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in Madhya Pradesh, India**

Alok Ranjan Chaurasia

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Shyam Institute
Mudian Ka Kuan
Datia, MP-475661
India
E-mail: aranjan_bpl@sancharnet.in

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Introduction

Madhya Pradesh is one of those states of India where fertility levels continue to be amongst the highest in the country. According to the sample registration system, the crude birth rate in the state has been estimated to be 31.2 live births per 1000 population for the year 2000 which is well above the national average of 25.8 live births per 1000 population (Government of India, 2001). Amongst the major states of the country, Madhya Pradesh has third highest birth rate next only to Uttar Pradesh and Bihar. Similarly, the total fertility rate in the state has been estimated to be 3.9 births per woman for the year 1998 which is fourth highest amongst the major states of the country (Government of India, 2000). Information available through the National Family Health Survey, 1998-99 also indicates persistence of high fertility in the state (International Institute for Population Sciences, 2000). Information available through the sample registration system also indicates that fertility in the state has always been amongst the highest in the country throughout the 30-year period from 1970 through 2000. During this period, the crude birth rate in the state decreased from 39.1 in 1971 to 32.1 live births per 1000 population in 2000 whereas the total fertility rate decreased from 5.6 in 1971 to 3.9 children per woman of reproductive age in 1998, yet the relative rank of the state vis-a-vis other major states of the country has more or less remained unchanged. Clearly, programmes and efforts to reduce fertility in the state have not been able to accelerate the pace of fertility decline as compared to other states of the country. Throughout the thirty years between 1970 and 2000, the state continued to lag behind other states of the country as far as fertility transition is concerned.

Despite the fact that fertility levels in the state continue to be well above the national average, there has been little systematic investigation of the factors behind persistent high fertility in the state. State specific studies on fertility and its determinants in Madhya Pradesh are extremely rare. Most of the knowledge about fertility dynamics of the state is derived from national level surveys and analyses. As the result, there is little incorporation of fertility determinants research in planning, designing and implementing fertility reduction activities in the state. Lack of adequate information and research base on fertility and related issues has also resulted in a stereo-type implementation of fertility control efforts largely guided by the dictates of the central government. There is little state specific initiative for hastening the pace of fertility transition. There has been some attempt to meet the information needs of fertility control efforts in the state through the National Family Health Survey Programme and through the Rapid Household Survey Programme under the Reproductive and Child Health Project. However, most of the information collected through these surveys is yet to be analyzed and used at the state and below state levels for planning, implementation and monitoring and evaluation of fertility control activities. Most of the analyses of the information collected through the National Family Health Survey and the Rapid Household Survey has been carried out under a macro perspective. Micro level analyses of the available information that can provide a better understanding of fertility decision making process and identification of factors and situations that influence this process are rare in Madhya Pradesh. This is one reason why fertility control efforts in the state are normative in terms of both the context and the contents.

In this paper, we make an attempt to analyze factors affecting fertility in Madhya Pradesh through an institutional perspective. The focus of the analysis is on factors that operate at the level of the family and the society. The institutional determinants of fertility has largely been a sidelined aspect of fertility research in India. Fertility control efforts and activities in India in general and in Madhya Pradesh in particular are virtually a prerogative of the government and, in line with the National Population Policy, a techno-medical approach has been adopted for inducing decline in fertility. This approach is service-provider oriented and rarely takes into consideration the role of the factors that operate at the level of the family and the society in shaping the reproductive behaviour. Government of Madhya Pradesh has recently announced its own population policy which calls for improving the quality of life of the people of the state by striking a balance between population, resources and environment through an accelerated reduction in fertility and mortality (Government of Madhya Pradesh, 2000). However, despite the very diverse social and cultural diversity prevailing in the state, the Policy is curiously silent about the role of institutional factors in shaping the reproductive behaviour and in deciding the levels of fertility. Like the National Population Policy, it also assumes the techno-medical approach of promoting the use of modern family planning methods through organized family welfare services delivery system as the basic framework for reducing fertility and achieving population stabilization. One reason behind the omission of the institutional context of fertility and family planning in Madhya Pradesh Population Policy 2000 is that there is little empirical evidence and understanding of the role of institutional factors in fertility decision

making process. At the same time, it is generally argued that with the process of social and economic development, the role of institutional factors on fertility decision making process can be minimized if not eliminated.

