DLHS - 2

Gujarat

Reproductive and Child Health

District Level Household Survey
2002-04

International Institute for
Population Sciences,
(Deemed University)
Mumbai – 400 088

Ministry of Health &
Family Welfare,
New Delhi – 110 011

Centre for Operations Research
and Training,
Vadodara - 390 007

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Contributors

Center for Operations Research and Training (CORT)

Bella Patel Uttekar
Wajahat Ullah Khan
Nayan Kumar

International Institute for Population Sciences (IIPS)

F. Ram
B. Paswan
L. Ladu Singh
Akash N. Wankhede
Rajiv Ranjan

STUDY TEAM
Seema Narvekar
Jashoda Sharma
Vasant Uttekar
Amit Nag
Jawahar Vishwakarma
Shweta Shahane

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PREFACE AND ACKNOWLEDGEMENT

Government of India had launched the Reproductive and Child Health (RCH) program to ensure that couples have access to adequate information and services for reproductive health care. As a first step, family planning target has been withdrawn and an effort is being made to provide a package of reproductive health services at different levels of health care centres.

Monitoring of the services is also being improved. New indicators are being added to assess quality of services and provision of an integrated reproductive health care service. The District Level Household Survey (DLHS) was initiated by Government of India and financed by the World Bank covering all the districts in the country. For the second time, district level estimates will be available for most of the critical reproductive health indicators. These important initiatives are certainly quite satisfying for all those who are concerned with taking ICPD reproductive health agenda ahead. The project is being coordinated by International Institute for Population Sciences, Mumbai and implemented by a number of consulting agencies.

For the purpose of data collection, uniform questionnaires, sampling design and field procedures were used throughout the country. The survey thus provided comparable data for all the districts in the state. The present report provides salient findings of Gujarat and covered all the districts. The findings of selected indicators of reproductive and child health services from the state of Gujarat are presented in the report.

It is believed that the data generated through the survey will meet the requirements of the Programme Administrators and Policy Makers for making effective interventions for providing quality services and achieving multiple objectives.

The DLHS-RCH could not have been successfully completed without cooperation and support from innumerable sources at various stages of the project. Although, it is not possible to acknowledge everyone involve in the survey, several organizations and individuals deserve special mention.

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We would be failing in our duty if we do not thank our respondents who spent their valuable time with tremendous patience. We are thankful to all of them.

Prof. M. M. Gandotra **September 2006**
Director

Centre for Operations Research
and Training (CORT), Vadodara

KEY INDICATORS, GUJARAT

DISTRICT LEVEL HOUSEHOLD SURVEY- REPRODUCTIVE AND CHILD HEALTH, (DLHS-RCH), 2002-04

Sample size	
Households surveyed	25,759
Currently married women age 15-44	20,796
Husband's of eligible women	15,311
Characteristics of households	
Percent rural	64.6
Percent Hindu	90.6
Percent Muslim	6.7
Percent other religion (Jain)	1.4
Percent scheduled caste	10.0
Percent scheduled tribe	12.9
Percent with electricity	86.2
Percent with flush toilet	37.3
Percent with no toilet facility	52.5
Percent living in *Kachcha* houses	23.2
Percent living in *Pucca* houses	49.3
Percent with low standard of living	34.6
Percent with high standard of living	33.2
Percent with iodized salt (15+ppm)	35.1
Characteristics of currently married women age 15-44 years	
Percent below age 30	48.2
Percent with age at first cohabitation below age 18	41.7
Percent illiterate	43.5
Percent having 10 or more years of schooling	21.5
Percent with illiterate husband	20.2
Percent with husband 10+ years of schooling	36.6
Marriage	
Mean age at marriage for boys	22.3
Mean age marriage for girls	19.4
Percent of boys married below age 21	33.7
Percent of girls married below age 18	24.6
Fertility	
Mean children ever born women age 40-44 years	3.6
Percent of births of order 3 and above[1]	38.2
Current use of family planning method	
Any method	59.2
Any modern method	52.4
Pill	3.2
IUD	3.8
Condom	4.8
Female sterilization	39.3
Male sterilization	1.3
Any traditional method	6.9
Rhythm/safe period	5.4
Withdrawal	1.4
Unmet need for family planning	
Percent with unmet need for spacing	6.8
Percent with unmet need for limiting	9.5
Percent with total unmet need	16.3
Maternal care[2]	
Percent of women received antenatal check-ups	87.6
Antenatal check-up at home	9.9
Antenatal check-up in first trimester	47.1
Three or more visit for ANC	61.4
Two or more tetanus toxoid injections	73.2
Adequate Iron folic acid tablets/syrup[3]	30.2
Full antenatal check-up[4]	25.8
Delivery characteristics[2]	
Delivery at home	47.5
Delivery at government health institutions	12.7
Delivery at private health institutions	39.5
Delivery attendant by skilled persons[5]	62.1
Child health	
Percent of children whose mother squeezed out milk from her breast[6]	64.0
Percent of children[7] with diarrhoea[8] who received ORS	24.4
Percentage of woman whose child[7] with pneumonia[8] sought treatment	64.9
Percent of children who received vaccinations[9]	
BCG	85.4
DPT (3 injections)	66.1
Polio (3 drops)	67.9
Measles	65.2
All vaccinations[10]	54.0
No vaccination at all	7.3
Percentage of women who had	
Pregnancy complication[2]	35.2
Delivery complication[2]	43.3
Post delivery complication[2]	25.5
Symptoms of RTI/STI	37.6
Problems of vaginal discharge	17.2
Menstruation related problem	17.3
Awareness of RTI/STI and HIV/AIDS	
Percent of women who have heard of RTI/STI	41.3
Percent of women who have heard of HIV/AIDS	45.2
Utilization of government health services	
Antenatal care	22.9
Treatment for pregnancy complication	29.0
Treatment for post-delivery complication	28.3
Treatment for vaginal discharge	19.1
Treatment for children with diarrhoea	17.1
Treatment for children with pneumonia	11.9
Quality of family planning services	
Percent non-users ever advised to adopt the family planning method	16.3
Percent users told about side effects of method	37.2
Percent users who received follow-up services	40.4
Characteristics of husband of eligible women	
Percent of husband knowing NSV	45.3
Percent of men who have heard of RTI/STI	50.3
Percent of men who have heard of HIV/AIDS	73.9
Percentage who had any symptoms of RTI/STI	6.4
Sought treatment for RTI/STI	39.5

[1] For births in past three years, [2] For live/still births during three years preceding the survey, [3] 100 or more IFA tablets/Syrup, [4] A minimum of three visits for ANC, at least one TT injections and 100 or more IFA tablets/syrup, [5] Either institutional delivery or home delivery assisted by Doctor/ANM/nurse, [6] Children age below 3 years, [7] Last but one living children below age 3 years, [8] Last two weeks preceding the survey, [9] Last but one living children (age 12-23 months) born during three years preceding the survey. [10] BCG, three injections of DPT, three drops of polio and measles.

SALIENT FINDINGS

For the assessment of district level Reproductive and Child Health indicators, Government of India proposed to undertake district level household surveys through non-governmental agencies on an annual basis. The District Level Household Survey (DLHS) was the result of government's initiative. In Gujarat, Centre for Operations Research and Training (CORT), was entrusted the work of carrying out the survey. The survey for Phase-1 of the DLHS covering 12 districts of the state was conducted during August 2002 to January 2003. The survey for Phase-2 covering the remaining 13 districts of the state was carried out during February 2004 to October 2004. The focus of the survey was on: i) Coverage of antenatal care (ANC) and immunization services, ii) Extent of safe deliveries, iii) Contraceptive prevalence rate and unmet need for family planning, iv) Awareness about RTI/STI and HIV/AIDS and v) Utilization of government health services and users' satisfaction. The salient findings of the survey are presented here.

For both the phases together, the data was collected from 25,759 households in Gujarat. From these households, 20,796 eligible women (usual resident or visitors who stayed in the sample household the night before the interview, currently married aged 15-44 years whose marriage was consummated) and 15,312 husbands of eligible women were interviewed.

Of the total households interviewed in Gujarat, nearly 35 percent were from urban areas. There were 91 percent Hindu households, seven percent Muslim and remaining came under other category in the sample. About 23 percent of the households belonged to either scheduled castes or scheduled tribes. About 23 percent of the households lived in *Kachcha,* 28 percent in Semi-*pucca* and 49 percent in *pucca* houses. Little more than one-third (35 percent) of the households belonged to low economic status.

About 70 percent of population aged seven and above are literate. Percent literate among females is 59 where as it is 81 for males. Proportion of non-literate is much higher among the older cohort compared to the younger ones. About 44 percent of eligible women in the state are non-literate, and 22 percent have completed 10 or more years of schooling. As regards distribution of non-literate women, lesser proportion of younger women's below age 30 are illiterate compared to older women age 30 and above. Similarly, the proportion of non-literate husbands is more in the age group of 35 years and above.

The reporting of the marriages during three years prior to survey gives the mean age at marriage among the boys and girls in the state as 22.3 and 19.4 years respectively. Thirty-four percent of boys and 25 percent of girls in the state got married before attaining the minimum legal age at marriage of 21 and 18 years respectively. In all the districts, except Navsari, Rajkot and Surat more than one-fifth of boys got married below the legal minimum age at marriage. In case of girls the proportion getting married below the legal minimum age varies from a lowest of three percent in Rajkot to highest of 42 percent in The Dangs district.

About 35 percent of the households use cooking salt that is iodized at the recommended level of 15 parts per million or higher level of iodine content whereas 45 percent of households used salts that are not iodized at all. Lowest proportion of households (25 percent) in Kachchh are using non-iodized salt whereas in Anand the highest proportion of households (65 percent) used non-iodized salt. While only in three districts Kachchh (56 percent), Panchmahals (50 percent), and Surat (61 percent), more than half of households consume adequately iodized salt.

On an average, women on the verge of completion of reproductive period have given birth to 3.6 children. The completed fertility in the state varies from the lowest of 2.8 children ever born per woman in Valsad to the highest of 4.5 children in Banaskantha.

The share of births of order 3 and above in the total births that occurred three years prior to survey is 38 percent. In most of the districts, proportion of higher order births is quite high, ranging from the lowest of about 24 percent in Navsari and Surat, to the highest of 57 percent in Dahod.

The data collected on the utilization of ANC services for the women who had their last live/still birth during three years prior to survey shows that the ANC coverage in the state is high as 88 percent of the women received at least one ante-natal care during pregnancy. Ten percent of the women during their pregnancy were visited by health worker at their residence to provide ANC services. Around half of the women visited private health facilities and 23 percent received ANC from government health facilities. The percentage of women who got some kind of ANC during pregnancy ranges between 73 percent in The Dangs to about 97 percent in Porbandar and Navsari. In 12 out of 25 districts, more than 90 percent women got some antenatal care.

Though 88 percent of the women in Gujarat received ANC, only 58, 62 and 67 percent women had check-up of weight, blood pressure and abdomen respectively. About 81 percent women received Iron and Folic Acid (IFA) tablets/syrup and 86 percent got at least one TT injection. A full package of ANC including minimum three ANC visits, at least one TT injection and 100 or more IFA tablets/syrup was received by 26 percent of women.

Minimum three ANC and timing of first check up is crucial for maternal and child care. In Gujarat, 47 percent of women got ANC in the first trimester and 61 percent had minimum three antenatal check-ups. Extent of ANC in first trimester varies from a minimum of 28 percent in Dahod to the maximum of 68 percent in Navsari. In Banaskantha and The Dangs, only 37-39 percent of women had minimum of three ANCs whereas in Navsari 88 percent women had got minimum of three ANCs.

About 52 percent of the total deliveries in Gujarat were conducted in the health institutions; 11 percentages point up from RCH Round I. The majority (40 percent) of the deliveries were conducted in private institutions as against government institution (13 percent of total deliveries). Nearly half (48 percent) of the total deliveries took place at home, and out of total home deliveries only 21 percent were assisted by either a doctor or nurse/ANM. So overall, 62 percent of the deliveries, more from the RCH Round I (52 percent), in the state were safe deliveries. The extent of institutional deliveries varies from the highest of 75 percent in Mahesana to the lowest of 11 percent in The Dangs. Safe deliveries were on the similar pattern in all the districts. The percent of the institutional deliveries increases substantially with women's education and economic status.

In Gujarat, 35, 43 and 26 percent of the women experienced pregnancy, delivery and post delivery complications respectively. Around 55 percent of the women sought treatment for the pregnancy and post-delivery complications each. The pregnancy complication varies from the lowest of 27 percent in Ahmedabad to the highest of 52 percent in Panchmahals. The incidence of all the three types of complications seems to be linked with each other. In the districts where the incidence of pregnancy complications is high, the incidence of delivery and post-delivery complications is also high.

In most of the districts and the state as a whole, the practice of breast-feeding is almost universal. However, the practice of initiation of breastfeeding within two hours of birth of the child is not common. In Gujarat, only 24 percent women started breastfeeding the child within two hours of birth and 55 percent started after one day of birth. There is great deal of variation in the pattern of breastfeeding across the districts. In Dahod and Panchmahals districts only seven percent of the women breastfed the child within two hours of birth while in the districts of The Dangs this percentage is highest at 74 percent.

In Gujarat 85, 66, 68 and 65 percent of the children received the BCG vaccine, three doses of DPT, Polio and measles vaccine respectively. There is 20 percentage points drop from BCG to measles. It means that large number of children that have contact with services providers are missed out of subsequent services. The complete schedule of immunization including BCG, three doses of DPT and Polio each and measles was received by 54 percent of the children, whereas seven percent of the children did not receive a single vaccination under routine programme. About 32 percent of the children received supplementation of at least one dose of vitamin A and only 19 percent children received IFA tablets/liquid for iron supplementation.

The extent of complete immunization consisting of BCG, three injections of DPT, three doses of Polio and measles is the lowest in Dahod (19 percent) and highest in Navsari (92 percent). In 11 districts, more that 60 percent of the children received complete immunization.

In Gujarat, 93 percent of the women were aware of diarrhoea management and 28 percent were aware of Oral Rehydration Salt (ORS). During the two-weeks period prior to survey, children of 13 percent of the women suffered from diarrhoea, and 24 percent women treated diarrhoea among children by giving ORS. In comparison with awareness about diarrhoea management, the awareness about danger signs of pneumonia is quite low. Only 23 percent of the women reported awareness about danger sings of pneumonia. Twenty-six percent of the women reported that their children suffered from cough, cold and difficulty in breathing in two-week period prior to survey and 65 percent sought treatment.

The knowledge of family planning methods is almost universal in most of the districts of Gujarat, with around 99 percent women reporting knowledge of one method or the other. However, the knowledge of any spacing method is low, but the proportion *per se* is quite high (88 percent). The knowledge of any modern methods is also universal in most of the districts, though the knowledge of all modern methods is only 56 percent. The proportion knowing all modern methods (males and females' sterilization, IUD, oral pills and condom) varies from merely 19 percent in The Dangs to 82 percent in Ahmedabad.

In DLHS, knowledge about No-scalpel vasectomy has been asked to husbands of eligible women. About 45 percent of the husbands were aware of no-scalpel vasectomy in the state. The proportion of husbands knowing No-scalpel vasectomy varies from 28 percent in Jamnagar to about 73 percent in Anand and Porbandar districts.

The contraceptive prevalence rate (any methods) in the state is 59 percent, 2 percentage point up from RCH Round I, comprising of prevalence of 52 percent of modern methods and seven percent of traditional methods. About two-fifths of the couples adopted sterilization. The percent user of the two male methods, sterilization and condom is only six percent. There has been positive association between contraceptive use and place of residence, female education, and economic development. The highest contraceptive prevalence is in Surat (70 percent)

followed by Navsari, Amreli, Narmada, Bhavnagar and Rajkot (67-69 percent) and lowest is in Banaskantha (41 percent).

In Gujarat, a total of 16 percent of women are found to have unmet need for family planning, with more for limiting than for spacing. The total unmet need varies from eight percent in Amreli to 32 percent in Kachchh followed by The Dangs (27 percent).

Only 13 percent of the women in the state reported that either ANM/LHV or health worker visited them at their residence at least once in the past three months. More than 80 percent of the women who were visited by ANM felt that ANM had given them sufficient time to discuss health-related matters and services.

