

**The Institutional Context  
of Fertility and Reproductive Health in  
Madhya Pradesh, India\***

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\* This research was funded by a grant from the Centre for Studies in Demography and Ecology (CSDE), University of Washington, out of funds received from the Mellon Foundation. I am grateful to CSDE and to the Mellon Foundation for this support. I also wish to thank Professor Anil Deolalikar of the University of Washington for his support and collaboration in the study and Professor Robert Plotnick, Director of CSDE, for his encouragement and guidance. I, alone, am responsible for any errors in this report.

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## **Chapter 1**

### **Introduction**

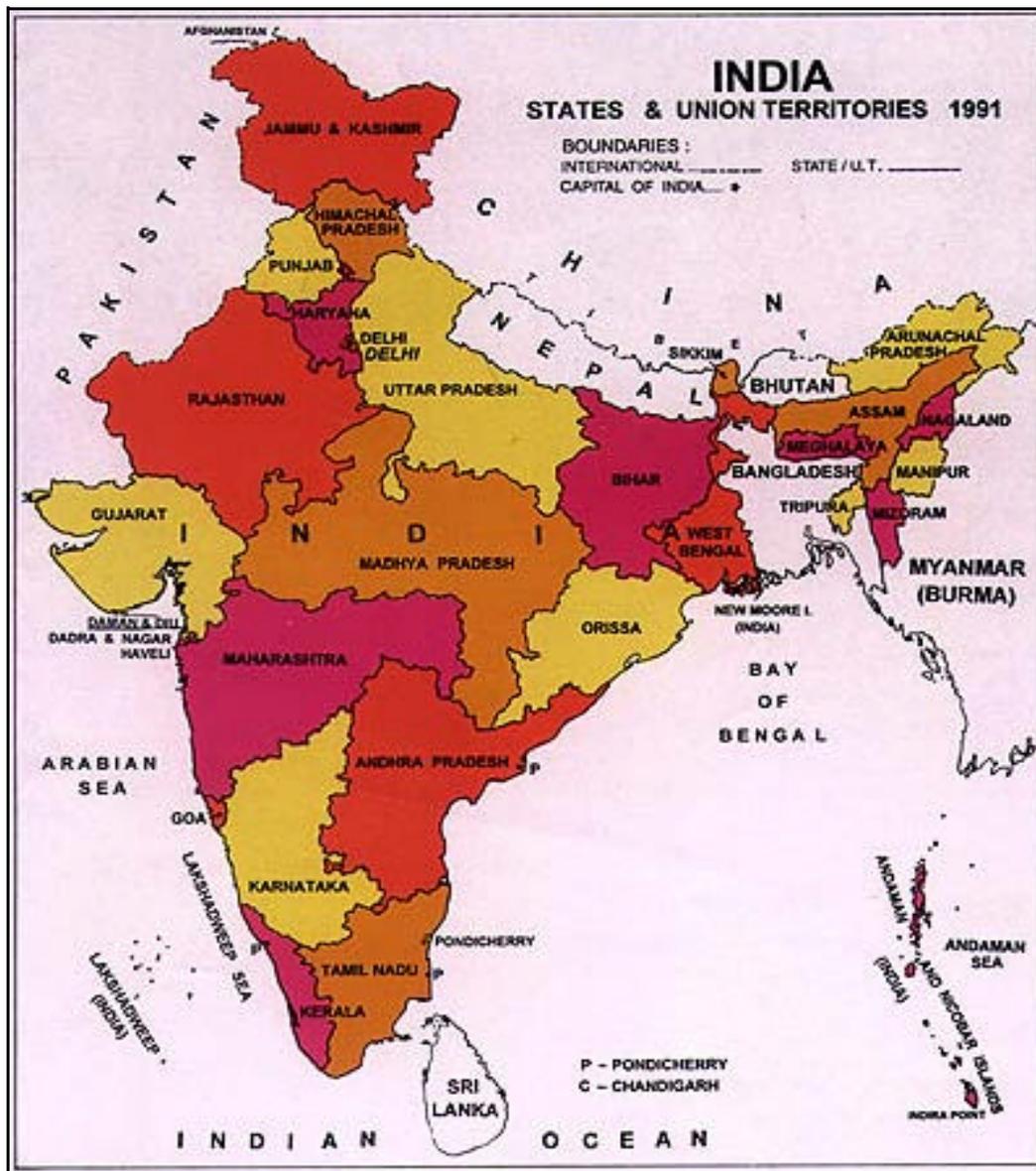
This report describes the fertility and reproductive health situation and associated institutional context in three development blocks of Madhya Pradesh, one of the constituent states of the Republic of India. It is based on a sample survey carried out in the three development blocks of the state during the months of October through December 1999 by 'Shyam' Institute, a no-profit voluntary research organization located at Datia in Madhya Pradesh, India in collaboration with the Centre for Studies in Demography and Ecology, University of Washington, Seattle, USA.

Madhya Pradesh is one of those states of the Republic of India which are known for their poor demographic and health situation. Reasons for poor demographic and health situation in the state may be traced in exceptionally high levels of fertility and mortality that have persisted over time and poor levels of social, economic and infrastructure development particularly development of health and family welfare services delivery infrastructure in rural areas. The state is very rich in natural resources but many of these resources are yet to be tapped in an efficient manner for the social and economic progress and infrastructure development.

Efforts to improve population and health situation in the state are primarily based on government initiatives and support. Health and family welfare services delivery facilities in the non government sector are few and most of them are located in large metropolitan areas. Moreover, private health care facilities focus on clinical and curative aspects of health only; they are costly and so are beyond the reach of the common people. The rural and remote areas of the state are nearly totally dependent upon the government health and family welfare services delivery infrastructure for their health and family welfare needs.

The state has very recently drafted its policy towards population and reproductive health issues which is yet to be implemented. It has so far adopted the national population and health Policy as the basis for planning and implementation of activities and programmes directed towards improving population and health situation. The national population and health policy is normative in nature and does not take into consideration local health and family welfare needs of the people.

Very little is currently known about the reproductive health situation in the state. A major problem in discussing the fertility and reproductive health situation in the state



is the availability of necessary information. The research and information base related to reproductive health in general and fertility and family planning in particular is exceptionally weak at the lower level of administration. Information on selected broad indicators of fertility and mortality are available at state and district level only.

In the absence of any direct information on maternal deaths, attempts have been made to estimate the risk of death due to complications of pregnancy and child birth through indirect procedures. The United Nations Children's Fund, using the correlation between the risk of death due to complications of pregnancy and child birth and infant mortality has estimated a maternal mortality ratio of 738 maternal deaths for every 100000 live births (UNICEF, 1995). Mari Bhat and others, on the other hand, have estimated a maternal mortality ratio of 507 maternal deaths for every 100000 live births during the period 1982-86 by using a different regression approach (Mari Bhat, et. al 1995). Recently, Ranjan has estimated a maternal mortality ratio of 828 deaths for every 100000 live births by using the correlation between the maternal mortality ratio and infant mortality rate and proportion of deliveries attended by trained persons (Ranjan, 1998). Ranjan has also estimated the risk of death due to complications of pregnancy and child birth for the constituent districts of the state. These estimates suggest that within the state, the risk of death due to complications of pregnancy and child birth vary widely. But below the district level, nothing is known about the magnitude of the risk of death associated with pregnancy and child birth as well as the social, cultural and other factors associated with complications of pregnancy and delivery.

There has been little investigation of the factors responsible for a very high risk of death due to complications of pregnancy and child birth in the state. The state, currently employs a preventive and health promotive approach to prevent maternal deaths. This approach consists of making available essential obstetric care services and identifying and referring high risk cases. But the impact of this approach has so far been poor because of the lack of efficient and effective emergency obstetric care services especially in the rural and remote areas and in urban slums of the state. It is only very recently that the state government has taken up a comprehensive programme of providing emergency obstetric care services right up to the development block level. Moreover, virtually nothing is currently known about the underlying social, economic and cultural factors which ultimately manifest into primary causes of maternal death.

## 1.2 Determinants of Fertility and Reproductive Health

One of the major problems in understanding determinants of fertility and reproductive health is the lack of comprehensive frameworks or models that specify the biological and behavioral mechanisms through which a host of social, economic, cultural factors operate to lead to a prevailing reproductive health situation. In order to explain the reproductive process, the proximate or intermediate variable approach

has been widely used in fertility research (Davis and Blake, 1956; Bongaarts, 1978). Recently, McCarthy and Maine have used the proximate determinants approach to develop a simple framework for analyzing the determinants of maternal morbidity and mortality (McCarthy and Maine, 1992). This framework is organized around three general stages or components of the process that leads to a death due to complications associated with pregnancy and child birth. Closest to such a death is the pregnancy, pregnancy related complications or a preexisting health problem that is aggravated during pregnancy. These stages, in turn, are most directly influenced by five sets of intermediate determinants:

1. the health status of the woman
2. her reproductive status
3. her access to health services
4. her health care behavior including use of available health services, and
5. a set of unknown factors.

Finally, this set of intermediate variables is influenced by a host of social, economic and cultural factors that operate at the background level.

One fundamental weakness in all proximate determinants frameworks developed for analyzing either fertility or health related behavior is that they provide, at best, only a post facto explanation of the reproduction related behavior under analysis. Moreover, the predictive capacity of all these frameworks is limited simply because they do not incorporate the social and cultural institutional environment in which all decision making takes place. These frameworks also do not take into account the strength of the infrastructure available. All issues related to fertility decision making and/or health seeking behavior, after all, are both social reaction that attaches at innumerable points to its socioeconomic and socio-cultural settings and biological response with dim evolutionary antecedents. The reason is that institutional priorities and institutional interests and changes in the interests and priorities induce corresponding changes in individual behavior and influence individual decision making through a loose articulation that, itself, is a major object of study.

Another reason for introducing the dimension of social institutions in the analysis of determinants of reproductive health is that the relationship between the background, intermediate and ultimate variables in the framework suggested by McCarthy and Maine are not invariant to changes in institutional forms and settings. Given the same

socioeconomic and cultural setting, the relationship between the intermediate and ultimate variables varies in different institutional settings.

There are at least three institutional forms which have direct bearings on fertility and reproductive health. The foremost of these institutional forms is the family. Family is the basic socio-biological unit within which all decisions related to reproductive health are taken. The institution of the family differ in many ways. But all variations in the structure and functions of the family have important implications to fertility and reproductive health mainly through the decision making process within the family. The influence of family formation system on the decision making environment in the family is well known. On the other hand, family types, in addition to nuclear, joint and extended families, have also been characterized on a scale having two polar points - family as an institution and family as a companionship. Little is currently known how a typical characterization of family either as an institution or as a companionship influence the fertility and reproductive health decision making process and the resulting fertility outcome and reproductive health status under similar socioeconomic and cultural settings.

Second area where the institution of family plays an important role is the transmission of information related to reproduction and reproductive health between different generations within the family and between same generations of different families. To many illiterate females who have never been in a school and have very limited contact with the world beyond the household, transmission of information within the family is the only way of knowing about reproduction and reproductive health issues and shaping reproduction related behavior accordingly.

The third area of the influence of the institution of the family on fertility and reproductive health decision making is the family values attached to members of different population groups within the family. Different values attached to members of different population groups may result in differential distribution of family resources which may have bearings on fertility and reproductive health.

The effect of gender roles on the decision making process within the family also has important bearings on fertility outcome and reproductive health situation. The traditional Indian family system is known for its strong kinship structure and well-specified gender roles. In such a system, family decision making is largely in the hands of family elders with limited individual choices, especially for younger generation. There is currently little information about how this constrained decision

making environment affects the fertility and reproductive health decision making process.

At the level of the community, there are a number of institutions which have bearings to fertility and reproductive health decision making and reproductive health status. In the Indian social system, families are organized into kinship structures, caste groups and religious mores. Moreover, the local level supra family groupings also exert considerable influence on the decision making environment within the family. An important distinguishing characteristics of community level institutions is their degree of corporateness and territoriality. Corporateness governs the capacity of institution or of an elite within it such as community peers, religious and caste leaders, to influence the behavior of members to suite institutional interests, however these may be defined. Territoriality, on the other hand affects the likelihood that behavior related to reproductive health concerns will be included in the kinds of behavior subjected to institutional pressure.

Marriage is another very important institution at the community level in understanding the determinants of fertility and reproductive health. A number of religious and family values are attached to the institution of marriage in the Indian mythology. Moreover, the marriage market in the Indian society usually remains very small because of its division on the basis of religion and caste. All these factors have important bearings on the timing of marriage and subsequent reproductive behavior.

Last but not least, availability of fertility regulation and reproductive health care services delivery infrastructure is another crucial determinant of fertility outcome and reproductive health. Health and family welfare services in India, especially in the rural areas, are largely a prerogative of government initiatives and efforts. Government efforts to provide fertility regulation and reproductive health care services to the people are confined to delivery of family planning services and, to some extent, delivery of essential obstetric care services. Emergency obstetric care services are largely absent in most of the rural health care delivery system. The availability of even minimal reproductive health services and their efficiency, obviously, are important determinants of the use of these services and the reproductive health situation.

The topics discussed above encompass some of the main institutional variables that need to be weighed in any analysis of the determinants of reproductive health in addition to the simple proximate determinants framework proposed for analyzing

determinants of fertility and reproductive health. Since the variables and relationships proposed in the proximate determinants frameworks operate only under a given institutional setting and environment, it is necessary for a better understanding of determinants of fertility and reproductive health that these institutional settings and environment are explored and their association with fertility and reproductive health decision making process is analyzed at some length. In other words, the proximate determinant frameworks of fertility and reproductive health need to be explored and tested in specific social and cultural institutional settings and environment and in the context of the strength of fertility regulation and reproductive health services that are available.

## 1.2 Objectives of the Report

The objective of the present report is limited to the description of the fertility and reproductive health situation and associated social and cultural institutional settings and environment in the three development blocks of Madhya Pradesh. No attempt has been made in this report to analyze or establish the causal relationship between a given institutional setting and environment and a given fertility and reproductive health outcome. This analysis is deferred to a subsequent, secondary analysis of the collected data.

Specifically, this report focuses on

- c) A description of the fertility and reproductive health situation in the three development blocks surveyed in terms of
  - 1.1 Patterns of marriage
  - 1.2 Levels of fertility
  - 1.3 Practice of family planning
  - 1.4 Knowledge about reproductive health issues
  - 1.5 Attention and care during pregnancy
  - 1.6 Women's health status
  
- b) A description of prevailing institutional settings and environment in the three development blocks surveyed in terms of
  - 1. A description of the decision making environment within the family with specific reference to the role of females in the decision making process

2. Status of females in the family
3. The institution of marriage
4. The value of children
5. Sources of knowledge about reproductive health issues
6. Availability and use of reproductive health care services.

### 1.3 Madhya Pradesh: An Overview

Madhya Pradesh, as the name implies, lies in the centre of India. It has an area of 443,406 sq. km which makes it the largest state of the country. At the time of 1991 population census, the population of the state was 66.136 million which was spread over more than 70 thousand villages and 465 towns of varying population size; the next population census is due in 2001. The state is divided into 12 administrative divisions, 61 districts and 459 development blocks. More than 23 per cent of the state population is tribal. This proportion is highest in the country. Because of its vast area, the population density in the state is only 149 which is second lowest in the country and well below the national average. Population sex ratio, like most of other states of the country and most of the countries of South Asia, is unfavourable to females. At the time of 1991 population census, there were 931 females for every 1000 males in the state. Within state, the population sex ratio varies widely. In the northeastern part of the state, the lowest sex ratio of 816 females for every 1000 males has been estimated on the basis of 1991 population census. By contrast, in the southeaster part of the state, the population sex ratio has been found to be 1002 females for every 1000 males. More than 40 per cent of the state population is below 15 years of age which has resulted in a high dependency ratio and a high child-woman ratio.

Madhya Pradesh has one of the fastest growing population amongst the states of the country. During the decade 1981-91, the population of the state increased at an average annual growth rate of 2.38 per cent per year which was second highest in the country, next only to the state of Rajasthan. Primary reason behind rapid population growth in the state is persistent high fertility and high mortality. Fertility levels, in the state, either measured in terms of crude birth rate or in terms of total fertility rate are third highest while mortality levels measured in terms of crude death rate and infant mortality rate are highest and second highest in the country according to the sample registration system of Government of India (Government of India, 1999). The result of the prevailing high levels of fertility and mortality is that the natural

## Madhya Pradesh Administrative Districts



growth rate in the state is 2.09 per cent per year which is well above the national average of 1.83 per cent per year. The contraceptive prevalence rate in the state, according to the National Family Health Survey, 1998-99 is just above 44 per cent which is substantially lower than the national average. Contraceptive practice in the state, like in India as a whole, is dominated by terminal methods of contraception.

Female sterilization alone accounts for more than 80 per cent of total current family planning users in the state (International Institute for Population Sciences, 1999).

Table 1.1: Madhya Pradesh - some salient features

Number of districts	61
Number of development blocks	459
Number of towns	465
Number of inhabited villages	71526
Number of village <i>Panchayats</i>	31135
Population, 1991 (million)	66.18
Area, 1991 (000 sq. km)	443.41
Population density, 1991	149
Sex ration, 1991 (F/1000M)	931
Females in reproductive age group, 1991 (per cent)	23.00
Child-woman ratio, 1991	614
Dependency ratio, 1991	1092
Average annual population growth rate, 1981-91 (per cent)	2.38
Crude birth rate, 1995-97 (0/00)	32.4
Crude death rate, 1995-97 (0/00)	11.1
Infant mortality rate, 1995-97 (0/00)	97
Total fertility rate, 1991-93	4.50
Contraceptive prevalence rate, 1998-99 (per cent)	44.0
Proportion of urban population, 1991 (per cent)	23.2
Literacy rate, 1991 (per cent)	44.2
Female literacy rate, 1991 (per cent)	28.8
Male literacy rate, 1991 (per cent)	58.4
Per capita income at current prices, 1994-95 (Rs)	5926
Population below poverty line, 1994-95 (per cent)	36.4

Nearly one fourth of the population of the state is tribal which provides an interesting social and cultural diversity. In most of the southern part of the state, tribal population outnumber the non tribal population. The life style patterns, the social values, family structures and other community level institutions of tribal people are significantly different from the non tribal people. Tribal people are commonly known as forest people. They have their own typical spatial patterns.

Madhya Pradesh is predominantly an agricultural state with 77 per cent of its population living in rural areas. Agriculture is the single largest sector of the state economy, employing 76 per cent of the labour force and accounting for 41 per cent of the personal income. The per capita state income in 1994-95 was Rs 5926 at current prices which was well below the national average of Rs 8282 and was fourth lowest in the country. More than 36 per cent of the population of the state was classified to be living below the poverty line in the year 1994-95. This proportion was third highest in the country.

Industrially, the state is poorly developed despite the fact that it is very rich in natural resources. Whatever industrialization is there, it is confined to selected pockets. Benefits of industrialization and related urbanization and modernization have not reached the rural and remote areas. As the result the rural-urban disparities in development remain wide.

Poor health status of the people of Madhya Pradesh is reflected by a crude death rate of 11 deaths per 1000 and an infant mortality rate of 97 infant deaths per 1000 live births during the period 1995-97. According to the annual survey of causes of death conducted by the Registrar General of India in the rural areas of the country, more than one fifth of the total deaths in the rural areas of the Madhya Pradesh are due to diseases of respiratory system while diseases of digestive system account for another 15 per cent deaths. Other major contributors to mortality in the rural areas of the state are diseases of circulatory system and diseases peculiar to infancy both of which account for almost 10 per cent of total deaths in rural areas. On the other hand, accidents and injuries and diseases of digestive system account for 7-8 per cent of total deaths in the rural areas. (Government of India, 1994). Information on causes of death in the urban areas of the state is not available as the survey of causes of death is restricted to rural areas only.

Deaths due to complications of pregnancy and delivery, commonly known as maternal deaths, in 1993, accounted for more than 2 per cent of total deaths; more than four per cent of total female deaths; and almost one fifth of total female deaths in the childbearing period in the rural areas of the state according to the annual survey of causes of death (Government of Madhya Pradesh, 1996). In recent years, there has been a significant increase in the proportion of maternal deaths due to haemorrhage and fever during pregnancy as well as due to toxemia of pregnancy. Between 1989 and 1993, the proportion of maternal deaths due to haemorrhage and fever during pregnancy increased from 13.0 per cent to 26.2 per cent. Similarly,

proportion of deaths due to toxæmia of pregnancy increased from just 4.4 per cent in 1989 to 19 per cent in 1993. On the other hand virtually no information is available about causes of maternal death in the urban areas as the survey of causes of death, is confined to rural areas of the state only. Similarly, virtually nothing is known about reproductive morbidity in the state.

The disease burden in the state is high as compared to the national average and most of the other states of the country. A recent survey carried out in the rural areas of the state by the National Council for Applied Economic Research has estimated short duration (30 days) morbidity prevalence rate of 195 persons per 1000 population per year and long duration morbidity prevalence of 48 persons per 1000 population (National Council of Applied Economic Research, 1996). An analysis of the indoor patients admitted in the district hospitals of the state during the period 1995-96 indicates that the diseases of digestive system account for more than 14 per cent of admissions in district hospitals followed by diseases of respiratory system (13.42 per cent) and infectious and parasitic diseases (12.75 per cent). The analysis also indicates that more than 8 per cent of total admissions were related to diseases and complications related to pregnancy and child birth (Chaurasia, 1998).

Health care delivery services in the state are available in both public and private sector. The public health care delivery system is stretched all over the state. In recent years, there has been some substantial growth of the private health care delivery system in the state. However, nearly all of this growth is confined to the metropolitan areas and big towns of the state. In the rural areas, government delivery system is virtually the only source of delivery of health and family welfare services. The private health care delivery system is largely unregulated. In 1997, the state government enacted the Madhya Pradesh Hospitals and Nursing Homes Regulation Act. The Act provides for compulsory registration of all health care services delivery institution and issue of a license by the competent supervisory authority to be constituted by the state government. The Act specifies minimum requirements essential for registration as a hospital or nursing home. This Act is yet to be implemented in an effective manner.

The public health care delivery system in the state can be divided into allopathic health care delivery system and the health care delivery system for indigenous system of medicine which includes *Ayurveda*, homeopathy and *Unani* system of medicines. *Ayurveda* is the centuries old traditional system of medicine of the country. This system of medicine has been well accepted by the Indian masses, being a part of the

traditional continuity. The focus of the government efforts towards improving the health of the people of the state, however, is on the allopathic public health care delivery system.

Organization of allopathic public health care delivery system in the state is different in the rural and urban areas. In the rural areas, the allopathic health care delivery system is a three-tier system comprising of sub-health centres, primary health centres and community health centres. These centres are established on the basis of population-based norms laid down by the government of India and provide both community based as well as hospital-based health and family welfare services. Interestingly, the norms laid down by the government of India do not take into account the geographical area covered in covering a pre decided population. In Madhya Pradesh, because of low population density, the geographical area covered by one sub-health centre or primary health centre or community health centre is substantially larger than the national average and significantly larger than the geographical area covered by these centres in high population density states like Kerala and West Bengal.

In the urban areas of the state, organization of allopathic health care delivery system is not well defined. There are civil dispensaries and civil hospitals in the urban areas. Moreover, the district hospitals, specialized hospitals and hospitals attached to the medical colleges - the teaching hospitals - are also located in the urban areas. Unlike the rural areas, establishment of health care delivery institutions in the urban areas is not based on any population-based norms.

The health care delivery system related to the indigenous system of medicine is also not population-based either in rural or in urban areas. Although *Ayurveda*, the traditional Indian system of medicine has deep roots in the rural areas, it has got a low priority in the official approach of health sector development as well as in the private sector.

#### 1.4 The Study Population

The survey which constitutes the basis of this report was carried out in three development blocks of the state - Lahar in district Bhind, Khategaon in district Dewas and Dharseeva in district Raipur - and five towns - towns Lahar, Alampur and Daboh in district Bhind, town Khategaon in district Dewas and town Raipur in district Raipur. District Bhind is located in the northwest part of the state; district Dewas in the southwest part while district Raipur is located in the southeast part of

the state. The five towns surveyed are of different population size. Town Raipur is one of the major cities of the state with a population of nearly 0.5 million at 1991 census. It has a nearly metropolitan character. By contrast, the remaining four towns are small with a typical rural economy and character. These towns are more like large villages which have been classified as urban in the Indian census mainly because of population size.

Table 1.2: Selected demographic and social development features of the development blocks surveyed.

Indicator	Development Block		
	Lahar (Bhind)	Khategaon (Dewas)	Dharseeva (Raipur)
Population, 1991	118111	108952	228907
Number of villages, 1991		164	132
Population sex ratio, 1991 (F/1000M)	813	922	948
Scheduled caste population, 1991 (per cent)	26.06	15.66	15.78
Scheduled tribe population, 1991 (per cent)	0.03	23.70	4.24
Literacy rate, 1991 (per cent)	43.78	34.60	48.42
Male	61.95	49.63	65.70
Female	21.03	18.18	30.01
Sub-health centres		25	
Primary health centres	4	3	4
Community health centre	1	0	0
Hospital beds in health care delivery institutions	30	18	6
Population served by one hospital bed	3937	6053	38151

*Source: Government of Madhya Pradesh (1999)  
Government of Madhya Pradesh (1999a)*

Selected demographic and social development features and available public sector health and family welfare services delivery infrastructure in the three development blocks are given in table 1.2 while those for the five towns are given in table 1.3. Information about private sector health and family welfare services delivery infrastructure is not available for the development blocks and the towns of the state. A comparison of the situation in the development blocks and towns surveyed reveals some stark differences in the population and social development situation in rural and urban areas. The first striking difference is in literacy, either male or female or combined. In the urban areas, literacy is invariably higher than that in rural areas. Moreover, the gap between urban and rural literacy rate is widest in case of females. Similarly, the proportion of the scheduled caste population is invariably higher in the rural areas as compared to the urban areas. Scheduled castes, in the Indian caste hierarchy is the lowest caste group and are commonly known as 'the untouchables'. They are the poorest of the Indian society in terms of income, education as well as in terms of health and family welfare status. On the other hand, in development block Lahar in district Bhind, there is virtually no tribal population whereas in the development block Khategaon, nearly one fourth of the population is tribal. In district Raipur also, proportion of tribal population is more in rural areas as compared to urban areas.

The population characteristics of the three development blocks and the five towns also have interesting especially in terms of the population sex ratio. In development block Lahar and in towns Lahar, Alampur and Daboh, all located in district Bhind, the population sex ratio is very heavily unfavourable to females. A population sex ratio of only 813 females for every 1000 males in development block Lahar is probably the lowest sex ratio in the country. In other development blocks and towns, the population sex ratio is comparatively more favourable to females but is still heavily biased towards to males. Moreover, the population sex ratio is marginally more favourable to females in urban areas than in rural areas in district Bhind but in districts Dewas and Raipur, it is more favourable to females in the rural areas than in urban areas.

Sharp differences in the distribution of public health and family welfare services delivery infrastructure are also evident from tables 1.2 and 1.3. As already mentioned, most of the public health and family welfare services delivery facilities in the state are concentrated in big towns and metropolitan areas. Being a big town,

Raipur has a heavy concentration of health facilities. In other towns surveyed, only skeleton facilities are available as these are relatively small towns. Although, detailed information is not available but a similar situation appears to prevail in private sector also.

Table 1.3: Selected demographic, social development features of the towns surveyed.