Institutional Determinants of Fertility

The role of institutional factors in shaping the human reproductive behaviour can be discussed in the broader context of how institutional settings influence the reproductive decision making process. Reproductive behavior is both biological behavior, with dim evolutionary antecedent and immediate physiological constraints, and social behavior that attaches at innumerable points to its social and cultural settings (McNicol, 1980). Because of its strong social and cultural dimensions, reproductive behavior is conditioned and influenced by the prevailing family, and community environment.

There are many institutional forms that have direct bearings on the reproductive behaviour. These institutional settings guide an individual or a couple in organizing its behaviour and activities into a definite pattern from the view point of an ordered social and family life. These institutions also provide support to individuals and couples at the time of distress and need and serve as some form of insurance to natural and financial risks. Members of these institutions share certain commonalities and are normally committed to safeguarding the interests of these institutions which gets reflected in their behaviour.

Among many institutional forms that contribute towards shaping the individual reproductive behaviour, the family is the foremost one. Family provides social, psychological, and financial support to its

members. In turn the behaviour of the members of the family is conditioned more by family interests than by individual choices and preferences. Family, as an institution, attaches different values to its different members with regard to their skills and capacities which results in a bounded or segmented individual rationality: at any particular decision-making juncture, only those issues are weighed and valued which increase the value of that individual within the family thereby influencing the behavior of the members of the family.

In the context of the institutional perspective, a family can be classified between “the family as an institution” and “the family as a companionship”. Large patriarchal type families most closely approximate the institutional family with its combination of the powerful sanctions of the mores, religion and law and practically the complete subordination of individual members to the authority of the patriarch. In such a family, unity is determined entirely by social pressure impinging on family members. Marriages, in these families, are arranged by the parents with emphasis upon prudence, economic and social status, religious and cultural similarity, etc. These families are authoritarian and autocratic by nature with a lot of power vested in the head of the family. Family assets and family property in the institution type families are usually in the name of the family patriarch. Compliance of duty and following of the traditional practices are the guiding principles of decision making in such families. Chief historic functions of the family - economic, educational, recreational, health protective and religious - are found in their fullest development in these type of families.

In the companionship type families, by contrast, family members enjoy a high degree of self-expression and, at the same time, are united by bonds of affection congeniality and common interests. These families are democratic in nature and are built around the equality of the husband and the wife. These families strive for consensus and participation of children in family decision making. Marriage, in these families, is in the hands of young people; selection is on the basis of romance, affection and personality adjustment. Control of the behaviour of family members by custom, tradition and community opinion is greatly weakened in these families and achievement of personal happiness and desire for innovation are the watchwords in these families. Unity in this type of families is developed out of mutual affection and intimate association of husband and wife and parents and children.

Beyond the family, there are local-level supra-family groupings that exert considerable influence on the decision-making environment within the family. Religion and caste are the most common of these supra-family groupings in India. The presence of priests and other society peers and their followers constitute another type of supra-family groupings which are mostly informal in nature but which have some very strong bonds. In matters of family rituals, especially those associated with some key events related to reproductive behaviour - marriage, birth of the child, etc. - the views and opinion of these priests and peers are sometimes ultimate and binding. An important distinguishing characteristics of these supra-family groupings is their corporateness and territoriality. Corporateness governs the capacity of an institution to influence the behavior of group members to suit

institutional interests, howsoever these may be defined. Territoriality affects the likelihood that reproductive behavior will be included in the kinds of behavior subjected to institutional pressure. An important implication of these supra-family groupings is the dominance and persistence of tradition and continuity in human behaviour which leads to a certain degree of orthodoxy in all kinds of human behaviour including the reproductive behaviour.

At present, little is known about the role of these supra-family groupings in shaping the fertility decision making process within the family and directing the reproductive behaviour of the members of the family. It is generally argued that with modernization, especially universalization of education, reproductive behaviour is increasingly conditioned more by individual choices and preferences than by family and society obligations and contexts. There is however little empirical evidence to prove this conjecture in a state like Madhya Pradesh.

Data

Information for the present analysis was collected through a survey carried out in 1999 in three community development blocks and five towns of the undivided Madhya Pradesh. A multi-stage sampling procedure was used to select the sample for the survey. The details of the sample selection methodology are given elsewhere (Chaurasia, 2000). The survey covered 2243 families out of which 167 filled up questionnaires were rejected at the editing stage because of inconsistencies in the data and incomplete information. The effective sample size therefore was 2,076 families - 1,475 families from three community development blocks and 601 families from the five towns.