Around half of the districts in Gujarat, less than 10 percent of the women reported the visit of ANM/LHV to their residence. In the 7 districts, 10-15 percent of the women reported visits of ANM/LHV and in the remaining more than 15 percent of the women reported visit of ANM/LHV.

It has been observed that in three months period prior to survey, 19 percent of the eligible women who were required to consult health facility visited any of the government health facilities. Small proportion (13-35 percent) of the women who visited the government health facility rated facility as excellent. On the other hand, those women who did not visit the government health facility reported poor quality of services, medicine not given or bad quality, inconvenient location or time is not suited as the reasons.

The district level variation in the utilization of the government health facilities ranges from 11 percent in Ahmedabad to 43 percent in The Dang. A large percentage of women, who visited to private health facilities (75 percent), ranges from 50-57 percent in The Dangs and Jamnagar to more than 80 percent in Gandhinagar, Panchmahals, Surat and Ahmedabad.

In Gujarat 41 and 45 percent of women are aware of RTI/STI and HIV/AIDS respectively. The corresponding level of awareness among husbands of eligible women is 50 and 74 percent. The percent of women who are aware of RTI/STI and HIV/AIDS is lowest in The Dangs 10 and 13 percent respectively to highest in Bharuch (76 percent for RTI/STI) and in Gandhinagar (66 percent for HIV/AIDS). Similarly awareness level of husbands of eligible women of RTI/STI and HIV/AIDS are lowest in The Dangs (19 and 32 percent respectively) to highest in Porbandar (81 and 89 percent respectively). Out of 25, in 12 districts the awareness of HIV/AIDS is below state figure for women and in 10 districts for husbands of eligible women.

About 38 percent of women and six percent of husbands of eligible women in the state reported having at least one symptoms of RTI/STI. The prevalence of RTI/STI for women is lowest in Navsari (20 percent) and highest in The Dangs (53 percent) and for men it is lowest in Gandhinagar and Jamnagar (3 percent each) while highest in Narmada (15 percent). About 17 percent of women reported vaginal discharge with low in The Dangs (9 percent) to highest in Anand (27 percent). One-fourth of women sought treatment for vaginal discharge problem and two-fifths of husbands sought treatment with at least one symptoms of RTI/STI. It may be noted that in most of the districts a higher proportion of men compared to women sought treatment for their reproductive health problems.

CHAPTER I

INTRODUCTION

1.1 Background and Objectives of the Survey

The Reproductive and Child Health (RCH) programme launched by Government of India (GoI) in 1996-97 envisages to provide quality services and achieve multiple objectives. It ushered a positive paradigm shift from method-oriented, target-based activity to providing client-centred, demand-driven quality services. Also, efforts are made to reorient provider's attitude at grassroots level and to strengthen the services at outreach levels.

The new approach requires decentralization of planning, monitoring and evaluation of the services. The district being the basic nucleus of planning and implementation of the RCH programme, Government of India has been interested in generating district level data on utilization of the services provided by government health facilities, other than that based on service statistics. It is also of interest to assess people's perceptions on quality of services. Therefore, it was decided to undertake District Level Household Survey (DLHS) under the RCH programme in the country.

The Round I of RCH survey was conducted during the year 1998–99 in two phases (each phase covered half of the districts from all states/union territories) in 504 districts for which International Institute for Population Sciences (IIPS), Mumbai was designated as the nodal agency.

In Round II, survey was completed during 2002-04 in 593 districts as per the 2001 Census. In DLHS-RCH, information about RCH has been collected using a slightly modified questionnaire. In Round II, some new dimensions, such as test of cooking salt to assess the consumption of salt fortified with iodine, collection of blood of children, adolescents and pregnant women to assess the level of anaemia, and measurement of weight of children to assess the nutritional status, were incorporated.

The main focus of the DLHS-RCH has been on the following aspects:

- Coverage of ANC and immunization services
- Proportion of safe deliveries
- Contraceptive prevalence rates
- Unmet need for family planning
- Awareness about RTI/ STI and HIV/AIDS
- Utilization of government health services and users' satisfaction.

For the purpose of conducting DLHS-RCH, all the states and the union territories were grouped into 16 regions. A total of twelve research organizations including Population Research Centres (PRCs) were involved in conducting the survey in 16 regions with IIPS as the nodal agency. Centre for Operations Research and Training (CORT) was appointed as regional research organization to conduct this study, covering all districts, in Gujarat.

1.2 Survey Design

In Round II, a systematic, multi-stage stratified sampling design was adopted. In each district, 40 Primary Sampling Units (PSUs – Villages/Urban Frame Size) were selected with probability proportional to size (PPS) using the 1991 Census data. All the villages were stratified according to population size, and female literacy was used for implicit arrangement within each strata. The number of PSUs in rural and urban areas was decided on the basis of percent of urban population in the district. However, a minimum of 12 urban PSUs were selected in each district in case the percent urban was low. The target sample size in each district was set at 1,000 complete residential households from 40 selected PSUs. In order to take care of non-response due to various reasons, sample was inflated by 10 percent (i.e. 1,100 households). In the second stage, within each PSU, 28 residential households were selected with Circular Systematic Random Sampling (CSRS) procedure after house listing.

For selecting the urban sample, the National Sample Survey Organization (NSSO) provided the list of selected urban frame size (UFS) blocks in the district. The UFS blocks were made available separately for each district for urban areas. The maps of selected blocks were obtained from the NSSO field office located in each state/union-territory.

But in each state, in two districts, the PSUs that were surveyed in Round I of DLHS-RCH (also known as RHS-RCH) were also selected for survey in Round II. This was done in order to measure the changes more accurately. Two districts, one with the highest proportion of safe delivery and another with the lowest proportion of safe delivery among those surveyed during Round I of the survey were selected for this purpose. In all other districts, fresh sample of PSUs were selected.

1.3 House Listing and Sample Selection

The household listing operation was carried out in each of the selected PSU segment prior to the data collection that provided the necessary frame for selecting the households. The household listing operation also involved preparation of location map and layout sketch map of the structures and recording the details of the households in these structures in each selected PSU. This exercise was carried out by independent teams each comprising of one lister, one mapper and one supervisor under the overall guidance and monitoring of the survey coordinator of households of the selected regional agencies.

A complete listing of households was carried out in villages with households up to 300. In case of villages with more than 300 households but less than or equal to 600 households, two segments of more or less same size were formed and one segment was selected at random and household listing was carried out. In case of villages with more than 600 households, segments each of about 150 households were formed and two segments were selected for listing using the systematic random sampling method.

Small villages with less than 50 households were linked with a nearest village. After combining it with the nearest village, the same sampling procedure was adopted as mentioned above. For the urban PSUs, the selected UFS blocks needed no segmentation as they were of almost equal size and contained less than 300 households.

No replacement was made if selected household was absent during data collection. However, if a PSU was inaccessible, a replacement PSU with similar characteristics was selected by the IIPS and provided to the regional agency for survey.

1.4 Questionnaire

DLHS-RCH collected information on various indicators pertaining to RCH that would assist policymakers and programme managers to formulate and implement the goals set for RCH programmes. The International Institute for Population Sciences (IIPS), Mumbai, the Nodal Agency for DLHS–RCH project has made necessary modifications in the two Questionnaires: Households Questionnaire and Women's Questionnaire and added three more Questionnaires i.e., Husband's Questionnaire, Village Questionnaire and Health Questionnaire, in consultation with MoHFW and World Bank. These Questionnaires were discussed and finalized in training cum workshop organized at IIPS during the first week of November 2001.

These modified questionnaires were canvassed during the round II of the DLHS–RCH survey, taking into consideration the views of all the regional agencies involved. The house-listing teams, the interviewers and the supervisors for the main survey were given rigorous training based on the manuals developed for the purpose by the Nodal Agency.

All the questionnaires were bilingual, with questions in both regional and English language.

The Details of questionnaires are as follows:

Household Questionnaire: The household questionnaire lists all usual residents in each sample household including visitors who stayed in the household the night before the interview. For each listed household member, the survey collected basic information on age, sex, and marital status, relationship to the head of the household, education and the prevalence/incidence of tuberculosis, blindness and malaria. Information was also collected on the main source of drinking water, type of toilet facility, source of lighting, type of cooking fuel, religion and caste of household head and ownership of other durable goods in the household. In addition, a test was conducted to assess if the household used cooking salt that has been fortified with iodine. Besides, details of marriages and deaths which happen to usual residents within reference period were collected. Efforts were also made to get information about maternal deaths.

Women Questionnaire: Women questionnaire is designed to collect information from currently married women age 15 – 44 years who are usual residents of the sample household or visitors who stayed in the sample household the night before the interview. The women questionnaire covered the following sections:

Section I: Background characteristics: In this section, information collected was on age, education status and birth and death history of biological children including still birth, induced and spontaneous abortions.

Section II: Antenatal, natal and post natal care: In this section, the questionnaire collected information only from the women who had live birth, still birth, spontaneous or induced abortion during last three years preceding the survey date. The information on whether women received antenatal and postpartum care, who attended the delivery and the nature of complications during pregnancy for recent births were also collected.

Section III: Immunization and childcare: This section gave information about feeding practices, the length of breastfeeding, immunization coverage and recent occurrence of diarrhoea, and pneumonia for young children (below age 3 years).

Section IV: Contraception: This section provided information on knowledge and use of specific family planning methods. Questions were included about reasons for non use, intentions about future use, desire for additional child, sex preference for next child etc.

Section V: Assessment of quality of government health services and client satisfaction. In this section the questions are targeted to assess the quality of family planning and health services provided by Government health facilities. The information were also collected about the rating of Government health facilities and staffs and reasons for not visiting to government health facilities by eligible woman.

Section VI: Awareness about RTI/STI and HIV/AIDS: In this section, the information were collected about women's knowledge of RTI/STI, source of knowledge, awareness of mode of transmission, curability, symptoms and treatment seeking behaviour. Awareness about HIV/AIDS, source of knowledge, awareness of mode of transmission and prevention etc were canvassed.

Husband Questionnaire: In DLHS-RCH, round II, husband questionnaire was used to collect information from husbands of eligible women about age, education status, knowledge and source of knowledge of RTI/STI and HIV/AIDS, reported symptoms of RTI/STI and male participation. Apart from these information, desire for children, reasons for not using F.P. methods, future intention to use F.P. methods and knowledge about no scalpel vasectomy (NSV) was also collected.

Health Questionnaire: In DLHS-RCH, round II, a health questionnaire is included. The information collected were on weight of children age 0–71 months old and the blood sample to assess the haemoglobin levels of children age 0–71 months old, adolescents 10–19 years old and pregnant eligible women. This information is useful for assessing the levels of nutrition prevailing in the population and prevalence of anaemia among women, adolescent girls and children.

Village Questionnaire: A village questionnaire is also added in this round of DLHS. The information collected on the availability and accessibility of various facilities in the village especially on accessibility to education and health facilities.

1.5 Fieldwork and Sample Coverage

The fieldwork for RCH Round II was done in two phases. During Phase I, 12 districts were covered from August 2002 to January 2003 and remaining 13 districts were covered during Phase II from February 2004 to October 2004.

In the two rounds, a total of 25,759 households were covered from the state of Gujarat. From these surveyed households, 20,796 currently married women (aged 15-44 years) and 15,312 husbands of eligible women were interviewed.

1.6 Data processing

All the five types of completed questionnaires were brought to the headquarter of CORT and data were processed using microcomputers. The process consisted of office editing of questionnaires, data entry, data cleaning and tabulation. Data cleaning included validation, range and consistency checks. For both data entry and tabulation of the data, IIPS developed the software package. The district and state level reports were prepared by CORT for Gujarat state whereas national report is prepared by the nodal agency.

1.7 Sample Weights

In generating district level demographic indicator sample weight for household, women and husband, weight have been used and these for a particular district are based on three selection probabilities f_1^i, f_2^i and f_3^i pertaining to i^{th} PSU of the district. These probabilities are defined as

f_1^i = Probability of selection of i^{th} PSU in a district

$$= \frac{(n_r * H_i)}{H}$$

Where, n_r is the number of rural PSU to be selected in a district, H_i refers to the number of household in the i^{th} PSU and $H = \sum Hi$, total number of household in a district.

f_2^i = Probability of selecting segment (s) from segmented PSU (in case the i^{th} selected PSU is segmented)

= (Number of segments selected after segmentation of PSU) / (number of segment created in a PSU)

The value of f_2^i is to be equal to one for un-segmented PSU.

f_3^i = probability of selecting a household from the total listed households of a PSU or in segment(s) of a PSU

$$= \frac{28 * HR_i}{HL_i}$$

Where HR_i is the household response rate of the i^{th} sampled PSU and HL_i is the number of households listed in i^{th} PSU in a district.

For urban PSU, f_1^i is computed either as the ratio of number of urban PSUs to be included from the district to the total number of UFS blocks of the district or as the ratio of urban population of the selected PSU to the total urban population of the district.

The probability of selecting a household from the district works out as;

$$f^i = \left(f_1^i * f_2^i * f_3^i\right)$$

The non-normalized household weight for the i[th] PSU of the district is, $w^i = \frac{1}{f^i}$, while the normalized weight used in the generation of district indicators as

$$n_i^d = \frac{\sum_i n_i}{\sum_i n_i * w^i} * w^i, \quad i= 1,2,3\ldots\ldots\ldots\ldots 40.$$

Where n_i is the number of households interviewed in the i[th] PSU. The weight for women and husband are computed in the similar manner after multiplication of expression for f^i by the corresponding response rate. State weights for households, women and husbands are further derived from the district weights n_i^d for the i[th] psu in d[th] district using external control so that for sample results do not deviate from the corresponding information about the population.

Let, $n_s = \sum_i n_i^d$ and $N_I = \sum_i N_i^d$, denote the number of households in the sample and census of a particular state, then state level households weights are worked out as;

$n_i^s = n_i^d * \frac{\left(n_i^d / n_s\right)}{\left(N_i^d / N_{sc}\right)}$, where n_i^d household sample in i[th] district, n_s is the total sample in the state, N_i^d is the census population in the i[th] district and N_{sc} is the census population in the state.

These households' weights are controlled for rural-urban separately.

Considering sample and census currently married women in 15-44 years and married males above 15 years for specified state by districts and rural-urban residence, state level women and husbands' weights are obtained for estimation of state level indicators.

1.8 Sample Implementation

Table 1.1 shows the period of fieldwork, number of households interviewed and household's response rates. A total of 25,759 households are interviewed, about two-thirds were rural. The overall household response rate – the number of households interviewed per 100 occupied households – was 99 percent. The household response rate was more than 97 percent in every district.

Table 1.1 NUMBER OF HOUSEHOLDS INTERVIEWED

Month and year of fieldwork and number of households interviewed by district, Gujarat, 2002-04

State/District	Month and year of field work		Number of households interviewed			Response rate
	From	To	Total	Rural	Urban	
State	-	-	25,759	16,627	9,132	99.0
State-phase I	08/2002	01/2003	-	-	-	-
State-phase II	02/2004	10/2004	-	-	-	-
Ahmedabad	01/2003	01/2003	1,012	199	813	97.7
Banaskantha	10/2002	12/2002	942	647	295	98.3
Gandhinagar	12/2002	01/2003	1,017	673	344	98.7
Jamnagar	09/2002	09/2002	982	550	432	98.1
Junagarh	10/2002	12/2002	1,005	695	310	98.3
Kachchh	08/2002	09/2002	959	669	290	97.8
Mahesana	11/2002	11/2002	969	684	285	98.6
Rajkot	09/2002	10/2002	989	521	468	98.0
Sabarkantha	11/2002	11/2002	997	708	289	98.9
Surat	10/2002	11/2002	981	397	584	97.8
Surendranagar	12/2002	12/2002	998	689	309	99.3
The Dangs	08/2002	10/2002	921	809	112	98.4
Amreli	05/2004	06/2004	1,076	750	326	99.7
Anand	02/2004	04/2004	1,070	759	311	99.4
Bharuch	05/2004	06/2004	1,077	756	321	99.8
Bhavnagar	04/2004	05/2004	1,054	668	386	99.2
Dahod	06/2004	07/2004	1,074	759	315	99.5
Kheda	07/2004	07/2004	1,088	769	319	99.7
Narmada	08/2004	09/2004	1,094	767	327	100.0
Navsari	08/2004	09/2004	1,090	765	325	99.8
Panchmahals	06/2004	07/2004	1,090	769	321	99.7
Patan	03/2004	04/2004	1,053	736	317	99.2
Porbandar	03/2004	05/2004	1,058	528	530	99.6
Vadodara	05/2004	10/2004	1,086	600	486	99.5
Valsad	07/2004	09/2004	1,077	760	317	99.3

Note: Table based on unweighted cases.