Indicator	Towns				
	Lahar	Alampur	Daboh	Khategaon	Raipur
Population, 1991	18703	7728	10848	15670	462494
Population sex ratio, 1991 (F/1000M)	816	864	825	879	921
Scheduled caste population, 1991 (per cent)	17.24	14.98	24.45	7.45	10.89
Scheduled tribe population, 1991 (per cent)	0.14	0.12	0.88	6.50	3.52
Literacy rate, 1991 (per cent)	59.75	60.67	55.05	68.61	73.79
Male	74.43	77.53	71.01	81.29	83.38
Female	41.48	41.00	35.62	53.91	63.30
Public sector health and family welfare institutions	1	1	1	1	2
Total beds in the public sector institutions	30	0	0	6	900
Population per bed	623			2612	514

Source: Government of Madhya Pradesh (1999)  
Government of Madhya Pradesh (1999a)

### 1.5 The Survey Design

The survey reported here was confined to selected families of selected villages of the three development blocks and selected municipal wards of the five towns. A multistage sampling procedure was adopted to select the sample for the survey. At the first stage of sampling, in each selected development block, the population was stratified into rural and urban population according to the classification adopted in

the 1991 population census. In the rural stratum, 30 clusters were selected in each development block through a circular systematic sampling procedure; clusters were villages as identified in the 1991 population census. In the urban stratum, 10 clusters were selected again through circular systematic sampling procedure in each town; clusters, in this case, were municipal wards as identified in the 1991 population census. Thus, a total of 40 clusters in one district or 120 clusters in three districts were selected for the survey. The sampling frame for the selection of clusters was constituted by the list of villages and towns of the 1991 population census.

At the second stage of sample selection, 10 per cent of the households were selected in each cluster. The circular systematic sampling procedure was used for the selection of the households. The sampling frame for the selection of the households was the house lists of 1991 population census. Within the selected household, if there was only one family, the same was selected for the survey. On the other hand, if there were more than one families in the selected household, one of them was selected randomly for the survey. A family, for the purpose of the survey, was defined as the group of persons sharing a common kitchen.

The last stage of sampling consisted of selection of individual respondents. In each selected family, two respondents were selected. The first respondent was the head of the family. The second respondent was a currently married female in the reproductive age group. In families where there were more than one currently married females in the reproductive age group, one of them was selected randomly.

A comprehensive questionnaire was developed for collecting the information during the survey. This questionnaire was in two parts. Part one of the questionnaire was related to the size and structure of the family, family assets and views of the family head related to various fertility and reproductive health issues. It was meant for the head of the family. The second part of the questionnaire was for the currently married female in the reproductive age group of the same family. This part of the questionnaire focused on reproductive health issues specific to the woman. Both the questionnaires were thoroughly pretested before their application.

The questionnaire for interviewing family head consisted of the following modules:

- Size and structure of the family.
- Family characteristics
- Role of family head in family matters

- Views of family head about marriage related issues
- Views of family head about women and children in the family
- Family income
- Family expenditure
- Exposure of family head to mass media

On the other hand, the questionnaire for females in the reproductive age group consisted of the following modules:

- Information about woman and her children
- Knowledge about reproduction and reductive health issues
- Pregnancy history
- Use of family planning methods
- Induced abortion
- Woman's health issues.
- Fertility and status of woman in the family
- Marriage and dowry
- Maternal deaths

Both the questionnaires were developed in Hindi, the local language with key words of the questionnaire translated into local dialect.

Actual collection of information was done on the basis of direct interview with the respondents. In every family the interview with the family head and the interview with the female in the reproductive age group was carried out simultaneously. This was done to ensure privacy in the interview with the females in the reproductive age group. Interview of the family head was carried out either by a male or a female investigator but the interview of females in the reproductive age group was invariably carried out by the female investigator. Every effort was made to organize the interview of the female in the reproductive age group in camera so as to ensure that the female respondents could respond to questions in a free environment.

Twenty field investigators and two field supervisors were employed for conducting the survey in three development blocks and five towns which was organized during the months of October through December 1999. They were given intensive training in different aspects of the survey including the purpose and orientation of each question in the questionnaire. The field supervisors were also involved in the pretesting of the questionnaire.

The filled up questionnaires were thoroughly edited and coded at the Shyam Institute. Initial processing of the collected information including conversion of the filled up questionnaires into electronic format was also done at the Shyam Institute. The PC-EDIT software package developed by the United Nations Department of Economic and Social Information and Policy Analysis and made available by United Nations Statistics Division was used for entering the data into computers (United Nations, 1993).

Basic tabulation of the collected information was done by using the XTABLE software package developed the United Nations Department of Economic and Social Information and Policy Analysis and made available by United Nations Statistics Division (United Nations, 1993). The XTABLE software package is a sister package of PC-EDIT. The two, in combination, constitute a complete survey data processing system.

#### 1.6 Organization of the Report

This report is organized into five chapters including this introduction. The next chapter of the report presents salient features of the population surveyed while the third chapter focuses on fertility and reproductive health situation that prevailed in the surveyed families. The fourth chapter of the report discusses, in some detail, the institutional context associated with the prevailing fertility and reproductive health situation while the last chapter gives an overview of the institutional context of reproductive health situation in the population surveyed.

## Chapter 2

### Characteristics of Population Surveyed

The survey covered 2076 families in the three development blocks and five towns selected for the survey out of which 1475 families were surveyed in the three development blocks (rural areas) and 601 families in five towns (urban areas). Basic characteristics of the families surveyed are presented in table 2.1. Most of the families surveyed were either farmers or farm related labourers, the two accounting for more than 70 per cent of the families surveyed. In rural areas, less than one fourth of the families surveyed were having business or service as their family occupation whereas this proportion was nearly half in the urban areas.

Nearly all the families surveyed belonged to Hindu religion; Muslims and Christian families accounted for just 5 per cent of the total families surveyed. Proportion of Muslim families surveyed was higher in urban areas in rural areas. Among Hindu families surveyed, nearly half were backward caste families while one fourth were upper caste families. The proportion of upper caste families was more than 40 per cent in the urban areas while it was only 20 per cent in rural areas. By contrast, the proportion of scheduled castes families in urban areas was only 6 per cent in comparison to 21 per cent in the rural areas.

Median per capita income of the families surveyed is estimated to be Rs 1932 per year. The distribution of families by per capita income is very heavily skewed to the left with more than 48 per cent of the families having per capita income of less than Rs 1800 per year. By contrast, nearly 8 per cent of the families surveyed were having a per capita income of more than Rs 9000 per year. Proportion of families having a per capita income of less than Rs 1800 per year was higher in urban than in rural areas. At the same time, proportion of families having a per capita income of more than Rs 9000 per year was also higher in the urban than in rural areas.

Table 2.1: Characteristics of the families surveyed.

Characteristics		Total	Rural	Urban
Family occupation	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
<i>Caste</i>	<i>Upper caste</i>	25.98	20.50	40.37
	<i>Backwards caste</i>	49.12	48.61	50.47
	<i>Scheduled caste</i>	16.86	21.00	5.98
	<i>Scheduled tribe</i>	8.04	9.89	3.18
	<i>All</i>	100.00	100.00	100.00
<i>N</i>		1946	1410	536
Per capita income	< 600	35.10	32.70	42.57
	600-1800	13.22	14.21	10.15
	1800-3000	15.26	17.38	8.66
	3000-4200	13.34	14.44	9.90
	4200-5400	5.77	5.95	5.20
	5400-6600	4.33	4.05	5.20
	6600-7800	3.00	2.70	3.96
	7800-9000	2.22	2.14	2.48
	>9000	7.75	6.43	11.88
	All	100.00	100.00	100.00
<i>N</i>		2076	1475	601

Remarks: *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.*

Relatively low level of income of the families surveyed is also reflected in terms of family holdings as may be seen from table 2.2. In general, very few families were having modern amenities like refrigerator, telephone, vehicle - tractor or car or jeep or motorcycle or scooter - and even radio. The only thing that appears to be more frequently available in the families surveyed was the black and white television which was found in almost one third of the families surveyed. Besides black and white television, radio was also found in about 14 per cent of the families surveyed, although there were many families which had both a television as well as a radio.

Table 2.2: Modern amenities available in the families surveyed.

Amenities	Total	Rural	Urban
Tractor	3.51	3.65	3.17
Refrigerator	6.48	2.55	16.00
Television B/W	32.86	23.78	54.83
Television Colour	4.78	1.38	13.00
VCR	1.71	0.62	4.33
Car or Jeep	2.10	0.62	5.67
Telephone	4.29	1.38	11.33
Motorcycle/Scooter	10.34	5.72	21.50
Radio	14.14	12.34	18.50
N	2076	1475	601

*Remark: Figures given in the table are proportion (per cent) of total families surveyed.*

There was, however, a very substantial difference between the availability of modern amenities in urban as compared to rural families surveyed. As an example, 16 per cent of the urban families were having refrigerator while this figure proportion only 2.55 per cent in rural families surveyed. Television, either black and white or colour, on the other hand, was available in more than 70 per cent of urban families surveyed but this proportion was only 25 per cent in rural families surveyed. Similarly, nearly 12 per cent of the urban families were having telephone facility but in the rural areas, telephone was available in negligible proportion of families.

Total population enumerated in the 2076 families surveyed was 13514. This gives an average family size of 6.51 persons per family. The average family size has been found to be larger in rural areas (6.55 persons per family) as compared to urban areas (6.40 persons per family). However, the difference between the average family size in rural and urban areas is not very large.

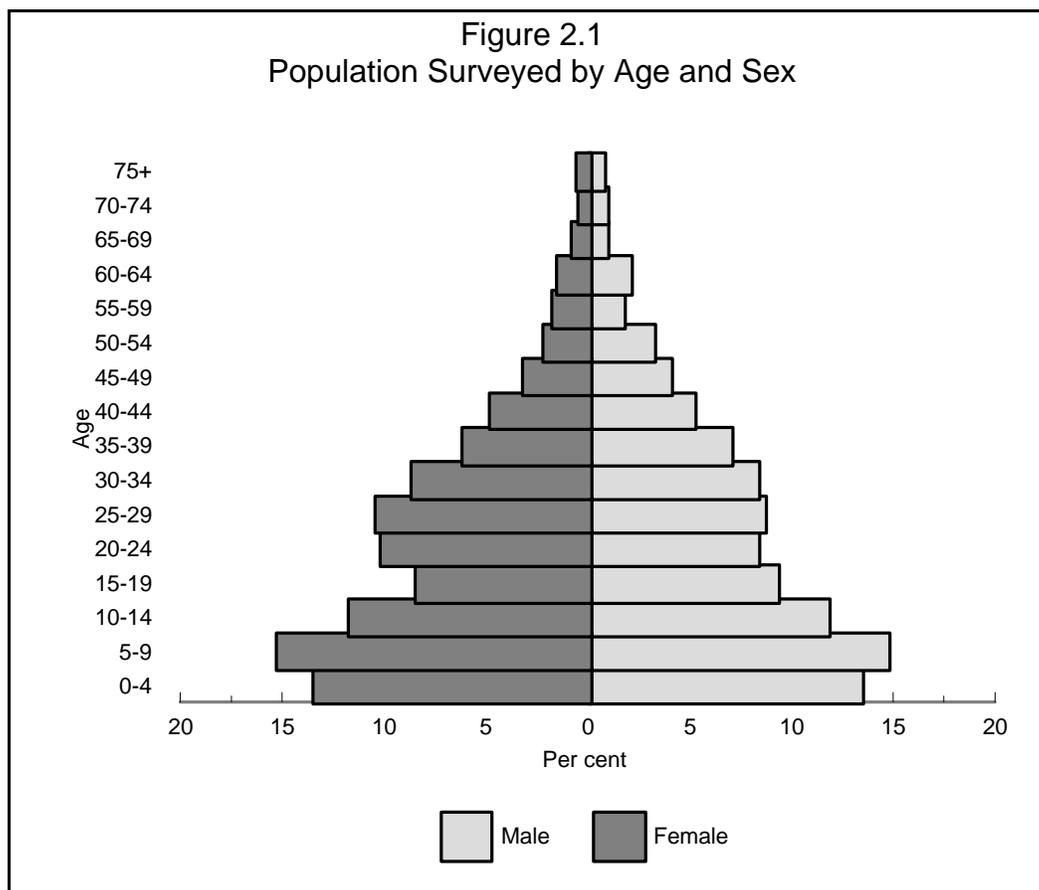
Among the 13514 individuals enumerated during the survey, 7316 were males and 6198 were females. This gives a sex ratio 847 females for every 1000 males. The simple average of the population sex ratio of the three development blocks and five towns based on 1991 population census has been estimated to be 873 females for every 1000 males indicating that the coverage of population during the survey was fairly satisfactory.

Table 2.3: Selected characteristics of the age structure of the population surveyed.

Characteristics	Total	Rural	Urban
Proportion of population < 15 years (per cent)	40.16	41.38	37.07
Proportion of population $\geq$ 60 years (per cent)	4.05	4.02	4.11
Sex ratio (F/M) per 1000	847	843	858
Child-woman ratio (0-4)	563	612	451
Child-woman ratio (5-9)	714	760	609
Dependency ratio			
Young	723	760	634
Old	103	104	101
All	826	864	735

Remarks:

Child-women ratio (0-4) = Children in 0-4 years age per 1000 females in 15-49 years age.  
 Child-woman ratio (5-9) = Children in 5-9 years age per 1000 females in 20-54 years age.  
 Young dependancy ratio = Population in 0-14 years age per 1000 population in 15-59 years age.  
 Old dependancy ratio = Population 60 years and above age per 1000 population in 15-59 years age.  
 All dependancy ratio = Young + Old dependancy ratio.



Selected indicators of the age structure of the population surveyed are given in table 2.3 and the age pyramid is shown in figure 2.1. The age pyramid is characteristically triangular in shape with a broad base and a thin top indicating that the population surveyed is very young and is reflective of persistent high fertility and high mortality. The child-women ratio also indicates that fertility levels in the population surveyed are high. More than 40 per cent of the population surveyed is less than 15 years of age while only about 4 per cent of the population is 60 years or more old. As the result the dependency ratio of the population is high. Table 2.3 also suggests that the age structure of the population is relatively younger and fertility is relatively higher in rural areas than in urban areas as is reflected from relatively higher proportion of population below 15 years of age, higher child-woman ratio and lower proportion of population with age 60 years and more in the rural areas. However, the difference between the age structure of rural and urban population is not very large.

Table 2.4: Age and sex structure of population surveyed.

Age	Total			Rural			Urban		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
0-4	13.42	13.37	13.49	14.26	14.03	14.54	11.31	11.69	10.87
5-9	14.95	14.68	15.28	15.48	15.21	15.81	13.62	13.33	13.96
10-14	11.78	11.81	11.75	11.64	11.70	11.56	12.14	12.08	12.22
15-19	8.88	9.23	8.47	8.83	9.26	8.32	9.00	9.13	8.84
20-24	9.15	8.26	10.20	9.11	8.31	10.06	9.23	8.12	10.53
25-29	9.47	8.65	10.44	9.38	8.62	10.29	9.70	8.74	10.81
30-34	8.44	8.23	8.68	8.07	7.82	8.37	9.36	9.28	9.46
35-39	6.57	6.92	6.16	6.25	6.56	5.88	7.38	7.83	6.87
40-44	5.02	5.19	4.82	5.07	5.18	4.93	4.91	5.22	4.56
45-49	3.60	3.95	3.18	3.48	3.76	3.14	3.90	4.44	3.27
50-54	2.76	3.25	2.18	2.61	3.22	1.88	3.15	3.33	2.93
55-59	1.69	1.63	1.76	1.63	1.52	1.76	1.82	1.88	1.75
60-64	1.81	2.04	1.53	1.84	2.10	1.54	1.72	1.88	1.52
65-69	0.87	0.93	0.81	0.84	0.90	0.77	0.96	1.01	0.90
70-74	0.71	0.92	0.47	0.73	0.97	0.45	0.65	0.77	0.51
75+	0.66	0.74	0.56	0.61	0.67	0.54	0.78	0.92	0.62
ANS	0.22	0.22	0.23	0.17	0.17	0.16	0.36	0.34	0.39
N	13514	7316	6198	9668	5246	4422	3846	2070	1776

ANS Age not stated.

Table 2.5: Educational status of the population (> 5 years) surveyed.

Indicator		Total	Rural	Urban
Ever gone to school	Total	61.20	55.29	75.49
	Male	71.77	67.01	83.47
	Female	48.70	41.29	66.27
1-5 years in school	Total	23.02	23.56	21.71
	Male	22.79	23.49	21.08
	Female	23.28	23.63	22.44
6-8 years in school	Total	17.60	17.02	19.00
	Male	20.84	21.04	20.34
	Female	13.77	12.22	17.45
9-10 years in school	Total	8.76	7.92	10.81
	Male	11.95	11.75	12.44
	Female	5.00	3.34	8.92
11-12 years in school	Total	6.58	4.54	11.51
	Male	9.33	7.21	14.55
	Female	3.33	1.35	8.01
More than 12 years in school	Total	5.24	2.25	12.45
	Male	6.85	3.51	15.06
	Female	3.33	0.75	9.45
N	Total	11227	7943	3284
	Male	6085	4325	1760
	Female	5142	3618	1524

*Remark: Figures are proportions (per cent) to total population surveyed with age 6 years and more.*

More than 61 per cent of the population surveyed with age 6 years and more has been found to have ever gone to school. The proportion of population ever gone to school was substantially higher in males as compared to females; 72 per cent and just 49 per cent. Similarly, this proportion is higher in urban than in rural areas; 75 per cent and 55 per cent. The difference between rural and urban areas in proportion of males ever gone to school is 16 per cent points but in females, this difference is 25 per cent points. In the rural population surveyed, nearly 60 per cent of the female were found to have never gone to school.

Proportion of population in school, however, decreases sharply with the increase in the number of years in school and only about 5 per cent of the total population surveyed with age 6 years and more has been found to be in school for more than 12 years. In the rural areas, this proportion is just 2.25 per cent while in urban areas, it is slightly better, although very low. But the situation is definitely poor in case of females. For the whole population, rural and urban combined, only about 3 per cent of the females with age 6 years and more have been found to be in school for more than 12 years during the survey whereas, in the rural population, this proportion is only 0.75 per cent. In urban areas, this proportion is found to be 9.45 per cent which, by all standards, is very low. By comparison, proportion of males with more than 12 years of schooling is somewhat better relative to females, although even this proportion is also very low in the rural population surveyed. Even in the urban population surveyed, only about 15 males for every 100 males with age 6 years and above had schooling of more than 12 years.

Table 2.6: Educational status of females in the reproductive age group.

Number of years in school	Total	Rural	Urban
Ever gone to school	52.5	45.2	70.8
1-5 years in school	14.3	14.3	14.1
6-8 years in school	14.8	14.5	15.7
9-10 years in school	8.4	7.9	9.7
11-12 years in school	8.0	5.4	14.3
More than 12 years in school	7.0	3.1	16.7
N	6246	4459	1787

Among females of reproductive age group (15-49 years of age), only about half of the females surveyed were found to have ever gone to school while only 15 per cent of these females were found to be in school for more than 10 years. In rural areas, almost 55 per cent of the females in the reproductive age group were never been to school while only about 8 per cent were in school for more than 10 years. In urban areas, however, the situation is much better. Nearly 71 per cent of the females in the reproductive age group in the urban areas were found to have ever gone to school while 31 per cent of these females had been in school for more than 10 years.

Table 2.7: Proportion of females in 15-49 years of age married by residence.

Age	Total	Rural	Urban
15-19	35.62	44.57	14.65
20-24	86.23	91.46	73.80
25-29	97.36	97.57	96.88
30-34	97.76	98.37	96.43
35-39	98.95	99.23	98.36
40-44	97.99	98.17	97.53
45-49	95.43	94.96	96.55
15-49	85.30	87.92	79.17
N	3217	2252	965

Marriage is nearly universal in the population surveyed as more than 85 per cent of women in the reproductive age group (15-49 years) were found to be married at the time of the survey. In rural areas, this proportion was even higher but it was relatively low in the urban areas. This is expected as marriage in the Indian mythology is associated with religious, cultural and moral values. Moreover, marriage takes place normally at an early age as may be seen from table 2.7; more than one third of the females of 15-19 years of age surveyed were found to be married at the time of the survey. In fact, most of the variation in proportion of females married by age in the population surveyed is confined to the age group 15-24 years only. After 25 years of age, marriage was found to be nearly universal in the population surveyed. Moreover, there was virtually no difference in the proportion of females married in the rural and urban population surveyed in the age group 25 years and above. As may be seen from table 2.7, virtually all difference in the proportion of females in the reproductive age married was found to be confined to the age group 15-24 years.

Schooling of females definitely has an impact on the proportion of females married at least up to the age group 15-24 years. Among the females surveyed who had never gone to school, the proportion married in the age group 15-19 years has been found to be nearly 62 per cent while this proportion was 96 per cent in the age group 20-24 years. Both these proportions have been found to decrease sharply with the increase

in the number of years in school. Among females who have been in school for more than 10 years, the proportion married has been found to be less than 5 per cent in the age group 15-19 years and less than 50 per cent in the age group 20-24 years. However, after 25 years of age, there is virtually no difference in the proportion of females married by the level of their education; the reason being that after 25 years of age, marriage becomes universal irrespective of whether a female has been in school or not.

Table 2.8: Proportion of females in 15-49 age married by level of education.

Age	Number of years in school					
	Never	1-5 years	6-8 years	9-10 years	11-12 years	> 12 years
15-19	61.93	38.55	26.52	11.69	2.50	5.88
20-24	96.03	91.00	90.10	80.77	56.67	29.79
25-29	98.61	94.25	96.74	97.06	93.75	97.50
30-34	98.15	98.77	97.96	88.89	100.00	96.67
35-39	99.59	97.83	96.88	100.00	96.30	100.00
40-44	98.19	97.30	93.33	100.00	100.00	100.00
45-49	94.08	100.00	100.00	100.00	100.00	100.00
15-49	94.16	85.05	73.96	62.04	66.05	69.64
N	1784	455	434	216	162	168

## Chapter 3

### The Reproductive Health Situation

#### 3.1 Age at Marriage

Marriage, in the Indian society, signals the beginning of socially recognized and acceptable reproductive and sexual life. It also constitutes an integral part of religious, cultural and moral traditions of the society. Moreover, under the caste system that prevails in most of the central India, the society does not permit inter-caste marriages, although there is no bar on inter-caste marriage according to law. Since the society in this part of the country is sharply divided into castes and sub-castes groups, social, cultural and traditional insistence on marriage within the caste actually results in a considerable narrowing of the marriage market.

Another interesting feature of marriage in India is that most of the marriages are arranged marriages. Family elders, especially the family patriarch, play key role in arranging these marriages and the wishes and likings of those who are getting married are often relegated to a residual limbo. Arranged marriages are perceived more as a relationship between two families rather than a relationship between a boy and a girl. The combined effect of all these factors is that marriage in India is not only universal but it is mostly an arranged marriage at a relatively young age, especially for girls.

In any case, marriage of girls at a very young age has a telling effect on her reproductive health status in many ways. First, marriage, in most instances, is immediately followed by pregnancy and delivery. Being very young, the girl, in such a situation, is not mature enough to bear the physical and mental trauma of getting pregnant and delivering a child. Second, in societies where practice of fertility regulation methods is not wide spread, entry into sexually active reproductive life at an early age usually leads to too many pregnancies in a very short period which very adversely affect the health of the woman especially under conditions of abject poverty and mass illiteracy. Because of these considerations, increasing the age at marriage has been one of the important components of efforts directed towards reducing fertility and improving reproductive health status.

Madhya Pradesh is one of those states of India where marriage at very young ages is nearly universal. According to 1991 population census, the mean age at marriage in Madhya Pradesh was 15.7 years which was second lowest in the country, next only

to Rajasthan. The National Family Health Survey carried out in the state during 1992-93 and 1998-99 also supports the above observation. A low mean age at marriage of females in the state has important implications for fertility levels and reproductive health status of women as practice of family planning methods in the state is not wide spread and whatever practice is there, it is oriented towards birth limitation rather than birth spacing.

Information about the age at marriage collected in the present survey also supports the observation that marriage at very young ages is nearly universal in Madhya Pradesh. The median age at marriage of females in the three development blocks and five towns covered under the survey has been estimated to be 15.73 years. Almost half of the women surveyed were found to be married before reaching the age of 15 years. In rural areas, these figures are even poorer - the median age at marriage is just 15.24 years and more than 52 per cent of the women surveyed were found to have got married before reaching 15 years of age. The situation appears to be marginally better in the urban areas where the female median age at marriage has been estimated to be 16.8 years and less than one third of the women surveyed were found to be married before reaching 15 years of age.

It is worth remarking here that under an act passed by the Government of India, female marriage below 18 years of age and male marriage below 21 years of age is a criminal offence. But the social, cultural, religious and traditional pressure in favour of marriage at ages younger than that prescribed in the Act is so strong that even the government Act declaring marriage at a young age has largely remained ineffective. This very fact may be judged from the fact that, in the present survey, nearly four out of every five women surveyed were found to be married before reaching the stipulated minimum age at marriage, i.e., 18 years; the corresponding proportions for rural and urban women surveyed being 81 per cent and 57 per cent respectively.

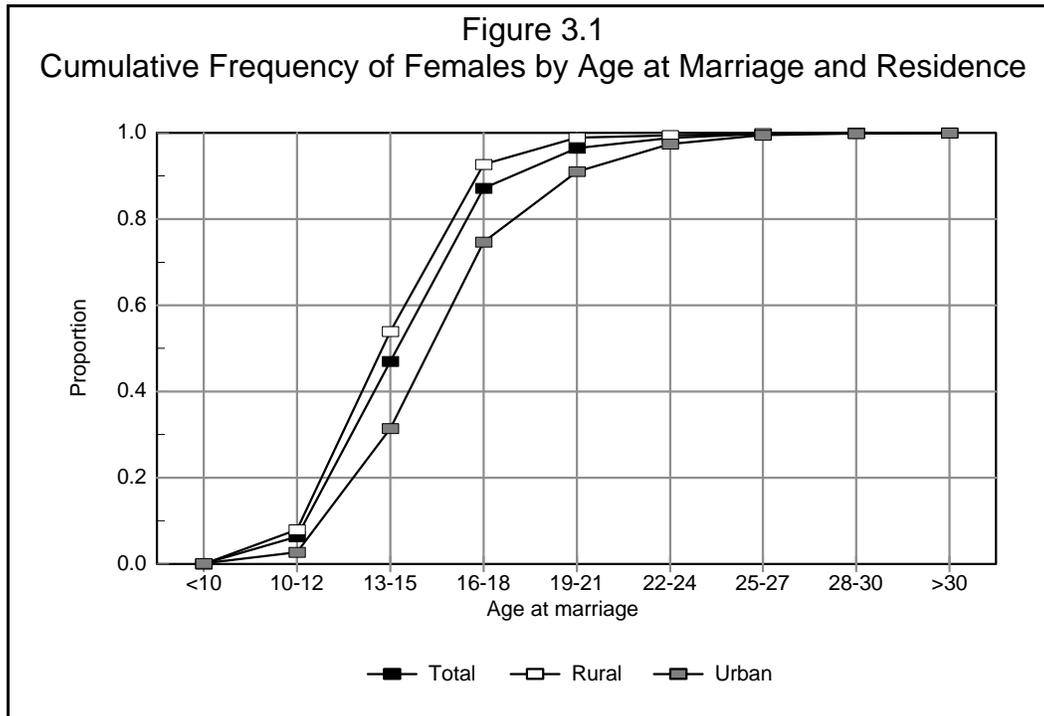


Table 3.1: Females married by age at marriage and residence.