In each family included in the sample, separate interviews were carried out with the head of the family and one currently married female in the reproductive age group on the basis of a pre-designed and pre-tested questionnaire. Direct interview procedure was adopted for collecting the information. The currently married females in the reproductive age group were interviewed in-camera by a trained female field investigator to maintain the confidentiality of the information provided by the respondent.

Basic characteristics of the population surveyed are shown in Table 1. In most of the families surveyed, the traditional or family occupation was either farming or farm related labour. Nearly all families were Hindu families; Muslim and Christian families accounted for a mere 5 per cent of all surveyed families. Among Hindu families surveyed, nearly one-half were 'backward' castes; one-fourth were upper castes and remaining one fourth were scheduled castes and scheduled tribe families. The median per capita income of the families surveyed was INR 1932 per year at the prevailing prices. More than 48 per cent of the families surveyed were having a per capita income of less than INR 1800 per year.

Levels of Fertility

Information about children ever born to a woman and estimates of age-specific fertility rate, crude birth rate, total fertility rate and other measures of fertility in the surveyed population are presented in table 2 for the entire population as well as separately for rural and urban areas. The table gives two estimates of total fertility rate. The first estimate of total fertility rate is based on the age specific fertility rates

derived directly from the pregnancy history data while the second estimate has been adjusted on the basis of children ever born. It is well known that age specific fertility rates obtained from pregnancy history data are associated with sampling and reporting errors such as misstatements of dates and events and even failure by the mother to recall the occurrence of pregnancies and births (Bogue and Bogue, 1970). In order to address these problems, the age specific fertility rates obtained directly from the pregnancy history data were adjusted on the basis of the age pattern of average number of children ever born per woman through the application of Relational-Gompertz model (Brass, 1981) to generate a second, adjusted estimates of total fertility rate. The exercise, however, revealed that the difference between unadjusted and adjusted total fertility rates was small.

For the total population surveyed, the average total fertility rate was estimated to be about 4.4 births per woman, while the average crude birth rate was estimated to be about 34.6 live births per 1,000 population for the period 1995-98 (one to four years prior to the survey). Clearly, high fertility conditions prevailed in the surveyed population. Between the rural and urban families surveyed, the total fertility rate has been estimated to be 31 per cent lower in the urban areas than in the rural areas. There are some differences in the age pattern of fertility between rural and urban areas as well. Fertility appears to be relatively more concentrated in the age group 20-24 years in the rural areas as compared to the urban areas. In both the areas, peak fertility is achieved early in the reproductive period. Moreover, after achieving its peak level at ages 20-24 years, fertility decreases relatively more sharply up to ages 30-34 in the rural areas than in the urban areas.

Fertility levels have also been found to be directly associated with the schooling of the women (table 3). The highest birth rate of more than 40 live births per 1000 population and the highest total fertility rate of 4.6 births per woman has been estimated in women who had never been to school. By contrast, women with more than 10 years of schooling had a total fertility rate of just 2.6 births per woman and a crude birth rate of just 24 live births per 1000 population. Clearly education of the mother has some very strong impact on fertility in the surveyed population.

The Institutional Context

During the survey, a number of questions were asked from both the head of the family and the currently married female in the reproductive age group to capture the prevailing family and society context that influences the reproductive behaviour of couples. These questions ranged from the opinion to actual experience within the family and in the society and can broadly be grouped into three categories. The first category of questions attempted to characterize the families surveyed on a scale ranging from an institutional family to a companionship type family. Questions in this category were related to the religion and caste of the family, ownership of the family property, control and authority of family patriarch, practice of purdah by the female members of the family, etc. The second group of questions attempted to collect the views of the family patriarch in such areas as most important family responsibility, preferred age at marriage of boys and girls of the family, cost and benefits associated with bringing up children, etc. Information about the presence of the family priest or peer

was also collected along with the role played by the family priest or peer in family decision making especially in decision making related to the reproductive behaviour. The currently married females in the reproductive age group interviewed during the survey were also asked about how pregnancy and associated birth contributed in deciding their status and value in the family and the society.