In the interviewed households, interviews were completed with 20,796 currently married women who are the usual member of the household or stayed night before the household interview and 15,312 husbands of eligible women were also interviewed (Table 1.2). The number of completed interviews per 100 identified eligible women and husbands in the households with completed interviews were 85 and 68 percent respectively. The variation in the women's response rate by district was highest in Navsari (92 percent) and lowest in Mahesana (73 percent), similarly husband's response rate was found to be highest in Bhavnagar (85 percent) and lowest in Ahmedabad (48 percent).

Table 1.2 NUMBER OF WOMEN AND HUSBANDS INTERVIEWED

Number of women and husbands interviewed by district, Gujarat, 2002-04

State/District	Number of women interviewed			Response rate	Number of husbands interviewed			Response rate
	Total	Rural	Urban		Total	Rural	Urban	
State	20,796	13,591	7,205	84.8	15,312	10,282	5,030	68.2
Ahmedabad	771	149	622	81.5	430	96	334	48.0
Banaskantha	688	463	225	74.1	422	295	127	48.8
Gandhinagar	799	541	258	84.1	506	359	147	57.8
Jamnagar	719	388	331	81.2	439	246	193	51.3
Junagarh	787	545	242	83.1	529	371	158	60.4
Kachchh	686	473	213	82.8	457	317	140	58.3
Mahesana	701	485	216	73.2	450	334	116	52.9
Rajkot	728	394	334	82.4	525	304	221	62.2
Sabarkantha	771	544	227	81.0	484	350	134	56.3
Surat	781	297	484	85.8	454	168	286	52.2
Surendranagar	724	479	245	80.2	495	350	145	59.0
The Dangs	765	677	88	78.6	521	458	63	55.6
Amreli	913	642	271	85.4	772	539	233	83.6
Anand	896	655	241	88.4	711	534	177	74.4
Bharuch	921	647	274	89.9	761	528	233	82.4
Bhavnagar	962	634	328	89.1	824	566	258	85.0
Dahad	988	702	286	88.0	780	560	220	76.4
Kheda	932	691	241	87.8	785	579	206	82.6
Narmada	929	664	265	91.5	767	545	222	84.7
Navsari	853	598	255	92.0	638	430	208	77.2
Panchmahals	944	686	258	90.0	724	533	191	82.9
Patan	856	616	240	82.9	705	520	185	76.6
Porbandar	937	483	454	91.1	718	379	339	75.9
Vadodara	859	493	366	84.0	713	398	315	76.4
Valsad	886	645	241	88.6	702	523	179	74.4

Note: Table based on unweighted cases.

1.9 Basic Demographic Profile of the State

Before presenting the survey result, the basic demographic features of Gujarat and its districts (as per census, 2001) are presented here.

The state of Gujarat, located in the western part of the country with 50.7 million populations in 2001, constitute about five percent of India's population. The international border of Pakistan is to the north-west of the state and the states of Rajasthan to the north-east, Madhya Pradesh to the east, Maharashtra and the Union territories of Diu, Daman, Dadra and Nagar Haveli to the south. The Arabian Sea makes up the state's western coast. The state is consisted of 25 districts, 226 sub-districts (Blocks) and 18,539 villages. The urban areas of the state comprise 242 towns during 2001. Gandhinagar is the capital of the state.

According to 2001 census, the population of Gujarat is 50.7 million out of which 26.4 millions are males and 24.3 millions are females. The rural and urban breakup of the population shows that 63 percent of the population was enumerated in rural areas and 37 percent in urban areas. Keeping pace with the national average, Gujarat has recorded an increase in the decadal growth rate from 21.2 percent in 1981-91 to 22.7 percent during 1991-2001. Among the districts, Surat with 47.0 percent has the highest decadal growth rate whereas Amreli with 6.4 percent has the lowest decadal growth rate of total population during 1991-2001.

The proportion of Schedule Tribe and Scheduled Caste population is recorded about 15 percent and seven percent respectively in the state in 2001 Census. Highest proportion of Schedule Tribe population has been recorded in The Dangs district (93.8 percent) followed by Narmada (78.1 percent) and Dahod (72.3 percent) and for Schedule Caste it is in Kachchh district (11.7 per cent). Amreli has the lowest proportion (0.2 percent) of ST and The Dangs has for SC (0.5 percent). With a population density of 258 per sq. km., Gujarat ranks 21st among the states and union territories in India and this figure is much lower than the all India density of 325 persons per square km. Among the districts, Ahmedabad has the highest density (718 person/sq. km.) and Kachchh has the lowest (33 person/sq. km).

The sex ratio of the total population in the state has gone down since 1991 Census from 934 to 920 per 1000 males. Amreli and The Dangs districts have recorded the highest sex ratio (987 each) and Surat has the lowest (835) within the state. The sex-ratio of Surat has drastically gone down from 901 to 835 during 1991-2001.

The literacy rate in the state has improved from 61.3 percent in 1991 to 69.1 percent in 2001 and it is higher even to the national average of 64.8 percent. The literacy rate in urban areas (81.8 percent) is much higher in the state than that in rural areas (61.3 percent). Among the districts, Ahmedabad has the highest literacy rate of 79.9 percent and Dahod has the lowest literacy rate of 45.7 percent. The male literacy rate for the state is 79.7 percent and the female literacy rate is 57.8 percent. Both the male and female literacy rates have increased from 1991 census to 2001 census.

Table 1.3 BASIC DEMOGRAPHIC INDICATOR

Basic demographic indicator of India, state and districts, Census 2001

India/state/district	Population (in thousand)	Percentage urban	Percentage decadal growth rate[1]	Sex ratio[2]	Percentage literate 7+		
					Male	Female	Persons
India	10,28,737	28.0	21.5	933	75.3	53.7	64.8
State	50,671	37.7	22.7	920	79.7	57.8	69.1
Ahmedabad	5,817	80.2	26.6	892	87.8	71.1	79.9
Banaskantha	2,504	11.0	26.3	930	66.9	34.5	51.3
Gandhinagar	1,334	35.0	23.9	912	87.9	64.9	76.8
Jamnagar	1,904	43.9	22.4	941	76.9	56.9	67.2
Junagarh	2,448	29.1	17.1	955	79.4	56.9	68.4
Kachchh	1,583	30.0	20.9	942	71.0	42.1	60.4
Mahesana	1,838	22.4	12.0	927	86.5	64.0	75.5
Rajkot	3,170	51.3	25.6	930	83.7	67.6	75.9
Sabarkantha	2,082	10.8	18.3	947	81.2	52.9	67.3
Surat	4,995	60.0	47.0	835	81.9	66.7	75.0
Surendranagar	1,515	26.6	25.3	924	75.3	48.7	62.5
The Dangs	186	0.0	29.6	987	71.4	49.0	60.2
Amreli	1,394	22.5	6.4	987	77.7	57.8	67.7
Anand	1,857	27.4	13.0	910	86.3	62.5	75.0
Bharuch	1,371	25.7	19.3	921	83.4	65.4	74.8
Bhavnagar	2,470	37.9	19.3	937	78.8	54.5	67.0
Dahod	1,636	9.6	28.4	985	59.5	31.7	45.7
Kheda	2,024	20.1	13.2	923	86.6	57.8	72.7
Narmada	514	10.1	14.4	949	72.9	47.2	60.4
Navsari	1,229	27.4	13.2	955	82.9	68.7	76.0
Panchmahals	2,025	12.5	20.4	938	76.6	45.4	61.5
Patan	1,183	20.2	14.1	932	74.1	46.4	60.6
Porbandar	537	48.7	14.4	946	78.9	58.8	69.1
Vadodara	3,642	45.2	19.8	919	80.7	61.2	71.3
Valsad	1,411	27.0	29.7	920	78.1	59.9	69.4

Note: Source: Primary Census Abstract, Series 25, Census of India, 2001. [1] 1991-2001, [2] Females per 1,000 males.

CHAPTER II

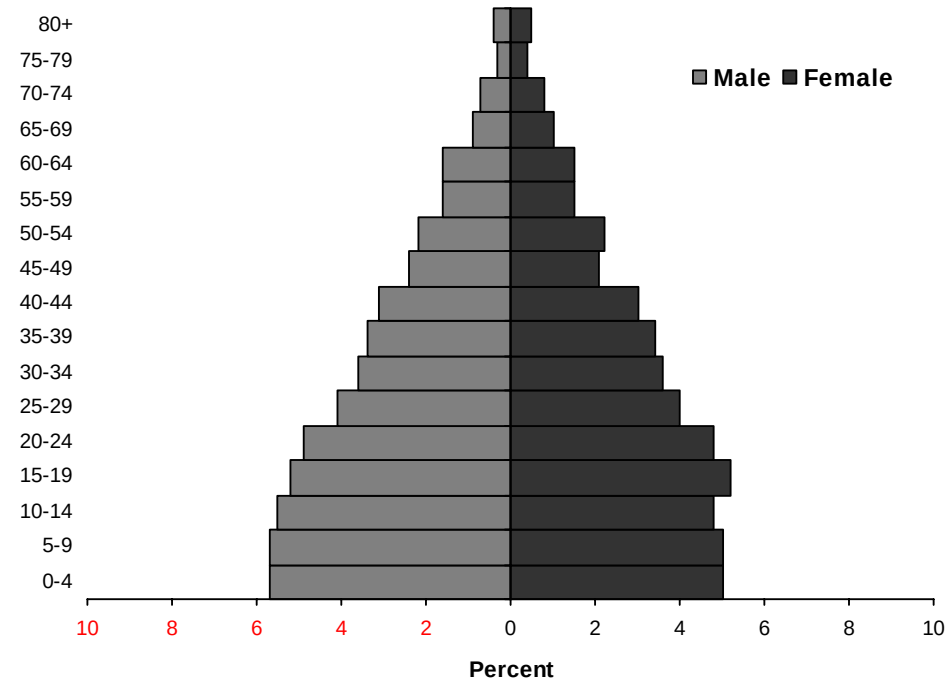
BACKGROUND CHARACTERISTICS OF HOUSEHOLD

This chapter provides a socio-economic and demographic profile of households interviewed in the District Level Household Survey-Reproductive and Child Health. Facilities and services such as Health, Education and Communication available in the representative sampled village are also presented here. The *de facto* method of enumeration is adopted in order to include every individual staying in the sampled Primary Sampling Units (PSU), either a village or an urban area, the night before the survey. The objective of adopting the *de facto* method is to avoid duplication of persons who are in transit.

2.1 Age–Sex Structure

The age-sex distribution of sampled household population classified by residence is presented in Table 2.1. The percent distribution is based on sampled *de facto* population of 129,666 persons of whom 65 percent lived in the rural areas of Gujarat. The state of Gujarat depicts a young and growing population with 30 percent below the age of 15 years (Figure 2.1). There are more children below 15 years recorded in rural areas (34 percent) compared to those in urban areas (28 percent).

Figure 2.1
Age-sex pyramid



The overall sex ratio of 105 males per 100 females is recorded for the *de facto* population. The sex ratio is more skewed, 107 in favour of males, in urban areas compared to 104 in rural areas.

Table 2.1 HOUSEHOLD POPULATION BY AGE AND SEX
Percent distribution of the household population by age and by residence and sex, Gujarat, 2002-04

	Total			Rural			Urban		
Age	Total	Male	Female	Total	Male	Female	Total	Male	Female
< 1	2.2	2.3	2.1	2.4	2.5	2.3	1.9	2.0	1.8
1-4	8.4	8.7	8.1	9.0	9.3	8.6	7.3	7.6	7.0
5-9	10.7	11.1	10.3	11.6	12.1	11.1	9.0	9.3	8.8
10-14	10.3	10.8	9.8	10.6	11.1	10.1	9.6	10.1	9.2
15-19	10.4	10.2	10.7	10.0	9.8	10.3	11.2	10.9	11.7
20-24	9.7	9.6	9.9	9.1	8.8	9.4	10.9	11.0	10.8
25-29	8.0	8.0	8.1	7.7	7.5	7.9	8.7	8.8	8.7
30-34	7.2	7.0	7.4	7.1	6.8	7.4	7.3	7.2	7.5
35-39	6.8	6.7	6.9	6.6	6.5	6.6	7.2	6.9	7.4
40-44	6.0	6.0	6.1	5.7	5.7	5.7	6.6	6.4	6.9
45-49	4.6	4.7	4.4	4.3	4.5	4.1	5.1	5.2	4.9
50-54	4.4	4.3	4.4	4.2	3.9	4.5	4.6	4.9	4.3
55-59	3.1	3.1	3.1	3.2	3.1	3.3	3.0	3.2	2.8
60-64	3.1	3.1	3.1	3.2	3.3	3.2	2.7	2.7	2.8
65-69	1.9	1.8	2.0	1.9	1.9	1.9	1.9	1.7	2.1
70-74	1.6	1.4	1.7	1.6	1.5	1.7	1.5	1.2	1.8
75-79	0.7	0.6	0.8	.7	0.6	0.7	0.7	0.5	0.9
80+	0.9	0.8	1.1	1.0	0.9	1.2	0.7	0.6	0.8
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of persons	1,29,666	66,470	63,196	84,803	43,250	41,553	44,863	23,220	21,644
Sex ratio[1]	105	NA	NA	104	NA	NA	107	NA	NA

Table is based on the *de facto* population, i.e. persons who stayed in the household the night before the interview (including both usual resident and visitors)
NA: Not applicable [1] Male per 100 females

2.2 Household Characteristics

The percent distribution of 25,759 households surveyed in the state of Gujarat by selected characteristics of the household head and the number of usual household members is shown in Table 2.2. This is based on *de jure*, the usual resident population. About 92 percent of household heads are male invariant of place of resident while only about eight percent are female-headed households. Nearly 71 percent of household heads are in the 30-59 years age group. The median age of household heads is around 45 years for the state as a whole, which being the same in rural and urban areas. About 11 percent of household heads are younger than 30 years and 18 percent are at least 60 years old. Majority of the household heads are Hindu (91 percent), seven percent are Muslim, and rest belongs to other religions. The proportion of Muslim households is relatively more in urban areas (9 percent) than rural areas (5 percent).

Table 2.2 HOUSEHOLD CHARACTERISTICS

Percent distribution of the household head by selected characteristics of the household head and household size, according to residence, Gujarat, 2002-04

Characteristic	Total	Residence	
		Rural	Urban
Sex of the household head			
Male	92.4	92.1	93.1
Female	7.6	7.9	6.9
Age of the household head			
< 30	10.9	11.2	10.4
30-44	39.6	39.7	39.4
45-59	31.2	30.0	33.3
60+	18.3	19.1	16.9
Median age of the household head	44.7	44.6	44.9
Religion of the household head			
Hindu	90.6	93.5	85.3
Muslim	6.7	5.3	9.4
Christian	1.0	1.1	0.7
Sikh	0.1	0.0	0.3
Jain	1.4	0.1	3.9
Zoroastrian	0.1	0.0	0.2
Other	0.0	0.0	0.1
Caste/tribe of the household head			
Scheduled caste	10.0	11.6	7.1
Scheduled tribe	12.9	17.7	4.1
Other backward class	37.5	39.9	33.3
Other #	37.2	28.2	53.5
Don't know	2.4	2.6	2.1
Number of usual members			
1	3.3	3.5	3.1
2	8.2	8.9	6.7
3	12.1	11.2	13.9
4	20.2	17.7	24.8
5	19.4	19.3	19.6
6	15.3	16.1	13.9
7	8.6	9.6	6.7
8	4.8	5.6	3.2
9+	8.2	8.2	8.0
Mean household size	5.0	5.0	4.8
Total percent	100.0	100.0	100.0
Number of households	25,759	16,628	9,131

Note: Table is based on the *de jure* population

Higher caste (Not belonging to a scheduled caste, a scheduled tribe and an other backward class)

Ten percent of the households in Gujarat belong to schedule caste, 13 percent to schedule tribe and 38 percent to other backward classes while 37 percent of the households are headed by other castes. About 18 percent of the household head belong to schedule tribe in rural areas and it is only four percent in urban areas. The overall state average household size is 5 persons. The rural-urban differential in average household size is not very much marked as it is 5 in rural areas and 4.8 in urban areas.