Age at marriage in years	Total	Rural	Urban
10-12	6.28	7.96	2.57
13-15	40.65	46.02	28.73
16-18	40.15	38.78	43.18
19-21	9.33	6.15	16.37
22-24	2.34	0.51	6.42
25-27	0.95	0.43	2.09
28-30	0.20	0.14	0.32
> 30	0.05	0.00	0.16
All	100.00	100.00	100.00
Proportion of females married before reaching 18 years of age	73.70	81.00	57.30
Median age at marriage	15.73	15.24	16.79
N	2076	1475	601

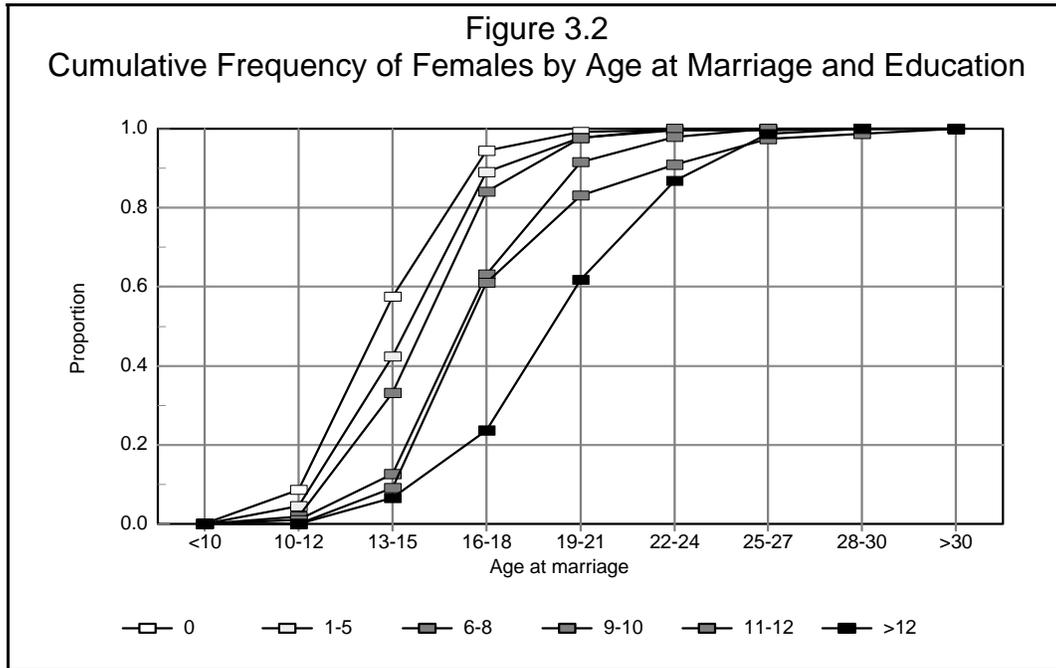


Table 3.2: Females married by age at marriage and level of education.

Age at marriage in years	Number of years in school					
	Never	1-5	6-8	9-10	11-12	> 12
10-12	8.56	4.55	1.87	1.05	0.00	0.00
13-15	48.86	37.88	31.31	11.58	9.09	6.58
16-18	36.92	46.59	50.93	50.53	51.95	17.11
19-21	4.79	8.71	13.55	28.42	22.08	38.16
22-24	0.47	1.89	2.34	6.32	7.79	25.00
25-27	0.24	0.00	0.00	2.11	6.49	11.84
28-30	0.08	0.38	0.00	0.00	1.30	1.32
> 30	0.00	0.00	0.00	0.00	1.30	0.00
All	100.00	100.00	100.00	100.00	100.00	100.00
Proportion married before reaching 18 years of age	83.50	73.50	67.30	38.90	32.50	14.50
Median age at marriage	15.04	15.99	16.49	17.75	17.90	20.57
N	1325	275	220	97	80	79

In fact, throughout northern India, there is a very old tradition of getting women married at an early age and there have been numerous attempts to check these marriages. The first such an attempt was made by the British in the nineteenth century. In Independent India also, there has been a lot of stress at the policy level to prevent young female marriages and many times the act banning marriage earlier than a certain specified age had been passed. But, despite all legal provisions, all these acts could never be implemented effectively because of some very strong social, cultural and religious traditions and values associated with the institution of marriage in the Indian society. Marriage, in India, is viewed more as a religious duty of the family patriarch than a biological necessity for the young generation.

Female age at marriage, however, has been found to be directly associated with the extent of schooling. The female median age at marriage has been found to be lowest in women with no schooling and highest in women with more than 12 years of schooling. There is a difference of more than five years in the median age at marriage of women with no schooling and median age at marriage of women with more than 12 years of schooling. Similarly, nearly 60 per cent of women with no schooling has been found to be married before reaching 15 years of age whereas this proportion for women with more than 12 years of schooling is less than 7 per cent. Alternatively, all but 15 out of every 100 women surveyed with no schooling were found to be married before reaching 18 years of age, the legal minimum age for female marriage. This proportion decreases with the increase in the number of years in school and it was only 14 per cent in women with more than 12 years of schooling. This shows that promoting female education may contribute towards increasing female age at marriage. But, female education appears to have any significant impact on female age at marriage only when the schooling is for at least 10 years. The current policy and approach of the government is to universalize primary education. Table 3.2 suggests that this approach may have only a limited impact in terms of increasing the female age at marriage.

An interesting feature of the institution of marriage in central India is the timing of the consummation of marriage. In many instances, completion of marriage rituals do not start the beginning of sexually active marriage life. Rather, the girl stays back in her parental house even after the marriage ceremony and is sent to in-law's house only after a certain period after marriage. This practice is particularly prevalent in situations where marriage is performed at an early age and appears to be the socio-cultural response to the fact that the sexually active life should begin only when both the girl and the boy have attained a certain physical and mental maturity.

Table 3.3: Age at marriage and the period between marriage and consummation of marriage.

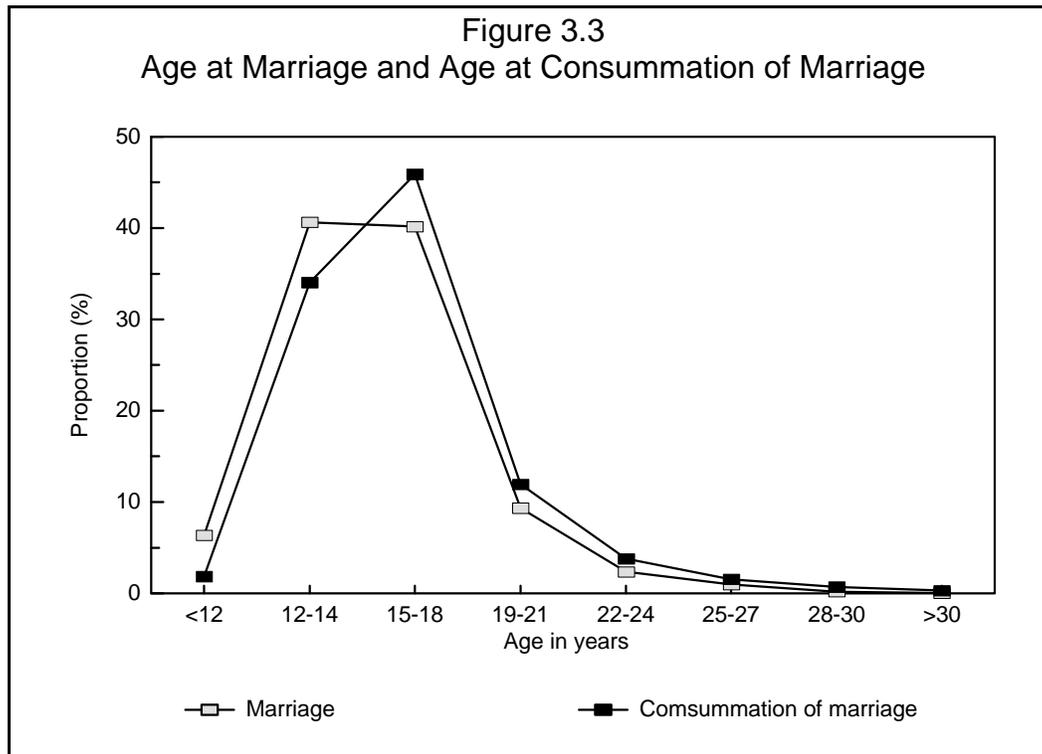
Period between marriage and consummation of marriage	Age at marriage				
	10-12	13-15	16-18	19-21	>21
Total					
With marriage	16.94	50.25	82.25	91.01	89.86
0-1 year	36.29	31.81	8.36	3.93	2.90
1-3 years	35.48	12.60	4.57	0.56	0.00
More than 3 years	11.29	5.34	4.83	4.49	7.29
All	100.00	100.00	100.00	100.00	100.00
N	135	848	827	192	75
Rural					
With marriage	16.36	49.68	79.54	92.41	85.71
0-1 year	37.27	31.11	9.27	7.59	7.14
1-3 years	36.36	13.65	6.18	0.00	0.00
More than 3 years	10.00	5.56	5.02	0.00	7.14
All	100.00	100.00	100.00	100.00	100.00
N	120	688	566	86	15
Urban					
With marriage	21.43	52.56	87.90	89.90	90.91
0-1 year	28.57	34.62	6.45	1.01	1.82
1-3 years	28.57	8.33	1.21	1.01	0.00
More than 3 years	21.43	4.49	4.44	8.08	7.27
All	100.00	100.00	100.00	100.00	100.00
N	15	180	261	106	60

Prevalence of this practice of consummation of marriage also implies that in the Indian social and cultural traditions, marriage from religious, cultural and traditional point of view is regarded as separate from the marriage from biological or reproductive point of view. Interestingly, age considerations have little relevance to performing religious, cultural and traditional rituals related to marriage as, in the traditional marriage institution, completion of religious, cultural and traditional marriage rituals does not automatically initiate the beginning of sexually active life.

The sexually active reproductive life starts only when there is consummation of marriage which, in the traditional society has always been a certain period after the completion of religious, cultural and traditional marriage rituals. In fact, the time of consummation of marriage is closely related with the age of the girl, the younger is the girl at the time of religious, cultural and traditional marriage rituals, the longer is the period between marriage and consummation of marriage. On the other hand, when the girl is old enough at the time of marriage then consummation of marriage takes place immediately after the marriage.

Table 3.3 provides the empirical evidence to the above observations. In only 17 per cent of the women surveyed who got married around 10-12 years of age, there was no gap in the marriage and the consummation of marriage as compared to more than 90 per cent of women surveyed who got married after 18 years of age. Alternatively, in nearly half of the women surveyed who got married around 10-12 years of age, the gap between marriage and consummation of marriage was at least one year or more as compared to only about 7 per cent in women surveyed who got married after 18 years of age. This means that, in the traditional Indian social system, marriage at younger ages of the girl and hence the boy does not automatically mean the beginning of sexually active married life and marriage at a young age is generally associated with a period of separation between the boy and the girl before the beginning of sexually active married life. The length of this period, as table 3.3 shows, depends upon the age at which the marriage rituals are completed, the younger is the age, the longer is the period of separation. Clearly, the Indian social and cultural system does permit marriage at any age but forbids the beginning of sexually active married life below a certain age.

These observations are brought out more clearly in figure 3.3. This figure shows that consummation of marriage, actually delays the entry of a female into the sexually active married life even after marriage. Information collected during the present survey indicates that nearly 47 per cent of the women interviewed were married before reaching the 15 years of age but only 36 per cent were consummated before 15 years of age. In other words, in about 11 per cent of the women interviewed, the sexually active married life started only after 15 years of age although they were married before 15 years of age. Even in ages beyond 15 years, it is clear from the figure that consummation of marriage delays the entry of a female into sexually active married life and hence lessens the exposure of the female to child bearing. This delay in the entry into sexually active married life has important implications to fertility and reproductive health.



The prevalence of the practice of consummation of marriage in the population surveyed shows that although religious, cultural and traditional considerations may encourage marriage at young ages, there is some inbuilt mechanism in the Indian social and cultural traditions that ensures that sexually active reproductive life is started only when the girl and the boy has attained a certain level of physical and mental maturity. This traditional thinking of viewing sexually active marriage separately from the religious, cultural and traditional marriage rituals has important implications from the view point of both regulation of fertility and reproductive health of the female. Since both fertility and reproductive health are dependent upon the beginning of sexually active marriage and not on the religious and cultural marriage rituals, it is the age at the consummation of marriage and not the age at religious and cultural marriage rituals which is important to any fertility reduction and reproductive health improvement programme. Unfortunately, very little attention has been paid to this very innovative feature of Indian marriage traditions in the whole approach for reducing fertility and addressing the women's reproductive health issues especially in rural areas where traditional thinking still dominates the way of life.

### 3.2 Levels of Fertility

Information on fertility was collected in two ways from the women in reproductive age group interviewed during the survey. First, every woman interviewed was asked about the total number of sons and daughters she was having at the time of the survey including those who had been married or those who were living separately. At the same time, all women interviewed were also asked about the number of sons and daughters who were born alive but who were no longer alive at the time of the survey for one reason or the other. On the basis of these information, total number of children ever born live per woman were calculated for each of the seven conventional five-year age groups and implied level of total fertility rate was calculated from the total number of children ever born per woman by applying the Relational-Gompertz method of estimating total fertility rate from children ever born data. The advantage of the Relational-Gompertz method of estimating total fertility rate from the children ever born data is that it does not require constant fertility assumption as is required by the commonly used P/F ratio method of fertility estimation suggested by Brass. Actual computations were done by using the Population Analysis Software (PAS) package developed and made available by the United States Bureau of Census (Arriaga, 1994).

In addition to information on children ever born, a detailed pregnancy history was also recorded from each female interviewed. The pregnancy history questions ascertained the year of every live birth and the year of termination of each pregnancy that did not result in a live birth. On the basis of this information along with the information on the age of the woman interviewed and her age at marriage, age-specific fertility rates, total fertility rate and other measures of fertility were calculated for 1-4 years prior to the survey, i.e., for the period 1995-98.

Age-specific fertility rates obtained from the pregnancy history data have been found to be associated with sampling errors as well as reporting errors such as misstatement of dates and events and even failure by the mother to recall the occurrence of pregnancies and births (Bogue and Bogue, 1970). It has been argued that while pregnancy history data provide useful information for estimating different measures of fertility in any population, they actually produce an underestimate of the true levels of fertility because of the under reporting of live births. The argument is the underestimate of fertility levels presumably results from the tendency of women, especially the older ones, to forget the births of children who have died in the first year of life, especially the children who have died immediately after the birth, during the early neonatal period.

Table 3.4: Levels of fertility.

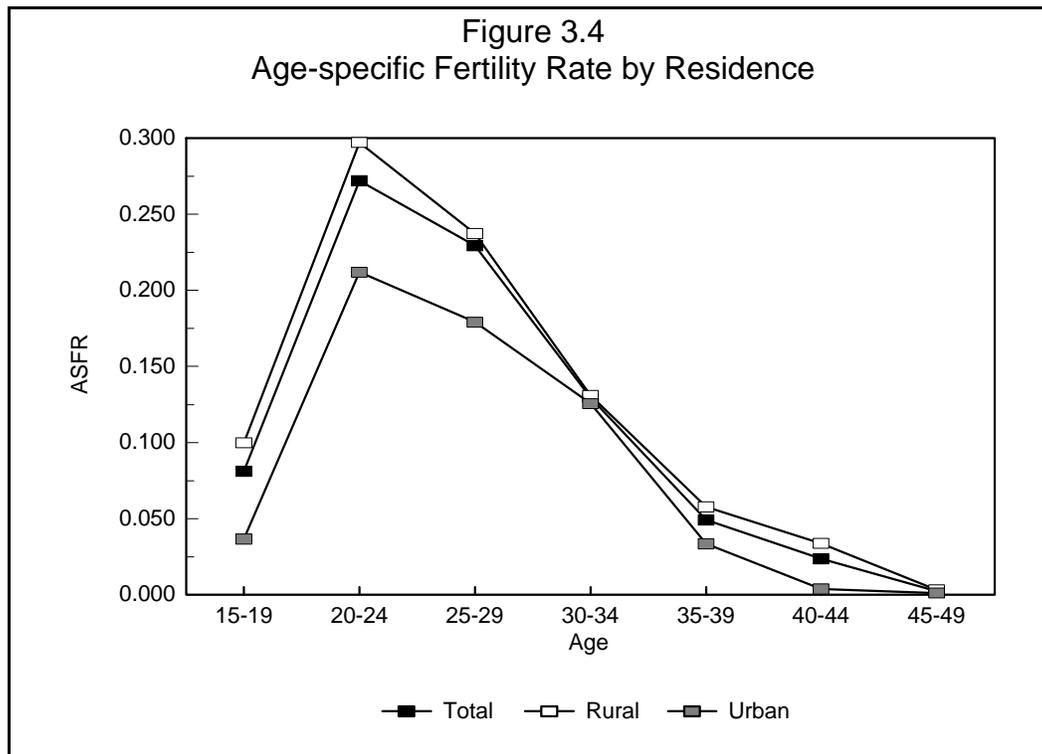
Fertility indicator	Total	Rural	Urban
Children Ever Born			
15-19	0.477	0.566	0.526
20-24	1.658	1.826	1.269
25-29	2.813	2.982	2.442
30-34	3.524	3.794	2.980
35-39	4.082	4.304	3.675
40-44	4.410	4.639	3.960
45-49	4.478	4.501	4.399
Age-specific fertility rate (1995-98)			
15-19	0.081	0.100	0.037
20-24	0.272	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

In order to address the problems associated with age-specific fertility rates obtained from the pregnancy history data, the age-specific fertility rates estimated from the pregnancy history data were adjusted on the basis of the age pattern of children ever born per woman through the application of the Relational-Gompertz model. The age-specific fertility rates estimated from the pregnancy history data were fed into the Relational-Gompertz model along with the children ever born per woman and new, adjusted estimates of total fertility rate were generated through the model. The exercise, however, revealed that there was not much difference between the unadjusted total fertility rate derived from the age-specific fertility rates obtained from the pregnancy history data and the adjusted total fertility rates obtained after correcting these rates on the basis of the information on children ever born per

woman. This shows that the error due to under reporting of births in the pregnancy history information collected during the survey was not very large.

Information about children ever born per woman, age-specific fertility rate and other macro measures of fertility are given in table 3.4 for total population as well as separately for rural and urban population surveyed. For the total population surveyed, the average total fertility rate has been estimated to be almost 4.4 births per woman while the average crude birth rate is estimated to be 34.57 live births per 1000 population for the period 1995-98 or about 1-4 years prior to the survey which shows that high fertility conditions prevail in the surveyed population. Moreover, fertility levels have been found to be higher in the rural areas as compared to the urban areas and this is expected. The total fertility rate has been found to be 1.5 births per woman less in urban areas as compared to rural areas. On the other hand, there are approximately 8 births less for every 1000 population every year in the urban areas as compared to the rural areas surveyed.

No information is available from any other source about levels of fertility in the development blocks and towns covered in this survey. Despite the fact that India has an uninterrupted record of decennial population census now spanning more than a century, the first attempt to prepare district level estimates of key demographic indicators was made only at the time of 1981 census and was repeated at the 1991 population census. The Registrar General of India also maintains a sample registration system which covers the whole country but this system is designed to provide estimates of selected demographic indicators at the state level only. On the other hand, the civil registration system is too poor to provide any reliable estimates of demographic indicators either at the local level or at the state or national levels and there has been little attempt to improve the civil registration system in the country. In recent years, two rounds of National Family Health Survey have been carried out throughout the country but these surveys have also been designed to provide estimates of demographic indicators only. In Madhya Pradesh, a comprehensive target couple survey was carried out in 1996 which covered nearly 93 per cent of the total couples in 15-49 years of age in the state. During this survey, information on total number of children ever born was collected from all the women contacted. (Shukla and Chaurasia, 1996). The children ever born data available from this survey has the potential of estimating levels of fertility even at the grass roots level - the village level. However, information available through the Madhya Pradesh Target Couple Survey has so far been used to estimate selected demographic indicators up to district level only (Chaurasia, 1999).



Although, there is a wide gap between fertility levels in the rural and urban populations surveyed, the age pattern of fertility is more or less identical in the two as may be seen from figure 3.4; the only difference being that the age pattern of fertility in the rural population is more leptokurtic around the age group 20-24 years while the age pattern of fertility in the urban population is relative more platokurtic around the same age group. This means that in the rural population, fertility is concentrated more in the age group 20-24 years than in the urban population. In both the populations, the peak fertility is achieved early in the reproductive period. Moreover, after achieving the peak fertility somewhere in the age group 20-24 years, the rural fertility decreases more sharply than the urban fertility up to the age group 30-34 years but the decline in this fertility slows down beyond the 30-34 years of age.

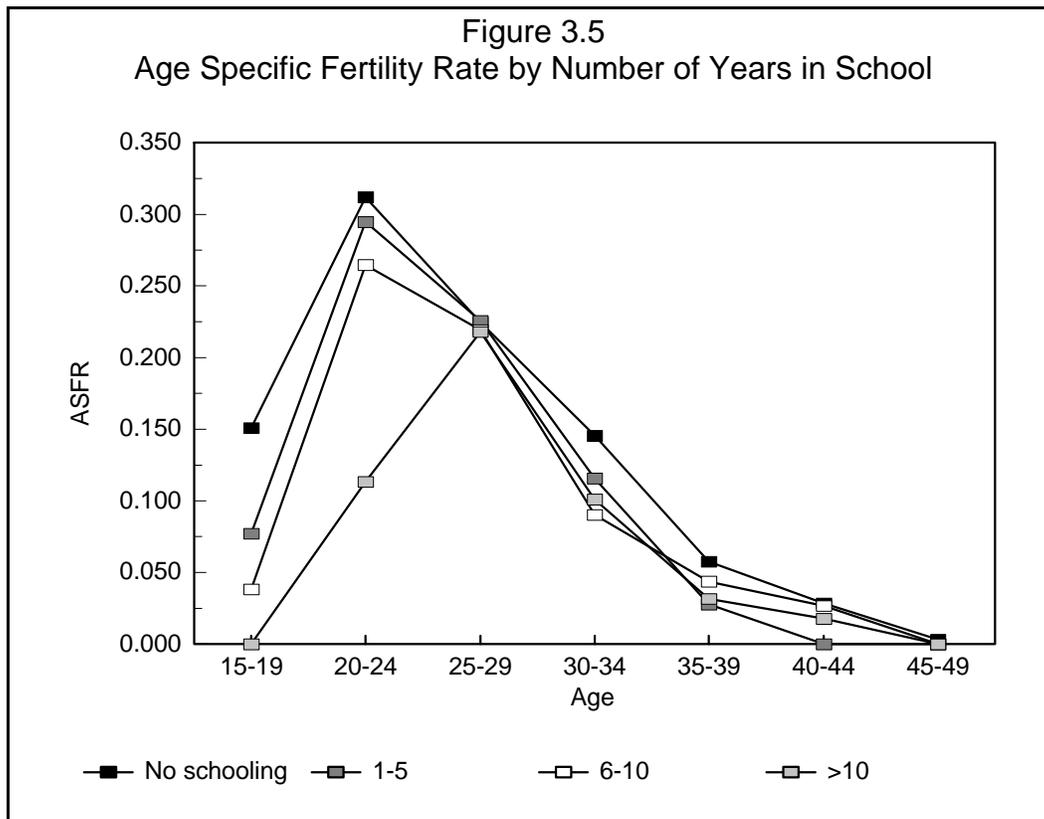
Fertility levels have also been found to decrease with the number of years of schooling of females. Highest total fertility rate of 4.6 births per woman has been obtained in women who have never been to school. By contrast, the total fertility rate in women who had more than 10 years of schooling has been estimated to be 2.6 births per woman. Total fertility rate has also been found to be low in women who

had 6-10 years of schooling in comparison to women who had never been to school. Clearly, education of the female has a strong impact on levels of fertility.

Table 3.5: Fertility differentials by level of education.

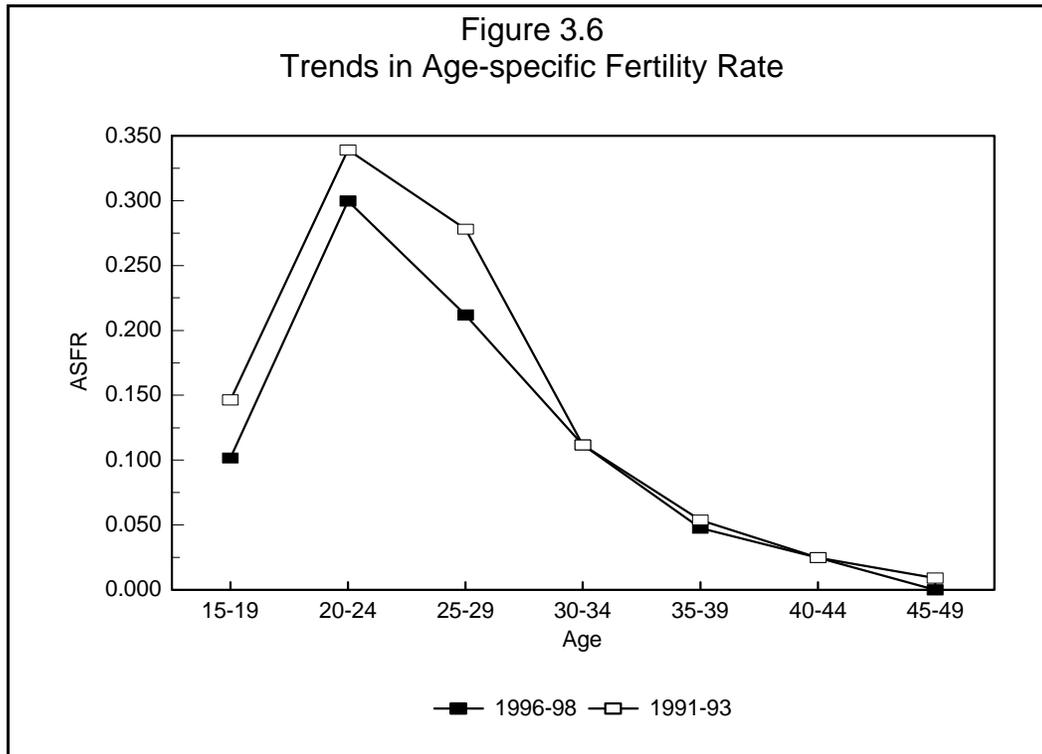
Indicator	Number of years in school			
	Nil	1-5 years	6-10 years	> 10 years
<b>Children Ever Born</b>				
15-19	0.883	0.463	0.126	0.000
20-24	2.035	1.685	1.310	0.492
25-29	3.078	2.808	2.364	1.768
30-34	3.847	3.473	2.769	2.252
35-39	4.381	4.002	3.333	2.845
40-44	4.461	4.685	4.150	3.429
45-49	4.402	4.923	5.600	3.875
<b>Age-specific fertility rate (1995-98)</b>				
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

Interestingly, the age pattern of fertility in women surveyed who had more than 10 years of schooling and women surveyed who had either less than or equal to 10 years schooling or no schooling at all has been found to be essentially different. In women with no schooling or in women having up to 10 years of schooling only, the peak fertility is achieved somewhere in the age group 20-24 years while in women having more than 10 years of schooling, the peak fertility is achieved in the age group 25-29



years only. This difference in the age pattern of fertility in females having more than 10 years of schooling and females having no or up to 10 years of schooling is largely due to the difference in age patterns of marriage in the two groups. In women with more than 10 years of schooling, the late marriage pattern prevails. There were very few women with more than 10 years of schooling who get married before 20 years of age. On the other hand in women with no schooling or in women having up to 10 years of schooling only, the early marriage pattern prevails. Most of these women have got married before reaching 20 years of age.

