	-	100.0	267
All methods	Percent	74.6	4.8	15.6	0.6	4.4	100.0
	Number	235	15	49	2	14	-
							315

Note: IUD denotes Intra Uterine Devices

Table 9: Percent distribution of currently married women aged 15-49 years, who never used any contraceptives, by main reason for not using any

Reasons for non-use	Number	Percent
Want more children	55	44.4
Menopausal	14	11.3
Health does not permit	3	2.4
Worry about side effects	2	1.6
Difficult to get pregnant	12	9.7
Afraid of sterilization	3	2.4
Opposed to family planning	14	11.3
Opposition of husband	21	16.9
Total	124	100.0

worry about side effects. Less than ten percent believe that if one continues to use contraceptives, it is difficult to get pregnant the contraceptive is discontinued. About 11 percent women are not interested in family planning (Table 9). This reflects that there is still a scope for the family planning programme to increase contraceptive use by providing further information.

CONCLUSIONS

From the foregoing discussion, it may be concluded that knowledge of family planning methods among Gujar women is widespread. Also, majority of women have favourable attitude towards family planning. However, there is a disparity between the knowledge and the practice of contraception among Gujjars. Female sterilization is far the most popular contraceptive method. Given the heavy emphasis on sterilization, women tend to adopt family planning only after they have achieved their desired family size. Also, son preference appears to have some effect on contraceptive use.

On the basis of the results of the present study

it may be suggested that realization on the part of couples is needed regarding the necessity of limiting the family size early in life, so that they may adopt birth control measures and plan their family accordingly. Increased spousal communication is necessary with regards to increased contraceptive use. There is a need to shift from women centric approach to couple centric approach for family planning. Gujar couples may make conscious effort that boy and girl child are equal.

ACKNOWLEDGEMENT

We are grateful to the families who form the basis of present study without whose co-operation and kind help, this work would not have been so smoothly possible.

REFERENCES

- Berelson, B.: Social science research on population. *Population Development Review*, **2**: 219-266 (1976).
- Bhat, P.N. Mari: Contours of fertility decline in India: A district level study based on the 1991 Census. In: *Population Policy and Reproductive Health*. K.Srinivasan (Ed.). Hindustan Publications, New Delhi (1996).
- Bora, R.S. and Jha, M.S.: Factors influencing the use of contraception: A study of rural Delhi. *Demography India*, **30(2)**: 299-311(2001).
- Bora, R.S., Malik, P. and Kulkarni, V.: *Operation Research on Spacing Methods: A Comparative Study for Rural Delhi*. Report submitted to the Ministry of Health and Family Welfare, GOI (1998).
- Bhasin, M.K. and Nag, S.: A Demographic profile of the people of Jammu and Kashmir: Family Planning. *Journal of Human Ecology*, **13**: 147-166 (2002)
- Bhasin, Veena: *Habitat, Habitation and Health in the Himalayas*. Kamla-Raj Enterprises, Delhi (1990).
- Bumpass, L.L.: The Risk of an unwanted birth: The changing context of contraceptive Sterilization in the US. *Population Studies*, **41**: 347-363 (1987).
- Chachra, S.P. and Bhasin, M.K.: Anthro-po-demographic study

- among the caste and tribal groups of central Himalayas: Family planning. *Journal of Human Ecology*, **9**: 445-450 (1998).
- Chacko, C.K.: *Fertility and Contraceptive Practice Among Religious Minorities in Two Districts of Tamil Nadu, Research Compendium: Findings and Implications of Population and Health Studies, 1964-87*. The Gandhigram Institute of Rural Health and Family welfare Trust, Gandhigram, Tamil Nadu (1988).
- Coale, A.J.: Factors associated with the developing of low fertility: A historic summary, In: *Proceedings of the World Population Conference*, Vol. **II**: 205-229 (1965).
- Dabral, S. and Malik, S.L.: Demography study of Gujjars of Delhi: I. Population structure and socio-cultural profile. *Journal of Human Ecology*, **16**(1): 17-24 (2004).
- Das Gupta, M.: Selective Discrimination against female children in rural Punjab, India. *Population and Development Review*, **13**: 77-100 (1987).
- Das, M. and Acharya, S. Correlates of female decision-making in an urban Indian society. *Journal of Family Welfare*, **45**(2): 30-42 (1999).
- Gandotra, M.M. and Das, N.P.: Contraceptive choice, shift and use continuation: A prospective study. *Journal of Family Welfare*, **36**(3): 54-69 (1990).
- Ghosh, Rima: Intention not to use contraception: A comparative study of Northern and Southern States of India. *Demography India*, **30**(2): 261-280 (2001).
- Goldscheider, C. and Mosher, W.D.: Religious affiliation and contraceptive usage: Changing American Patterns, 1951-82. *Studies in Family Planning*, **19**: 48-57 (1988).
- Gulati, S.C.: Contraceptive method's use and choice in Kerala and Uttar Pradesh: Multinomial logit analysis of NFHS Data. *Demography India*, **25**(1): 205-220 (1996).
- International Institute of Population Sciences: *National Family Health Survey (NFHS), 1998-99, Delhi*. Mumbai (2002).
- Kamal, N.: Inter-spousal communication on family planning as a determinant of the use of modern conception in Bangladesh. *Journal of Family Welfare*, **45**(1): 31-43 (1999).
- Khan, M.E.: Determinants of sterilization in India pp. 111-128. In: *The Role of Surveys in the Analysis of Family Planning Programmes*, A.I. Hermalin and B. Entwistle (Eds.). Oridna Publications, Belgium (1980).
- Lasee, A. and Becker, S.: Husband-wife communication about family planning and contraceptive use in Kenya. *International Family Planning Perspectives*, **23**(1): 15-20 (1997).
- Levine, R.E., Cross, H.E., Chhabra, S. and Viswanathan, H.: Quality of health and family planning services in rural Uttar Pradesh: The client's view. *Demography India*, **21**(2): 247-265 (1992).
- Nag, M.: Sex Preference in Bangladesh, India and Pakistan, and its effect on fertility. *Demography India*, **20**: 163-185 (1991).
- Rajaram, S.: Timing of sterilization in two low fertility states in India. *Demography India*, **27**: 179-191 (1998).
- Rajaretnam, T.: Socio-cultural determinants of contraceptive method choice in Goa and Kerala, India. *Journal of Family Welfare*, **46**(2): 1-11 (2000).
- Raju, K.N.M. and T.N. Bhat: sex composition of living children against socio-economic variables while accepting family planning methods. *Demography India*, **24**: 87-99 (1995).
- Ramesh, B.M., Gulati, S.C. and Rutherford and Robert, D.: Contraceptive use in India. *National Family Health Survey Subject Reports No. 2*. IIPS, Mumbai and Honolulu, East-West Center (1996).
- Ramkumar, S.R. and Gopal, S.V.S.: Husband-wife communications and fertility in a sub-urban community exposed to family planning. *Journal of Family Welfare*, **18**(2): 30-36 (1972).
- Reddy, M.M.K.: *Fertility and Family Planning Behaviour in Indian Society*. Kanishka Publishers and Distributors, New Delhi (1996).
- Srinivasan, K., Jejeebhoy, S.J., Easterlin, R.A. and Crimmins, E.M.: Factors affecting fertility control in India: A cross-sectional study. *Population Development Review*, **10**: 273-295 (1984).
- Weeks, John, R.: *Population: An Introduction to Concepts and Issues*. 8th Ed. Wadsworth Thomson learning, U.S.A (2002).
- World Health Organization: *Health Education in Health Aspects of Family Planning*. Technical Report Series No. 483 (1971).