2.3 Educational Level of the Household Population

The educational background of Gujarat state presented in this section is based on *de facto* household population. Literacy rate and years of schooling, according to age, sex and residence are shown in Table 2.3.

Table 2.3 EDUCATIONAL LEVEL OF THE HOUSEHOLD POPULATION

Percent distribution of household population age 7 and above by literacy level and years of schooling, according to age , residence and sex, Gujarat, 2002-04

Age	Non-literate	Literate but no schooling	Years of schooling: 1-5	6-8	9-10	11 or more	Missing	Total Percent	Number of persons
					Total				
					Male				
7-9	14.7	0.7	84.2	0.5	0.0	0.0	0.1	100.0	4,548
10-14	7.4	0.2	42.2	43.8	6.2	0.0	0.2	100.0	7,150
15-19	10.4	0.2	11.5	23.8	34.7	19.4	0.0	100.0	6,764
20-29	13.2	0.3	11.4	19.3	27.3	28.5	0.0	100.0	11,658
30-39	21.3	0.4	16.9	17.0	21.4	23.0	0.0	100.0	9,046
40-49	24.8	0.4	18.3	17.4	19.4	19.6	0.0	100.0	7,130
50+	38.2	1.1	22.8	13.6	11.1	13.3	0.0	100.0	9,989
Total	19.5	0.5	25.0	19.8	18.5	16.8	0.0	100.0	56,285
					Female				
7-9	19.1	0.8	79.2	0.1	0.0	0.0	0.8	100.0	3,897
10-14	14.2	0.1	38.1	41.6	5.9	0.0	0.1	100.0	6,200
15-19	20.9	0.1	10.8	24.7	26.0	17.5	0.0	100.0	6,785
20-29	33.9	0.2	11.4	16.8	18.4	19.3	0.0	100.0	11,403
30-39	48.7	0.2	12.0	14.6	12.4	12.2	0.0	100.0	9,058
40-49	56.6	0.1	12.4	12.2	9.4	9.3	0.0	100.0	6,611
50+	71.2	0.3	14.0	7.0	3.7	3.8	0.0	100.0	10,206
Total	41.2	0.2	20.0	16.6	11.7	10.2	0.1	100.0	54,160
					Total				
7-9	16.7	0.7	81.9	0.3	0.0	0.0	0.4	100.0	8,445
10-14	10.6	0.1	40.3	42.8	6.0	0.0	0.2	100.0	13,350
15-19	15.7	0.2	11.1	24.2	30.3	18.5	0.0	100.0	13,549
20-29	23.5	0.3	11.4	18.1	22.9	23.9	0.0	100.0	23,060
30-39	35.0	0.3	14.4	15.8	16.9	17.6	0.0	100.0	18,104
40-49	40.1	0.3	15.5	14.9	14.6	14.7	0.0	100.0	13,741
50+	54.9	0.7	18.3	10.3	7.4	8.5	0.0	100.0	20,195
Total	30.1	0.4	22.5	18.3	15.2	13.5	0.0	100.0	1,10,445

Note: Table is based on *de facto* population.

Contd...

Table 2.3 indicates that, 30 percent of the population aged seven and above are not-literate. The proportion of non-literates is much higher (41 percent) among females compared to 20 percent among males. The proportion of non-literate is much higher among the older cohorts compared to the younger ones. For both males and females, going by expected trend, the level of literacy is higher in the younger population than in the older age groups with the exception of the youngest age group of 7-9 years (Figure 2.2).

Figure 2.2
Percentage Literate by Age and Sex

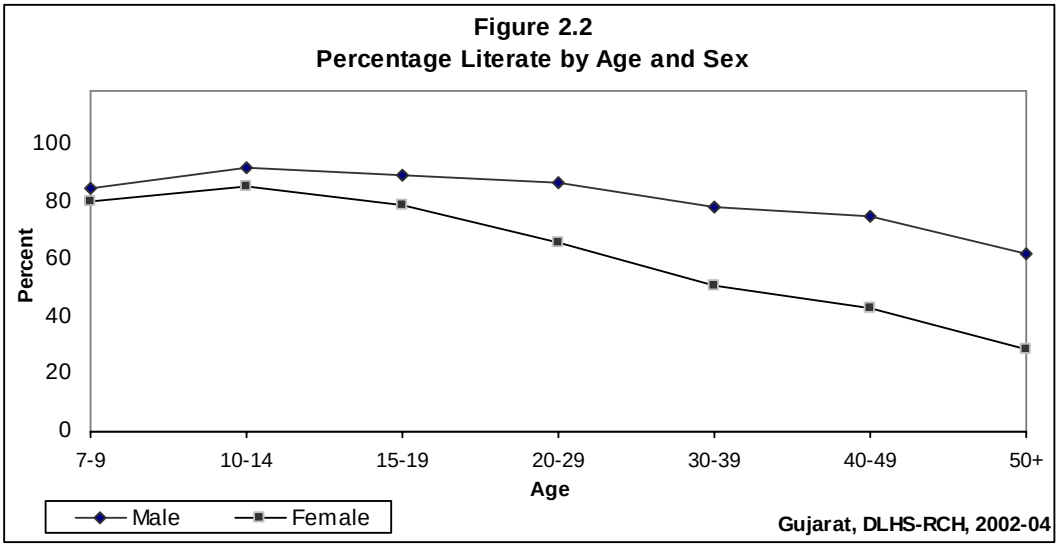


Table 2.3 EDUCATIONAL LEVEL OF THE HOUSEHOLD POPULATION

Percent distribution of household population age 7 and above by literacy level and years of schooling, according to age , residence and sex, Gujarat, 2002-04

Age	Non-literate	Literate but no schooling	Years of schooling				Missing	Total Percent	Number of persons
			1-5	6-8	9-10	11 or more			
RURAL									
Male									
7-9	16.8	0.7	81.9	0.6	0.0	0.0	0.1	100.0	3,183
10-14	8.7	0.2	43.0	42.2	5.7	0.0	0.2	100.0	4,813
15-19	13.9	0.2	11.8	27.1	31.6	15.3	0.0	100.0	4,244
20-29	17.3	0.4	13.4	20.6	28.1	20.2	0.0	100.0	7,066
30-39	28.7	0.6	19.5	17.5	19.2	14.6	0.0	100.0	5,771
40-49	33.7	0.5	22.0	18.7	15.4	9.8	0.0	100.0	4,442
50+	49.9	1.3	23.8	13.4	6.1	5.5	0.0	100.0	6,561
Total	25.5	0.6	27.1	20.5	16.1	10.3	0.0	100.0	36,081
Female									
7-9	21.1	1.0	77.7	0.1	0.0	0.0	0.1	100.0	2,793
10-14	17.9	0.1	40.4	37.8	3.8	0.0	0.1	100.0	4,215
15-19	28.8	0.1	13.4	26.5	22.2	8.9	0.0	100.0	4,263
20-29	43.7	0.2	13.5	16.7	15.3	10.6	0.0	100.0	7,182
30-39	62.4	0.2	12.9	12.6	7.4	4.5	0.0	100.0	5,830
40-49	71.8	0.1	12.3	8.8	4.8	2.2	0.0	100.0	4,055
50+	84.2	0.2	9.3	4.3	1.2	0.9	0.0	100.0	6,872
Total	51.2	0.2	20.8	15.1	8.3	4.4	0.0	100.0	35,210
Total									
7-9	18.8	0.8	79.9	0.4	0.0	0.0	0.1	100.0	5,976
10-14	13.0	0.1	41.8	40.2	4.8	0.0	0.1	100.0	9,029
15-19	21.4	0.2	12.6	26.8	26.9	12.1	0.0	100.0	8,507
20-29	30.6	0.3	13.5	18.6	21.6	15.3	0.0	100.0	14,249
30-39	45.6	0.4	16.2	15.1	13.3	9.5	0.0	100.0	11,601
40-49	51.9	0.3	17.3	14.0	10.3	6.1	0.0	100.0	8,497
50+	67.4	0.7	16.4	8.7	3.6	3.2	0.0	100.0	13,433
Total	38.2	0.4	24.0	17.8	12.2	7.4	0.0	100.0	71,291

Contd.

About 84 percent of the male children and 79 percent female children in the age group of 7-9 years had 1-5 years of schooling. However, one-fourth males and one-fifths females have had education for 1-5 years. Lesser proportion of females are found in higher education of 9-10 years (12 percent) and 11 or more years (10 percent) as compared to the males having corresponding figures of 19 percent and 17 percent respectively. A negligible proportion of the total population, are found to be literate without any formal schooling.

An examination of the educational attainment by place of residence revealed that the urban-rural differential was quite pronounced. In urban areas, only 16 percent of the total population is non-literate in comparison with 38 percent of the rural population. The number of non-literate females living in rural areas of Gujarat accruing a share as high as 51 percent, while non-literate rural males is 26 percent. Prevalence of illiterate is much less in urban areas with figures of 23 percent and nine percent non-literate females and males respectively. A contrasting feature of rural-urban difference in educational level is that in rural areas majority of the people who had 10 or more years of schooling was just 20 percent, whereas in urban areas a much higher proportion of people (45 percent) had this level of education.

Table 2.3 EDUCATIONAL LEVEL OF THE HOUSEHOLD POPULATION

Percent distribution of household population age 7 and above by literacy level and years of schooling, according to age , residence and sex, Gujarat, 2002-04

Age	Non-literate	Literate but no schooling	Years of schooling: 1-5	6-8	9-10	11 or more	Missing	Total Percent	Number of persons
					URBAN				
					Male				
7-9	9.7	0.6	89.5	0.2	0.0	0.0	0.0	100.0	1,365
10-14	4.9	0.2	40.5	47.2	7.1	0.0	0.2	100.0	2,337
15-19	4.4	0.2	11.0	18.2	39.8	26.4	0.0	100.0	2,520
20-29	7.0	0.2	8.1	17.3	26.1	41.2	0.0	100.0	4,591
30-39	8.5	0.2	12.4	15.9	25.2	37.8	0.0	100.0	3,275
40-49	10.2	0.3	12.3	15.1	26.1	35.9	0.0	100.0	2,688
50+	15.8	0.8	20.8	13.9	20.6	28.0	0.0	100.0	3,429
Total	8.8	0.3	21.1	18.6	22.8	28.3	0.0	100.0	20,204
					Female				
7-9	14.0	0.3	83.0	0.2	0.0	0.0	2.5	100.0	1,104
10-14	6.3	0.1	33.2	49.7	10.4	0.0	0.2	100.0	1,985
15-19	7.5	0.1	6.3	21.7	32.3	32.1	0.0	100.0	2,522
20-29	17.2	0.3	7.8	16.9	23.7	34.1	0.0	100.0	4,221
30-39	23.9	0.2	10.3	18.0	21.5	26.1	0.0	100.0	3,229
40-49	32.3	0.2	12.7	17.5	16.6	20.7	0.0	100.0	2,556
50+	44.6	0.5	23.5	12.8	9.0	9.8	0.0	100.0	3,334
Total	22.6	0.2	18.5	19.5	18.2	20.8	0.2	100.0	18,950
					Total				
7-9	11.6	0.5	86.6	0.2	0.0	0.0	1.1	100.0	2,469
10-14	5.5	0.1	37.1	48.3	8.6	0.0	0.2	100.0	4,321
15-19	6.0	0.1	8.6	19.9	36.1	29.2	0.0	100.0	5,042
20-29	11.9	0.3	8.0	17.1	25.0	37.8	0.0	100.0	8,812
30-39	16.1	0.2	11.4	17.0	23.4	32.0	0.0	100.0	6,504
40-49	21.0	0.3	12.5	16.3	21.5	28.5	0.0	100.0	5,243
50+	30.0	0.6	22.1	13.4	14.9	19.0	0.0	100.0	6,762
Total	15.5	0.3	19.8	19.1	20.5	24.7	0.1	100.0	39,154

2.4 Marital Status of the Household Population

The DLHS, collected information on the marital status of all household members aged 10 years and above. Table 2.4 shows percentage distribution of the household population by marital status distribution of *de facto* household population by age and sex. Nearly one-fifth of females in the age group 15-19 years, followed by 74 percent in the age group 20-24 years, and 94 percent in the age group 25-29 years, are currently married. The proportion of never married population is 31 percent in the state, and it is higher for males (36 percent) than females (26 percent). The proportion of never married among males declines with increasing age and reaches very low at about four percent by the time they are in the age group 30-44 years. A similar pattern has been observed in the case of females, with the same never married proportion for the age group 25-29 years. The proportion of divorced, separated or widowed is seven percent however it is limited to the older ages. More than half (57 percent) women aged 60 years or above are widowed/divorced/separated while in case of males this figure is about 17 percent. Among the *de facto* population aged 10 years and above, 60 percent of males and 62 percent of females are currently married.

Table 2.4 MARITAL STATUS OF THE HOUSEHOLD POPULATION

Percent distribution of the household population aged 10 years and above by marital status, according to age and sex , Gujarat, 2002-04

Age	Marital status				Total Percent	Number of persons
	Never married	Currently married	Married, g*auna* not performed	Widowed/ divorced/ Separated		
			Male			
10-14	98.6	0.7	0.6	0.1	100.0	7,150
15-19	92.6	5.5	1.7	0.2	100.0	6,764
20-24	58.6	38.4	1.7	1.2	100.0	6,363
25-29	19.4	78.3	0.6	1.7	100.0	5,294
30-44	3.6	93.4	0.0	3.0	100.0	13,019
45-59	1.1	93.9	0.0	4.9	100.0	8,068
60+	0.9	82.4	0.1	16.6	100.0	5,079
Total	36.1	59.8	0.6	3.5	100.0	51,737
			Female			
10-14	98.2	0.6	1.2	0.0	100.0	6,200
15-19	77.2	18.8	3.5	0.5	100.0	6,785
20-24	21.0	74.1	2.7	2.2	100.0	6,265
25-29	3.7	93.8	0.1	2.5	100.0	5,138
30-44	1.0	92.9	0.0	6.0	100.0	12,912
45-59	0.6	82.0	0.0	17.4	100.0	7,538
60+	0.5	43.0	0.0	56.5	100.0	5,425
Total	25.9	62.2	1.0	10.9	100.0	50,262
			Total			
10-14	98.4	0.6	0.9	0.1	100.0	13,350
15-19	84.9	12.2	2.6	0.3	100.0	13,549
20-24	40.0	56.1	2.2	1.7	100.0	12,628
25-29	11.7	86.0	0.3	2.1	100.0	10,432
30-44	2.3	93.1	0.0	4.5	100.0	25,931
45-59	0.9	88.1	0.0	11.0	100.0	15,605
60+	0.7	62.0	0.1	37.2	100.0	10,504
Total	31.1	61.0	0.8	7.1	100.0	1,01,999

Note: Table is based on *de facto* population

2.5 Marriage

Marriage in the household is an important event that reflects the socio-cultural practices of the communities surveyed in DLHS. This section outlines the marriage ceremonies during the three years period prior to the survey. Mean age at marriage by sex and percentage of total marriages, which are below legal age at marriage, 21 years for boys and 18 years for girls by residence at the state and at district levels are shown in Table 2.5.

Mean age at marriage for boys and girls in urban areas of Gujarat are 24 years and 20 years respectively. The corresponding figures in rural areas are 22 years and 19 years. On the whole, as far as Gujarat is concerned, both boys and girls seem to oblige the legal age at marriage, the mean age at marriage being 22 years for boys and 19 years for girls. However, a little more than one-third of boys and one-fourth of girls got married below the corresponding specified legal age at marriage. The proportion is higher in the rural areas compared to the urban areas of the state.

When it comes to district level variation in mean age at marriage, it is highest in Valsad and Navsari district at 25 years for boys and 22 years for girls. The lowest mean age at marriage for boys is 20 years recorded in the district of Dahod, and for girls, the lowest is 18 years in Mahesana.