The third set of questions canvassed during the survey were related to the basic characteristics of currently married females in the reproductive age group. This information included age of the woman interviewed, her age at marriage and the number of years she has been to school, total number of children ever born and total number of children surviving at the time of the survey, etc. The women interviewed were also asked about the use of any family planning methods either by her or by her husband to regulate fertility. They were also asked about their experience in the family and the society in getting pregnant and how the value system in the family and the society changed with successive pregnancies.

Among the many questions asked from the head of the family and from the currently married female in the reproductive age group, six questions were selected to reflect the institutional context of fertility and reproductive decision making in the families surveyed. The questions that have been selected are

- i. Whether all family property is in the name of the family head or some property is also in the name of other members of the family including unmarried and married females.

- ii. Practice of purdah by the married female members of the family and communication between married female members and the head of the family.
- iii. Presence of a priest or peer in the family whose opinion and advice is sought in family decision making including decision making related to fertility and reproductive behaviour.
- iv. Views and opinion of the head of the family about bringing up and rearing up children.
- v. Views and opinion of currently married females in the reproductive age group whether getting pregnant is beneficial and, if yes, how.
- vi. Experience of the currently married females in the reproductive age group about their status in the family and the society on getting pregnant.

The prevailing levels of the above six variables used for characterizing the institutional context of fertility and reproductive behaviour in the surveyed population are summarized in table 4. The table suggests that most of the families surveyed were primarily institution type families in which family property was in the name of the family patriarch and where the practice of purdah was nearly universal. Similarly, the existence of a family priest or some family peer in most of the families surveyed indicates the existence of supra-family institutions that influence the decision making process in the family including the reproductive decision making. On the other hand, majority of women interviewed viewed pregnancy as beneficial for them as getting pregnant was an indicator of their womanhood and their contribution to the interests of the family happiness. On the other hand, less than 7

per cent head of the families surveyed were of the view that bringing up and rearing up children involved some type of costs.

An important implication of the prevailing institutional context in the population surveyed as judged from table 4 is a very strong family orientation of institutional settings which shape the decision making environment. It appears that family requirements, family choices and family preferences have a dominating importance over individual choices, preferences and desires as far as decisions related to fertility are concerned and the institutional settings provide support to the prevailing decision making paradigm. This observation again reflects the fact that most of the families surveyed are the institution type families.

Institutional Context and Fertility

In order to explore the impact of the prevailing institutional context on fertility, the total number of children ever born to a woman were regressed on the eight indicators of institutional context described above. In addition to the institutional variables, age of the woman at the time of the interview, her age at marriage, number of years she had been to school, number of children born alive but dead at the time of the survey and the use of family planning methods by her or her husband were included in the regression analysis as control variables. Family religion, family occupation and residence of the family were also included in the regression analysis as control variables as the level of fertility has been found to be influenced by these factors also. Since the dependent variable is a continuous variable, ordinary least square regression was used for the analysis.

Summary measures of the variables used in the regression analysis are presented in table 5 whereas the results of the regression analysis are given in table 6. The backward elimination of variables method was used in the regression analysis to exclude those variables from the regression which are statistically insignificant. In the backward elimination method, all variables are first entered into the regression equation simultaneously and then variables are eliminated one by one according to a fixed elimination criteria. When no variable meets this criteria, the elimination of variables is stopped.

It may be seen from table 6 that among the eight institutional variables used in the regression analysis, three have been found to be statistically significant even after controlling a host of characteristics of the women interviewed and their family. Moreover, the sign of the regression coefficients is in expected direction. Thus, presence of the family priest or some other family peer in the family has a direct influence on the total number of children ever born per woman. Similarly, the thinking that getting pregnant is beneficial has a direct bearing on the number of children ever born whereas the thinking that pregnancy is associated with some type of cost has a negative bearing on the total number of children ever born. The results suggest that perceptions of women about the benefits and costs of getting pregnant and supra-family institutions built around family priest or peer are important institutional determinants of fertility in the surveyed population. In a society where getting pregnant is an indicator of womanhood and where pregnancy is viewed by women as their contribution to the family, there is an inbuilt impetus for more children.

In such an institutional environment, children are regarded as essential for family happiness.