The pregnancy history data also makes it possible to assess the trend in the levels of fertility. Since pregnancy history data are usually associated with a number of reporting errors including errors related to digit preferences, the time series data on the annual number of live births obtained from the pregnancy history was smoothed by calculating three year moving averages and this average was used to estimate total fertility rates for two periods five years apart - 1991-93 and 1996-98.



A comparison of the total fertility rate for the period 1991-93 with the total fertility rate for the period 1996-98 obtained from the pregnancy history data indicates that the total fertility rate has declined during the five years between 1991-93 and 1996-98 in the surveyed population. For the total population surveyed, the total fertility rate decreased from about 4.8 births per woman during 1991-93 to about 4 births per woman during 1996-98. This decline in total fertility rate appears to be marginally sharper in the rural population than in the urban population surveyed. Moreover, a comparison of age-specific fertility rates during 1991-93 and 1996-98 indicates that most of the decline in fertility that has taken place in the surveyed population since 1991 has been confined to the age group 15-29 years. Beyond 30 years of age, there has been virtually little change in the age-specific fertility rate between 1991-93 and 1996-98. This implies that most of the fertility reduction that has taken place in the surveyed population during the last five years has been confined to younger generation. In other words, if the trend in the levels of fertility as well as the change in the pattern of age-specific fertility is any indication then some transition in the reproductive behavior of the population surveyed appears to be evident from the figure 3.6.

### 3.3 Contraceptive Use

Information related to the use of different contraceptive methods was collected from the women interviewed in two ways. First, all women interviewed who reported that they were not pregnant at the time of the survey were asked whether they or their husband were using any contraceptive method at the time of the survey. Those women interviewed who replied in negative were further asked whether they or their husband had ever used any contraceptive method in the past. Those women who reported that they or their husband had never used any contraceptive method currently as well as in the past were also asked about the reasons for not using any contraceptive method and whether they or their husband intended to use a contraceptive method. The choice of the contraceptive method was also asked from those women who reported that they or their husband were willing to use a contraceptive method.

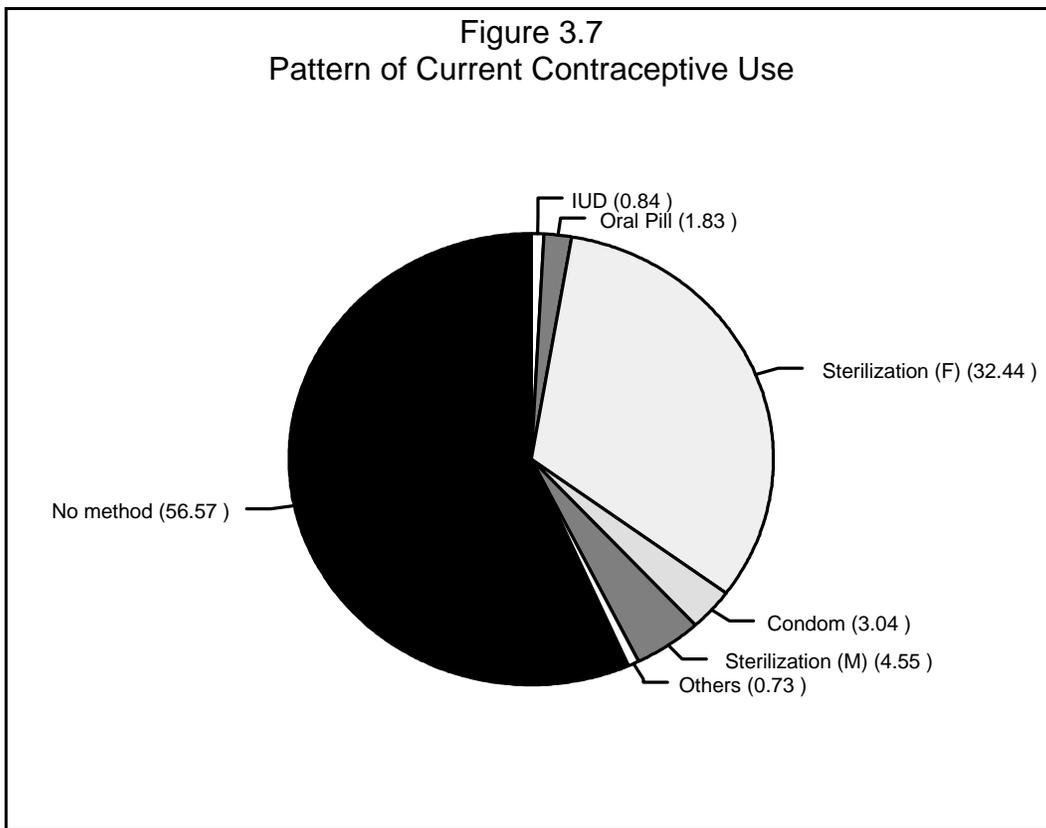


Table 3.6: Current contraceptive prevalence rate in surveyed population.

	Proportion of currently married women surveyed						
	All methods	CuT	Oral Pill	Sterilization		Condom	Other methods
				Female	Male		
Total	40.55	0.79	1.29	30.62	4.32	2.83	0.69
Residence							
Rural	35.56	0.49	0.77	28.18	4.57	1.19	0.35
Urban	49.76	1.44	2.39	35.09	3.35	6.22	1.28
Number of years in school							
Nil	37.77	0.23	0.55	30.53	4.67	1.25	0.55
1-5	42.91	0.75	2.99	31.72	4.10	2.99	0.37
6-10	41.75	0.65	2.59	27.83	3.56	6.15	0.97
>10	57.14	5.84	1.95	35.06	3.25	9.09	1.95
Number of living children							
1-2	28.24	1.27	2.29	16.92	2.80	4.20	0.76
3-4	53.56	0.69	0.92	43.81	5.39	2.06	0.69
5 and more	46.57	0.00	0.00	38.27	6.14	1.81	0.36
Age							
15-19	5.81	0.00	0.00	2.33	0.00	3.49	0.00
20-24	15.86	1.28	2.05	6.91	1.28	3.58	0.77
25-29	38.54	0.83	1.46	26.67	4.17	3.96	1.46
30-34	51.94	1.59	1.82	37.59	7.29	3.19	0.46
35-39	57.56	0.00	0.32	48.87	6.11	1.61	0.64
40-44	54.95	0.00	0.99	49.50	4.46	0.00	0.00
45-49	44.34	0.00	0.00	40.57	1.89	1.89	0.00

At time of the survey, more than 40 per cent of the women surveyed or their husband were found to be using one or the other method of contraception. This proportion was higher in urban (49.76 per cent) than in rural (35.56 per cent) population surveyed. More interestingly, almost 35 per cent of the women interviewed or their husband were found to be sterilized at the time of the survey. This means that more than 86

per cent of the contraceptive users identified at the time of the survey were sterilized. In other words, less than 14 per cent of the contraceptive users identified during the survey or slightly more than 5 per cent of currently married women in the reproductive age group surveyed were using a contraceptive method other than sterilization. Clearly, contraceptive practice in the surveyed population is nearly totally dominated by sterilization, especially female sterilization. Both male and female sterilizations are terminal methods of contraception. A straightforward interpretation that can be drawn from the table 3.6 is that contraceptive use in the surveyed population is virtually limited to just female sterilization. Rest of the contraceptive methods contribute only marginally to the total contraceptive practice. Moreover, this pattern of contraceptive use is more or less same in urban and rural population surveyed although, contraceptive prevalence rate in the rural population was less than that in the urban population surveyed.

Table 3.6 also presents the level of contraceptive use by various social and economic characteristics of the women interviewed. These variations in contraceptive use are on expected lines. Once again the dominance of females sterilization in contraceptive practice in the surveyed population is clear. It is only in women with more than 10 years of schooling that modern spacing or barrier methods of contraception account for more than 20 per cent of the total contraceptive use. In rest of the women surveyed, modern spacing methods of contraception account for less than 10 per cent of the total contraceptive use. This means that contraceptive use in the surveyed population is virtually directed towards women and that too for stopping or limiting the number of births and not for proper spacing between successive births. This feature of contraceptive use in the surveyed population is basically a reflection of the pattern of contraceptive use in the state as well as in the country as a whole.

The pattern of contraceptive use revealed through the present survey is similar to the pattern of contraceptive use at the state level obtained from the National Family Health Survey and through the service statistics of the National Family Welfare Programme. Efforts to promote contraception in India have been known for their bias towards terminal methods of contraception. This bias, in fact, reflects the official policy and basic orientation of the National Family Welfare Programme, the mainstay of fertility regulation efforts in the country, towards limiting the number of births thereby controlling the rapid population growth. It is only very recently that there has been some shift in the official approach towards family planning from terminal to spacing methods of contraception. However, this shift is yet to be reflected in the pattern of contraceptive use.

Table 3.7: Proportion (per cent) of women interviewed reporting use of contraception after successive live births.

	Birth Order					
	All	1	2	3	4	5 & more
Total	15.38	9.72	12.96	20.36	21.39	18.37
Residence						
Rural	10.54	6.25	6.37	17.14	16.55	10.67
Urban	29.44	19.42	28.85	30.77	38.10	43.48
Number of years in school						
Nil	11.10	3.14	6.00	15.34	15.67	18.13
1-5	12.30	6.00	11.29	14.29	30.43	5.88
6-10	21.43	10.75	21.74	37.50	41.67	8.33
> 10	37.50	30.23	42.86	60.00	20.00	33.33
N	1404	391	355	275	187	196
Method mix						
All	100.00	100.00	100.00	100.00	100.00	100.00
CuT	10.42	24.00	13.95	7.41	7.89	3.125
Condom	15.63	44.00	20.93	5.56	7.89	12.5
OP	9.38	32.00	6.98	3.70	13.16	0.00
Sterilization (F)	55.21	0.00	46.51	75.93	57.89	71.875
Sterilization(M)	5.21	0.00	6.98	3.70	10.53	3.125
Others	2.08	0.00	0.00	3.70	0.00	6.25
Do not recall	2.08	0.00	4.65	0.00	2.63	3.125

All women who had a live birth during five years prior to the survey were also asked whether they or their husband used any contraceptive method after birth of the child. Out of the total 1404 live births that occurred during the five years prior to the survey, in case of only about 15 per cent of the live births, the women interviewed reported that either they or their husband had used some contraceptive method. Contraceptive use after a live birth increases with the order of the birth at least up to birth order three irrespective of either the residential status of the female or the number of years she had been to school. This shows that very few couples surveyed

practiced contraception for planning successive births, especially for proper spacing between successive births, an observation which is also supported by a very low current contraceptive prevalence rate of barrier or spacing methods of contraception. This observations once again confirm that contraception, in the surveyed population is primarily used for limiting births and not for properly spacing successive births. In the reproductive health context, the relevance of the prevailing pattern of contraceptive use is extremely limited as unplanned pregnancies at very short intervals pose perhaps the greatest reproductive health hazard to women, especially in an environment of mass illiteracy, ignorance and poverty. In any case, the basis for the promotion of contraception in India has always been limiting births so as to reduce fertility and control the rate of population growth. It is only recently, that emphasis has been put on the health related aspects of reproduction. It is yet to be seen how this emphasis on reproductive health leads to a reshaping of contraceptive use patterns in the country.

The fact that contraception, in the surveyed population, is used primarily for limiting births is also confirmed by the method mix given in table 3.7 as in more than 60 per cent of the live births during the five years prior to the survey, the female or her husband opted for sterilization which means that the contraception was used for stopping further births. In fact, barring contraceptive use after first live birth and, to some extent, after the second live birth, all contraceptive use after successive live births in the surveyed population was meant for stopping births. There were very few women either who or their husband used contraception for spacing successive births.

Those women who were not pregnant at the time of the survey and who or their husband were not using any contraceptive method at the time of the survey were further asked whether they or their husband had ever used a contraceptive method any time in the past. Only about 2 per cent of these women responded that they or their husband had used some contraceptive method in the past but were not using any method at the time of the survey. Like the current use of contraception, the ever use of contraception also increased with the number of years the female was in school as well as by her residence. In any case, an extremely low ever use of contraception is again indicative of the fact that contraception, in the surveyed population, is used primarily for limiting births and not for birth planning or for proper spacing between successive births. In the urban population surveyed as well as in women with more than 10 years of schooling, there are some indications of birth planning and birth spacing as may be judged through a relatively higher prevalence of spacing methods of contraception but in the rural population as well as in women who have no

schooling, there is little evidence of any birth spacing or birth planning and virtually all the contraceptive practice was found to be confined to just stopping births only. Incidentally, rural women with no schooling constituted the majority not only in the sample surveyed but in the population as a whole.

Table 3.8: Proportion (per cent) of women surveyed reporting use of contraception in the past but not using any method currently.

	Ever use of contraception				
	All methods	CuT	Oral Pill	Condom	Others
Total	2.01	0.11	0.63	1.06	0.21
Residence					
Rural	0.55	0.00	0.14	0.27	0.14
Urban	6.85	0.46	2.28	3.65	0.46
Number of years in school					
Nil	1.14	0.16	0.33	0.16	0.00
1-5	3.10	0.00	0.78	0.78	0.78
6-10	2.04	0.00	0.00	2.72	0.00
>10	7.14	0.00	5.36	7.14	1.79

Reasons for not using any contraceptive method by those women surveyed or their husband who were neither pregnant at the time of the survey nor they or their husband used a contraceptive method currently as well as in the past are given in tables 3.9. The very fact that family planning has received only a casual attention by majority of the women either who or their husband had never used any contraceptive method may be judged from the fact that more than one third of the women surveyed could not identify any specific reason for not using any contraceptive method either by them or by their husband. This proportion, interestingly, has been found to be almost the same in rural and urban populations as well as in women with different number of years of schooling. On the other hand, more than 30 per cent of the women surveyed reported that they did not use any contraceptive method because they wanted more children. This proportion was very marginally higher in rural as compared to the urban women surveyed. Among other reasons, a reason of some magnitude is the opposition of the husband and other members of in-law family for

practicing contraception. In the urban areas, nearly 13 per cent women reported that main reason for never using a contraceptive method by them was the opposition of either their husband or their in-laws. In rural areas, about 8 per cent of the women interviewed cited opposition of the husband and in-laws as the reason for never using a contraceptive method.

Table 3.9: Reasons for never using any contraceptive method.

Reasons for never using a contraceptive method	Total	Rural	Urban
20. Wanted child	31.20	3.53	30.09
21. No knowledge	3.77	4.87	0.00
22. Never thought of regulating fertility	5.13	5.01	5.56
23. Husband not in favour	8.06	7.17	11.11
24. In-laws not in favour	1.15	1.08	1.39
25. Religion does not permit	1.88	1.76	2.31
26. Do not believe in regulating fertility	1.36	1.22	1.85
27. Others	10.05	9.61	11.57
28. Cannot say	37.28	37.75	36.11
All	100.00	100.00	100.00
N	1404	1040	360

The fact that contraceptive use in particular and reproductive behavior in general is given a somewhat casual attention is also confirmed by the fact that more than one fourth of the women who never used any contraceptive method and who were not pregnant at the time of the survey were not specific about their intentions and views regarding contraceptive use in future when it was specifically asked from them whether they or their husband wanted to use a contraceptive method. This indefiniteness about future contraceptive use was comparatively much higher in the rural women as compared to the urban women surveyed. In fact, only less than one fifth of the women interviewed were definite in their views about contraceptive use in future. Interestingly, the proportion of women having definite views about using a contraceptive method in future has also been found to be higher in rural areas than in urban areas; the reason probably being that the prevalence of contraception is low in the rural areas and hence the demand for contraception is higher in rural women. But the contraceptive method of choice remains female sterilization to nearly all women who responded that they wanted to use a contraceptive method in future. More than 85 per cent of the rural women reported that they wanted to get themselves

sterilized in future probably when they achieve the desired number and composition of children. This demand for sterilization as a means of stopping births was also found to be nearly the same in rural and urban women surveyed. Clearly, contraception in the surveyed population is viewed primarily as a means of stopping or limiting total number of births rather than as a means of maintaining proper spacing between successive births.

Table 3.10: Future intentions about contraceptive use by residence.

	Total	Rural	Urban
<b>Want to practice contraception</b>			
Yes	17.80	18.13	16.67
No	56.65	54.13	65.27
Cannot say	25.55	27.74	18.06
All	100.00	100.00	100.00
<i>Method of choice</i>			
<i>IUD</i>	2.89	0.75	10.26
<i>Oral Pill</i>	1.73	1.49	2.56
<i>Condom</i>	5.20	6.72	0.00
<i>Female Sterilization</i>	84.39	85.07	82.05
<i>Male Sterilization</i>	1.73	0.75	5.13
<i>Undecided</i>	4.05	5.22	0.00
<i>All</i>	100.00	100.00	100.00
<i>N</i>	170	134	36
<b>N</b>	<b>955</b>	<b>739</b>	<b>216</b>

Remark: Information in the table is confined to those women only who were neither pregnant nor using any contraceptive method at the time of the survey.

An interesting observation of table 3.10 is a very limited demand for temporary or barrier methods of contraception in the population surveyed. This limited demand for barrier methods of contraception, like the limited use of these methods, is largely due to the orientation of the government approach towards slowing down population growth by limiting number of births and consequent emphasis on terminal methods of contraception under the official National Family Welfare Programme. The government approach towards population control, right from its beginning, has focused on the need for limiting the number of births in order to reduce levels of fertility and hence curbing rapid population growth. Accordingly, the National

Family Welfare Programme, over the years, has developed and institutionalized operational procedures and frameworks for implementation that is directed to the promotion of terminal methods rather than spacing methods of contraception. It is only after the 1994 International Conference on Population and Development that there has been a shift in the official approach to addressing population related issues and some emphasis has now been given on promoting barrier methods of contraception under the programme but operational procedures and implementation frameworks necessary for promoting barrier methods of contraception are yet to be developed and institutionalized right up to the lowest level of programme implementation. At the grass roots level, the preference is still for the terminal methods of contraception. This preference towards terminal methods of contraception in the implementation of National Family Welfare Programme appears to have resulted in the community demand for these methods.

Table 3.11: Future intentions about contraceptive use by number of years in school.

	Number of years in school			
	Nil	1-5	6-10	> 10
Want to practice contraception				
Yes	16.83	14.96	23.81	19.61
No	57.93	55.12	56.38	56.86
Cannot say	25.24	29.92	47.62	23.53
All	100.00	100.00	100.00	100.00
<i>Method of choice</i>				
<i>IUD</i>	<i>0.94</i>	<i>9.52</i>	<i>2.94</i>	<i>8.33</i>
<i>Oral Pill</i>	<i>0.00</i>	<i>0.00</i>	<i>5.88</i>	<i>8.33</i>
<i>Condom</i>	<i>4.72</i>	<i>9.52</i>	<i>5.88</i>	<i>0.00</i>
<i>Female Sterilization</i>	<i>85.85</i>	<i>80.96</i>	<i>82.36</i>	<i>83.34</i>
<i>Male Sterilization</i>	<i>1.89</i>	<i>0.00</i>	<i>2.94</i>	<i>0.00</i>
<i>Undecided</i>	<i>6.60</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>
<i>All</i>	<i>100.00</i>	<i>100.00</i>	<i>100.00</i>	<i>100.00</i>
<i>N</i>	<i>106</i>	<i>19</i>	<i>35</i>	<i>10</i>
N	630	127	147	51

Remark: Information in the table is confined to those women only who were neither pregnant nor using any contraceptive method at the time of the survey.

Table 3.12 gives the distribution of women interviewed who were neither pregnant nor using any contraceptive method at the time of the survey but willing to use a contraceptive method by the number of living children they were having at the time of the survey. The intention to use some contraceptive method was highest in women having one or two living children. On the other hand, this intention was least in women having five or more children. This is expected as women with five or more living children are of older age cohort in general than the women with one or two living children.

Table 3.12: Future intentions about contraceptive use by the number of living children.

	Number of living children			
	0	1-2	3-4	5 and more
<b>Want to practice contraception</b>				
Yes	16.67	19.46	16.27	14.06
No	40.91	43.67	45.86	46.88
Cannot say	42.42	36.87	37.87	39.06
All	100.00	100.00	100.00	100.00
<i>Method of choice</i>				
<i>IUD</i>	<i>11.11</i>	<i>3.49</i>	<i>1.79</i>	<i>0.00</i>
<i>Oral Pill</i>	<i>0.00</i>	<i>3.49</i>	<i>0.00</i>	<i>0.00</i>
<i>Condom</i>	<i>11.11</i>	<i>4.65</i>	<i>7.14</i>	<i>0.00</i>
<i>Female Sterilization</i>	<i>77.78</i>	<i>81.40</i>	<i>87.50</i>	<i>89.47</i>
<i>Male Sterilization</i>	<i>0.00</i>	<i>2.33</i>	<i>1.79</i>	<i>0.00</i>
<i>Undecided</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>10.53</i>
<i>All</i>	<i>100.00</i>	<i>100.00</i>	<i>100.00</i>	<i>100.00</i>
<i>N</i>	<i>11</i>	<i>86</i>	<i>55</i>	<i>18</i>
<b>N</b>	<b>66</b>	<b>442</b>	<b>338</b>	<b>128</b>

Remark: Information in the table is confined to those women only who were neither pregnant nor using any contraceptive method at the time of the survey.

But the method of choice for future contraceptive use remains female sterilization. Interestingly, even women surveyed who had no living children at the time of the survey also expressed their intention to get sterilized although this number was just a very small proportion of the total number of women interviewed during the survey;

there were only 8 women who wanted to get sterilized even though they were not having any living child at the time of the survey. This dominance of female sterilization as a method of choice for future contraceptive use is, as already mentioned, is largely due to the approach adopted under the official National Family Welfare Programme which has so far almost entirely focused on terminal methods of contraception for reducing fertility levels. This focus on terminal methods of contraception under the National Family Welfare Programme has resulted in a near universal awareness of the community about sterilization. By contrast, knowledge about spacing methods of contraception, as is evident from the next section, remains poor.

In any case, the analysis of the unmet need for contraception in the surveyed population once again makes it very much clear that nearly all the contraceptive behavior in the population surveyed is oriented towards stopping births and limiting family size rather than properly spacing successive births. This orientation of the contraceptive behavior, as already stressed, is primarily due to the focus of the National Family Welfare Programme on reduction in birth rate through birth limitation in order to control the rapid population growth. Such an orientation of contraceptive behavior may be of some limited relevance in reducing levels of fertility. But, in the context of reproductive health of women, it is clear that the relevance of the current patterns of contraceptive behavior is of practically little relevance. In the context of reproductive health of women, it is important that relatively more emphasis is given to proper spacing between successive births than to limiting births.

The proportion of women who were not pregnant at the time of the survey and who never used a contraceptive method but intending to use a contraceptive method in future may be viewed as the measure of the unmet need for contraception in the surveyed population. By this account, the unmet need of contraception in the surveyed population has been found to be approximately 18 per cent. The unmet need of contraception is relatively low in urban than in rural women surveyed and this is expected. The recently conducted National Family Health Survey in the state has also estimated an unmet need of contraception of about 20 per cent in the state (International Institute for Population Sciences, 1999). Estimates of unmet need of contraception at the district and development block levels in Madhya Pradesh have been estimated from the information available through the Madhya Pradesh Target Couple Survey and refer to the year 1996 (Chaurasia, 1999). All these estimates suggest an unmet need of around 20 per cent for family planning in the state.

### 3.4 Knowledge of Reproductive Health Issues

As a theoretical perspective, knowledge about reproductive health issues is viewed as essential regarding attitudes towards these issues and appropriate action to addressing these issues, although addressing the reproductive health issues also depends upon the availability of necessary reproductive health services. Both knowledge and attitudes towards pertinent reproductive health issues and availability of appropriate reproductive health services are hypothesized to have an impact on the use of reproductive health services.

In the present survey, all women interviewed were asked a comprehensive set of questions to assess their knowledge about key reproductive health issues as well as their attitudes about some important aspects of reproductive health. These questions ranged from the knowledge about pregnancy detection to the use of family planning methods and the need for prenatal and post natal examinations. Probing was frequently used at the time of the interview to get as specific response from the respondents as possible.

Knowledge levels of the women interviewed on various issues related to fertility and reproductive health are summarized in table 3.13. The scenario that emerges from the table is that, barring a few exceptions, the women interviewed did not have very specific knowledge of various reproductive health issues. They had only superficial knowledge about these issues. This is expected as there are no well defined channels in the society for transmitting knowledge related to reproductive health issues. Under the official National Family Welfare Programme, information, education and communication activities are organized to enhance the knowledge level of the people but these activities, until very recently, have been confined to specific family planning methods and immunization of children only. Other reproductive health issues have got only a residual attention in these activities. Moreover, outside the official National Family Welfare Programme, there is virtually no systematic effort to enhance the knowledge levels of the community about reproductive health issues. Traditionally, knowledge about reproductive health issues has been transmitted from the older generation to the younger generation within the family. This transmission of knowledge, however, is generally casual in manner and lacks comprehensiveness. In most of the situations, the knowledge transmitted is outdated as the family elders, themselves, are ignorant about current trends in reproductive health and emerging reproductive health issues. On the other hand, relatively closed family system does not allow the younger generation to gather information on reproductive health issues from external sources.

Table 3.13: Knowledge about reproductive health issues by residence.