Table 2.5 MARRIAGE

Mean age at marriage and percentage of marriages below legal at marriage by sex and by districts, Gujarat, 2002-04

Place of residence/ District	Mean age at marriage		Percentage of marriage below legal age at marriage	
	Boy	Girl	Boy (<21)	Girl (<18)
State – Total	22.4	19.4	33.7	24.6
State – Rural	21.6	18.9	43.1	28.5
State – Urban	23.7	20.4	16.0	15.2
District				
Ahmedabad	22.3	18.5	28.8	32.5
Amreli	22.5	20.1	30.5	8.3
Anand	22.6	21.3	30.7	16.6
Banaskantha	21.0	18.7	48.2	37.0
Bharuch	23.0	19.8	22.2	20.9
Bhavnagar	22.0	19.3	38.2	21.3
Dahod	20.1	19.0	60.5	32.3
Gandhinagar	21.9	19.7	37.8	30.7
Jamnagar	22.7	20.3	30.7	7.6
Junagarh	22.5	19.8	29.1	16.2
Kachchh	22.7	19.3	32.4	20.2
Kheda	21.4	18.8	43.2	37.6
Mahesana	22.3	18.0	36.7	37.2
Narmada	21.7	18.6	37.3	31.0
Navsari	25.4	21.9	10.5	12.3
Panchmahals	21.6	18.5	44.8	37.5
Patan	21.7	19.3	39.4	25.8
Porbandar	23.2	19.9	20.5	16.1
Rajkot	24.5	21.0	14.6	3.3
Sabarkantha	21.6	19.3	42.8	29.7
Surat	23.8	19.4	13.1	17.8
Surendranagar	21.5	19.0	43.3	24.3
The Dangs	20.5	18.3	56.0	41.8
Vadodara	22.4	19.6	33.9	24.6
Valsad	25.5	20.5	22.1	21.7

Note: Table based on *de jure* population.
Reference period: - January 1st, 1999 to survey date for phase-1, and January 1st, 2001 to survey date for phase-2.

It is also found that, the percentage of girls who were married below the legal age at marriage was the highest in the district of The Dangs (42 percent) and the lowest in Rajkot (3 percent). In five out of 25 districts more than 35 percent girls were marrying below the legal age at marriage (see Map-1). In the case of boys, marriages below the legal age at marriage are the highest in Dahod district (61 percent) and lowest in Navsari (11 percent).

2.6 Morbidity Rates

The DLHS-RCH has collected information on the morbidity status relating to blindness, tuberculosis and malaria of the *de jure* members of the household. Table 2.6 provides prevalence rates.

Table 2.6 MORBIDITY RATES

Prevalence of blindness, tuberculosis, and malaria, according to place of residence, Gujarat, 2002-04.

Morbidity	Total	Residence	
		Rural	Urban
Prevalence rate of blindness			
Male			
Partial	2,996	3,421	2,199
Complete	214	236	173
Night blindness	368	460	197
Female			
Partial	4,159	4,577	3,356
Complete	261	287	212
Night blindness	488	559	351
Persons			
Partial	3,561	3,986	2,757
Complete	237	261	192
Night blindness	426	508	271
Prevalence rate of tuberculosis			
Male	342	434	169
Female	182	233	86
Person	264	336	129
Prevalence rate of malaria[1]			
Male	1,020	1,333	439
Female	1,100	1,374	576
Person	1,626	1,357	268

Note: All the rates refer to *de jure* population.
Prevalence rate per 100, 000 population
Reference period: - January 1st, 1999 to survey date for phase-1, and January 1st, 2001 to survey date for phase-2.
[1] Last two weeks prior to the survey

Partial, Complete and Night Blindness

The overall prevalence of partial blindness is 3,561 per 100,000 population in the state of Gujarat and is higher in rural areas (3,986 per 100,000) than in urban areas (2,757 per 100,000). It is more among the females. The prevalence of complete blindness is 237 per 100,000 population with a rural-urban differential of 261 against 192 per 100,000. Sex differential in complete blindness is also observed to some extent. The prevalence of night blindness due to vitamin A deficiency is 426 per 100,000 population, and is much higher in rural areas (508) than in urban areas (271).

Tuberculosis

The prevalence of tuberculosis is 264 per 100,000 population, with rural areas having a higher prevalence of 336 compared to 129 per 100,000 in urban areas. The prevalence of TB is higher among males (342 per 100,000) than among females (182 per 100,000).

Malaria

In the DLHS-RCH, household respondents were asked to state whether any member of their household suffered from malaria (characterized by recurrent fever with shivering) any time during the two weeks prior to the survey. In the state of Gujarat, 1,626 persons per 100,000 population were reported to have suffered from malaria. Rural residents are almost five times more likely to suffer from malaria (1357 per 100,000) than urban residents (268 per 100,000). The reported prevalence of malaria is more for females than males.

2.7 Morbidity Rates by Districts

Table 2.7 shows the prevalence of blindness, tuberculosis and malaria in the districts of Gujarat. The prevalence of partial blindness varies among the districts the lowest being 1,048 per 100,000 in Anand district and the highest, 5,676 per 100,000 in Jamnagar.

Table 2.7 MORBIDITY RATES BY DISTRICTS

Prevalence of blindness, tuberculosis, and malaria, by district, Gujarat, 2002-04

District	Prevalence[1] of morbidity			
	Partial blindness	Complete blindness	Tuberculosis	Malaria[2]
Ahmedabad	3,146	255	85	512
Amreli	2,306	95	150	474
Anand	1,048	235	143	591
Banaskantha	1,757	105	52	430
Bharuch	3,201	430	236	417
Bhavnagar	4,105	286	311	976
Dahod	2,533	57	246	1,697
Gandhinagar	5,371	57	275	719
Jamnagar	5,676	758	323	630
Junagarh	5,586	289	128	816
Kachchh	4,808	915	341	934
Kheda	3,026	143	488	980
Mahesana	3,855	353	681	1,673
Narmada	3,376	109	296	2,510
Navsari	3,358	80	194	1,126
Panchmahals	4,380	142	487	1,548
Patan	2,782	149	450	1,544
Porbandar	1,689	280	172	405
Rajkot	4,843	424	146	561
Sabarkantha	4,070	262	423	1,054
Surat	2,168	45	63	1,410
Surendranagar	5,616	186	357	1,530
The Dangs	3,371	345	350	2,403
Vadodara	2,508	77	395	1,708
Valsad	3,043	139	318	671
Gujarat	3,561	237	264	1,626

Note: All the rates refer to *de jure* population.
[1] Prevalence rate per 100, 000 population
Reference period: - January 1st, 1999 to survey date for phase-1, and January 1st, 2001 to survey date for phase-2. [2] Last two weeks prior to the survey

The districts with a prevalence rate above 5,000 per 100,000 are Gandhinagar, Junagarh, Surendranagar and Jamnagar. The prevalence rate of complete blindness ranges from 45 per 100,000 in Surat to 915 per 100,000 in Kachchh.

Inter-district variations are substantial for tuberculosis and malaria. The prevalence rate of tuberculosis is the highest in Mahesana district (681 per 100,000 population) and it is lowest in Banaskantha (52 per 100,000). In the case of malaria, the prevalence rate is highest in Narmada (2,510 per 100,000) and lowest in Porbandar (405 per 100,000).

2.8 Housing Characteristics

This section describes the availability of basic amenities in the state. Table 2.8 presents the percentage distribution of households by selected housing characteristics. Eighty-six percent

of the households in Gujarat have electricity connection and it is much more in urban areas (98 percent) than in rural areas (80 percent).

As regards source of drinking water about two-thirds of the households get drinking water through taps, while 21 percent from hand pumps/ bore-wells, and 10 percent drink water from wells. Ninety percent of households in urban areas get piped water for drinking, whereas in rural areas only 52 percent of the households have such provision.

When it comes to sanitation facility, only 37 percent of the households have flush toilets, while six percent have pit based toilets or latrines, four percent depend on shared toilets and 53 percent of the households have no toilet facility. There is a large rural-urban difference; 75 percent of rural households have no toilet facility, compared to just 12 percent of urban households.

Table 2.8 HOUSEING CHARACTERISTICS

Percent distribution of the household by housing characteristics and percentage of households owing selected durable goods, according to residence, Gujarat, 2002-04

Housing characteristic	Total	Residence	
		Rural	Urban
Electricity			
Yes	86.2	80.0	97.7
No	13.8	20.0	2.3
Source of drinking water			
Tap inside	45.8	31.2	72.5
Tap shared public	19.7	20.9	17.6
Hand pump/ bore well	21.0	28.4	7.4
Well covered	0.7	1.0	0.2
Well uncovered	9.6	14.4	1.0
River	0.6	1.0	0.0
Pond	0.2	0.4	0.0
Spring	0.1	0.1	0.0
Other	2.2	2.8	1.2
Sanitation facility			
Own flush toilet	37.3	17.9	72.6
Own pit toilet / latrine	5.9	5.5	6.6
Shared toilet of any type	3.6	1.4	7.7
Public/community toilet	0.7	0.3	1.6
No toilet facility	52.5	74.9	11.5
Main type of fuel used for cooking			
Liquid petroleum gas/ electricity	34.8	13.6	73.3
Kerosene	7.0	4.6	11.3
Wood	57.0	80.5	14.1
Other	1.3	1.2	1.3
Type of house			
Kachcha	23.2	34.0	3.5
Semi - *pucca*	27.5	33.4	16.7
Pucca	49.3	32.6	79.8
Household assets			
Fan	75.6	64.5	95.8
Radio/transistor	24.9	18.1	37.2
Sewing machine	12.1	6.3	22.7
Television	45.4	28.2	76.8
Telephone	20.9	12.4	36.4
Bicycle	43.1	37.0	54.1
Motor cycle/ scooter	23.6	14.1	40.9
Car/Jeep	3.3	1.5	6.7
Tractor	2.3	3.3	0.4
Standard of living index			
Low	34.6	51.1	4.4
Medium	32.3	34.5	28.2
High	33.2	14.4	67.3
Number of households	25,759	16,628	9,131

DLHS-RCH has also collected data on type of fuel used in the households for cooking. More than half (57 percent) of the households depends on fire woods for cooking in Gujarat whereas 35 percent of the households use liquid petroleum/gas or electricity. Seven percent of households rely on kerosene for cooking. The use of liquid petroleum gas/ electricity for cooking is reported more in urban areas (73 percent), while firewood for cooking is reported more in rural areas (81 percent).

There is considerable variation in the quality of housing. On the basis of building material, type of floor, walls and roof, households are categorised into *kachcha*, semi-*pucca* and *pucca*. Nearly one-fourth of the households are living in *kachcha* houses, 28 percent in semi *pucca* houses and nearly half in *pucca* houses. Eighty percent of urban households live in *pucca* houses compared to 33 percent of rural households.

The possession of consumer durable goods is an indication of a household's socio-economic status. Table 2.8 shows that many of the households in the state own an electric fan (76 percent), television (45 percent), bicycles (43 percent), radio/transistor (25 percent) and motor cycle/scooter (24 percent).

Other durable goods found in the surveyed households are telephone (21 percent) and sewing machine (12 percent). Car/jeep and tractor each are owned by two-three percent of households in the state of Gujarat. Ownership of all these consumer durable items, except the tractor is more among the urban households than among the rural households.

Considering household amenities, such as, source of drinking water, type of house, source of lighting, fuel for cooking, toilet facility and ownership of durable goods a composite measure, standard of living index (SLI) is made for classification of households. The standard of living index is calculated by adding the following scores;

Source of drinking water: 3 for Tap (own), 2 for Tap (shared), 1 for hand pump and well, and 0 for other;

Type of house: 4 for *pucca*, 2 for semi-*pucca*, and 0 for *kachcha*;

Source of lighting: 2 for electricity, 1 for kerosene, and 0 for other;

Fuel for cooking: 2 for LPG gas/electricity, 1 for kerosene and 0 for other;

Toilet facility: 4 for own flush toilet, 2 for own pit toilet, 2 for shared toilet and 0 for no toilet;

Ownership for items: 4 each for car and tractor, 3 each for television, telephone and motorcycle/scooter, and 2 each for fan, radio/transistor, sewing machine and bicycle.

The total of the scores may vary from the lowest of a 0 to maximum of 40. On the basis of total score, households are divided into three categories as;

a) Low – if total score is less than or equal to 9,
b) Medium – if total score is greater than 9 but less than or equal to 19 and
c) High – if total score is greater than 19.

As per the standard of living index, 35 percent of the households come under the low standard of living category, 32 percent of households to medium standard of living, and 33 percent of the households to high standard of living.

The proportion of sample households with high standard of living is comparatively higher in urban areas (67 percent) than in rural areas (14 percent), and the proportion of households with a low standard of living is much higher in rural households (51 percent) than in urban households (4 percent) in the state of Gujarat.

2.9 Housing Characteristics by District

The 25 districts in Gujarat are not uniform in terms of basic amenities and possession of consumer durables. Table 2.9 presents an inter-district comparison of housing characteristics. The percentage of households with electricity is least in the districts of The Dangs (47 percent), and highest in Ahmedabad (97 percent). More than 90 percent of households used piped water or water from a hand pump for drinking in only nine districts of the state.

Largely the districts in Gujarat have inadequate toilet facility, in 18 of the 25 districts less than 50 percent of the households have toilet facilities and it is the least in district of The Dangs (16 percent).

Table 2.9 HOUSEING CHARACTERISTICS BY DISTRICT
Selected housing characteristics by district, Gujarat, 2002-04

	Percentage of households:				
Districts	With electricity	With drinking water[1]	With toilet facility	Using Liquid petroleum gas/ electricity	Living in *pucca* house
Ahmedabad	97.4	95.3	74.4	63.7	72.7
Amreli	92.7	86.8	44.2	17.6	56.5
Anand	83.4	97.0	62.8	41.1	48.8
Banaskantha	79.2	91.4	34.7	22.9	35.6
Bharuch	88.5	86.7	51.9	29.1	54.1
Bhavnagar	90.7	79.0	47.6	36.0	59.1
Dahod	59.3	68.6	29.1	24.7	32.7
Gandhinagar	95.2	99.9	57.5	55.8	65.1
Jamnagar	92.4	87.1	49.3	31.2	57.8
Junagarh	95.6	82.0	40.6	26.3	46.7
Kachchh	83.4	79.8	43.5	25.4	41.4
Kheda	79.4	89.6	39.5	27.3	53.9
Mahesana	87.6	93.3	47.4	37.8	42.6
Narmada	72.8	97.5	34.3	26.3	35.4
Navsari	90.9	79.7	48.9	38.9	47.7
Panchmahals	69.5	80.9	36.3	27.2	42.1
Patan	78.9	90.8	43.5	27.5	51.6
Porbandar	92.7	82.2	46.3	30.2	82.8
Rajkot	97.2	87.8	54.9	38.4	61.4
Sabarkantha	87.0	88.9	45.8	29.0	46.2
Surat	94.2	94.1	74.6	62.1	55.1
Surendranagar	94.6	75.9	31.0	25.0	41.9
The Dangs	47.1	74.9	16.0	5.3	3.4
Vadodara	82.0	92.3	55.5	39.4	53.4
Valsad	86.6	80.0	33.9	33.3	37.9
Gujarat	86.2	87.2	47.5	34.8	49.3

Note: [1] That is piped or from a hand pump/bore well/well covered

In only three districts, Ahmedabad, Surat and Gandhinagar more than half of the households have been using liquid petroleum gas/electricity for cooking whereas in the rest of the districts, it is further low ranging between five percent to 41 percent. The percentage of households living in *pucca* houses is quite low in all the districts of Gujarat. In more than half of the districts less than half of the households live in *pucca* houses. Porbandar is the only district where more than 80 percent of the households (83 percent) live in *pucca* houses followed by Ahmedabad (73 percent).

2.10 Iodization of Salt

Consumption of salt fortified with iodine is recommended to avoid miscarriages, brain disorders, cretinism and retarded psychomotor development. As per the Prevention of Food Adulteration Act, 1988, the minimum iodine content of edible salt is 30 parts per million (PPM) at the manufacturing level.