The other institutional variable having a significant influence on fertility is the presence of family priest or peer to guide and advise the family in family related matters. The regression analysis indicates that the presence of family priest or peer has a direct influence on the total number of children a woman has. There are reasons for this relationship. In the Indian social context, there are important social, religious and cultural rituals that are typically performed at all milestones of the reproductive process - marriage, pregnancy and birth. These rituals are almost invariably performed by the family priest. These social and religious traditions are not only a source of livelihood for the family priest but also means of maintaining corporateness and sustaining his or her territoriality or the sphere of influence and dominance. Since every pregnancy and associated birth is a source of potential financial and other gains to the family priest, the maximization of fertility is often in the interest of the family priest.

Another institutional variable which has been found to have a strong but not statistically significant association with the number of children ever born is the pattern of owning of family property and family assets. This variable is taken in the regression analysis as a proxy for the type of the family - institution type or the companionship type. The results of the regression analysis indicate that in families where all family property and family assets are in the name of family head only, the tendency is towards having a large number of children. By contrast, in families where family property or family assets are distributed among the members of the family, fertility appears to be relatively low. Clearly,

in families which are democratic in orientation and where there is openness and regular interaction between family members, especially of different generations, there appears to be some inclination towards lesser number of births than in families which are authoritative and autocratic in nature.

Another important observation of table 6 is a very strong relationship between children ever born and children dead in the surveyed population. This shows that in women who have experienced a child loss, fertility, as measured by children ever born is significantly higher than in women who have not experienced any child loss. There are a number of factors behind premature child loss. An important reason is the availability of easily accessible and affordable health care services. The very fact that the average child loss per woman in the surveyed population is around 0.33 children raises concerns about the availability, accessibility of basic child survival services in the surveyed population and up to what extent, these services are affordable. In any case, availability of affordable child health and child care services within the reach of the people at large constitutes another important institutional context of fertility in the surveyed population.

Conclusions

The empirical analysis presented in this paper highlights the role of the factors that operate at the level of the family and the society in shaping the reproductive behaviour of individual couples and in deciding fertility levels. It is clear from the analysis that fertility in particular and reproductive behaviour in general have a strong institutional orientation in the Indian social system. If female education

is regarded as an indicator of social and economic development at the family level, then the foregoing analysis suggests that the strong family orientation to reproductive behaviour and associated fertility holds across all levels of development.

An important finding of the present analysis is that the relative values accorded to individuals, especially women, within the family is an important motivational force in reproductive decision making in the surveyed families. Getting pregnant and delivering children is an important component of this value system in the family as well as in the society. The present study indicates that getting pregnant is viewed by the majority of women surveyed as a means of enhancing their status in their husband's families. This suggests that issues related to reproductive behaviour and fertility appear to be related to the self-esteem of women in the Indian social and family system. The analysis presented here also suggests that this relationship between self-esteem and fertility persists irrespective of the level of education of the women.

The analysis also brings out in clear perspective, the influence of local level supra-family groupings on the reproductive decision making. Once again these influences are independent of the level of education of the women surveyed. In fact, the opinion and views of these supra-family institutions largely decide the value system in the society and in the family. A high fertility regime appear to suite these supra-family institutions in many ways including economic benefits, and the authority and hold of these institutions on families and individuals. In the rural areas, the authority and hold of these institutions in establishing social norms and cultural practices is usually beyond any dispute or discussion.

The findings of the present analysis confirm the oft repeated hypothesis that a substantial reduction in infant and child mortality is critical to reducing fertility. This means that establishing an efficient yet affordable system of preventing pre-mature deaths is another institutional context that is critical for an accelerated reduction in fertility.

The results of the present analysis have important policy implications. The current approach to fertility regulation and control pays little attention to the social and family environment in which reproductive decisions are taken. The present analysis however reveals that reproductive decisions are not taken in a social and cultural vacuum. Rather, individual reproduction making is influenced by a number of institutional factors that operate at the level of the family and the society. It therefore appears imperative that the institutional factors are given due consideration in designing and implementing fertility control efforts, especially at the local level. Incidentally, the techno-medical approach which has currently been adopted for planning and implementing fertility control activities and programmes is not suited for integrating institutional factors in these activities and programmes. There is a need of people centered efforts and activities for accelerating the pace of fertility decline which takes into consideration the institutional context of reproductive decision making in addition to specific reproductive needs of the couple.