Issues	Total	Rural	Urban
How is pregnancy detected?			
Stopping of menses	93.10	94.99	88.80
Examination	4.54	3.06	7.89
Others	2.08	1.81	2.68
Cannot say	0.29	0.14	0.63
When in pregnancy probable			
Immediately before menses	9.22	9.32	8.99
During menses	4.49	5.49	2.21
Immediately after menses	9.75	7.51	14.83
One week after menses	17.76	17.39	18.61
15 days after menses	14.24	13.63	15.62
Any time	15.25	16.34	12.78
Others	0.53	0.56	0.47
Cannot say	28.76	29.76	26.50
Effect of breast feeding on the risk of pregnancy			
Increases the risk of pregnancy	12.48	11.40	14.92
Decreases the risk of pregnancy	50.34	49.24	52.86
No effect	17.07	16.19	17.30
Cannot say	20.12	22.54	14.92
Is pregnancy associated with complications?			
Yes	54.84	52.26	60.67
No	35.35	37.27	30.98
Cannot say	9.82	10.47	8.35
Effect of poor health of woman during pregnancy			
Increases complications	88.44	88.53	88.25
Decreases complications	1.79	1.53	2.38
No effect	4.06	3.82	4.60
Cannot say	5.71	6.12	4.76

Issues	Total	Rural	Urban
Is prenatal examination necessary?			
Yes, always	48.07	38.18	70.63
Only in case of complications	42.26	50.42	23.65
No	3.05	3.62	1.75
Cannot say	6.62	7.79	3.97
Which examinations should be carried out during prenatal period?			
Anaemia	66.52	59.30	82.86
Urine	45.45	34.53	70.16
Blood pressure	37.08	26.46	61.11
Examination of foetus	52.70	44.70	70.79
Is postnatal examination necessary?			
Yes	60.66	54.03	75.76
No	31.40	37.42	17.70
Cannot say	7.94	8.55	6.54
Is woman weakened due to repeated pregnancies?			
Yes	85.59	83.73	89.84
No	8.22	9.46	5.40
Cannot say	6.19	6.82	4.76
Can births be spaced?			
Yes	76.31	70.48	89.63
No	6.31	7.47	3.67
Cannot say	17.38	22.05	6.70
<u>How can births be spaced?</u>			
<i>By absenting</i>	<i>45.01</i>	<i>48.18</i>	<i>39.31</i>
<i>By absenting on selected days</i>	<i>35.28</i>	<i>36.06</i>	<i>33.88</i>
<i>By using family planning methods</i>	<i>78.92</i>	<i>73.84</i>	<i>88.04</i>
<i>N</i>	<i>1542</i>	<i>990</i>	<i>552</i>

Issues	Total	Rural	Urban
<b>Knowledge of spacing methods of family planning</b>			
Yes	66.67	58.73	84.76
No	33.33	41.27	15.24
<u>Family planning methods known</u>			
Condom	33.43	25.73	45.51
CuT	35.82	24.02	54.30
Oral pill	89.87	88.54	91.97
N	1378	844	534
<b>Can births be stopped?</b>			
Yes	94.64	93.88	96.37
No	3.28	3.89	1.89
Cannot say	2.08	2.23	1.74
<u>Methods known for stopping births</u>			
Female sterilization	94.92	94.27	96.12
Male sterilization	68.36	66.14	72.43
N	1961	1383	578
<b>Unwanted pregnancy should be continued or terminated</b>			
Continued	24.90	22.81	29.68
Terminated	21.32	20.45	33.02
Cannot say	50.82	56.75	37.30
<u>Is pregnancy termination easy?</u>			
Yes	31.08	23.81	41.35
No	59.76	64.63	52.88
Cannot say	9.16	11.56	5.77
N	502	294	208
All	100.00	100.00	100.00
N	2076	1475	601

Remarks: *In case of examinations during prenatal period, multiple responses were given by the respondents.*

More specifically, nearly all women surveyed reported that stopping of menses is the indication that conception had taken place, although a relatively higher proportion of urban women interviewed responded that pregnancy could best be determined only through necessary examination. On the other hand, knowledge about the most probable period when conception can take place was found to be poor among the women interviewed. Nearly 30 per cent of the women interviewed had virtually no idea about when the conception could take place. In addition, another 15 per cent of the women responded that conception could take any time while another 14 per cent of women reported that the most likely period of conception was 15 days after the menses. Moreover, there is little difference in the knowledge levels of urban and rural women surveyed. Probably and so obviously, this lack of knowledge about the most like period of conception may be one of the reasons that women interviewed paid little attention towards planning the births that they had.

All women interviewed were also asked about the effect of breast feeding on the risk of pregnancy. The fact that breast feeding reduces the risk of pregnancy, however, was not very well known to the women interviewed. Only about 50 per cent of the women interviewed reported that breast feeding reduced the risk of pregnancy whereas another one fifth of the women interviewed had no idea about the effect of breast feeding on the risk of pregnancy. According to the opinion of the remaining women interviewed, breast feeding either had no effect on the risk of pregnancy or it resulted in an increase in this risk.

Interestingly, only about half of the women interviewed reported that pregnancy was always associated with some type of complications. By contrast, more than 35 per cent of the women interviewed were of the view that pregnancy was not associated with any complications. These women, obviously, do not perceive common complaints and problems associated with pregnancy as complications and problems associated with pregnancy that need specific attention and care. Moreover, concern about complications during pregnancy has been found to be relatively higher in urban women interviewed as compared to their rural counterpart.

But, nearly all women interviewed, whether living in areas or in urban areas, were unanimous about the very fact that poor health status of woman resulted in increased complications during pregnancy. Only 4 per cent of the women interviewed were of the view that health of the woman did not have any relationship with the complications during pregnancy whereas another six per cent had no idea about the linkages between health status and complications during pregnancy.

Knowledge of the women interviewed about the need for prenatal examination was also not uniform. Only less than half of the women interviewed reported that the prenatal examination must be carried out in all pregnancies whereas, a larger proportion of women interviewed were of the view that prenatal examination should be carried out only when there were some complications. The rural-urban gap in the knowledge of the need of prenatal examination has however been found to be substantial. More than 71 per cent of the urban women were of the view that prenatal examination must be carried out in all pregnancies. This proportion was only 38 per cent among the rural women interviewed. By contrast, more than 50 per cent of the rural women interviewed were of the view that prenatal examination should be carried out only when there were complications during the pregnancy.

All women interviewed were also asked about specific examinations which should be carried out during the prenatal period. The response received indicates that knowledge about different common examinations to be carried out during the prenatal period was not universal. The most popularly known examination during the prenatal period was the examination for anaemia. More than two third of the women interviewed reported that anaemia should be checked during pregnancy. By contrast, slightly more than one third of the women reported the need for checking up the blood pressure during pregnancy. The survey also revealed a very substantial gap in the knowledge of examinations to be carried out in rural and urban areas. In the rural women, the level of knowledge about the examinations to be carried out during the prenatal period has been found to be very poor as compared to the knowledge levels in the urban women interviewed. Similarly, only about 54 per cent of the rural women interviewed expressed the need of post natal examination after each delivery as compared to more than 75 per cent of the urban women interviewed.

On the contrary, the knowledge about the fact that repeated pregnancies weaken the female was almost universal among the women interviewed. Only less than 10 per cent of the women interviewed were of the opinion that repeated pregnancies did not weaken the woman where as about 6 per cent of the women interviewed had no knowledge about the role of spacing between successive births on the health status of the woman.

Like the knowledge about issues related to pregnancy and delivery, the knowledge of women interviewed about matters related to contraceptive use was not universal. This is despite the fact that enhancing the knowledge and hence promoting the use of family planning methods has been the focus area of the National Family Welfare

Programme in the country right from its inception. Thus only about three fourth of the women interviewed reported that births could be spaced; this proportion being particularly low in the rural areas where more than 22 per cent of the women interviewed had no idea about spacing between successive births. By comparison, almost 90 per cent of the urban women interviewed knew that births could be spaced. But majority of those women interviewed who knew that births could be spaced also had the knowledge that use of family planning methods could help in spacing births.

Those women who reported that births could be spaced by the use of family planning methods were further asked to name the family planning methods they knew that could help in spacing births. Poor knowledge about spacing methods of family planning can be judged by the fact that only 33 per cent of the women interviewed who reported that births could be spaced by the use of family planning methods named condom as a method of spacing births while 36 per cent named the intra-uterine device CuT. These proportions were even lower in the rural women surveyed where only about one fourth of the women knew about condom and CuT as family planning methods for spacing births. Even in the urban areas, only about half of the women interviewed reported that condom and CuT were the family planning methods used for spacing between births.

By contrast, the knowledge of oral pill as a method for spacing births was much more widespread in the women interviewed as nine out of every ten women interviewed were knowing that births could be spaced by the use of oral pills. Moreover, unlike the gap in the knowledge of condom and CuT in rural and urban women interviewed, there was very little difference in the knowledge of oral pill as a family planning method for spacing births between rural and urban areas.

The women interviewed were also asked whether it was possible to stop births all together. The knowledge of women interviewed about the fact that births could be stopped through the use of family planning methods was nearly universal. More than 95 per cent of the women interviewed were knowing that births could be stopped all together through sterilization. In case of male sterilization, this proportion was found to be 68 percent. Moreover, the gap in this knowledge between rural and urban women interviewed was also found to be very small.

Finally, all the women interviewed were asked whether the unwanted pregnancy should be continued or terminated. Nearly one fourth of the women interviewed were of the view that it should be continued while about 22 per cent were of the opinion

that the unwanted pregnancy should be terminated; remaining women had no idea about what to do with the unwanted pregnancy. The proportion of women who were not definite about what to do with the unwanted pregnancy was found to be substantially higher in the rural population as compared to the urban population surveyed. This indicates that urban women interviewed were comparative more specific and more definite about their fertility preferences as compared to their rural counterpart.

But, majority of the women interviewed did not regard termination of pregnancy as an easy option. Only about 31 per cent of those women interviewed who were of the view that unwanted pregnancy should be terminated was of the opinion that pregnancy termination was an easy process while more than 60 per cent were of the view that pregnancy termination was not easy. The proportion of women who were of the view that pregnancy termination was not easy was higher in rural as compared to the urban women interviewed. This is expected as nearly all the pregnancy termination facilities are concentrated in the urban areas. The above observations suggest that a very small proportion of the women interviewed had a favourable perception about terminating the unwanted pregnancy. In general, the prevailing perception in the women interviewed, either in terms of the attitude towards the unwanted pregnancy or the perception about the difficulties involved in getting a pregnancy terminated, is such that most of the unwanted pregnancies are continued willingly or unwillingly and result in live births thereby increasing the levels of fertility. The inclination of most of the women interviewed to continue even an unwanted pregnancy gets support from the family, social and cultural context in which children have got a high value in the society and producing children is regarded as an indication of womanhood.

Having specific as well as detailed knowledge of particular health issue has been hypothesized to be a precondition for an effective addressing of that issue. However, the scenario that prevailed in the surveyed population in this context indicates that the knowledge of the women interviewed about the reproductive health issues was, at best, partial and incomplete. It was not comprehensive in nature. Moreover, a number of misconceptions such as breast feeding increases or has no effect on the risk pregnancy, most likely period of getting pregnant and complications associated with pregnancy appeared to be widely prevalent in the women interviewed. This imperfect knowledge and misconceptions about reproductive health issues obviously have important implications for attention and care during pregnancy and at the time of delivery.

### 3.5 Attention and Care during Pregnancy and Delivery.

Majority of the reproductive health issues of women are closely associated with pregnancy and delivery. As such, attention and care during pregnancy and at the time of delivery is regarded as one of the important dimensions of the reproductive health situation. As such, adequate attention and care during pregnancy as well as at the time of the delivery has been identified as one of the essential components of any reproductive health improvement programme. In line with the above wisdom, a core package of essential services during pregnancy and at the time of delivery has been developed.

In the present survey, detailed information about attention and care during pregnancy was collected for all pregnancies that occurred within five years prior to the survey. This information included examination during the antenatal period, immunization against tetanus, iron supplementation, blood pressure measurement and urine examination. These examinations constitute the core of the essential package of services during pregnancy. The responses received from the women interviewed are compiled in table 3.14 which gives a comprehensive picture of the extent of attention and care received by the women interviewed. The information given in the table is limited to only those women interviewed who had a live birth during five years prior to the survey.

A review of table 3.14 indicates that, in general, majority of women interviewed did not receive even the minimal attention and care during pregnancy. The situation appears to be particularly poor in the rural areas where essential reproductive health care was limited to only a small proportion of women except for one or two exceptions. In the urban areas, the situation was relatively better, but, since it is the rural population that constitutes the majority of the population, the extremely unsatisfactory situation in the rural areas is well reflected in the poor situation for the whole population.

Among the five components of basic reproductive health care during pregnancy, the only component, which was found to be somewhat satisfactory during the survey is the immunization of the female for preventing neonatal tetanus in the new born and iron supplementation to the female. More than 64 per cent of the women interviewed informed that they had received doses of Tetvac; the proportion being almost 59 per cent in the rural areas and 81 per cent in the urban areas. Similarly, more than 52 per cent of the women interviewed reported that they had received iron folic acid tablets during the pregnancy.

Table 3.14: Attention and care during pregnancy.

Particulars	Total	Rural	Urban
<b>Antenatal checkup</b>			
Yes	30.27	21.65	55.28
No	65.10	72.61	43.33
Do not recall	4.63	5.75	1.39
<u>Time of first antenatal checkup</u>			
First trimester	40.50	29.31	51.09
Second trimester	23.46	24.71	22.28
Third trimester	24.86	35.06	15.22
At the time of delivery	5.87	6.90	4.89
Do not recall	5.31	4.02	6.52
<u>Number of checkup</u>			
One	14.25	20.69	8.15
Two	23.46	27.01	20.11
Three	18.44	25.29	11.96
More than three	39.66	22.99	55.43
Do not recall	4.19	4.02	4.35
N	425	226	199
<b>Immunization against Tetanus</b>			
Yes	64.46	58.81	80.83
No	30.41	35.06	16.94
Do not recall	5.13	6.13	2.22
<u>Number of doses received</u>			
One	5.93	7.41	2.90
Two	93.24	91.36	97.10
Do not recall	0.83	1.23	0.00
<u>Time of first dose</u>			
First trimester	16.84	20.63	9.06
Second trimester	70.70	66.31	79.71
Third trimester	12.46	13.05	11.23
N	905	614	291

Particulars	Total	Rural	Urban
<b>Iron tablets received</b>			
Yes	53.28	46.74	72.22
No	41.10	46.84	24.44
Do not recall	5.63	6.42	3.33
<u>Number of tablets received</u>			
30 or less	48.62	48.19	49.39
30-60	8.73	9.05	8.16
60-100	42.36	42.31	42.45
Do not recall	0.29	0.45	0.00
N	748	488	260
<b>Blood pressure checked during pregnancy</b>			
Yes	24.57	16.86	46.94
No	69.52	76.53	49.17
Do not recall	5.91	6.61	3.89
<u>When was Blood Pressure checked?</u>			
First trimester	30.53	21.37	38.31
Second trimester	15.79	16.03	15.58
Third trimester	25.96	35.11	18.18
At delivery	21.40	20.61	22.08
Do not recall	6.32	6.87	5.84
N	345	176	169
<b>Urine examined during pregnancy</b>			
Yes	18.02	9.67	42.22
No	72.36	78.93	53.33
Do not recall	9.62	11.40	4.44
All	100.00	100.00	100.00
N	1404	1044	360

Remark: The table gives proportion (per cent) of those women interviewed who had a live birth during the five years prior to the survey.

Barring immunization against tetanus and iron supplementation, the situation in the other three components of basic reproductive care was found to be extremely poor. For example, only 22 per cent of the rural women interviewed reported that they had an antenatal examination during the pregnancy. Moreover, in more than 30 per cent of the women who reported to have an antenatal checkup, the checkup was done either at the third trimester of pregnancy or at the time of delivery while only 58 per cent of the women reported that they were examined at least three times during the pregnancy. Similarly, only about one fourth of the women interviewed informed that their blood pressure was checked during the pregnancy while only 18 percent reported that their urine was examined.

Another important observation of table 3.14 is some sharp difference between the extent of care and attention in rural and urban areas. It is clear from the table that attention and care during pregnancy was substantially better in the urban as compared to the rural areas. This is expected as most of the public and private health care facilities are located in the urban areas. In the rural areas, there is a near total lack of institutional health care facilities where emergency obstetric care facilities are available round the clock. In an attempt to extend the public health care delivery system to every corner of the state, the government has established sub-health centres but most of the time these health centres remain closed as the health care providers posted at these centres remain on tour to villages covered by these centres and there is no body to take care of the emergency cases that arrive at these centres. On the other hand private health care facilities are almost absent in the rural areas.

Table 3.15: Place of delivery.

	Home	Government hospital	Private hospital	Others	All	N
Total	87.64	9.44	2.32	0.58	100.00	6196
Residence						
Rural	93.90	4.84	0.56	0.67	100.00	4486
Urban	71.23	21.34	6.96	0.35	100.00	1710
Schooling						
Nil	92.40	6.92	0.69	0.59	100.00	4230
<= 10	81.57	15.64	2.23	0.56	100.00	1611
> 10	57.19	20.00	22.25	0.56	100.00	355

In addition to information about attention and care during pregnancy, all the women interviewed were asked about the place of delivery and the person who conducted the delivery. This information was collected for all the pregnancies the female had in her life. It may be seen from table 3.15 that home delivery was the norm in the surveyed population. More than 87 per cent of the deliveries were found to be conducted at home; this proportion being almost 90 per cent in the rural areas. Even in the urban areas, more than 70 per cent of the deliveries were found to be conducted at home. However, preference for hospital as the place for delivery increases sharply with the increase in the number of years of schooling of women interviewed. In women with more than 10 years of schooling, more than 42 per cent of the deliveries were conducted at hospital, either private or government, whereas this proportion was only 7 per cent in women who had never been to school.

Table 3.16: Delivery conducted by.

	Family member	Untrained <i>Dai</i>	Trained <i>Dai</i>	Nurse/ Doctor	All	N
Total	41.05	30.18	11.26	16.47	100.00	6196
Residence						
Rural	44.73	38.02	6.98	6.70	100.00	4486
Urban	31.38	13.70	19.96	34.71	100.00	1710
Schooling						
Nil	45.53	33.97	10.30	9.00	100.00	4230
<= 10	33.58	25.88	14.53	25.26	100.00	1611
> 10	21.69	4.51	7.89	65.63	100.00	355

Similarly, most of the deliveries were found to be conducted by untrained persons - a family member or an untrained traditional birth attendant. Only about 28 per cent of the deliveries were found to be conducted by trained persons - a trained traditional birth attendant or a nurse or a doctor. In the rural areas and in women with no schooling, this proportion was nearly 83 per cent and 80 per cent respectively. By contrast, in the urban areas, only about 45 per cent of the deliveries were found to be conducted by untrained persons whereas more than one third of the deliveries were conducted either by a nurse or a doctor. In women with no schooling, only 9 per cent of the deliveries reported were conducted either by a nurse or a doctor as compared to almost 66 per cent in women with more than 10 years of schooling.

### 3.6 Health Status of Women Interviewed

All women interviewed during the survey were asked about the knowledge of diseases specific to women and specific health problems that they were having at the time of the survey. They were also asked whether they had the knowledge of any diagnostic and treatment facilities available in their neighbourhood where women's health problems, especially complications during pregnancy could be examined and treatment could be provided. The neighbourhood in asking these questions was defined as the village in the rural areas and the mohalla in the urban areas. The essential idea behind using the term neighbourhood in asking about the knowledge of health care facilities was that of accessibility. The women interviewed were asked about some treatment and diagnosis facility where they could go easily, all the time and without compromising significantly their routine work schedule.

Those women who reported knowledge of some treatment and diagnostic facility for women's diseases, especially complications during the pregnancy, in their neighbourhood were also asked whether they had attended the facility concerned or not. Moreover, all women interviewed were also asked whether they had the addiction of smoking and whether they had the knowledge of self breast examination and the PAP smear test. Those women interviewed who reported that they had the knowledge of self breast examination and PAP smear test were also asked whether they had ever carried out self breast examination and had PAP smear test done for detecting malignancy.

In addition to the questions on the health problems specific to women, the women interviewed were also asked about any complications they had during the pregnancies they had in the past. This information, however, was collected from only those women who had a live birth during the five years prior to the survey. Detailed information was also collected about the nature of complications during the pregnancy from those women interviewed who reported that they had some complications in any of the pregnancy they had during the five years prior to the survey. Moreover, all the women who had a live birth during the five years prior to the survey were also asked about any problems and complications they had during the postnatal period - the period immediately after the delivery. Those women interviewed who reported that they had some problems and complications during the postnatal period were also asked in detail about the nature of the complications or any specific health problems during the postnatal period and the treatment they had taken for addressing these complications and problems.

Table 3.17: Health problems reported by women surveyed.

Problem	Total	Rural	Urban
Extreme fatigue and weakness during household work	56.37	56.25	56.64
White discharge with bad smell and itching	29.62	29.00	31.04
Menstrual problems	18.92	16.98	23.36
Frequent urination and burning during last three months	5.59	6.50	3.52
Pain and bleeding during passing of stool	1.61	1.61	1.60
Continued discharge	5.74	5.80	5.60
Pain in lower abdomen, fever and discharge	19.16	15.44	27.68
N	2076	1475	601

Remarks: *Figures given in the table are percentages. They do not add up to 100 as women interviewed reported more than one complications.*

Information about specific health problems of women interviewed is given in table 3.17. More than half of the women surveyed reported that they felt extreme fatigue and weakness during routine household work whereas nearly 30 per cent of the women interviewed reported that they were suffering with the problem of white discharge with bad smell and itching. Problems related to menstruation were reported by almost one fifth of the women surveyed and nearly same proportion of women interviewed reported pain in lower abdomen, fever and discharge. In general, proportion of women reporting a health-related problem was found to be marginally higher in urban areas as compared to rural areas with a major exception of frequent urination and burning during the last three months which was found to be more common in rural women than in urban women.

Information about health problems specific to women given in table 3.17 suggests that majority of the women surveyed were having one or the other type of health problem. This implies that the women's diseases burden in the surveyed population was very high. This abnormally high women's diseases burden in the population surveyed appears to be the result of a number of factors including lack of knowledge about women's diseases and absence of necessary diagnostic and treatment facilities in the neighbourhood, especially in the rural areas.

In addition to health problems specific to women, all women interviewed were also asked about their smoking habits. Smoking, in the surveyed women was virtually not prevalent as only less than 5 per cent of the women surveyed reported that they were addicted to smoking. On the other hand, examination such as self breast examination and test like PAP smear for detecting malignancy were virtually unknown to the women surveyed. Only about 3 per cent of the women surveyed reported that they heard about self breast examination while just 0.73 per cent reported any knowledge about the PAP smear test while an infinitesimal proportion of women interviewed reported that they had carried out the self breast examination or had got the PAP smear examined for the detection of malignancy.

All women who had a live birth during the five years prior to the survey were also asked about the complications they had and problems they faced during pregnancy and subsequently during the postnatal period. Thirty per cent of the women interviewed who had a live birth during the five years prior to the survey reported that they had some complications during pregnancy. The proportion of women interviewed reporting complications during pregnancy was almost same in rural and urban areas.

Main complications during pregnancy reported by the women interviewed included weakness and fatigue (62 per cent), swollen feet (31 per cent), anaemia (29 per cent) and backache (27 per cent). Other complications reported by at least 10 per cent of the women interviewed included high fever and discharge with bad smell.

In general, the prevalence of different types of complications during pregnancy was not found to be very different in rural and urban women interviewed. The only exception to this similarity was backache. More than 40 per cent of the urban women interviewed reported backache as a complication during the pregnancies they had in the five years prior to the survey as compared to only 23 per cent by the rural women interviewed. This difference in the prevalence of backache in rural and urban women interviewed appears to be due to the difference in physical work done by a rural woman as compared to an urban woman. Majority of the rural women work in family fields in addition to their normal household work. By contrast, urban women have extremely limited physical work in addition to the routine household activities. At the same time, this difference in the reporting of backache by rural and urban women may also be due to the difference in the perception of backache as a complication associated with pregnancy. The rural women might not have perceived backache as a problem associated with pregnancy.

Table 3.18: Complications during pregnancy.

Complications during pregnancy	Total	Rural	Urban
Yes	30.20	30.17	30.28
No	61.89	60.06	67.22
Do not recall	7.91	9.77	2.50
All	100.00	100.00	100.00
<i>Type of complications</i>			
<i>Bleeding in first trimester</i>	2.03	2.68	0.00
<i>Bleeding in second trimester</i>	3.30	3.68	2.11
<i>Bleeding in third trimester</i>	4.82	5.02	4.21
<i>Weakness and fatigue</i>	62.22	61.92	63.16
<i>High blood pressure</i>	7.36	6.02	11.58
<i>Swollen feet</i>	31.23	32.45	27.37
<i>High fever</i>	10.91	11.04	10.53
<i>Discharge with bad smell</i>	10.66	10.70	10.53
<i>Backache</i>	27.41	23.08	41.05
<i>Pain in lower abdomen</i>	16.24	15.05	20.00
<i>Anaemia</i>	28.68	28.43	29.47
<i>Convulsions</i>	2.54	2.68	2.11
<i>Vision problem</i>	1.78	1.67	2.11
N	424	315	109
N	1404	1044	360

Remarks: *Figures in the table are percentage of women interviewed reporting complications. They do not add up to 100 as women interviewed reported more than one complications.*

All women interviewed who had a live birth during the five years prior to the survey were also asked whether they had any complication or health-related problem in the period immediately after the delivery. Nearly 15 per cent of the women interviewed reported that they had some complications and problems after the delivery. The proportion of women interviewed reporting complications after delivery was higher in rural areas (15.33 per cent) as compared to the women interviewed in the urban areas (11.39 per cent). In women of rural areas, complications like discharge with bad smell and problems in urination were found to be more prevalent but in women of urban areas interviewed, the problem of pain in abdomen was found to be relatively more prevalent.

Table 3.19: Complications and problems after delivery.

Complications after delivery	Total	Rural	Urban
Yes	14.32	15.33	11.39
No	76.35	73.66	84.17
Do not recall	9.33	11.01	4.44
All	100.00	100.00	100.00
<i>Type of complications</i>			
<i>Too much bleeding</i>	26.29	26.17	26.92
<i>Discharge with bad smell</i>	41.14	42.95	30.77
<i>Infected wound</i>	1.71	2.01	0.00
<i>Unconsciousness</i>	6.86	8.05	0.00
<i>Problems in urination</i>	14.29	15.44	7.69
<i>Pain in abdomen</i>	38.29	34.90	57.69
<i>Infection in breasts</i>	2.29	2.68	0.00
<i>N</i>	201	160	41
<b>N</b>	1404	1044	360

Remarks: *Figures in the table are percentage of women interviewed reporting complications. They do not add up to 100 as women interviewed reported more than one complications.*

The overall scenario that emerges from the foregoing discussion is that the reproductive health status of women in the surveyed population was not satisfactory at all. This unsatisfactory reproductive health status of women interviewed appear to be the result of a host of factors which shape the perception and the behavior of the people about health issues in general and reproductive health issues in particular. Among these factors are a set of institutional factors that create the social and cultural environment in which reproductive health decisions are made. These institutional factors also create the conditions which encourage or discourage the people for specific reproductive health actions such as timing of marriage of females, practice of contraception, care and attention at the time of delivery, etc. A description of these institutional factors as they prevailed in the surveyed population and a discussion of their possible impact on the reproductive health situation is given in the next chapter.

## Chapter 4

### The Institutional Context

The underlying hypothesis of the present study has been that the reproductive behavior and reproductive health related decisions are not taken in a social, cultural and family vacuum. This means that the institutional environment - the family, the society, the culture and tradition, etc. - in which people live has strong bearings on reproductive health decision making and hence on fertility and reproductive health outcomes. Similarly, the present study also assumes that availability of reproductive health services is a precondition for their use and knowledge alone about the reproductive health issues may not be sufficient to modify the reproductive health related behavior of people if necessary services delivery infrastructure is missing. In other words, two types of institutional settings play important role in reproductive health decision making and in deciding the reproductive health situation - social and cultural institutions which characterize the decision making environment and institutions related to services delivery infrastructure which ensure an appropriate reproductive health practice if an enabling social and cultural environment is already in place. If adequate services delivery infrastructure is missing then just an enabling social and cultural environment may not lead to an appropriate reproductive health practice. Similarly, if an enabling social and cultural environment is lacking then mere availability of services delivery infrastructure may not be enough for the use of the services available. It is the right kind of the mix of the social and cultural environment and availability of reproductive health services delivery infrastructure which ensures appropriate reproductive health practice and improvements in the reproductive health situation. This chapter is devoted to a description of the institutional - social and cultural as well as services delivery - context of the prevailing reproductive health situation in the population surveyed that has been described in the previous chapter.

There are many dimensions of social and cultural institutional context that influence the reproductive health decision making and hence the reproductive health situation. Similarly, there are many dimensions of the reproductive health services delivery infrastructure that influence its use by the people. Among different dimensions of social and cultural institutional context that have a relevance to fertility and reproductive health are:

- d) Status of women within the family and the society.
- e) The decision making environment within the family.

- f) The process of marriage settlement.
- g) The marriage market.
- h) Values accorded to children in the family and the society.

On the other hand three dimension of the reproductive health services delivery infrastructure are critical to a given reproductive health situation. These dimensions are:

- i) Knowledge about the availability of reproductive health services.
- j) Use of reproductive health services.