In the DLHS-RCH survey, each interviewer was provided with a test kit to measure the level of iodine content of salt consumed by the surveyed households. The test results (Table 2.10) are classified by degree of iodization of salt and categorised by background characteristics. It is observed that only 35 percent of households used salt that contained a minimum recommended 15 ppm or higher level of iodine content whereas 45 percent of households used salt that is not iodized at all and another 18 percent used salt, which was inadequately iodized.

Table 2.10 IODIZATION OF SALT
Percent distribution of household heads by degree of Iodization of salt, according to selected background characteristics, Gujarat, 2002-04

Background characteristic	Not Iodised	7ppm	15+ppm	Other[1]	Total percent	Number of households
Place of Residence						
Rural	53.3	18.2	25.4	3.0	100.0	16,628
Urban	28.3	16.3	52.6	2.8	100.0	9,131
Education of the household heads						
Non-literate	56.9	18.3	21.0	3.8	100.0	8,000
0-9@ years	46.1	19.2	32.0	2.7	100.0	10,872
10 and above	27.4	14.0	56.3	2.3	100.0	6,887
Religion of household head						
Hindu	44.9	17.8	34.3	2.9	100.0	23,333
Muslim	44.6	15.5	37.0	2.9	100.0	1,735
Christian	36.9	8.6	51.9	2.6	100.0	250
Jain	23.2	19.8	54.2	2.8	100.0	368
Other	20.8	10.6	67.1	1.5	100.0	72
Caste/tribe of the household head#						
Scheduled caste	48.0	17.3	30.4	4.3	100.0	2,568
Scheduled tribe	55.4	12.3	29.5	2.7	100.0	3,312
Other backward class	49.1	20.9	27.5	2.6	100.0	9,671
Other	34.5	16.0	46.5	3.0	100.0	9,581
Standard of living index						
Low	59.0	17.8	19.4	3.8	100.0	8,900
Medium	47.9	19.7	30.1	2.4	100.0	8,315
High	25.9	15.2	56.3	2.6	100.0	8,544
Total	44.5	17.5	35.1	2.9	100.0	25,759

Note: ppm: Parts per million
@ Literate persons with no years of schooling are also included. # Total number of cases may not add upto N due to do not know and missing cases. [1] Includes salt not at home, salt not tested, refused and missing cases.

In rural areas, 53 percent of households against 28 percent in urban areas used non-iodized salts. Percentage of households using inadequately iodized salt in rural and urban areas is almost same. Number of households using non-iodized or inadequately iodized salt is closely associated with the educational level of the household head. More than half (56 percent) of households headed by persons who had more than 10 years of schooling reported the use of adequately iodized salts against only 21 percent those non-literate. Consumption of adequately iodised salt among households of other caste is 47 percent, followed by 30 percent each in scheduled caste and scheduled tribe and among the other backward class households it is 28 percent.

Differential in the consumption of properly iodized salt is more pronounced when analysed by religion of the household head and standard of living index. Percentage of households using adequately iodized salt is only 34 percent among the Hindus and 37 percent among the Muslims households, whereas the corresponding figures for Christian, Jain and other religion households are 52, 54 and 67 percent respectively. Again, households with low standard of living are more likely to use non-iodized or inadequately iodized salt compared to households with medium or high standard of living index. Nearly three-fifths of households with low standard of living used non-iodized salt, while 26 percent households with a high standard of living fall in this category. The number of households with a high standard of living using adequately iodized salt is almost three times more than those with a low standard of living.

2.11 Iodization of Salt by Districts

Table 2.11 shows district level variation in the percent distribution of households by level of iodization of salt used in the households.

Table 2.11 IODIZATION OF SALT BY DISTRICT

Percent distribution of household heads by degree of iodization of salt by district, Gujarat, 2002-04

District	Not iodized	7ppm	15+ppm	Other[1]
Ahmedabad	31.4	27.4	38.9	2.4
Amreli	46.5	23.6	28.1	1.8
Anand	65.4	16.5	15.7	2.5
Banaskantha	42.9	21.5	32.2	3.4
Bharuch	45.5	15.1	36.6	2.7
Bhavnagar	47.6	30.9	20.1	1.4
Dahod	43.4	9.3	44.0	3.3
Gandhinagar	36.3	26.1	34.4	3.2
Jamnagar	45.8	22.7	30.0	1.5
Junagarh	43.2	21.8	30.6	4.4
Kachchh	24.9	15.2	56.0	3.9
Kheda	47.3	18.6	29.9	4.2
Mahesana	55.0	13.1	29.5	2.5
Narmada	39.0	9.4	47.3	4.3
Navsari	49.8	6.9	40.6	2.7
Panchmahals	33.5	14.5	50.2	1.8
Patan	58.8	18.6	20.4	2.1
Porbandar	45.2	22.2	31.1	1.5
Rajkot	49.0	14.6	31.7	4.7
Sabarkantha	51.7	12.6	30.8	4.8
Surat	30.9	6.8	60.6	1.7
Surendranagar	36.8	24.7	35.2	3.2
The Dangs	29.8	20.5	45.6	4.2
Vadodara	49.0	9.8	36.8	4.4
Valsad	49.3	8.7	40.2	1.8
Gujarat	44.5	17.5	35.1	2.9

Note: ppm: Parts per million. [1] Includes salt not at home, salt not tested, refused and missing cases

Kachchh district has the lowest proportion of households (25 percent) using non-iodized salt, whereas Anand has the highest proportion of households (65 percent) using non-iodized salt. Percentage of households using inadequately iodized (7 ppm) salt is the highest (31 percent) in Bhavnagar and the lowest in Surat and Navsari (7 percent each). About 35 percent of the households in the state used adequately iodized salt (15+ ppm), the highest being in the district of Surat (61 percent). Half of the households and above in Kachchh (56 percent), Panchmahals (50 percent) and Surat (61 percent) were using adequately iodized salt (see Map-2).

2.12 Availability of Facility and Services to the Rural Population

The DLHS-RCH collected information about surveyed village from knowledgeable persons such as, the '*Sarpanch*' or '*Pradhan*', (village head) or other village officials or other persons including 'teacher' in the villages on health and educational facilities and other services available in the village. One important aspect was on the distance of the village from various types of education facilities, if not available within the village, including primary school, middle school, secondary school, higher secondary school, college, *Gurujee* scheme and '*Madarsa*'. Further information was collected on the distance of the village, from various types of health facility, including sub-centres, primary health centres (PHCs), community health centres/ Rural Hospitals (CHCs/RHs), Government dispensary, hospital, private clinic or hospitals and health facilities of Indian system of Medicine (ISM) if not available within the village.

Table 2.12 gives the distance of surveyed villages from an education facility. The unit of analysis is usual residents of rural population. Almost all the rural residents (99 percent) (the *de-jure* rural population) in the state live in villages that have a primary school, 70 percent live in villages with middle school and 37 percent of the rural population live in villages with secondary schools. Higher secondary schools are available for 13 percent of the rural population. Nineteen percent of the rural population live in villages, which have *Madarssas*. Only two percent of the surveyed villages have a college. As regards the distribution of educational institutions within 5 kilometres distance from the village, it can be seen that, 17 percent of the villages have middle school, 27 percent have secondary school, 18 percent have higher secondary school and six percent have a college within this distance. For 75 percent of the rural population the college is more than 10 kilometres away while for 45 percent of them higher secondary school is available at this distance. However, *Madarssa* is available for 44 percent of the rural population at the distance of more than 10 kilometres. For one-third of the rural household population the *Gurujee* Scheme is reported to be available at the same distance.

Table 2.12 DISTANCE FROM THE NEARST EDUCATION FACILITY

Percent distribution of rural household population by distance from the nearest education facility, Gujarat, 2002-04

Education facility	Within village	Distance from the village: < 5 km	5-9 km	10+ km	Don't know/ missing	Total percent
Primary School	99.0	1.0	0.0	0.0	0.0	100.0
Middle School	70.0	16.7	7.3	5.3	0.8	100.0
Secondary School	37.4	27.1	17.5	17.9	0.1	100.0
Higher Secondary School	13.0	18.0	23.9	45.1	0.0	100.0
College	1.7	5.8	16.6	75.4	0.6	100.0
Gurujee Scheme	10.0	11.0	12.4	33.3	33.4	100.0
Madarssa	18.7	10.4	15.1	44.4	11.4	100.0

Note: Table based on rural *de jure* population

Table 2.13 summarises the availability of health facilities within the surveyed villages and provides information on the distance between the villages and the nearest health facility. About 42 percent of the rural population live in villages with Sub-centres. Only 15 percent of the rural household population live in a village with a primary health centre, though the proportion of villages having facilities of either Sub-centre or primary health centre is nearly half of the rural household population. The proportion of rural population with each CHCs/RHs, Government dispensary and Government hospitals is less than five percent. However, 43 percent of the rural household population live in the villages where private clinic is available.

The proportion of rural population located within a distance of 5 kilometres from health facilities are 27 percent for sub-centres, 23 percent for primary health centres, 10 percent for a Government dispensary, five percent for CHCs/RHs., three percent for Government hospitals and 17 percent for private clinic. Distance of particular health facilities is beyond 10 kilometres from surveyed villages in the case of Government hospitals (78 percent), CHCs/RHs (73 percent), and for private hospitals, (67 percent).

Table 2.13 DISTANCE FROM THE NEAREST HEALTH FACILITY

Percent distribution of rural household population by distance from the nearest health facility, Gujarat, 2002-04

Health facility	Within village	Distance from the village: < 5 km	5-9 km	10+ km	Don't know/ missing	Total percent
		Rural household population				
Sub-centre	41.8	26.8	16.2	12.0	3.2	100.0
Primary health centre	15.3	22.8	31.0	30.1	0.8	100.0
Either sub-centre or PHC	48.6	26.8	14.7	9.9	0.0	100.0
Community health centre/ referral hospital	2.7	4.9	18.8	72.5	1.1	100.0
Government dispensary	4.4	10.3	15.3	59.5	10.5	100.0
Government hospital	1.9	3.2	10.8	78.1	6.1	100.0
Private clinic	42.5	16.8	18.7	21.1	0.8	100.0
Private hospital	6.5	7.4	17.8	67.0	1.3	100.0
ISM health facility	10.8	10.8	16.9	58.2	3.3	100.0

Note: Table based on rural *de-jure* population

Table 2.14 shows the proportion of rural residents in the state that live in the villages with various health services. Almost all (97 percent) of rural residents live in villages that have an *anganwadi*, (a nursery school for children age 3-6 years) and at the same time 91 percent of rural households live in villages with *anganwadi* workers (*Anganwadi* workers provide integrated child development services).

Table 2.14 AVAILABILITY OF SERVICES

Percentage of rural residents living in villages that have sleeted services, Gujarat, 2002-04

Services	Percentage of rural residents
Anganwadi centre	96.6
Anganwadi worker	90.5
Private doctor	41.2
Visiting doctor	35.6
Homeopathic doctor	7.5
Village health guide	5.5
Trained birth attendant	48.2
Traditional healer	27.3
Dai	64.3

Note: Table based on rural *de jure* population

More than two-fifths (41 percent) of the rural residents live in villages that have a private doctor, 36 percent live in villages with a visiting doctor, eight percent with a homeopathy doctor, six percent with a village health guide, 48 percent with a trained birth attendant and 27 percent with a traditional healer. Nearly two-thirds of the rural residents live in villages that have a *Dai* (*Dai* provides the services for the delivery).

2.13 Availability of Education Facility and Health Services by Districts

Table 2.15 shows the availability of education and health facilities for the rural population within the surveyed villages by districts in Gujarat. Except the Kachchh and Mahesana districts where only 82 and 91 percent of the rural population have access to the primary or middle school, all the rural population in other districts have access to primary schools in the state of Gujarat. About 42 percent of the rural population in the state have sub-centres within the village, with the highest coverage of 61 percent in Gandhinagar and the lowest of 18 percent of the rural population in Banaskantha.

Table 2.15 AVAILABILITY OF FACILITY AND SERVICES BY DISTRICT

Selected facility and services of rural household population within village by district, Gujarat, 2002-04

	Percentage of rural household population with:						
Districts	Primary or middle school	Sub-centre	PHCs	Any government health facility[1]	Doctor[2]	TBA[3]	*Anganwadi* worker
Ahmedabad	100.0	34.2	13.3	47.5	72.7	42.8	57.4
Amreli	100.0	49.4	23.2	52.0	58.2	42.2	94.0
Anand	100.0	45.2	35.2	68.7	77.4	45.4	100.0
Banaskantha	100.0	18.4	14.5	39.6	60.0	41.7	80.3
Bharuch	100.0	53.3	27.6	65.1	54.0	74.8	93.4
Bhavnagar	100.0	48.3	12.6	55.5	59.1	47.7	90.5
Dahod	100.0	40.3	17.9	47.8	26.7	48.0	100.0
Gandhinagar	100.0	60.8	21.1	73.9	90.8	53.7	96.8
Jamnagar	100.0	54.1	6.7	59.4	74.4	68.4	92.4
Junagarh	100.0	45.6	14.7	56.1	75.4	42.9	92.6
Kachchh	82.2	39.2	7.1	45.5	36.4	49.3	87.7
Kheda	100.0	55.5	9.4	62.0	54.3	47.0	94.7
Mahesana	90.6	45.6	28.7	71.7	65.6	23.0	97.3
Narmada	100.0	24.1	11.1	29.3	17.4	56.1	70.0
Navsari	100.0	33.1	17.8	34.6	60.6	27.9	93.4
Panchmahals	100.0	33.5	19.8	51.0	26.2	40.2	93.4
Patan	100.0	27.5	17.3	41.4	67.8	57.5	100.0
Porbandar	100.0	57.2	30.5	68.6	63.3	52.6	95.5
Rajkot	100.0	42.5	4.8	45.6	94.0	71.7	96.1
Sabarkantha	100.0	46.2	15.0	52.6	47.1	14.9	75.1
Surat	100.0	52.9	0.0	52.9	82.6	71.4	94.4
Surendranagar	100.0	52.9	7.1	67.9	43.2	50.5	96.4
The Dangs	100.0	18.5	5.9	18.5	22.1	70.7	87.3
Vadodara	100.0	36.1	20.8	46.3	42.1	56.7	84.6
Valsad	100.0	25.7	10.2	33.1	62.7	45.1	95.3
Gujarat	99.0	41.8	15.3	52.3	58.7	48.2	90.5

Note: [1] Includes sub-center, primary health center, community health center or referral hospital, government hospital, and government dispensary within the village [2] Either private or visiting doctor [3]Trained birth attendant

In Surat district, none of the surveyed village is found with PHCs within the villages. Highest availability of PHCs within the village is found in Anand district (35 percent). However, only in Gandhinagar and Mahesana districts, more than 70 percent of the households in the rural area have access to at least one government health facility including sub-centre, primary health centre, community health centre or referral hospital, government hospital and government dispensary within the village.

As high as 94 percent of the rural households are visited either by private or by visiting doctors in the surveyed villages of Rajkot district, whereas only 17 percent households can be classified in this category in Narmada district. Highest number of rural household population (75 percent) are attended by trained birth attendant in Bharuch, while only 15 percent of rural population, had such provision in Sabarkantha. In Anand, Dahod and Patan Districts, all the rural households are visited by *anganwadi* workers, while it is lowest in Ahmedabad district (57 percent).

CHAPTER III

CHARACTERISTICS OF WOMEN, HUSBANDS AND FERTILITY

The Reproductive and Child Health (RCH) programme is targeted towards the underprivileged section of the population, particularly, women and children. The utilization of RCH services provided across the country depends to a large extent on the characteristics of women, their husbands and episodes of pregnancies, miscarriages, abortions, number of children born to them and survival status of children. Age of women, marital duration, educational attainment, social background and living standard are important factors, which influence reproductive and child health. With this in view, the DLHS-RCH data were collected on demographic characteristics, such as current age, age at consummation of marriage and number of pregnancies, live births and surviving children from eligible women respondents of selected representative households. Information regarding household background characteristics was collected using a separate household questionnaire that covered religion and caste of head of household, type of house, source of drinking water and possession of consumer durables. Fertility preference of women in terms of timing and desire for additional children in comparison with the number of living children provides information on the need for reproductive and child health services.