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Table 1: Characteristics of the families surveyed

Characteristics		Total	Rural	Urban
Occupation of family head	Agriculture	42.75	51.83	20.47
	Business	10.07	4.00	24.96
	Service	12.48	7.39	24.96
	Labour	28.10	30.05	23.29
	Mixed	6.60	6.72	6.32
	All	100.00	100.00	100.00
Religion	Hindu	94.51	95.92	91.00
	Muslim	4.66	3.27	8.15
	Christian	0.44	0.48	0.34
	Others	0.39	0.34	0.51
	All	100.00	100.00	100.00
Caste	<i>Upper castes</i>	25.98	20.50	40.37
	<i>Backwards castes</i>	49.12	48.61	50.47
	<i>Scheduled castes</i>	16.86	21.00	5.98
	<i>Scheduled tribes</i>	8.04	9.89	3.18
	All	100.00	100.00	100.00
N		1946	1410	536
Per capita income	< 600	35.10	32.70	42.57
	600-1799	13.22	14.21	10.15
	1800-2999	15.26	17.38	8.66
	3000-4199	13.34	14.44	9.90
	4200-5399	5.77	5.95	5.20
	5400-6599	4.33	4.05	5.20
	6600-7799	3.00	2.70	3.96
	7800-8999	2.22	2.14	2.48
	>9000	7.75	6.43	11.88
	All	100.00	100.00	100.00
N		2076	1475	601

Notes: Per capita income is in Indian Rupees per person per year at the prices prevailing at the time of the survey.
Distribution of families by caste is limited for Hindu families only. There are no castes in families of other religions.

Table 2: Levels of fertility

Fertility indicator	Total	Rural	Urban
Average children ever born			
15-19	0.477	0.566	0.526
20-24	1.658	1.826	1.269
25-29	2.813	2.982	2.442
30-34	3.524	3.794	2.980
35-39	4.082	4.304	3.675
40-44	4.410	4.639	3.960
45-49	4.478	4.501	4.399
Age-specific fertility rate (1995-98)			
15-19	0.081	0.100	0.037
20-24	0.272	0.297	0.212
25-29	0.229	0.237	0.179
30-34	0.129	0.131	0.126
35-39	0.049	0.058	0.034
40-44	0.024	0.034	0.004
45-49	0.002	0.003	0.001
TFR	3.934	4.298	2.957
GFR	0.142	0.154	0.109
CBR (0/00)	33.94	36.00	27.39
TFR (Adj)	4.367	4.713	3.194

Table 3: Fertility differentials by level of education

Indicator	Number of years in school			
	Nil	1-5 years	6-10 years	> 10 years
Average children ever born				
15-19	0.883	0.463	0.126	0.000
20-24	2.035	1.685	1.310	0.492
25-29	3.078	2.808	2.364	1.768
30-34	3.847	3.473	2.769	2.252
35-39	4.381	4.002	3.333	2.845
40-44	4.461	4.685	4.150	3.429
45-49	4.402	4.923	5.600	3.875
Age-specific fertility rate (1995-98)				
15-19	0.151	0.077	0.038	0.000
20-24	0.312	0.295	0.265	0.113
25-29	0.225	0.226	0.219	0.218
30-34	0.145	0.116	0.090	0.101
35-39	0.057	0.028	0.044	0.032
40-44	0.028	0.000	0.027	0.018
45-49	0.003	0.000	0.000	0.000
TFR	4.609	3.704	3.412	2.408
GFR	0.151	0.145	0.131	0.096
CBR	40.66	25.60	28.88	23.88
TFR (Adj)	4.660	3.464	3.004	2.583

Table 4: The institutional context of surveyed women

Context	Total	Rural	Urban
1. All family property in the name of family head (FPROP)	75.78	79.97	66.89
2. Presence of family priest (FPRIEST)	66.18	65.14	68.76
<i>Opinion of priest</i>			
• <i>always sought</i>	37.35	42.77	24.69
• <i>often sought</i>	50.59	49.63	52.84
• <i>rarely sought</i>	7.91	3.91	17.28
• <i>not sought</i>	4.14	3.70	5.29
3. According to women interviewed, getting pregnant is beneficial (PBENEF)	56.71	53.16	64.72
<i>Reasons</i>			
• <i>Indication of womanhood</i>	31.40	31.44	31.33
• <i>Increased prestige</i>	10.29	10.03	10.78
• <i>Family prosperity</i>	3.25	3.12	3.51
• <i>Contribution to family</i>	27.26	26.42	28.82
• <i>Family happiness</i>	23.66	24.39	22.31
4. Practice of purdah among family members (PPURDAH)	79.33	84.63	66.50
• <i>Despite purdah, talk to family head</i>	62.31	68.64	47.00
• <i>Purdah and do not talk to family head</i>	17.02	15.99	19.50
5. According to family heads interviewed, no cost is involved in bringing up children (CCOST)	93.38	93.58	92.92
6. According to the women interviewed, getting pregnant increases prestige in the family (EXP)	61.51	57.19	71.43