Very little is currently known about the aforesaid dimensions of the institutional context of reproductive behavior and reproductive health in Madhya Pradesh. The National Family Health Survey carried out in the state in 1992-93 and again in 1998-99 as well as other fertility and family planning related surveys carried out in the past have not covered the institutional context of reproductive behavior and reproductive health. At the same time, the programme service statistics of the National Family Welfare Programme are confined to the number of new acceptors recruited under the programme.

In order to collect information on various dimensions of the institutional context of reproductive behavior and reproductive health in the present survey, both the family head and the women interviewed were asked a range of questions designed to capture some elements of the structure and orientation of the institutions that are thought to be critical to reproductive behavior and reproductive health related decision making. These questions were related to the situation that prevailed in the families surveyed and to the opinion and views of the respondents. The findings, based on the information gained from the family head and women interviewed, are discussed, at some length in the following pages.

#### 4.1 The Family Environment.

Family is central to Indian social and cultural settings. Indian family system is known for its very strong kinship structure and bondage between its members. Because of its structure, the Indian family system is more like an institution in which family interests are central to the behavior of its members. Compliance of the family responsibilities and following the family traditions are the guiding principles of the institution of the family while family decision making is normally under the control of family elders, especially the family head or family patriarch.

In order to capture the environment within the family that may have bearings on reproductive behavior and reproductive health related decision making and hence on the reproductive health situation, questions related to the nature of the authority of the family head in the family, perception about the most important role of the family head in family matters, the process of family decision making, communication between members of the family within the family, specially in matters related to health and well-being of women of the family, extent and nature of traditional practices followed by the family in family rituals functions, etc. were asked from the family head interviewed. The responses given by the family head interviewed are summarized in table 4.1. The impression that emerges from the table is that in most of the families surveyed, some form of regulated environment prevailed. Although, a total control of the family head or family patriarch in family related matters did not appear to be prevailing in most of the families surveyed, yet the dominating role played by the family head or family patriarch in the families surveyed is very much apparent from the table. It appears that, in general, the family environment is guided more by family traditions and by the discretions of the family head or patriarch in family decisions than by the liking, interests and choices of individual family members. Obviously, such an environment has important implications in matters related to reproductive health as the reproductive health decision making is largely guided by the prevailing family traditions and decisions for appropriate action are taken by the family head or family patriarch either at his or her own or primarily in consultation with the elder members of the family.

An even more interesting observation of table 4.1 is that there appears to be little difference in the basic character and orientation of the family environment in rural and urban areas. Although the family environment in the urban families appeared to be somewhat little less regulated in terms of the authority of the family patriarch and in terms of the dominance of the family head in the decision making process, yet this difference is, at best, only marginal. Similarly, there is very marginal difference in the rural and urban families regarding adherence to family traditions indicating that traditional orthodoxy in family practices remains immune to the residential status of the family. An implication of this observation is that modernization normally associated with urbanization has little influence on traditional orthodoxy in family practices. In the context of reproductive behavior and reproductive health related decision making, this implies that members of the family go more by the family traditions and family values in making reproductive behavior related decisions than by other factors and issues related to reproductive behavior. The dominance of tradition in the family also implies that the thinking and the choices of the members

of the family are also oriented towards the traditional practices followed in the family.

Table 4.1: The family environment.

Particulars	Total	Rural	Urban
Most important role as family head			
Management of family property	15.20	16.38	12.33
Management of family income	19.32	20.99	15.24
Education of children	28.86	22.25	45.03
Family decision making	25.29	29.12	15.93
Marriage of children	3.53	3.22	4.28
Health of family members	7.80	8.05	7.19
Authority of family head in family related matters			
Complete authority	2.07	1.83	2.66
Total authority in matters related to family finance and marriage	14.18	15.75	10.32
Family head takes decision after consultation with family members	31.20	32.79	27.29
Consensus is sought among family members	44.36	43.45	46.59
Members free to take decisions only after getting approval from family head	6.99	5.16	11.48
Members free to take decisions just by informing the family head	1.11	1.02	1.33
Total freedom	0.10	0.00	0.33
Family decision making			

Particulars	Total	Rural	Urban
Only by head	2.07	2.03	2.16
Some decisions are taken by head only and some after consultation with family members	18.16	19.93	13.81
Decisions are taken by the family head only after discussion with family members	36.08	37.83	31.78
Decision are taken only after arriving at a consensus among family members	37.86	35.46	43.76
Family members are free to take decisions except in matters related to marriage and family property	4.38	3.66	6.16
Family members are free to take decisions except in matters related to family property	1.25	0.95	2.00
Total freedom	0.19	0.14	0.33
Traditional practices in family affairs			
Totally followed	70.14	70.97	68.08
Partially followed	27.31	27.57	26.66
Not followed	2.55	1.45	5.26
All	100.00	100.00	100.00
N	2076	1475	601

*Remark: The table gives percentages of the total family head interviewed.*

Table 4.1 also provides some indications about the priorities and preferences of the family as an institution. Interestingly, health of the members of the family and marriage of children did not appear to be a high priority issue when the head of the family interviewed were asked about their most important role as compared to issues like family decision making and education of children. In the urban areas, nearly half of the head of the family interviewed reported that their main concern was the education of children whereas in the rural areas, family decision making was the dominating role of the head of the family. By contrast, only about 8 per cent of the family head interviewed identified health of the family members as their most

important role as family head while getting their children married was the most important responsibility for only about 3 per cent of the family head interviewed.

Some type of corporate character of the most of the families surveyed is reflected in the responses of the family head interviewed to questions asked to capture the process of decision making within the family. Majority of the family head surveyed responded that they did not exercise total authority in taking decision in family matters. Rather, they preferred consultation and consensus among family members. However, the dominance of the family head in family decision making process may be judged from the fact that in more than 56 per cent of the families surveyed, the family head had the discretionary power in family decision making. By contrast, there were very few family head interviewed who reported that members of their family were free to take decisions at their own.

Quite interestingly, the basic character and orientation of the family and its decision making environment does not appear to be influenced by the level of education of the family head as may be seen from table 4.2. The information given in the table also indicates that the fundamental thinking of the family head about various matters related to the family largely remains invariant to his or her level of education. This indicates that orthodoxy in family traditions and family practices in the families surveyed were quite strong and are largely not influenced by such variables as urbanization and associated modernization or by the level of education of the person who is virtually in control of the family, its functions and its business.

Table 4.2: The family environment by the education of the family head.

Particulars	Number of years in school			
	Never	1-5	6-10	>10
Most important role as family head				
Management of family property	15.77	12.96	16.46	8.51
Management of family income	19.91	20.37	15.61	12.77
Education of children	28.34	27.47	29.54	51.06
Family decision making	24.77	29.63	23.21	19.15
Marriage of children	3.28	3.40	5.49	2.13
Health of family members	7.92	6.17	9.70	6.36
Authority of family head in family related matters				

Particulars	Number of years in school			
	Never	1-5	6-10	>10
Complete authority	2.14	2.11	1.64	2.13
Total authority in matters related to family finance and marriage	14.17	11.75	18.44	10.64
Family head takes decision after consultation with family members	32.41	27.11	28.28	38.30
Consensus is sought among family members	43.40	51.81	41.39	36.17
Members free to take decisions only after getting approval from family head	6.36	6.93	9.43	12.77
Members free to take decisions just by informing the family head	1.38	0.30	0.82	0.00
Total freedom	0.14	0.00	0.00	0.00
Family decision making				
Only by head	2.14	1.50	2.46	2.13
Some decisions are taken by head only and some after consultation with family members	19.06	14.41	19.67	8.51
Decisions are taken by the family head only after discussion with family members	34.94	39.64	36.48	44.68
Decision are taken only after arriving at a consensus among family members	37.85	39.34	35.25	40.43
Family members are free to take decisions except in matters related to marriage and family property	4.49	4.50	4.51	0.00
Family members are free to take decisions except in matters related to family property	1.24	0.60	1.64	4.26
Total freedom	0.28	0.00	0.00	0.00
Traditional practices in family affairs				

Particulars	Number of years in school			
	Never	1-5	6-10	>10
Totally followed	69.97	69.62	70.49	70.21
Partially followed	26.96	28.66	27.05	29.79
Not followed	3.07	1.52	2.46	0.00
All	100.00	100.00	100.00	100.00
N	1452	333	244	47

*Remark: The table gives percentages of the total family head interviewed.*

It is well known that family decision making process is also influenced by the opinion and views of family acquaintances who are not the members of the family but who have regular interactions with the family, particularly the family head or family patriarch. Among these acquaintances, the role of family priest or family peer in influencing the reproductive health decision making environment within the family has been found to be important for at least two reasons. First, many of the reproductive health issues in the Indian social and cultural traditions have religious dimensions. As such, decision making in relation to these issues is normally done only after consulting the family priest. Second, the family priests, themselves, try to influence the behavior of the family members to suite their own interests and maintain their influence on the family. Moreover, because of religious dimensions associated with a number of reproductive behavior and reproductive health related issues, they also have an inbuilt capacity and power to influence the family behavior. In other words, family priests have a strong degree of corporateness and territoriality in the family decision making process.

In order to assess the degree of corporateness and territoriality in family decision making environment, especially in the reproductive health decision making, the family head interviewed were asked about the existence of a family priest or a peer who gave guidance and advice in different matters related to the family. The family head were also asked to what extent the family priest or peer was involved in family related matters, particularly in matters related to marriage and the extent of the importance given to the opinion and advice given by the family priest in family and marriage related matters. The responses given by the family head interviewed are given in table 4.3. More than two third of the family head replied that their family had a priest and that they and their family members sought the opinion and advice of

the family priest in different family related matters. Once again, there was not much difference in the proportion of urban and rural families reporting presence of the family priest.

Table 4.3: The corporateness and territoriality of family decision making environment.

	Total	Rural	Urban
<u>Presence of a family priest or family peer</u>			
Yes	66.18	65.14	68.76
No	33.82	34.86	31.24
<u>Involvement of family priest</u>			
<i>Opinion always sought</i>	37.35	42.77	24.69
<i>Opinion often sought</i>	50.59	49.63	52.84
<i>Opinion rarely sought</i>	7.91	3.91	17.28
<i>Opinion not sought</i>	4.14	3.70	5.29
<u>Importance of opinion of family priest</u>			
<i>Mandatory</i>	36.17	42.13	22.22
<i>Optional</i>	58.14	52.38	71.60
<i>No importance</i>	5.70	5.49	6.17
<u>Opinion of family priest in matter related to marriage</u>			
<i>Opinion is always sought</i>	69.62	69.62	69.63
<i>Opinion is often sought</i>	28.75	28.48	29.38
<i>Opinion is never sought</i>	1.63	1.90	0.99
<i>All</i>	100.00	100.00	100.00
<i>N</i>	1367	956	411
All	100.00	100.00	100.00
N	2076	1475	601

In those families where the presence of a family priest was reported by the family head, the importance of the family priest in the family affairs can be judged from the

fact that in nearly 80 per cent of these families, consulting the family priest in family related matters was found to be a regular feature. There were less than 5 per cent of the family head interviewed who reported the presence of a family head but who never involved the family priest in different matters related to the family. Similarly, in more than one third of these families, the opinion and advice given by the family priest was regarded as mandatory. By comparison, in only 6 per cent of the families, little attention was paid to the opinion and advice given by the family priest, although there are some indications that the orthodoxy to follow the advice and opinion given by the family priest was marginally less in urban than in rural families.

The importance of family priest in influencing family decision making is reflected better in marriage related matters. Table 4.3 suggests that seeking the opinion and views of the family priest in matters related to marriage of family members was nearly universal in all the families surveyed, either rural or urban which indicates a very high degree of the corporateness of the family priest in those families which had a family priest.

Table 4.4 attempts to capture the effect of the education of the family head in the context of the presence of family priest and his territoriality and corporateness in family related matters. It may be seen from the table that the level of education of the family head is virtually not related with the presence or absence of family priest. Similarly, the level of education of the family head appears to have only a marginal influence on the nature of the influence of the family priest in family related decisions. This implies that the corporateness and territoriality of the family priest largely remain unaffected by the level of education of the family head. Table 4.4, however, gives some indication that orthodoxy in following the advice and opinion of the family priest in different family related matters including matters related to marriage somewhat loosens in families where the family head had a schooling of more than 10 years. The proportion of family head who always sought the opinion of the family priest and compulsorily followed the opinion given was relatively low among those having more than 10 years of schooling as compared to those family head who had either no schooling or less than 10 years of schooling. However, at the same time, the proportion of family head often seeking opinion and in general following the opinion of the family priest was found to be higher in family head interviewed having more than 10 years of schooling as compared to the family head interviewed who had either no or a schooling of less than 10 years. These observations once again reveal the persistence of family and social traditions in the family decision making environment. Moreover, it is also clear that these traditions

and practices do not appear to be substantially influenced by the educational level of the people.

Table 4.4: Corporateness and territoriality of family decision making environment.

Particulars	Number of years in school			
	Never	1-5	6-10	> 10
<u>Presence of a family priest or family peer</u>				
Yes	65.19	70.30	63.52	76.60
No	34.81	29.70	36.48	23.40
<u>Involvement of family priest</u>				
<i>Opinion always sought</i>	38.81	38.20	31.61	22.22
<i>Opinion often sought</i>	49.47	51.93	52.26	63.89
<i>Opinion rarely sought</i>	8.53	5.15	7.74	8.33
<i>Opinion not sought</i>	3.20	4.72	8.39	5.56
<u>Importance of opinion of family priest</u>				
<i>Mandatory</i>	36.60	35.19	34.84	30.56
<i>Optional</i>	58.40	57.94	56.13	66.67
<i>No importance</i>	5.00	6.87	9.03	2.78
<u>Opinion of family priest in matter related to marriage</u>				
<i>Opinion is always sought</i>	71.10	68.80	65.16	55.56
<i>Opinion is often sought</i>	27.80	27.70	32.26	44.44
<i>Opinion is never sought</i>	1.10	3.50	2.58	0.00
All	100.00	100.00	100.00	100.00
N	947	234	155	36
All	100.00	100.00	100.00	100.00
N	1452	333	244	47

An integral yet important feature of the family system in India is the difference of views and opinion among family members on different family related and personal issues. This difference in the views and opinion influences the decision making

environment in the family and the behavior of family members. In matters related to reproductive behavior, the difference in opinion and views of wife, husband and members of the husband's family, especially elders of the family in terms of number and timing of children is expected to have some influence on reproduction related decisions within the family and hence on fertility outcome and reproductive health status of females. Moreover, in a decision making environment in which there are a number of mutually conflicting views and opinion, it is the dominating view and opinion that normally prevails. An implication of such a situation is that often the woman has to compromise with the views and opinion of the husband and members of the husband's family as they, in combination, constitute a dominating group in the family decision making environment.

In order to assess the magnitude of this conflict in reproduction related decision, all women interviewed who had a live birth in five years prior to the survey were asked for all births during the five years prior to the survey whether they wanted birth at that time or they wanted to postpone the birth for future or they did not want the birth at all. The women interviewed were also asked whether their husband, their in-laws and their parents had views similar to her or had divergent views about the birth in question. On the basis of the responses given by the women interviewed, the proportion of deliveries in which the woman and her husband were having same view and proportion of deliveries in which they had divergent views were calculated. In a similar manner the extent of similarity and dissimilarity in the views about of the women interviewed and her in-laws as well as her parents were also calculated. Results of the exercise are given in table 4.5 for births of different parity. The table indicates that although small in magnitude, there existed some dissimilarity in the opinion and views between women surveyed and their husband or in-laws and even parents regarding the number and timing of children that had during the five years prior to the survey. This indicates that there existed somewhat conflicting decision making environment within the family in matters related to reproduction. Interestingly, this dissimilarity appears to increase with the increase in the order of the birth and in births with four and higher order parity, this dissimilarity in the views and opinion of the women interviewed and their closest kin regarding the desire for children and the timing of the pregnancy and delivery becomes quite substantial in magnitude. Obviously, this conflicting environment is expected to have some influence of fertility outcome and reproductive health of women.

Table 4.5: Similarity in views and opinion of women interviewed about number and timing of children with her kin.

Views about the	Birth order					
	1	2	3	4	5	All
Total						
Wife and husband						
Similar	91.05	87.61	86.91	77.01	67.62	84.40
Dissimilar	3.07	5.63	7.27	11.76	10.48	6.34
Wife and in-law						
Similar	89.77	87.04	86.55	76.47	65.71	83.55
Dissimilar	3.84	6.20	7.64	12.83	13.33	7.19
Wife and parents						
Similar	88.75	86.76	85.82	76.47	67.62	83.26
Dissimilar	4.86	6.48	8.36	12.30	12.38	7.55
All	100.00	100.00	100.00	100.00	100.00	100.00
N	391	355	275	187	105	1313
Rural						
Wife and husband						
Similar	90.97	85.26	86.67	74.48	65.88	82.57
Dissimilar	3.13	5.98	6.19	11.03	9.41	6.13
Wife and in-law						
Similar	88.89	85.66	86.19	73.79	63.53	81.61
Dissimilar	4.86	5.58	6.19	12.41	12.94	7.09
Wife and parents						
Similar	88.19	85.66	85.71	74.48	64.71	81.61
Dissimilar	5.56	5.58	6.67	11.72	11.76	7.18
All	100.00	100.00	100.00	100.00	100.00	100.00
N	288	251	210	145	85	979

Views about the	Birth order					
	1	2	3	4	5	All
Urban						
Wife and husband						
Similar	91.26	93.27	87.69	85.71	75.00	89.72
Dissimilar	2.91	4.81	10.77	14.29	15.00	6.94
Wife and in-law						
Similar	92.23	90.38	87.69	85.71	75.00	89.17
Dissimilar	0.97	7.69	12.31	14.29	15.00	7.50
Wife and parents						
Similar	90.29	89.42	86.15	83.33	80.00	88.06
Dissimilar	2.91	8.65	13.85	14.29	15.00	8.69
N	103	104	65	42	20	360

*Remark: The table gives the percentage of women interviewed. These percentages do not add up to 100 as proportion of women who were not sure about their own views about the birth or the views of their husband, in-laws or parents is not shown in the table.*

#### 4.2 Status of Women in the Family

The status of woman in the families surveyed was captured through a set of nine questions. Five of these nine questions are situational variables, related to the situation that prevailed in the family at the time of the survey. These questions are related to the involvement of females in family decision making process including the decisions making process related to marriage of family members, family property in the name of married and unmarried females of the family and practice of purdah within the family. The remaining four questions, on the other hand, are opinion variables and are related to the opinion of the family head about the attention to be given to females in the family in comparison to the attention to males, usefulness of the girl to the family, perceived benefits of having at least a girl in the family and the opinion of the family head whether he or she wanted a girl in the family. All questions were asked from the head of the family who happened to be male in nearly all families surveyed. The details regarding the prevailing situation in the family as well as the opinion given by the family head interviewed are summarized in tables 4.6 through 4.8.

Table 4.6: Indicators of status of woman in the family.

Indicator	Total	Rural	Urban
Involvement of females in family decision making			
Yes, in all matters	13.14	10.50	19.63
Yes, in some matters	69.96	71.88	65.22
No	16.90	17.62	15.14
Discussion with females in marriage related issues			
Yes	91.09	89.90	94.01
No	8.91	10.10	5.99
Practice of purdah			
All married females	39.42	44.03	28.30
Only young brides	39.91	40.60	38.20
No	20.67	15.37	33.50
Despite purdah, talk to family head	62.31	68.64	47.00
No purdah, talk to family head	14.38	9.99	25.00
Purdah and do not talk to family head	17.02	15.99	19.50
No purdah but do not talk	6.29	5.38	8.50
All	100.00	100.00	100.00
N	2076	1475	601

Table 4.6 indicates that, in general, women in the families surveyed are only selectively involved in the family decision making process. There were very few families surveyed where the head of the family reported that women of the family were regularly and fully involved in the decision making processes within the family. In majority of the families surveyed, either rural or urban, involvement of women in family decision making process was mostly dependant upon the discretion of the family head, although the selective involvement of females in family decision making process was somewhat more prominent in rural areas. However, in matters related to marriage of members of the family, involvement of females in the decision making process has been found to be nearly universal. More than 90 per cent of the family head surveyed reported that they discussed the issues related to the marriage of members of the family with females in the family.

Practice of purdah has widely been used as an indicator of the status of woman within the family. In its broadest term, purdah is defined as a set of norms and strictures that set standards of female morality, mobility, code of conduct for women's economic activities and interaction with men within and outside the family. In the present study, practice of purdah has been found to be prevalent in four-fifth of the families surveyed. In about 40 per cent of the families surveyed, the practice of purdah appeared to be relatively more conservative as all married females in these families had been found to be practicing purdah. By contrast, an almost similar proportion of families surveyed, practice of purdah was not found to be so conservative as only newly married females were found to be practicing purdah.

But, the practice of purdah does not mean that there is a total communication gap between the female members of the family and the family head. First, it is worth pointing out here that practice of purdah is limited to only the married members of the family. There is no tradition of unmarried females of the family practicing purdah within the family. Second, despite practicing purdah, talking and discussing family issues with the family head has also been found to be quite common in the families surveyed. In fact, in nearly four fifth of the families where practice of purdah was found to be prevalent, the family head interviewed reported that females of the family were frequently talking and discussing various family related matters. Moreover, an absence of the practice of purdah does not automatically mean that there is no communication gap between the females of the family and the family head. It has been observed families that in at least 6 per cent of the families surveyed, females in the family were not practicing purdah yet they were not communicating directly with the family head on family related issues. It appears that the practice of purdah, as practiced in the families surveyed, is rather notional and is practiced primarily to show respect to the family head and other male elders of the family. There is no purdah between female members of the family. Similarly, elder females in the family do not practice purdah with the younger male members of the family. Clearly, there are communication channels within the family through which the family females are able to communicate their opinions, views and needs to other members of the family.

Table 4.7 explores the relationship between the level of education of the head of the family and the status of women in the family as captured by variables included in table 4.6. Interestingly, no clear picture emerges from the table about the impact of the level of education of the family head on the status of women in the family. Better education of the family head appears to result in increased involvement of females in family decision making and relatively lower prevalence of the practice of purdah

in family females. However, increased education of the family head also appears to have resulted in some lack of communication between the family head and the female members of the family indicating that higher level of education of the family head may itself be some impediment to the within family communication process.

Table 4.7: Indicators of status of woman in the family by the level of education of the family head.

Indicator	Number of years in school			
	Never	1-5	6-10	>10
Involvement of females in family decision making				
Yes, in all matters	12.42	12.01	15.16	29.79
Yes, in some matters	70.60	73.57	63.52	61.70
No	16.98	14.41	21.31	8.51
Discussion with females in marriage related issues				
Yes	91.44	90.99	90.98	80.85
No	8.56	9.01	9.02	19.15
Practice of purdah				
All married females	39.30	35.44	43.85	31.91
Only young brides	40.47	41.14	33.61	38.30
No	20.23	23.42	22.54	29.79
Despite purdah, talk to family head	63.11	63.19	59.41	52.78
No purdah, talk to family head	13.74	15.34	16.47	15.28
Purdah and do not talk to family head	17.22	14.42	17.65	25.00
No purdah but do not talk	5.93	7.06	6.47	6.94
All	100.00	100.00	100.00	100.00
N	1452	333	244	47

The family head interviewed were also asked whether all family property was in their name or whether some of it was in the name of other members of the family also. Those family head who reported that all family property was not in their name were further asked whether any of the family property was in the name of females also. In

more than four-fifth of the families surveyed, entire family property was found to be in the name of family head. However, in more than one fifth of those families where all family property was not in the name of the family head, some family property was in the name of married females of the family. In the urban areas, this proportion was more than 33 per cent. By contrast, in less than 10 per cent of the families having family property in the name of members of the family other than family head, the family property was in the name of unmarried females also.

The reason that very few families were found to be having some family property in the name of unmarried females of the family is basically related to the fact that after marriage, unmarried females of the family move to their in-law's family and no longer remain the member of the parent family. If unmarried females have some family property in their name, then this marriage related migration of unmarried females of the family automatically entails transfer of the family property in the name of the female concerned from the parent family to the in-law family. Because of these complexities, family property in the Indian family system is rarely registered in the name of unmarried females of the family. But when a female becomes a member of the family after marriage, there is no complexity involved in registering family property in her name.

Table 4.8: Family property in the name of females, unmarried or married.

Particulars	Total	Rural	Urban
All family property in the name of family head	75.78	79.97	66.89
All family property not in the name of family head	24.22	20.03	33.11
a. <i>Some family property in the name of unmarried females</i>	8.38	4.79	14.07
b. <i>Some family property in the name of married females</i>	22.55	16.10	33.17
c. <i>Other members of the family</i>	69.07	79.11	63.76
<i>All</i>	<i>100.00</i>	<i>100.00</i>	<i>100.00</i>
<i>N</i>	<i>501</i>	<i>292</i>	<i>199</i>
All	100.00	100.00	100.00
N	2076	1475	601

Table 4.9: Family property in the name of females, unmarried or married, by the level of education of family head.

Particulars	Number of years in school			
	Never	1-5	6-10	> 10
All family property in the name of family head	75.92	76.28	75.21	70.21
All family property not in the name of family head	24.08	23.72	23.79	29.78
d. Some family property in the name of unmarried females	9.09	5.06	4.84	21.43
e. Some family property in the name of married females	20.51	30.38	22.58	21.43
f. Other members of the family	70.40	69.62	72.58	57.14
All	100.00	100.00	100.00	100.00
N	350	79	58	14
All	100.00	100.00	100.00	100.00
N	1452	333	244	47

In general, there appears little impact of the education of the family head on the registration of the family property in the name of females of the family, either unmarried or married. More than one fifth of the family head with more than 10 years of schooling who did not have all family property in their name reported that they had some family property in the name of the unmarried females of the family. However, total family head interviewed in this group was very small.

In addition to the situational indicators of status of women within the family, the head of the family interviewed were also asked about their views regarding the attention given to females in comparison to males in the family and the usefulness of females for the family. The majority opinion of the family head interviewed was that females should be treated at par with males in the family. There were even some family head interviewed who were of the view that females of any age group, unmarried, married or widow required more attention than males in the family. This proportion was relatively high in urban as compared to the rural head of the family interviewed. By contrast, at least 15 per cent of the head of the family interviewed were of the view that females, in general, deserved less attention than males in the

family. This indicates, that some form of discrimination against females existed in these families as compared to males.

Table 4.10: Indicators of status of woman in the family.

Indicator	Total	Rural	Urban
Attention given to unmarried females in comparison to males			
Less than males	15.77	16.90	12.98
Equal to males	83.17	82.69	84.36
More than males	1.06	0.41	2.66
Attention given to married females below 30 years of age in comparison to males			
Less than males	15.44	16.44	12.98
Equal to males	83.70	83.29	84.69
More than males	0.87	0.27	2.33
Attention given to married females more than 30 years of age in comparison to males			
Less than males	15.37	16.21	13.31
Equal to males	83.76	83.51	84.36
More than males	0.87	0.27	2.33
Attention given to widow/divorced females in comparison to males			
Less than males	14.83	15.87	12.31
Equal to males	83.81	83.52	84.53
More than males	1.36	0.62	3.16
Who is useful, boy or girl?			
Boy	9.64	9.41	10.22
Girl	4.29	4.37	4.09
Both	86.07	86.22	85.69
All	100.00	100.00	100.00
N	2076	1475	601

Another opinion indicator used for assessing the status of females in the family was related to the usefulness or the benefit of having girls in the family. The head of the family interviewed were asked about their opinion regarding the usefulness or the benefit of having the boy or the girl for the family. Majority of the family head interviewed were of the view that both the boy as well as the girl were useful and beneficial to the family, although preference for boy than girl was found to be relatively more in urban as compared to the rural families surveyed.