This chapter provides a comprehensive outline of distribution of currently married women by present age, age at consummation of marriage, duration of marriage, complete years of schooling, pregnancy episodes, children ever born and children surviving, along with social and economic characteristics of households the women represent.

3.1 Background Characteristics of Women

The percentage distribution of currently married women in the reproductive age group 15-44 years by residence, religion and caste of head of household, economic standard of household and other demographic characteristics are shown in Table 3.1. A sample of 20,796 eligible women represents the state of Gujarat in DLHS-RCH and nearly two-thirds of these women are drawn from rural areas. About 61 percent of the currently married women are in the age range of 20-34 years and atleast a similar age distribution is observed both for urban and rural areas. Age at consummation of marriage, particularly in rural areas is found to be very low with as many as 49 percent of the women having cohabited before 18 years of age, while it is 27 percent in urban areas. Looking at the distribution of marital duration it is noted that about 39 percent of the women across the state are married for more than 15 years.

Among the sample of 20,796 representative women in Gujarat, Hindus and Muslims constitute 91 percent and 7 percent respectively. More, Muslim women are found in urban areas (10 percent) than in rural areas (5 percent). The presence of women belonging to other religious groups is insignificant in proportion and absolute terms. Nearly 38 percent of the sample women (38 percent) belong to the other backward classes. About 13 percent women are from scheduled tribes and 10 percent from scheduled castes. In rural areas, there are more women belonging to scheduled caste, scheduled tribe and other backward classes than in urban areas, while more women from other castes are found in urban areas. There is a clear rural-urban differential in the educational attainment of women. For the state of Gujarat, 44

percent of women are non-literate and women of this literacy category constitute 55 percent in rural areas, while it is just 22 percent in urban areas.

Table 3.1 BACKGROUND CHARACTERISTICS OF ELIGIBLE WOMEN
Percent distribution of currently married women aged 15-44 by selected background characteristics, according to residence, Gujarat, 2002-04

Background characteristic	Total	Residence	
		Rural	Urban
Age group			
15-19	6.2	7.6	3.6
20-24	20.7	21.8	18.4
25-29	21.3	20.9	22.2
30-34	19.0	18.8	19.3
35-39	17.5	16.8	18.8
40-44	15.3	14.0	17.7
Age at consummation of marriage			
Below 18 years	41.7	49.4	27.4
18 years & above	58.3	50.6	72.6
Marital duration			
0-4	20.9	20.3	21.9
5-9	21.4	21.6	21.1
10-14	18.9	18.7	19.5
15+	38.8	39.4	37.6
Religion			
Hindu	91.1	93.6	86.4
Muslim	6.7	5.2	9.6
Christian	0.9	1.1	0.4
Sikh	0.1	0.0	0.3
Buddhist	0.0	0.0	0.1
Jain	1.1	0.0	3.1
Zoroastrian	0.0	0.0	0.1
Other	0.0	0.0	0.1
Caste/tribe			
Scheduled caste	10.1	11.3	7.9
Scheduled tribe	13.3	18.1	4.3
Other backward class	38.1	40.2	34.2
Other #	36.1	27.8	51.8
Don't know	2.3	2.6	1.9
Education (Years of schooling)			
Non-literate	43.5	54.8	22.3
0-9@ years	35.0	33.7	37.3
10 years & above	21.5	11.5	40.4
Husband's education (Years of schooling)			
Non-literate	20.2	26.5	8.2
0-9@ years	42.5	45.6	36.5
10 years & above	36.6	26.9	55.0
Don't know	0.7	0.9	0.3
Standard of living index			
Low	32.4	47.9	3.2
Medium	32.9	35.6	27.9
High	34.6	16.4	68.9
Number of women	20,796	13,591	7,205

Note: # Not belonging to a scheduled caste, scheduled tribe and an other backward class.
@ Literate persons with no year of schooling are included.

More than one-third (35 percent) of the women across the state have completed 0-9 years of schooling. Only a handful, 12 percent of rural women have completed 10 or more years of schooling compared to 40 percent for urban women. Men are more literate than their

spouses. In Gujarat, 20 percent of the husbands of eligible women are non-literate and the corresponding figures are 27 percent in rural areas and 8 percent in urban areas.

The DLHS-RCH includes data on materials used for floor, walls and roofs of the housing structure along with status of possession of a list of durables and these are utilized to construct a composite index of household standard of living. Households are further classified as those with low, medium and high standard of living. About 35 percent of the women in the state belong to high standard of living category while the rest are almost equally divided into low and medium standard of living. Majority (48 percent) of the rural women across the state could be categorised as low standard of living. In urban areas, 69 percent of women belong to high standard of living and the corresponding figure is 16 percent in rural areas.

3.2 Educational Level of Women

Table 3.2 provides details of educational level of eligible women in terms of classification by years of schooling, and selected background characteristics, such as, place of residence, religion, and caste and husbands' education. As regards distribution of non-literate women, it is observed that a lesser proportion of younger women below 30 years of age are non-literate compared to older women above 30 years. A distinct pattern of educational attainment of women is that maximum of them attended schooling for 6-8 years and only 13 percent of them attended 11 or more years of schooling. For the women in the age group 15-19 years, 12 percent and a meagre four percent had 9-10 years and 11 or more years of schooling. Among the older women in the age group 40-44 years, distribution of schooling by year is more or less uniform with 13 percent, 13 percent, 12 percent and 9 percent of them having attended school for 1-5, 6-8, 9-10 and 11 or more years of schooling.

There is a substantial rural-urban differential in the level of education of women in Gujarat. More than half (55 percent) of rural eligible women are non-literate and only six percent of them have 11 or more years of schooling. The corresponding figures in urban areas are 22 percent and 27 percent respectively. Religion wise data indicates that more Christian women (51 percent) are non-literate compared to Hindu women (44 percent) and Muslim women (39 percent). However, only two percent of the women belonging to Jain communities are found to be non-literate. For literate eligible women from Hindu and Muslim religious communities, maximum of them have 6-8 years of schooling. The proportion of Hindu women with 1-5 years of schooling is 12 percent and the same is 20 percent for Muslim women, 14 percent for Christian women and six percent for women from Jain religion. Among the Muslim women only five percent of them have 11 or more years of schooling, while 13 percent of Hindu women have attained this level of education.

The uneven level of educational attainment by caste can be noted from the recorded proportion of non-literate women among scheduled caste (58 percent), scheduled tribe (66 percent), other backward class (51 percent) and other caste or tribe (22 percent). The literate women belonging to different castes or tribes are concentrated more in the range of 6-8 years of schooling. The husband's education is an important characteristic, which has strong association with the education of eligible women. For as many as 86 percent of women whose husbands are non-literate, women are also non-literate, while only 12 percent of women whose husbands have 11 or more or years of schooling are non-literate. Forty four

percent of literate women educated for 11 or more years of schooling have husbands who have the same level of education.

Table 3.2 LEVEL OF EDUCATION OF ELIGIBLE WOMEN

Percent distribution of currently married women age 15-44 by years of schooling, according to selected background characteristics, Gujarat, 2002-04

Background characteristic	Non-literate	Literate but no schooling	Years of schooling: 1-5 years	6-8 years	9-10 years	11 or more years	Missing	Total percent	Number of women
Age group									
15-19	43.7	0.0	14.6	25.9	11.9	3.9	0.0	100.0	1,297
20-24	36.1	0.0	12.6	18.5	18.8	13.9	0.0	100.0	4,295
25-29	38.0	0.1	10.4	17.3	16.3	17.9	0.0	100.0	4,436
30-34	45.1	0.0	11.7	15.5	12.8	15.0	0.0	100.0	3,951
35-39	49.6	0.1	12.5	13.4	13.4	11.0	0.0	100.0	3,645
40-44	52.2	0.1	13.4	13.1	11.8	9.4	0.0	100.0	3,172
Place of residence									
Rural	54.8	0.1	13.4	14.8	10.8	6.1	0.0	100.0	13,591
Urban	22.3	0.1	9.8	19.5	21.9	26.5	0.0	100.0	7,205
Religion									
Hindu	44.3	0.1	11.7	16.0	14.7	13.2	0.0	100.0	18,940
Muslim	39.2	0.2	19.5	23.4	12.9	4.8	0.0	100.0	1,399
Christian	51.4	0.0	14.1	10.7	11.8	12.1	0.0	100.0	179
Jain	1.8	0.0	6.1	9.3	27.3	55.5	0.0	100.0	228
Other	(28.9)	(0.0)	(10.5)	(7.9)	(13.2)	(39.5)	(0.0)	(100.0)	40
Caste/tribe #									
Scheduled caste	58.2	0.1	11.5	14.1	10.0	5.9	0.0	100.0	2,108
Scheduled tribe	65.5	0.1	7.5	10.1	10.1	6.8	0.0	100.0	2,767
Other backward class	51.3	0.1	13.2	17.1	11.4	6.9	0.0	100.0	7,924
Other	21.9	0.1	13.0	18.7	21.5	24.8	0.0	100.0	7,510
Husband's education									
Non-literate	85.7	0.0	6.4	5.0	1.8	1.1	0.0	100.0	4,197
Literate but no schooling	(63.6)	(10.9)	(12.7)	(5.5)	(0.0)	(7.3)	(0.0)	(100.0)	42
1-5 years	63.4	0.2	18.9	10.8	5.7	1.0	0.0	100.0	3,254
6-8 years	42.8	0.0	17.5	25.1	12.0	2.6	0.0	100.0	3,658
9-10 years	24.0	0.0	14.1	25.5	26.1	10.3	0.0	100.0	4,838
11 or more years	11.5	0.0	6.5	14.5	23.3	44.2	0.0	100.0	4,656
Total	43.5	0.1	12.2	16.4	14.7	13.1	0.0	100.0	20,796

Note: # Total number may not add upto N due to don't know and missing cases. Table includes 152 do not know cases on husband's education were not shown separately. ( ) Based on less than 50 unweighted cases.

3.3 Background Characteristics of Husbands of Eligible Women

In DLHS-RCH, husbands of eligible women were also interviewed. Selected background characteristics of husbands are shown in Table 3.3. Across the state of Gujarat, majority (38 percent) of husbands are in the age group 25-34 years. About 15 percent of them are 45 years or older. In Gujarat, 92 percent of the husbands are Hindus, six percent are Muslims and presence of other religious groups is insignificant. Ten percent of husbands in the state belong to the scheduled caste and 14 percent to the scheduled tribe and it is little more in rural areas than in urban areas. Thirty-seven percent of the husbands belong to other backward classes. In urban areas husbands from other castes constitute 55 percent, while it is 28 percent in rural areas. As regards educational characteristics of the husbands of surveyed eligible women, 47 percent of them have completed 0-9 years of schooling and the proportion of non-literate husband ranges from eight percent in urban areas to 28 percent in rural areas, while the overall state figure is 21 percent.

Table 3.3 BACKGROUND CHARACTERISTICS OF MEN

Percent distribution of husband of eligible women by selected background characteristics, according to residence, Gujarat, 2002-04

Background characteristic	Total	Residence	
		Rural	Urban
Age group			
< 25	11.7	13.4	8.2
25-34	37.7	37.5	38.1
35-44	35.8	34.7	37.9
45+	14.9	14.4	15.8
Religion			
Hindu	91.7	93.8	87.3
Muslim	6.3	5.0	9.0
Christian	1.0	1.2	0.8
Sikh	0.1	0.0	0.3
Jain	0.8	0.0	2.4
Zoroastrian	0.0	0.0	0.1
Other	0.0	0.0	0.1
Caste/tribe			
Scheduled caste	10.3	11.7	7.4
Scheduled tribe	14.1	18.9	4.4
Other backward class	37.0	39.8	31.4
Other #	36.5	27.5	54.8
Don't know	2.1	2.1	2.0
Education (Years of schooling)			
Non-literate	21.3	27.9	7.7
0-9@ years	47.0	49.4	42.1
10 years & above	31.7	22.7	50.2
Standard of living index			
Low	33.9	48.9	3.4
Medium	32.3	35.4	25.9
High	33.8	15.7	70.7
Number of living children			
0	11.6	11.5	11.7
1	15.9	13.6	20.6
2	29.7	27.4	34.2
3	22.7	24.5	18.9
4+	20.2	22.9	14.6
Number of Men	15,311	10,282	5,030

Note: # Higher caste (Not belonging to a scheduled caste, scheduled tribe and an other backward class).
@ Literate persons with no year of schooling are included.

The proportion of husbands classified as low, medium and high standard of living is almost equal at 34 percent, 32 percent and 34 percent respectively. In rural areas, nearly half of the husbands live in low standard of living households compared to three percent in urban areas. This is complementary in the case of husbands living in high standard of living households, 71 percent in urban and 16 percent in rural areas. Around 30 percent of husbands across the state reported to have two living children. The corresponding figures for rural and urban areas are 27 and 34 percent respectively. Across the state of Gujarat, more than two-fifth (43 percent) of the husbands have three or more living children and it is more in rural areas (47 percent) compared to the husbands of urban eligible women (34 percent).

3.4 Educational Level of Husbands of Eligible Women

Educational levels in categories of years of schooling classified by age, place of residence, religion and caste/tribe of husbands of eligible women are shown in Table 3.4. The percentage distribution of non-literate husbands is directly proportional to the age. As age of the husbands increases the proportion of non-literate husbands increases. About 16 percent of husbands are non-literate in the age group of less than 25 years compared to 18 percent, 25 percent and 26 percent for husbands in the age groups 25-34 years, 35-44 years and 45 years of more respectively. Among the literate husbands, irrespective of their age at the time of survey, most (44 percent) of them have at least 9 years of schooling. About 17 percent of the younger husbands below 25 years have 11 or more years of schooling compared to 29 percent of those in the age group 25-34 years, 18 percent in the age group of 35-44 years and 17 percent above 44 years. Unlike in the case of eligible women, more (22 percent) of Hindu husbands are non-literate while the corresponding non-literate husbands of Muslim and Christian are 16 percent and 17 percent respectively. In Jain community as in case of women, only four percent of the husbands are non-literate. The proportions of husbands of Hindu, Muslim, Christian and Jain religions who have 11 or more years of schooling constitute 22 percent, 11 percent, 29 and 60 percent respectively. Educational attainment of husbands of eligible women varies according to the caste/tribe they belong. There are more non-literate husbands belonging to scheduled tribes (36 percent) followed by scheduled caste (30 percent) and other backward class (24 percent). Among the scheduled caste, scheduled tribe and other backward class husbands, 34 percent, 31 percent and 37 percent of them have 9 or more years of schooling. Among the husbands belonging to other castes, nine percent of them are non-literate and 60 percent of them have 9 or more years of schooling.

Table 3.4 LEVEL OF EDUCATION OF MEN

Percent distribution of husband's of eligible women by years of schooling, according to selected background characteristics, Gujarat, 2002-04

Background characteristic	Non-literate	Literate but no schooling	Years of schooling: 1-5 years	6-8 years	9-10 years	11 or more years	Missing	Total percent	Number of men
Age group									
< 25	15.5	0.1	15.2	21.2	31.2	16.8	0.0	100.0	1,791
25-34	17.5	0.2	13.5	16.6	23.4	28.8	0.0	100.0	5,766
35-44	25.1	0.2	19.5	18.2	18.9	18.1	0.0	100.0	5,479
45 +	26.1	0.3	22.2	16.8	17.7	16.9	0.0	100.0	2,276
Place of residence									
Rural	27.9	0.2	19.4	18.5	19.4	14.5	0.0	100.0	10,282
Urban	7.7	0.2	12.6	16.1	26.8	36.6	0.0	100.0	5,030
Religion									
Hindu	21.8	0.2	16.7	17.5	21.7	22.1	0.0	100.0	14,037
Muslim	15.6	0.5	25.5	24.3	23.5	10.6	0.0	100.0	961
Christian	17.2	0.0	23.1	11.8	19.0	28.9	0.0	100.0	156
Jain	3.6	0.0	0.0	5.0	30.2	60.1	1.0	100.0	123
Other	(14.8)	(3.7)	(7.4)	(18.5)	(22.2)	(33.3)	(0.0)	(100.0)	28
Caste/tribe #									
Scheduled caste	30.3	0.3	20.5	15.4	19.9	13.6	0.0	100.0	1,580
Scheduled tribe	36.2	0.1	18.5	14.4	18.0	12.8	0.0	100.0	2,163
Other backward class	24.4	0.3	19.1	19.2	21.4	15.5	0.0	100.0	5,668
Other	9.3	0.1	13.2	17.8	24.7	34.9	0.0	100.0	5,585
Total	21.3	0.2	17.2	17.7	21.8	21.8	0.0	100.0	15,311

Note: # Total number may not add upto N due to don't know and missing cases. ( ) Based on less than 50 unweighted cases.