Table 5: Summary measures of variables used in regression analysis

Variable and their categories	Value	Mean	SD
FPUSE Using a family planning method Not using any method	 1 0	 0.3808	 0.4857
FPRIEST Presence of priest or peer in the family No priest or peer	 1 0	 0.6659	 0.4718
PPURDAH Practice of purdah is practiced Purdah is not practices	 1 0	 0.7849	 0.4110
RES Rural Urban	 1 0	 0.7035	 0.4569
FPROP Family property in the name of other members also Family property in the name of family head only	 1 0	 0.2487	 0.4324

Variable and their categories	Value	Mean	SD
PBENEF Getting pregnant is beneficial Getting pregnant is not beneficial	1 0	0.4314	0.4954
EXP Getting pregnant increases prestige Getting pregnant does not increase prestige	1 0	0.6232	0.4847
CCOST Bringing up children incurs cost Bringing up children doe not incur cost	1 0	0.0284	0.1680
CD Children born alive but dead now (continuous)		0.33	0.82
AGE Age of the woman surveyed (continuous)		30.52	7.63
AGEM Age of the woman surveyed at marriage (continuous)		16.07	2.75
EDU Number of years in school (continuous)		2.85	4.35

Table 6: Results of the regression of children ever born on selected institutional and individual variables

Variables	Regression Number					
	1	2	3	4	5	6
PBENEF	0.091 <i>0.060</i>	0.091 <i>0.064</i>	0.092 <i>0.060</i>	0.091 <i>0.060</i>	0.095 <i>0.059</i>	0.094 <i>0.059</i>
FPROP	-0.020 <i>0.066</i>	-0.019 <i>0.066</i>	-0.019 <i>0.066</i>	-0.019 <i>0.066</i>	-0.020 <i>0.066</i>	
CCOST	-0.017 <i>0.171</i>	-0.017 <i>0.171</i>	-0.017 <i>0.171</i>			
EXP	-0.022 <i>0.064</i>	-0.021 <i>0.064</i>	-0.019 <i>0.063</i>	-0.020 <i>0.063</i>		
RES	-0.009 <i>0.070</i>					
PPURDAH	0.013 <i>0.072</i>	0.011 <i>0.071</i>				
FPRIEST	0.057 <i>0.066</i>	0.057 <i>0.066</i>	0.057 <i>0.066</i>	0.056 <i>0.066</i>	0.063 <i>0.062</i>	0.062 <i>0.062</i>
FPUSE	0.067 <i>0.061</i>	0.068 <i>0.061</i>	0.068 <i>0.061</i>	0.068 <i>0.061</i>	0.067 <i>0.061</i>	0.066 <i>0.061</i>
Age of the woman	0.425 <i>0.004</i>	0.426 <i>0.004</i>	0.425 <i>0.004</i>	0.425 <i>0.004</i>	0.425 <i>0.004</i>	0.426 <i>0.004</i>
Age at marriage	-0.155	-0.154	-0.155	-0.155	-0.154	-0.155

Variables	Regression Number					
	1	2	3	4	5	6
	<i>0.012</i>	<i>0.012</i>	<i>0.012</i>	<i>0.012</i>	<i>0.012</i>	<i>0.012</i>
Number of years in school	-0.069 <i>0.008</i>	-0.067 <i>0.007</i>	-0.067 <i>0.007</i>	-0.067 <i>0.007</i>	-0.069 <i>0.007</i>	-0.071 <i>0.007</i>
Children dead	0.434 <i>0.036</i>	0.433 <i>0.036</i>	0.434 <i>0.036</i>	0.434 <i>0.036</i>	0.433 <i>0.036</i>	0.434 <i>0.036</i>
R ²	0.557	0.557	0.557	0.557	0.557	0.557
N	1772	1772	1772	1772	1772	1772

Figures in italics denote 't' values.