Table 4.11: Benefits of having females in the family.

Benefits	Total	Rural	Urban
Prosperity in the family	21.93	22.18	21.30
Sister is necessary for brothers	18.74	18.75	18.71
To take care of the house	17.19	16.87	17.97
For religious duty ( <i>Kanyadan</i> )	26.34	27.03	24.63
Girls care more for parents than boys	15.81	15.16	17.41
All	100.00	100.00	100.00
N	1878	1337	541

Those family head who were of the opinion that there should be a girl in the family were also asked about the benefits of having girls. Respondents gave a variety of response, the most prominent of which was that girls in the family were necessary for completing the religious ritual of *Kanyadan*. The ritual of *Kanyadan* is related to the institution of marriage. *Kanyadan* means donation of the girl to the in-laws for the rest of the life. In the Indian tradition, the traditional belief is that every father must perform the ritual of *Kanyadan* at least once in his entire life.

Other benefits of having girls in the family included the social concept that presence of girls in the family brought prosperity to the family and for younger males of the family, there must be a sister. The brother and sister combination in the family has religious sentiments as well as social bondage. In the Indian social tradition, there is an important religious ceremony of *Rakshabandhan*. In this ceremony, the sister seeks the protection and support from her brothers. This ceremony develops a sense of responsibility and accountability in males toward their sisters and creates a social bond that remains intact for the rest of the life of the brother and the sister. Through this ceremony, the females are assured of type of security cover from her brothers.

Table 4.12: Indicators of status of woman in the family by the level of education of the family head.

Indicator	Number of years in school			
	Never	1-5	6-10	> 10
Attention given to unmarried females in comparison to males				
Less than males	15.07	13.55	23.77	10.64
Equal to males	84.11	85.54	74.59	82.98
More than males	0.83	0.90	1.64	6.38
Attention given to married females below 30 years of age in comparison to males				
Less than males	14.60	13.21	24.18	10.64
Equal to males	84.64	86.19	74.59	85.11
More than males	0.76	0.60	1.23	4.26
Attention given to married females more than 30 years of age in comparison to males				
Less than males	14.69	12.99	23.36	10.64
Equal to males	84.62	86.10	75.41	85.11
More than males	0.69	0.91	1.23	4.26
Attention given to widow/divorced females in comparison to males				
Less than males	14.31	12.77	21.40	10.64
Equal to males	84.31	86.32	77.37	85.11
More than males	1.39	0.91	1.23	4.26
Who is useful, boy or girl?				
Boy	10.03	7.81	9.88	10.64
Girl	3.67	3.60	9.05	2.13
Both	86.30	88.59	81.07	87.23
All	100.00	100.00	100.00	100.00
N	1452	333	244	47

Level of education of the family head, once again, does not appear to have a telling effect on the indicators of status of women within the family as may be seen from table 4.13. There is however some indication of an increase in the preference for only boy among family head with more than 10 years of education. This preference, however, was not found to be very large. Similarly, in general, reasons for having at least one girl in the family also do not vary appreciably by the level of education of the family head. However, relatively a smaller proportion of family head with more than 10 years of schooling cited the need of a sister for brothers as a reason for having girls in the family as compared to the family head having either no schooling or up to 5 years of schooling. By contrast, a larger proportion of the family head with more than 10 years of schooling cited the need of a girl in the family to support the females in the family, usually the mother, in the household work.

Table 4.13: Benefits of having females in the family.

Benefits	Number of years in school			
	Never	1-5	6-10	> 10
Prosperity in the family	21.23	23.78	22.17	30.95
Sister is necessary for brothers	19.23	21.17	14.03	7.14
To take care of the house	16.02	19.87	18.55	23.81
For religious duty ( <i>Kanyadan</i> )	27.13	24.44	24.89	26.19
Girls care more for parents than boys	16.40	10.75	20.36	11.90
All	100.00	100.00	100.00	100.00
N	1452	333	244	47

In order to explore the impact of birth of a child on the status of the woman in the family, all women interviewed were asked whether there was any change in the attitude of the husband and other members of the family when they got pregnant. All women interviewed were also asked whether this change in attitude was also associated with increased care and attention. More than 55 per cent of the women interviewed reported that there was a change in the attitude of the husband and the family members. The proportion reporting change was higher in urban women as compared to rural women. This change in the attitude was reflected in terms of change in the diet and reduction in the household work and it was more apparent in urban than in rural families surveyed. Similarly, majority of women interviewed that attention of their husband towards them increased on getting pregnant.

Table 4.14: Change in the attitude of the husband and family members as the result of pregnancy.

Particulars	Total	Rural	Urban
First pregnancy			
Change in husband's attitude	55.87	51.18	66.56
Increased attention by the husband	52.20	47.50	62.92
Change in the attitude of the family	55.36	51.25	64.67
Change in diet	43.55	37.94	56.24
Change in household work	42.85	37.44	55.11
Increased attention and care in subsequent pregnancies			
Second pregnancy	56.96	53.23	65.53
Third pregnancy	40.98	38.82	45.95
Fourth pregnancy	24.26	24.89	22.82
Fifth pregnancy	14.02	14.14	13.75
All	100.00	100.00	100.00
N	2076	1445	601

There is however a clear decrease in the care and attention on getting pregnant either by the husband or by the members of the family as the number of pregnancies increase. At the time of the fifth pregnancy, for example, less than 15 per cent of the women interviewed reported that there was a change in attention and care either by their husband or by other members of the family as compared to almost 57 per cent women interviewed reporting increase in the care and attention at the time of second pregnancy. But the point that is important here is that getting pregnant appears to be an important component of the value system of females in the families surveyed. In fact, as table 4.15 reveals, a very large proportion of the women interviewed, especially the urban women interviewed, were of the view that getting pregnant and delivering children had an important place to decide their status within the family and hence in the society. According to these women, delivering children led to an increase in their prestige in the family as well as in the society. Clearly, the importance of children in the value system for females in the family and the society remains a strong motivational force for females for getting pregnant and delivering children.

Table 4.15: Experience of women interviewed in getting pregnant and delivering child.

Nature of experience	Total	Rural	Urban
Prestige in the family increased	61.51	57.19	71.43
No change	20.15	21.93	16.05
Prestige in the family decreased	0.92	1.12	0.48
Cannot say	17.42	19.76	12.04
All	100.00	100.00	100.00
N	2076	1475	601

The foregoing observations and findings suggest that females do have specific values in the traditional Indian family system. These values, interestingly, deeply integrated in the social norms and social practices and are even given some form of religious recognition in the traditional Indian mythology. The nature of these traditions and the religious and social importance to these traditions clearly indicate that the Indian social system recognizes importance of females in the family and the society and ensures their recognition. From a pure economic point of view, females may have got a lower value than males in the Indian family system but the traditional social system has some inbuilt social norms which value females in the family and the society in their own context. These traditional norms and values, deep rooted in the Indian social system, accord females an important place in the family and the society. In fact, status of women has a different characterization in the traditional Indian social system than the characterization of the status of men; it is rather difficult to compare the two as the dimensions of the two characterizations are basically different.

From the fertility and reproductive health point of view, an important implication of the social, religious and traditional values attached to females in the traditional Indian social system is that, in general, there existed considerable demand for female children in most of the families surveyed along with the demand for male children. The very fact that only a very small proportion of family head interviewed opined that there should be only male children in the family clearly indicates that the desire of having at least a girl in the family may often be an influential factor in the fertility decision making process and may contribute to shaping the reproductive behavior of the people.

#### 4.3 The Institution of Marriage.

Marriage of boys and girls at a young to very young age is widely prevalent in India, especially in its northern Hindi speaking states of which Madhya Pradesh is a part. In the present survey also, majority of females surveyed were found to be married at a young age. Since marriage, in the Indian society, signals the beginning of socially acceptable reproductive life, marriage is an important institutional context related to fertility and reproductive health.

Marriage, in India, is not just a matter of liking, choice and decision of the boy and the girl. It is a very complex decision making process that has individual, family and cultural and traditional dimensions. The relationship between wife and husband, in the Indian social system, is not viewed as a companionship. Rather, this relationship is viewed as eternal. Moreover, marriage between a girl and a boy is viewed more as a long-lasting relationship between two families, the family of the girl and the family of the boy. In addition, the complex religion and caste system in the Indian society induce another dimension of complexity in the institution of marriage. The Indian mythology and Indian social norms do not permit inter-religion or inter-caste marriages. Because of these complexities, all but only a very small proportion of marriages in India are arranged marriages. Most of the marriages are arranged on the basis of a complex yet tedious process of discussion and dialogue between the elders of the family of the girl and the elders of the family of the boy and involves a number of dimensions beginning from the matching of horoscope to the compatibility of social and economic status of the two families. Interestingly, in this whole process, a very low priority is given to the choice and opinion of the girl and the boy going to be married. In fact, in majority of instances in the rural areas, the girl and the boy do not know each other before the marriage.

In the present survey, detailed information about various aspects of marriage was collected during the interview with the head of the family. This information included views of the family head about the necessity of marriage, the process of decision making related to the settlement of marriage of unmarried members of the family, main factors involved in settling marriage, age at which females should, in general, be married including reasons for getting females married by this age, and religious and traditional beliefs associated with the institution of marriage. Moreover, the head of the family interviewed were also asked about the need for consummation of marriage after the marriage ceremony had taken place and the relevance of consummation of marriage particularly from the view point its impact on the health of married females.

Table 4.16: Opinion and views of family head about various issues related to marriage.

	Total	Rural	Urban
Necessity of marriage			
Biological necessity	48.20	43.10	60.68
Family necessity	89.56	88.69	91.69
Necessary for having children	89.91	89.45	91.02
Necessary for pleasure	28.02	25.88	33.22
Religious necessity	67.60	65.86	71.86
The process of settling marriage			
Only by the family head	6.41	6.31	6.66
By family head in consultation with family members other than boy or girl	54.43	57.36	47.25
By family head in consultation with the boy or girl and other family members	6.50	7.12	4.99
By family head only after seeking approval from the boy or girl	2.60	2.71	2.33
By consensus among family members	26.93	23.66	34.94
On the basis of the choice of the boy	0.87	0.68	1.33
On the basis of the choice of the girl	0.24	0.20	0.33
Others	2.03	1.97	2.16
Main considerations in the settlement of marriage			
Matching of horoscope	69.59	65.94	78.54
Similarity in social and economic status of two families	84.17	82.60	88.02
Caste and culture	91.77	92.15	90.85
Education of boy and girl	51.20	44.21	68.39
Adjustment and coordination between two families	58.66	54.37	69.22
Love between the girl and the boy	22.86	19.91	30.12
All	100.00	100.00	100.00
N	2076	1475	601

The basic orientation of the institution of marriage in the families surveyed may be apparent from table 4.16. Majority of the family head interviewed were of the view that marriage was necessary from the view point of the interests of the family as well as for producing children. By contrast, only about one fourth of the family head responded that marriage is necessary for pleasure in life. Clearly, marriage, in the Indian social and cultural settings, is viewed more as an institutional issue rather than an individual issue. This observation is also supported by the process of marriage settlement and considerations involved in settling marriage. Settling the marriage involves detailed discussions and within the family in which the members of the family are actively involved. In the present survey, more than 80 per cent of the family head surveyed reported that marriages are settled either by the family head in consultation with family members other than the boy or the girl or by arriving at a consensus among the members of the family. There is very little involvement of the boy or the girl going to be married in this consultation process as only a small proportion of the family head surveyed responded that either the boy or the girl going to be married was involved in the decision making process or the marriage was settled only after seeking prior approval of the girl or the boy or on the basis of their choice. Similarly, the settlement of marriage has been found to be based on a number of considerations, the most important of which, according to the response of family head surveyed, was the compatibility in caste and culture and the social and economic status of the family of the boy and the family of the girl.

An important observation of table 4.16 is that there is not much difference in the views about marriage and the process of marriage settlement in rural and urban families. Similarly, as may be seen from table 4.17, these patterns remain largely unaffected by the level of education of the family head. Key considerations in the settlement of marriage remain same irrespective of the educational status of the family head. Involvement of the boy or the girl going to be married in the marriage settlement process was found to be extremely rare in the families surveyed. This implies that marriage settlement in majority of the families surveyed was guided by traditional practices and norms and conventional approaches for ensuring behavior change in the society such as education has very limited impact on these practices and norms. The reason probably, as discussed earlier, appears to be the fact that marriage in the Indian social and cultural wisdom, is valued more in the context of the betterment and interests of the family and relationship and bond between two families than in the context of individual choices and interests, especially those of the boy or the girl going to be married. This family orientation to the institution of marriage also makes the whole marriage settlement process very orthodox.

Table 4.17: Opinion and views of family head about marriage by the education of the family head.

	Number of years in school			
	Never	1-5	6-10	> 10
Necessity of marriage				
Biological necessity	48.20	48.29	48.56	45.65
Family necessity	89.22	93.46	88.48	78.26
Necessary for having children	89.78	95.64	85.19	78.26
Necessary for pleasure	27.06	30.53	28.81	39.96
Religious necessity	66.31	76.95	63.79	63.04
The process of settling marriage				
Only by the family head	6.83	5.39	5.74	4.26
By family head in consultation with family members other than boy or girl	53.35	59.28	55.33	46.81
By family head in consultation with the boy or girl and other family members	6.76	4.79	7.79	4.26
By family head only after seeking approval from the boy or girl	2.97	1.20	2.87	0.00
By consensus among family members	26.57	27.54	25.00	44.68
On the basis of the choice of the boy	1.04	0.30	0.82	0.00
On the basis of the choice of the girl	0.28	0.30	0.00	0.00
Others	2.21	1.20	2.46	0.00
Main considerations in the settlement of marriage				
Matching of horoscope	70.43	71.52	69.73	73.40
Similarity in social and economic status of two families	85.00	88.18	86.03	69.08
Caste and culture	93.13	96.06	88.67	92.01
Education of boy and girl	50.46	50.91	58.11	71.71
Coordination between families	58.44	63.03	61.33	57.52
Love between the girl and the boy	23.13	23.03	24.12	23.03
All	100.00	100.00	100.00	100.00
N	1452	333	244	47

The size and the nature of the marriage market has been found to be an important determining factor in the timing of marriage during the course of discussion with the head of the family. An implication of the multitude of considerations involved in settling marriage is that the marriage market becomes very narrow and there are very limited options for choice. A direct consequence of this narrow marriage market is that parents and guardians are very keen to search a match for their boy or girl as early as possible. Any delay in the search for the ‘match’ for the boy or the girl autonomically results in narrowing down the options for selecting the right ‘match’ either for the girl or for the boy. Because of these very reasons, parents and guardians usually prefer to search for a suitable match for their ward as early as possible which, then, provides the basis for marriage at a young age.

Table 4.18: Opinion of the family head about the female age at marriage.

Age at marriage	Region		
	Total	Rural	Urban
< 10 years	0.83	0.55	1.53
10-12 years	1.22	1.09	1.53
12-15 years	11.98	14.32	6.13
15-18 years	64.25	69.24	51.79
> 18 years	21.72	14.80	39.01
All	100.00	100.00	100.00
N	2076	1475	601

Another important factor behind the tradition of marriage of boys and girls at a relatively young age is related to the migration of the girl to her in-laws family after marriage. In general, the family environment in the parent family and the in-laws family is not the same. There are some important differences. As such, the girl has to get herself adjusted in the new family environment. There is a general perception that younger girls who are in the developing stage get adjusted in the new family environment more easily than the older girls who have matured. On the other hand, since every girl has to migrate to her in-laws family after marriage, the girl, as she matures, is treated as a liability in the parent family.

A reflection of the above considerations can be found in the views of the head of family surveyed about the age at which females of the family should be married. As

may be seen from table 4.18, in general, the head of the family interviewed had an inclination to get the unmarried females of the family married at an early age. There were slightly more than one fifth of the respondents who were of the opinion that the girls should be got married only after they attain 18 years of age whereas nearly 80 per cent of the family head interviewed were of the opinion that the girls should be married before reaching the 18 years of age. Even in urban areas, more than 60 per cent of the family head interviewed were of the opinion that the females should be married before reaching the age of 18 years. Moreover, education of the family head appeared to have only a limited impact on his or her views about the age by which females should be married. Although, the proportion of family head who were of the view that females should be married only after reaching 18 years of age increases with the increase in the level of the education of the family head measured in terms of the number of years in school, yet the dominance of early marriage norm for females can be judged by the fact that more than 50 per cent of the family head with more than ten years in school were of the view that females should be married before reaching 18 years of age.

Table 4.19: Opinion of the family head about the female age at marriage by the level of education of the family head.

Age at marriage	Number of clears in school			
	Never	1-5	6-10	>10
< 10 years	0.98	0.60	0.41	0.00
10-12 years	1.46	0.60	0.41	2.13
12-15 years	13.18	10.88	7.47	6.38
15-18 years	63.81	68.58	64.73	44.68
> 18 years	20.57	19.34	26.97	46.81
All	100.00	100.00	100.00	100.00
N	1452	333	244	47

Although, marriage of females at a young age has traditionally been and still continues to be a norm in the Indian social system yet the social system in India has evolved the tradition of consummation of marriage to safeguard the females married at a young age from the ill-effects of marrying at a young age. As discussed earlier, marriage, in the Indian social system does not immediately and automatically signals the beginning of a sexually active reproductive life. There is another ceremony

known as *Gauna* in the local language which takes place sometimes after the marriage. It is only after this ceremony of consummation of marriage, the couple starts sexually active married life. This delay in starting sexually active married life as the result of consummation of marriage has important implications to fertility and reproductive health of the woman. First, it helps married females to gain physical and mental maturity by the time sexually active married life starts. Second, it reduces the period of exposure to conception. It has been observed that younger the age of the female at marriage, the longer is normally the period between marriage and the consummation of marriage. Clearly, the traditional social system in India gives due consideration and weight to the fact that sexually active reproductive life should start only when the female attains a certain level of physical and mental maturity.

Table 4.20: Necessity of consummation of marriage and its benefit to woman's health.

	Total	Rural	Urban
<b>Necessity of consummation of marriage</b>			
Necessary	48.58	55.97	30.34
Not necessary	39.26	35.39	48.81
Cannot say	12.16	8.64	20.85
<i>Reason for consummation of marriage</i>			
<i>Girl matures</i>	<i>49.54</i>	<i>51.04</i>	<i>42.31</i>
<i>Religious tradition</i>	<i>39.37</i>	<i>39.07</i>	<i>40.77</i>
<i>In family interest</i>	<i>3.04</i>	<i>1.91</i>	<i>8.46</i>
<i>Do not know</i>	<i>8.06</i>	<i>7.97</i>	<i>8.46</i>
<i>All</i>	<i>100.00</i>	<i>100.00</i>	<i>100.00</i>
<i>N</i>	<i>1008</i>	<i>826</i>	<i>182</i>
<b>Consummation of marriage useful to woman's health</b>			
Useful	45.08	49.86	32.97
Not useful	17.95	16.69	21.15
Cannot say	36.97	33.45	45.88
All	100.00	100.00	100.00
N	2076	1475	601

The family head interviewed during the survey were also asked specifically about the necessity and usefulness of the tradition of consummation of marriage in the context of the health of the women, especially the newly married ones. Nearly half of the family head interviewed were of the view that consummation of marriage was necessary while another 12 per cent were not having any specific opinion about this tradition. Incidentally, the proportion of family head having a positive opinion about consummation of marriage was substantially higher in rural areas than in urban areas. Moreover, the family head interviewed were having, in general, the understanding that consummation of marriage actually helped newly married girl to attain maturity before starting the sexually active married life, although a substantial proportion was of the view that it was a religious tradition.

When asked specifically about the usefulness of consummation of marriage to the health of the woman, more than 45 per cent of the family head interviewed were of the clear opinion that consummation of marriage was helpful to woman's health. This proportion, again, was substantially higher in rural than in urban areas. Moreover, at least one third of the family head interviewed were unable to give any clear view about the usefulness of consummation of marriage to the health of the woman. In fact, less than one fifth of the respondents were of the view that the tradition of the consummation of marriage was not useful to the health of woman.

In any case, the prevalence of the tradition of consummation of marriage is a positive feature of the Indian social system in the context of fertility and reproductive health of woman. It shows that the Indian social system has inbuilt mechanisms to safeguard the females from the ill effects of marrying at a young age. Moreover, the present survey indicates that the tradition of consummation of marriage has got wide acceptance in the Indian society.

Unfortunately, consummation of marriage has not received due attention in the official approach to reducing fertility and improving reproductive health status of woman in India. Being a traditional custom, consummation of marriage is regarded as somewhat anti-modern. But the tradition of consummation of marriage has tremendous significance to reducing fertility and improving the reproductive health of woman, especially when increasing the female age at marriage has been found to be quite difficult because of a narrow marriage market and a very complex process of settlement of marriage which involves consideration on a number of issues of very diverse nature. Marriage, in the traditional Indian social system, is associated with some very strong religious, family and individual sentiments. It has never been a

matter of the choice and liking of the boy and the girl. Because of these sentiments, efforts to raise the female age at marriage through government legislation and other bureaucratic means have never been successful in India. In fact, because of these strong religious and cultural sentiments, government legislation about legal minimum age at marriage could never be applied with determination and purpose. Over the years, there has been some increase in the average age at marriage but this increase has been too slow to have any telling impact on fertility levels and reproductive health of woman. In such situation, a feasible yet socially acceptable strategy should focus on reducing the ill effects associated with marriage at a young age. In this context, promotion of the concept of consummation of marriage as part of any program for reducing fertility improving the reproductive health status of woman may be important. Delaying the start of sexually active married life up to the age when the newly married girl becomes mature enough to be mentally and physically prepared for child bearing may have important bearings not only on the reproductive health status but also in bringing down the levels of fertility. Since, consummation of marriage is an integral feature of Indian social system and is a socially acceptable concept as the findings presented here indicate, any program directed to promoting the concept of marriage at any time but consummation of marriage at an appropriate time is expected to have a higher chance of adoption by the community and hence modifying the reproductive behavior accordingly.

#### 4.4 Value of Children.

Values accorded to children in the family and the society is an important institutional context to fertility and reproductive health. In order to assess the magnitude and the nature of values accorded to children in the population surveyed, the family head interviewed were asked about their views about children in the family, utility of children and whether producing and bringing up children involved any cost. The family head surveyed were also asked about the ideal number of children a family should have. The views of the family head interviewed, presented in table 4.21 indicate that children, in the families surveyed are highly valued and the family head did not perceive any cost involved in bringing up children.

Another observation of table 4.21 is that nearly all the reasons cited by the family head interviewed for having children have an orientation toward the welfare and interests of the family. More than half of the family head were of the view that children in the family were necessary to provide support in the old age while the remaining ones cited various family related issues such as support to family business or occupation, protection of family property, family peace and happiness, etc. as

reasons for having children. Such an orientation of the views of the family head interviewed is expected. As already mentioned, family is an institution, in the Indian social system and issues related to the welfare and interest of the family appears to have got over individual interests and preferences. Since growth of the family depends upon children, children have got a high value in the society.

Table 4.21: Most important reason for having children by residence.

Most important reason for having children	Total	Rural	Urban
Support to family business	24.71	23.85	26.83
Old age support	53.80	53.76	53.91
As insurance during family emergencies	1.30	1.42	1.00
Social status	2.89	2.98	2.66
Protection of family property	7.70	8.46	5.82
Peace and happiness in the family	3.90	3.99	3.66
Social and family responsibility	5.67	5.48	6.16
All	100.00	100.00	100.00
N	2076	1475	601

In addition to getting views of the family head, women in the reproductive age group interviewed during the survey were also asked about their perception about having children. As may be seen from table 4.22, majority of the women surveyed were of the view that having children and getting pregnant was beneficial to them in many ways. This proportion, interestingly, was higher in urban women interviewed than in rural women.

The women interviewed were also asked about the reasons why they thought having children was beneficial to them. More than 30 per cent of the women reported that having children was the indicator of their womanhood while another 10 per cent reported that having children increased their prestige in the family. On the other hand more than half of the women interviewed cited a number of family related reasons in favor of having children. These included contribution to the family, family happiness and family prosperity. Clearly, welfare and interests of the family are the dominating factors in valuing children not only among the family head surveyed but also among the women in reproductive age group interviewed.

Table 4.22: Opinion of the women interviewed about the benefit of having children.

Perception	Total	Rural	Urban
Having children is beneficial	56.71	53.16	64.72
Having children is not beneficial	21.97	23.67	18.12
Cannot say	21.32	23.17	17.15
<i>Reasons why children are beneficial</i>			
<i>Indication of womanhood</i>	<i>31.40</i>	<i>31.44</i>	<i>31.33</i>
<i>Increase in prestige in the family</i>	<i>10.29</i>	<i>10.03</i>	<i>10.78</i>
<i>Family prosperity</i>	<i>3.25</i>	<i>3.12</i>	<i>3.51</i>
<i>Contribution to the family</i>	<i>27.26</i>	<i>26.42</i>	<i>28.82</i>
<i>Family happiness</i>	<i>23.66</i>	<i>24.39</i>	<i>22.31</i>
<i>Others</i>	<i>4.14</i>	<i>4.60</i>	<i>3.25</i>
<i>All</i>	<i>100.00</i>	<i>100.00</i>	<i>100.00</i>
<i>N</i>	<i>1177</i>	<i>784</i>	<i>389</i>
All	100.00	100.00	100.00
N	2076	1475	601

Another reason for a high family and social value accorded to children in the families surveyed appears to be the fact that there was a general perception among the majority of the family head interviewed that little cost was involved in having and bringing up children. There were only 3.5 per cent of the family head surveyed who were of the opinion that having children and bringing them up involved certain costs. On the contrary, according to more than 93 per cent of the family head interviewed, virtually no additional cost was involved in having and bringing up children. Moreover, there was little difference in the perception of the cost involved in having and bringing up children among family head of rural and urban families surveyed. Similarly, the level of education of the family head did not appear to have any influence on the perception about the cost involved. This means that, in general, children in most of the families surveyed were regarded as family assets rather than some liability to the family. This thinking, incidentally, constitutes a strong motivational force against limiting the number of children and influences the fertility decision making process as well as the reproductive behavior of the people and the reproductive health status of women.

Table 4.23: Perception of the family head about the cost involved in having and bringing up children.

	Cost involved	No cost involved	Undecided	All	N
Total	3.51	93.38	3.11	100.00	2076
Residence					
Rural	3.49	93.58	2.93	100.00	1475
Urban	3.54	92.92	3.54	100.00	601
Number of years in school					
Never	3.32	94.06	2.62	100.00	1452
1-5	3.07	92.33	4.60	100.00	333
6-10	5.02	90.80	4.18	100.00	244
> 10	4.35	93.48	2.17	100.00	47

On the other hand, only about one in every 10 women interviewed reported that getting pregnant involved some cost. In rural areas, this proportion was only about 7 per cent compared to almost 15 per cent in the urban areas. However, the proportion of women interviewed who were of the view that no cost was involved in getting pregnant was almost the same in rural and urban areas. In fact, nearly one fourth of the rural women interviewed were not clear about the cost involved in getting pregnant as compared to only about 14 per cent women interviewed in the urban areas. Clearly, cost associated with pregnancy was not an influential factor to majority of the women interviewed.

Table 4.24: Perception of women interviewed about cost involved in getting pregnant.

Perception	Total	Rural	Urban
Cost is involved	9.63	7.28	14.89
No cost involved	70.52	70.22	71.20
Cannot say	19.85	22.49	13.92
All	100.00	100.00	100.00
N	2076	1475	601

Table 4.25: Number of children, a family should have according to head of family interviewed.

Number of children	Total	Rural	Urban
As many as possible	0.44	0.34	0.68
More than 4	7.55	8.19	5.95
3-4	17.19	20.34	9.35
2-3	50.90	52.22	47.62
Less than 2	22.60	17.61	35.03
Cannot say	1.32	1.30	1.36
All	100.00	100.00	100.00
N	2076	1475	601

The family head interviewed were also asked about their views regarding the number of children a family should have in the context of the most important reason for having children they had cited. The fact that majority of the family head were not in favor of large families is clear from table 4.25. More than half of the family head interviewed were of the opinion that a family should have two to three children only while about 22 per cent of the family head interviewed preferred that a family, on average, should have less than 2 children. By contrast, the proportion of family head interviewed who were of the view that a family, on average, should have at least four children was very small. Clearly, the general opinion of the family head interviewed was not in favor of large to very large families despite the fact that value of children in the family and the society was high; children were regarded as asset to the family and the general perception was that having children and bringing them up did not involved any additional cost to the family. In the urban areas, there appears to be a clear trend towards small families as more than one third of the family head interviewed reported that they were in favor of less than 2 children in the family whereas only a negligible proportion were in favor of four and more children in the family. But, in the rural families surveyed, there is a clear indication of a preference towards a relatively larger family as almost 30 per cent of the family head interviewed in the rural areas were in favour of at least three children in the family. In any case, favour and inclination for many children is not apparent from table 4.25. In the context of fertility decision making and reproductive health of woman, this perception of the family head about the number of children is a positive feature of the prevailing family and social environment.

#### 4.5 Sources of Knowledge about Reproductive Health Issues.

Talking and discussing about sexuality and sexuality related issues including fertility and reproductive health is a taboo in the Indian society. As the result, there is no well defined and well established institutional framework for informing people, especially the adult unmarried males and females and young married couples about various aspects of fertility and reproductive health issues. For married couples, some information, education and communication activities are organized as part of the officially sponsored National Family Welfare Program but because of the bureaucratic orientation of the program, these activities are confined more to informing people about the availability of health and family welfare services rather than meeting out the information needs of the people regarding fertility and reproductive health. Moreover, these activities are focused towards married couples only. Family life education is not the part of the general education in India. As the result, most of the unmarried adults remain largely ignorant of reproduction and reproductive health issues prior to the marriage and even after marriage, they do have any reliable and authentic source of information about these issues. The problem is particularly severe for females who have little interaction from the outside world because of the prevailing social and family norms. For them, the only source of information is the family where they learn usually by the experiences of the elders of the family. In terms of behavior, this means that most of the young married females learn about the traditions that are followed in the family in matters related to fertility and reproductive health. In such a learning environment, there is little scope for rational thinking and new ideas.

In order to get an idea about how unmarried adults and newly married ones, especially females, come to know about fertility and reproductive health related issues, all women interviewed during the survey were enquired at length about how they got the information about married life when they were going to be married. The first question that was asked from all women interviewed was whether anybody informed them about married life before the marriage. Those women who responded that somebody informed them about married life before marriage were further asked who was the person and whether she or he also gave some information about pregnancy and family planning. On the other hand, those women who reported that no body ever told anything about married life before marriage were further asked whether they themselves tried to get some knowledge about the married life before the marriage either by reading literature or asking from somebody. Those women who reported in affirmative were asked who was the person whom they approached to get the knowledge. Women interviewed were also asked whether they got any

information related to the married life and associated fertility and reproductive health issues through radio, television or other mass media before marriage.

All women interviewed were also asked whether anybody talked to them about married life, pregnancy, family planning, etc. immediately after marriage and, if yes, who was the person or the women themselves tried to discuss these issues with somebody and, if yes, who was the person concerned. The women interviewed were also asked whether their husband discussed issues related to married life and whether he also discussed common marital problems. Similarly, women interviewed were asked whether they themselves discussed pregnancy related issues at the time of their first pregnancy and, if yes, with whom.

The social and cultural shyness of the Indian society about exchanging knowledge related to married life and associated fertility and reproductive health issues in the population surveyed is very much apparent from table 4.26. Only a very small proportion of all women interviewed reported that anybody informed them any thing about married life before the marriage and even a smaller proportion reported that they themselves tried to get information about married life and associated fertility and reproductive health issues before the marriage. Similarly, only an insignificant proportion of women interview reported that they got some information about the married life from popular mass media like radio, television and news papers. The situation appears to be somewhat better in the urban areas but in the rural areas, as may be seen from table 4.26, majority of women interviewed totally ignorant about various aspects of the married life and associated fertility and reproductive health issues before the marriage. These observations are expected as free and frequent discussion on issues related to the married life and associated fertility and reproductive health issues are not the part of the popular discussion and debate in the society and culture in India. These observations also suggest that majority of the women interviewed were having virtually little concern about planning their family in terms of the number, sex and timing of children at the time of their marriage. As such, it is difficult to assume that these women would have followed a path of rational choice and reasoned decision making about the number and timing of children during their married life. Rather, it appears majority of women interviewed had followed a 'natural' path of reproductive behavior, a conjecture that is well reflected in high levels of fertility estimated in the population surveyed. In any case, this lack of knowledge about fertility and reproductive health issues at the time of the marriage and subsequent reproductive behavior after marriage has direct bearings on fertility levels and the reproductive health status of women.

Table 4.26: Proportion of women interviewed reporting that somebody talked to them about married life before marriage or they tried to get information about married life before marriage.

Knowledge source	Total	Rural	Urban
Anybody told about married life	17.68	14.30	25.44
<i>Who was the person?</i>			
<i>Mother</i>	26.74	34.16	17.20
<i>Other family members</i>	44.85	50.50	37.58
<i>Friends</i>	26.74	13.86	43.31
<i>Others</i>	1.67	1.49	1.91
<i>Informed about pregnancy</i>	48.06	47.52	48.73
<i>Informed about family planning</i>	34.72	34.65	34.81
<i>All</i>	100.00	100.00	100.00
<i>N</i>	367	211	153
Tried to get information	3.65	1.82	7.89
Tried to know from somebody	6.19	3.07	13.34
<i>Who was the person?</i>			
<i>Mother</i>	28.35	40.91	21.69
<i>Elder sister</i>	13.39	9.09	15.66
<i>Brother's wife</i>	25.20	18.18	28.92
<i>All</i>	100.00	100.00	100.00
<i>N</i>	129	45	80
Got information from Radio/TV	7.50	3.52	7.39
All	100.00	100.00	100.00
N	2076	1475	601

Among those women interviewed who reported that either somebody told them about married life and related fertility and reproductive health issues or they themselves were able to get some information about married life before marriage, the primary

source of information was the family and, in most of the cases, it was mother to daughter communication. The elder married sister and wife of the brother have also been found to be a part of this within family communication network but beyond the family, any communication network or information exchange system that had provided information about married life and reproductive health issues to the women interviewed was found to be largely absent. Even the popular media like radio and television was not found to be a source of information about fertility and reproductive health issues.

When asked whether anybody discussed about the married life and reproductive health issues after marriage, a relatively higher proportion of women interviewed reported in affirmative. However, as may be seen from table 4.28, discussion related to married life was not universal among the women interviewed. In fact, majority of the women interviewed reported that neither anybody discussed with them issues related to married life and reproductive health nor they themselves tried to discuss these issues with anybody even after marriage. Moreover, in majority of the women interviewed who reported that they had discussed about married life and related fertility and reproductive health issues after marriage, the discussion was literally limited with their husband. There were very few women interviewed who reported that persons other than the husband such as mother-in-law or other female members of in-law family had discussed married life issues with them after marriage. Even mother of the women interviewed and other members of their parent family rarely discussed these issues. Similarly, very few women interviewed reported that they themselves discussed issues related to married life and reproductive health to persons other than their husband.

Finally, all women interviewed were also asked whether they discussed pregnancy related issues with somebody at the time of their first pregnancy. Nearly 60 per cent of the women interviewed reported to have discussed issues related to pregnancy and delivery at the time of their first pregnancy. In the urban areas, this proportion was more than two third of the women interviewed whereas in the rural areas, more than half of the women interviewed reported that they had discussed pregnancy related issues at the time of the first pregnancy. However, this time, the discussion was not confined with the husband only as was the case immediately after the marriage. Rather, majority of the women interviewed reported that they discussed pregnancy and delivery related issues with their mother-in-law or with other members of in-law family.

Table 4.27: Proportion of women interviewed reporting that somebody talked to them about married life after marriage or they tried to get information about married life after marriage.

Knowledge source	Total	Rural	Urban
Anybody told about married life after marriage	47.34	45.20	52.24
<i>Who was the person?</i>			
<i>Husband</i>	88.53	90.98	83.69
<i>Member of in-law family</i>	6.20	6.53	5.54
<i>Mother-in-law</i>	0.21	0.00	0.62
<i>Mother</i>	1.86	0.78	4.00
<i>Friends and others</i>	3.11	1.40	5.23
<u>Talked about pregnancy and delivery</u>	54.08	48.91	64.31
<u>Talked about family planning</u>	26.37	18.22	42.46
<i>All</i>	100.00	100.00	100.00
<i>N</i>	983	799	314
Read literature	4.33	1.89	9.89
Tried to discuss with somebody	36.20	33.26	43.45
<i>Who was the person?</i>			
<i>Husband</i>	88.01	90.47	83.70
<i>Mother-in-law</i>	1.89	2.33	1.11
<i>Members of in-law family</i>	3.77	4.24	2.96
<i>Mother</i>	0.13	0.00	0.37
<i>Members of parent family</i>	2.29	2.33	2.22
<i>Friends and others</i>	3.90	0.63	9.63
<i>All</i>	100.00	100.00	100.00
<i>N</i>	752	491	261
All	100.00	100.00	100.00
N	2076	1475	601

Table 4.28: Source of knowledge about pregnancy related issues at the time of first pregnancy.

	Total	Rural	Urban
Discussed pregnancy related issues at first pregnancy	59.83	56.50	67.48
<i>Who was the person?</i>			
<i>Husband</i>	33.85	32.00	37.41
<i>Mother-in-law</i>	18.98	17.63	21.58
<i>Mother</i>	2.47	2.75	1.92
<i>Members of in-law family</i>	29.91	33.50	23.02
<i>Members of parent family</i>	6.57	5.25	9.11
<i>Friends</i>	2.47	2.88	1.68
<i>Others</i>	0.99	0.50	1.92
<i>Do not recall</i>	4.77	5.50	3.36
<i>All</i>	100.00	100.00	100.00
<i>N</i>	1242	833	406
All	100.00	100.00	100.00
N	2076	1445	601

In any case, it is clear from tables 4.27 and 4.28 that for most of the women interviewed, the only source of information about married life and associated fertility and reproductive health issues was the family - either the husband or other members of the in-law family. There were very few women interviewed who reported to have got the information on married life and associated fertility and reproductive health issues from a source outside the institution of family. An implication of such a system of exchange of information for fertility and reproductive health issues is that family interests, family values and family traditions in relation to reproduction and reproductive behavior are automatically become a part of the knowledge that is being shared. Moreover, there is little updating of the knowledge that is transferred from one generation of the family to its another generation. As such the reproductive decision making among the younger generation of the family, if there is any, is normally shaped in an environment which gives a preference to traditional family values and traditional family knowledge.

#### 4.6 Availability and Use of Reproductive Health Services.

Knowledge about fertility and reproductive health issues is just one of the two prerequisites of a rational reproductive behavior. In order to ensure that couples adopt a rational reproductive behavior which is conducive to low fertility levels and improved reproductive health status of the population, it is imperative that necessary fertility regulation and reproductive health services are available within the easy reach of the people so that they can use these services. If the necessary fertility regulation and reproductive health services are either not available or, if available, are not within the easy reach of the people then only knowledge of fertility and reproductive health issues may not be sufficient enough to adopt a rational reproductive behavior. Availability of fertility regulation and reproductive health facilities and the knowledge of the availability of these services among the people, therefore, constitutes an important dimension of the use of these services and hence adoption of a rational reproductive behavior.

In order to get an idea about the extent of the knowledge of the availability of fertility regulation and reproductive health services and the use of these services in the families surveyed, the family head interviewed were asked whether they knew of any health facility in their neighborhood and whether females of the family were using the facility or not. Similarly, all women interviewed during the survey were also asked whether they knew anybody in their neighborhood who could diagnose women's health problems or whether they had the knowledge of any treatment facility for women's health problems in their neighborhood and whether they had used this facility or not. Summary of the response given by the family head are presented in table 4.29 while those given by the women are presented in table 4.30.

Among the family head interviewed, only about 35 per cent were knowing that there was some health care facility in their neighborhood - the village in the rural area and the mohalla in the urban area. In rural areas, this proportion was only 21 per cent but it was nearly 70 per cent in the urban areas. Poor knowledge about the availability of health care facility among the family head surveyed in the rural areas is reflective of non availability of even the basic minimum health services and facilities in the villages surveyed. In Madhya Pradesh like in other states of India, health care delivery facilities are available in both public and private sector. In the rural areas, however, nearly all the health care delivery facilities are in the public sector and are free of cost. Private health care delivery facilities, on the other hand, are costly, beyond the reach of the poor and are located mostly in the urban areas, particularly in large metropolitan towns.

The public sector health care facilities consist of sub-health centers, primary health centers and community health centers in rural areas and civil dispensaries and civil hospitals in urban areas. In addition, public sector secondary and tertiary level hospitals - district hospitals, specialized hospitals and teaching hospitals attached to medical colleges are also located in the urban areas. In the rural areas, a population based normative approach has been adopted for the provision of basic health services. Thus, the government approach for providing health care facilities in the rural areas calls for creating a health care facility for a given population size and not for all rural habitation. In the urban areas, on the other hand, establishment of public health care services facilities are not based on any norm; it is purely ad-hoc in nature.

Table 4.29: Proportion of family head interviewed reporting availability and use of health facility in their neighborhood.

	Total	Rural	Urban
<u>Any health facility available in village/mohalla</u>			
Yes	35.13	21.23	69.24
No	62.34	75.89	29.08
Do not know	2.53	2.88	1.68
<u>Type of health facility available</u>			
<i>Traditional birth attendant</i>	<i>22.71</i>	<i>17.10</i>	<i>26.94</i>
<i>Nurse</i>	<i>40.44</i>	<i>47.10</i>	<i>35.44</i>
<i>Private doctor</i>	<i>50.00</i>	<i>25.48</i>	<i>68.45</i>
<i>Government hospital</i>	<i>21.47</i>	<i>9.35</i>	<i>30.58</i>
<u>Females using the facility</u>			
<i>Yes</i>	<i>93.67</i>	<i>92.91</i>	<i>94.23</i>
<i>No</i>	<i>4.68</i>	<i>6.74</i>	<i>3.15</i>
<i>Do not know</i>	<i>1.66</i>	<i>0.35</i>	<i>2.62</i>
<i>All</i>	<i>100.00</i>	<i>100.00</i>	<i>100.00</i>
<i>N</i>	<i>722</i>	<i>313</i>	<i>416</i>
All	100.00	100.00	100.00
N	2076	1445	601

Current norms for establishing a sub-health center, a primary health center and a community health center in the rural areas, as outlined in the national health policy are described in table 4.30. These norms are different for the tribal and remote areas and for other rural areas. According to these norms, a sub-health center has been established for every 3000 population in tribal and remote areas and for every 5000 population in other rural areas. The problem with this normative approach of establishing health care delivery facilities is that a population of 3000 or a population of 5000 is distributed over a number of villages and helmets. According to the 1991 population census, the average population size of a village in Madhya Pradesh was approximately 650. If this average population size is taken as a standard, then the norms given in table 4.30 suggest that, on average, there will be one sub-health center for every 5 villages in tribal and remote areas and for every 7 villages in other rural areas. Since the health center can be located in one village only, this implies that about four to six villages in the rural areas or approximately 70-80 per cent of the villages will always be without a health facility even if the norms laid down by the government are achieved. Incidentally, this proportion is almost the same as the proportion of female head interviewed reporting that had no knowledge of any health facility in their village.

Table 4.30: Population norms adopted by the government for the establishment of public health care delivery facilities in rural areas.

Name of the health care delivery institution	Norm for tribal and remote rural areas	Norm for other rural areas
Sub-health center	One for every 3000 population	One for every 5000 population
Primary health center	One for every 20 thousand population	One for every 30 thousand population
Community health center	One for every 80 thousand population	One for every 120 thousand population

As regards the type of health care facility available, half of the family head interviewed reported that a private doctor was available in their neighborhood. However, availability of a private doctor in the rural areas was just 25 per cent compared to nearly 70 per cent in the urban areas. This is expected as majority of private health care facilities in the state are located in urban areas, especially in large towns and metropolitan areas. By contrast, a larger proportion of the family head of

rural families surveyed reported availability of a nurse in the neighborhood as compared to the family head of urban families. The same is true about the availability of traditional birth attendants. Interestingly, availability of a government hospital in the neighborhood was reported by only about one fifth of the family head interviewed. In rural areas, this proportion was even less than 10 per cent. Although, government claims availability of basic health services to all in the rural and remote areas, yet the findings presented in table 4.29 clearly indicate that the rural population was largely ignorant of the availability of these services.

Knowledge of the availability of some type of health facility in the neighborhood has been found to be directly related to the use of that facility by the females of the family head interviewed. Nearly 94 per cent of those family head who were knowing of some health facility in the neighborhood reported that females of their family were using the health facility available. Moreover, there was little rural-urban differential in the use of health care facilities among those families in which the family head had the knowledge that health care services were available in the neighborhood. Clearly, availability of health care facilities and knowledge of the availability of such facilities are critical for the use of these facilities by the people.

In addition to the family head, the women interviewed during the survey were also asked about the diagnostic and treatment facilities related to woman's health issues available in their neighborhood that could address the woman's health, especially reproductive health related problems. Only about one fifth of the women interviewed reported that they knew of some person in their neighborhood who had the knowledge and skills to diagnose the health problems specific to women. This proportion was just 15 per cent in the rural areas. Although this proportion was relatively better in the urban areas, yet it was still less than 40 per cent. On the other hand, relatively higher proportion of the women interviewed reported that they knew of some treatment facility for women's health problems in their neighborhood, although the proportion of women interviewed knowing some treatment facility in their neighborhood was extremely low in the rural areas. In fact, knowledge about the treatment facility for women's health related problems was very high in the urban areas which appears to have influenced the proportion of women knowing about some treatment facility for the rural and urban population combined. If it is assumed that knowledge of the treatment facility is an indicator of its availability then, it is clear, that in the rural areas surveyed, treatment facilities for the health related problems of women were simply not available.

Table 4.31 Proportion of women interviewed reporting the availability of reproductive health services delivery facilities in the neighborhood and use of these facilities.

	Total	Rural	Urban
Anybody in the neighborhood who can diagnose women's health problems			
Yes	21.91	15.64	36.28
No	72.77	79.87	56.50
Do not know	5.32	4.49	7.22
Any treatment facility in the neighborhood			
Yes	27.72	12.64	62.12
No	64.65	78.47	33.12
Do not know	7.63	8.89	4.75
<i>Attended the facility</i>			
<i>Yes</i>	<i>78.84</i>	<i>58.76</i>	<i>87.95</i>
<i>No</i>	<i>19.40</i>	<i>37.29</i>	<i>11.28</i>
<i>Do not recall</i>	<i>1.76</i>	<i>3.95</i>	<i>0.77</i>
<i>All</i>	<i>100.00</i>	<i>100.00</i>	<i>100.00</i>
<i>N</i>	<i>574</i>	<i>183</i>	<i>373</i>
All	100.00	100.00	100.00
N	2076	1445	601

The use of the available treatment facility was, once again, found to be very high in those women interviewed who were knowing that some treatment facility was available in the neighborhood. In the urban areas, nearly 9 out of every 10 women interviewed who were knowing about the treatment facility in their neighbourhood reported that they had also attended that facility that they knew. In rural areas, on the other hand, only 60 about per cent of the women interviewed who had the knowledge of health care facility in their neighbourhood reported that they had used the facility. However, yet even this proportion amply reflects the high rate of use of available health facilities among rural women who were having the knowledge of the existence of the facility.

This description of the institutional context of the reproductive health situation that prevailed in the population surveyed clearly highlights the complexity and positive and negative features of the institutional environment in which all reproduction and reproductive health related decisions and are made. At the level of the family and the society, there are some institutional frameworks that influence the reproductive health of women in somewhat adverse manner. At the same time, there are some inbuilt positive features of the family and social system in relation to fertility and reproductive health of the women. In general, the family and social environment of the population surveyed presents a mixed scenario which has both positive and negative effects on fertility and reproductive health.

By contrast, issues like availability of reproductive health services, basic orientation of population control efforts and availability of communication networks for adult unmarried males and females are some of the areas of the institutional context of fertility and reproductive health which appear to be a cause of concern in terms of fertility reduction and improvements in reproductive health of women. The importance of these issues of the institutional context in modifying the reproductive behavior are well known and many of these issues are the focus areas of government interventions directed towards fertility reduction and improvements in reproductive health situation. However, the present survey reveals that there are serious deficiencies in the current government interventions to address these issues. Because of these deficiencies, the impact of these interventions on fertility levels and reproductive health of women, in the population surveyed, appears to be very limited.

## **Chapter 5**

### **Epilogue**

The poor fertility and reproductive health situation the three development blocks and five towns of Madhya Pradesh, one of the constituent states of India is very much apparent from the findings of the survey presented in the foregoing pages. The situation that prevails in the surveyed population is very much similar to the fertility and reproductive health situation in the state as a whole. Madhya Pradesh is ranked amongst the poorest states of the country in terms of demographic and health transition with continued exceptionally levels of fertility and mortality. At the same time, the extent and nature of attention and care during pregnancy and at the time of delivery has also been found to be grossly inadequate. The disease burden among females, especially during pregnancy has also been found to be very high while knowledge of females about key fertility and reproductive health related issues, at best, is imperfect.

The prevailing fertility and reproductive health situation in the surveyed population has been found to be associated with an institutional context which is, in general traditional and orthodox at the level of the family and society and which is ill designed in terms of fertility regulation and reproductive health services delivery infrastructure. The traditional and orthodox nature of the institution of the family has both positive and negative features in relation to reproductive behavior and reproductive health. Thus, the family oriented institutional environment of reproductive behavior and reproductive health accords a relatively high value to children that may be a contributing factor towards high fertility and marriage, especially of girls, at a very young age, it also has the system of consummation of marriage which not only reduces the period of exposure of a female to conception and helps in safeguarding the females from the ill effects of marrying at a young age. Similarly, females in the Indian family and the society have their own value. This value system is driven by the religious and cultural sentiments attached to women in the Indian society than by the economic rationale. Because of this value system, the desire for female children is very much there in the Indian family.

An implication of the family orientation of the institutional context of reproductive behavior and reproductive health in the surveyed population is that the institutional context of reproductive behavior and reproductive health is relative closed in terms of transmission of knowledge about fertility and reproductive health issues.

Information about issues related to reproductive behavior and reproductive health is normally transmitted within the family, from one generation to the other. As the result, there is little advancement in terms of the knowledge and so little transition in terms of reproductive behavior.

By contrast, the health and family welfare services delivery infrastructure required for ensuring transition in reproductive behavior and improvements in reproductive health appears to be ill designed and grossly inadequate. The strategy for modifying the reproductive behavior and improving reproductive health status of the population is based primarily on promoting the use of contraceptive methods for birth spacing and birth limitation and on providing essential obstetric care to pregnant women. But the National Family Welfare Programme, the mainstay of efforts to promote the use of contraceptive methods is heavily biased towards promoting the use of birth limitation methods like female and male sterilization. There is little evidence of any evidence of the promotion of the contraceptive methods which help in spacing between births either in terms of knowledge about these methods or in terms of the use of these methods in the population surveyed. At the policy level, the programme strategy stresses the need for promoting spacing methods of contraception but, at the operational level, the planning, management and monitoring and evaluation frameworks required for promoting the use of spacing methods are grossly inadequate.

Similarly, ensuring delivery of a package of essential obstetric services to all pregnant women is still a distant preposition in the surveyed population, especially in the rural areas. One critical factor in the grossly inadequate attention and care during pregnancy and at the time of delivery is that necessary essential obstetric care services are not within the easy reach of the most of the population. On the other hand, essential obstetric care services are virtually absent in the rural areas. The government has adopted a population based normative health care services delivery model for the rural areas. But this model is grossly inadequate for meeting out the reproductive health needs of majority of females. There is a need of a village based family welfare and reproductive health care delivery system which must be guided by the needs of the people, not by the norms laid down by the government. There is currently no such system in existence. Orienting the existing family welfare and reproductive health services delivery system to the needs of the people and ensuring its availability to all settlements is a major challenge to improving the reproductive health situation.

## References

- Arriaga, E.E. 1994. *Population Analysis with Microcomputers*. United States Bureau of Census.
- Bhat, P.N. Mari, K. Navaneetham, S.I. Rajan. 1995. Maternal mortality in India: Estimates from a regression model. *Studies in Family Planning* 24:217-232.
- Bogue, D.J. and E.J. Bogue. 1970. *Techniques of Pregnancy History Analysis*. Chicago, University of Chicago, Community and Family Study Centre.
- Bongaarts, J. 1978. A framework for analyzing the proximate determinants of fertility. *Population and Development Review* 4:105-132.
- Chaurasia, Alok Ranjan. 1998. *The State of Health in Madhya Pradesh*. Bhopal, State Information Education Communication Bureau, Department of Public Health and Family Welfare, Government of Madhya Pradesh.
- Davis, K. and J. Blake. 1956. Social structure and fertility: An analytic framework. *Economic Development and Cultural Change* 4:211-235.
- Government of India. 1994. *Annual Report of the Survey of Causes of Death (Rural)*. New Delhi, Registrar General of India.
- Government of India, 1999. *Sample Registration Bulletin, October 1999*. New Delhi, Registrar General of India.
- Government of Madhya Pradesh. 1996. *Report on the Survey of Causes of Death in Madhya Pradesh (Rural)*. Bhopal, Directorate of Economics and Statistics.
- Government of Madhya Pradesh. 1999. *District Census Handbook, 1991*. Bhopal, Directorate of Economics and Statistics.
- Government of Madhya Pradesh. 1999a. *Health Services in Madhya Pradesh*. Bhopal, Directorate of Public Health and Family Welfare.
- International Institute for Population Sciences. 1999. *National Family Health Survey, 1998-99. Madhya Pradesh (Preliminary Report)*. Mumbai, International Institute for Population Sciences.
- McCarthy, J. and D. Maine. 1992. A framework for analyzing determinants of maternal mortality. *Studies in Family Planning* 23:23-33.
- National Council for Applied Economic Research. 1996. *India: Human Development Report*. New Delhi, National Council of Applied Economic Research..
- Ranjan, Alok (Chaurasia). 1998. Maternal mortality in Madhya Pradesh. *Journal of Family Welfare* 44:55-61.
- Shukla, A. and A.R. Chaurasia. 1996. *Madhya Pradesh Target Couple Survey*. Vol I. Bhopal, Government of Madhya Pradesh, Rajiv Gandhi Mission for Elimination of Iodine Deficiency Disorders.

- United Nations. 1993. *PCEDIT: Software Programme for Data Entry and Editing*. New York, United Nations. Department of Economic and Social Information and Policy Analysis.
- United Nations. 1993a. *XTABLE: Software Programme for Cross Tabulations*. New York, United Nations. Department of Economic and Social Information and Policy Analysis.
- United Nations Children's Fund. 1995. *Progress of Nations*. New York, United Nations Children's Fund.