3.5 Children Ever Born and Surviving

In DLHS-RCH, currently married women in the age group of 15-44 years were asked about the children ever born alive and the number of children surviving. Table 3.5 shows mean children ever born and mean surviving children by selected background characteristics and sex of children. A look at the mean children ever born by age of the women reveals that older women as expected had experienced more average live births than younger women. On the average, women in the reproductive age group have given birth to more male children than female children and similar sex differential is also noted when it comes to mean surviving children. Completed fertility, that is, mean children ever born to women in the age group 40-44 years is 3.6 for the state of Gujarat and it comprises an average of 1.9 male children and 1.7 female children. Out of the 3.6 mean children ever born to women in the 40-44 year age group, an average of 3.2 children survived. By sex of children, out of 1.9 mean numbers of males, on the average 1.7 survived and the corresponding mean number of females surviving was 1.5 out of 1.7.

Table 3.5 CHILDREN EVER BORN AND LIVING

Mean children ever born (CEB) and children surviving (CS) by selected background characteristics of currently married women age 15-44 years, Gujarat, 2002-04

Background characteristic	Mean children ever born			Mean children surviving			Number of women
	Total	Male	Female	Total	Male	Female	
Age group (years)							
15-19	0.5	0.2	0.2	0.4	0.2	0.2	1,297
20-24	1.4	0.7	0.7	1.3	0.7	0.7	4,295
25-29	2.4	1.3	1.1	2.2	1.2	1.0	4,436
30-34	3.0	1.6	1.4	2.7	1.5	1.3	3,951
35-39	3.4	1.8	1.6	3.1	1.6	1.5	3,645
40-44	3.6	1.9	1.7	3.2	1.7	1.5	3,172
Marital duration							
0-4	0.8	0.4	0.4	0.7	0.3	0.4	4,343
5-9	2.1	1.1	1.0	1.9	1.1	0.9	4,452
10-14	3.0	1.5	1.4	2.7	1.4	1.3	3,940
15+	3.6	1.9	1.7	3.2	1.7	1.5	8,060
Residence							
Rural	2.7	1.4	1.3	2.4	1.3	1.1	13,591
Urban	2.2	1.2	1.1	2.1	1.1	1.0	7,205
Religion							
Hindu	2.5	1.3	1.2	2.3	1.2	1.1	18,940
Muslim	2.8	1.4	1.3	2.6	1.3	1.2	1,399
Christian	2.5	1.1	1.4	2.3	1.0	1.3	179
Jain	1.7	0.9	0.8	1.7	0.9	0.8	228
Other	(2.6)	(1.5)	(1.0)	(2.4)	(1.3)	(1.0)	40
Caste/tribe #							
Scheduled caste	2.9	1.5	1.5	2.6	1.3	1.3	2,108
Scheduled tribe	2.8	1.4	1.3	2.4	1.2	1.2	2,767
Other backward class	2.7	1.4	1.2	2.4	1.3	1.1	7,924
Other	2.2	1.2	1.0	2.1	1.1	1.0	7,510
Education							
Non-literate	3.2	1.7	1.5	2.8	1.5	1.4	9,051
0-9@ years	2.2	1.2	1.1	2.1	1.1	1.0	7,269
10 years & above	1.7	0.9	0.8	1.6	0.9	0.7	4,473
Standard of living index							
Low	3.0	1.5	1.4	2.6	1.3	1.2	6,745
Medium	2.6	1.4	1.3	2.4	1.2	1.1	6,851
High	2.1	1.1	1.0	2.0	1.1	0.9	7,200
All women	2.5	1.3	1.2	2.3	1.2	1.1	20,796

Note: # Total number may not add upto N due to don't know and missing cases. Total includes 3 women with missing information on education were not shown separately. @ Literate women with no year of schooling are included. ( ) Based on less than 50 unweighted cases.

Here again, women with longer marital duration have higher mean children ever born. On the average, women who are married for 15 or more years have 3.6 children ever born and on the average 3.2 of them are surviving. There is a clear rural-urban divide in terms of mean children ever born with 2.7 children in rural areas and 2.2 children in urban areas. The mean children ever born to women who are Hindu, Muslim, Christian and Jain are 2.5, 2.8, 2.5 and 1.7 respectively. The corresponding mean surviving children are respectively 2.3, 2.6, 2.3 and 1.7 for these religious groups. The average children ever born also vary by caste/tribe of the eligible women. For women belonging to scheduled caste, the mean children ever born are 2.9, for the scheduled tribe it is 2.8, other backward classes it is 2.7 and other castes mean children ever born is 2.2.

The mean children ever born is higher for non-literate women (3.2) than women who have completed 0-9 years of schooling (2.2) and 10 or more years of schooling (1.7). The mean number of surviving children for women corresponding to these educational levels is 2.8, 2.1 and 1.6 respectively. Further the mean children ever born for women classified into low, medium and high standard of living are 3.0, 2.6 and 2.1 respectively. For the state of Gujarat, the DLHS-RCH shows inverse association between mean children ever born and educational attainment of women and also the level of household economic comfort.

3.6 Completed Fertility by District

The level of completed fertility as measured by mean children, ever born to women of 40-44 years by districts in Gujarat together with mean number of surviving children are shown in Table 3.6.

Table 3.6 COMPLETED FERTILITY BY DISTRICT

Mean children ever born (CEB) and children surviving (CS) to currently married women age 40-44 by district, Gujarat, 2002-04

	Mean children ever born			Mean children surviving		
District	Total	Male	Female	Total	Male	Female
Ahmedabad	3.2	1.8	1.5	2.8	1.5	1.3
Amreli	4.1	2.2	1.9	3.8	2.0	1.8
Anand	3.1	1.7	1.4	2.9	1.6	1.3
Banaskantha	4.5	2.5	2.0	3.9	2.2	1.7
Bharuch	3.3	1.8	1.6	2.9	1.5	1.4
Bhavnagar	4.4	2.3	2.1	3.9	2.1	1.9
Dahod	4.2	2.2	2.0	3.6	1.9	1.8
Gandhinagar	3.4	1.8	1.6	3.0	1.6	1.3
Jamnagar	3.7	1.9	1.8	3.3	1.6	1.6
Junagarh	4.0	2.1	1.8	3.5	2.0	1.6
Kachchh	3.7	2.0	1.8	3.1	1.7	1.4
Kheda	3.3	1.7	1.6	2.9	1.6	1.4
Mahesana	3.5	1.9	1.6	3.1	1.6	1.4
Narmada	3.3	1.9	1.4	2.9	1.7	1.2
Navsari	2.9	1.6	1.3	2.7	1.4	1.3
Panchmahals	3.7	2.0	1.7	3.1	1.6	1.4
Patan	4.0	2.0	2.0	3.4	1.7	1.7
Porbandar	3.9	2.0	1.9	3.5	1.7	1.7
Rajkot	3.4	1.7	1.7	3.1	1.6	1.5
Sabarkantha	3.3	1.9	1.4	3.0	1.7	1.3
Surat	3.1	1.6	1.5	2.9	1.5	1.4
Surendranagar	4.2	2.1	2.0	3.6	1.9	1.7
The Dangs	4.0	2.1	1.9	3.6	1.9	1.7
Vadodara	3.2	1.6	1.6	2.8	1.4	1.4
Valsad	2.8	1.5	1.3	2.5	1.4	1.1
Gujarat	3.6	1.9	1.7	3.2	1.7	1.5

On an average, women on the verge of completing reproductive period have given birth to 3.6 children in their reproductive life of which on the average 3.2 children are surviving. Completed fertility in Gujarat varies from the low of 2.8 mean children ever born for Valsad to the highest of 4.5 children in Banaskantha district. With the exception of Valsad and Navsari, mean children ever born in all other districts of Gujarat is more than 3. It is also true that in most of the districts mean number of male children is more than the mean of female children born to women in the 40-44 year age group. Banaskantha and Bhavnagar (3.9 each) recorded highest mean number of surviving children. Looking at the absolute difference between mean children ever born and mean number of surviving children, it seems that infant and child mortality varies among districts in Gujarat.

3.7 Birth Order

Birth order distribution by selected background characteristics of women is provided in Table 3.7 and Figure 3.1. This distribution can be used as a measure of fertility in the absence of formal measures of fertility, such as, crude birth rate and total fertility rate.

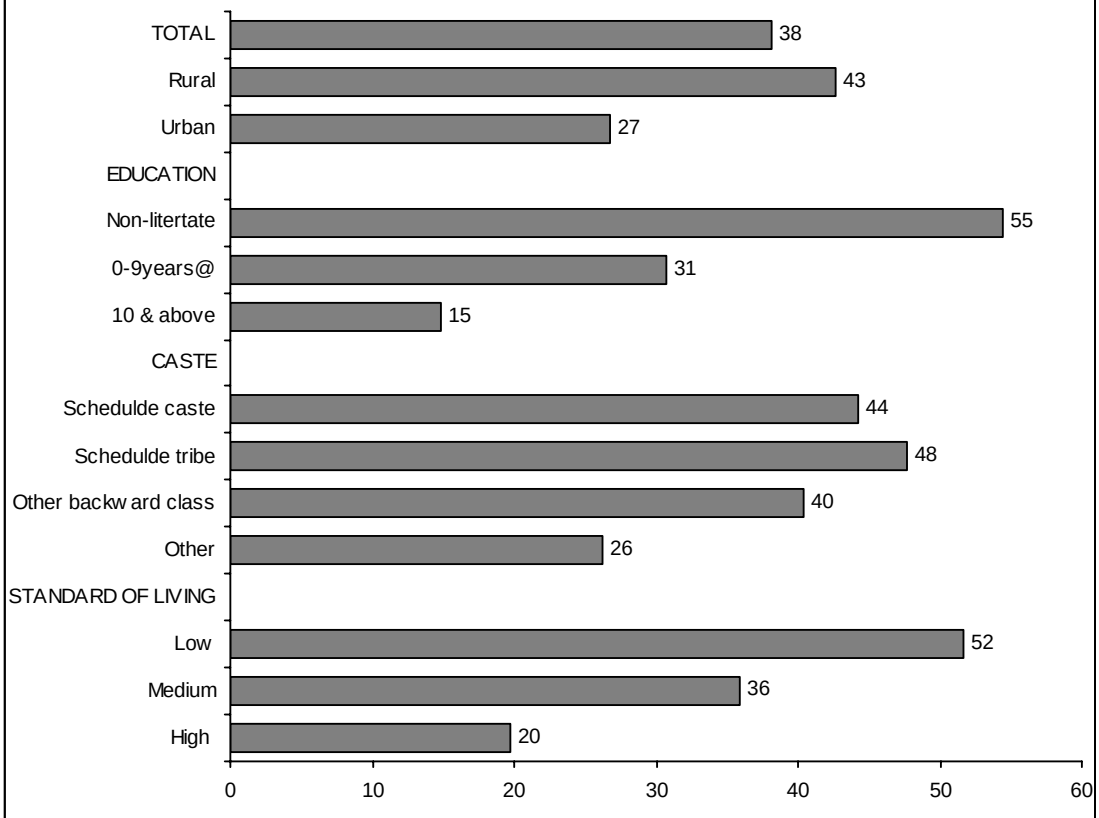
Table 3.7 BIRTH ORDER
Percent distribution of births during three years preceding the survey by birth order by selected background characteristics, Gujarat, 2002-04

Background characteristic	Birth order 1	2	3	4+	Total percent	Number of births
Age of women						
15-19	81.5	16.2	2.3	0.0	100.0	576
20-24	43.7	35.9	15.4	5.0	100.0	3,429
25-29	20.2	29.9	22.4	27.5	100.0	2,472
30-34	6.2	18.6	19.1	56.1	100.0	982
35-39	1.8	16.4	11.4	70.4	100.0	297
40-44	3.7	4.3	14.4	77.6	100.0	56
Place of residence						
Rural	29.7	27.5	18.2	24.5	100.0	5,553
Urban	39.2	34.0	13.9	12.9	100.0	2,259
Education (Years of schooling)						
Non-literate	20.7	24.8	20.3	34.2	100.0	3,496
0-9@ years	37.0	32.3	16.1	14.6	100.0	2,725
10 years & above	50.7	34.5	11.0	3.8	100.0	1,589
Religion						
Hindu	32.7	29.1	17.1	21.1	100.0	7,106
Muslim	30.0	30.0	17.3	22.6	100.0	588
Christian	28.2	41.0	8.7	22.1	100.0	63
Jain	(59.5)	(23.8)	(11.9)	(4.8)	(100.0)	47
Caste/tribe #						
Scheduled caste	26.4	29.3	15.1	29.1	100.0	924
Scheduled tribe	28.1	24.2	18.2	29.5	100.0	1,185
Other backward class	30.6	29.0	18.9	21.5	100.0	3,079
Other	40.7	33.1	14.0	12.2	100.0	2,385
Standard of living index						
Low	24.8	23.6	19.3	32.3	100.0	3,125
Medium	30.5	33.6	17.7	18.2	100.0	2,742
High	47.6	32.7	12.3	7.4	100.0	1,945
Total	32.5	29.4	17.0	21.2	100.0	7,812

Note: Total includes 1 birth with missing information on mother's education and 7 births on other religion were not shown separately. @ Literate mothers with no years of schooling are also included. () Based on less than 50 unweighted cases.

For the state of Gujarat, one-third of the births born in the three years period preceding the survey were of first order, 29 percent of second order and the remaining 38 percent were of third and higher order births. By current age of eligible women, more than 70 percent of births to the women in the age group 35-39 years and 40-44 years are 4 and higher order births. For women of 15-19 years, 82 percent births are of first order and 16 percent births are of second order. In the case of eligible women in urban areas, 27 percent of the births are of 3 and higher order whereas this order births constitute 43 percent for rural women indicating that higher order births are more concentrated in rural areas. Of the total births born to non-literate women, 55 percent are 3 and higher order births, followed by 31 percent for women with 0-9 years of schooling and 15 percent for women who had 10 or more years of schooling. In short, births born to non-literate women are of higher order whereas much lower order births occurred to women who completed 10 or more years of schooling. Looking at the religion differential in birth order distribution, it is observed that 40 percent of births born to Muslim women are 3 and higher order births. For Hindu and women from Christian religions, the 3 and higher order births constitute 38 percent and 31 percent respectively. The occurrence of births of order 3 and above is more among scheduled tribe (48 percent) than among scheduled caste (44 percent), other backward classes (40 percent) and other castes (26 percent) women. Incidence of births of order 3 and above for women classified by household standard of living index are 20 percent for high, 36 percent for medium and 52 percent for low living standard households women.

Figure 3.1
Birth Order 3 & above by Selected Background Characteristic



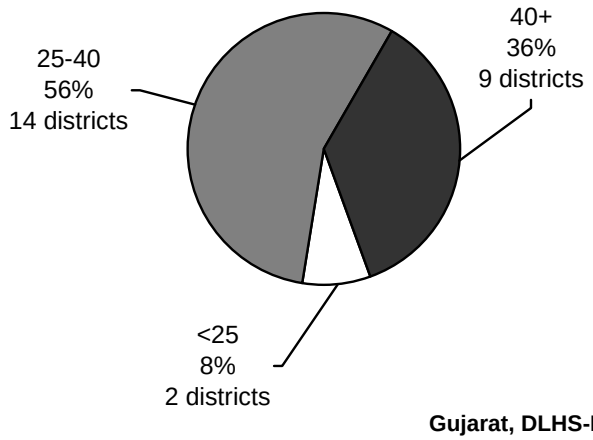
@ Literate w omen w ith no years of schooling are also included

Gujarat, DLHS-RCH, 2002-04

3.8 Birth Order by District

Table 3.8 and Figure 3.2 shows the births order distribution by districts in Gujarat. The proportion of births of order 3 and above ranges from the lowest of about 24 percent in Navsari to the highest of 57 percent in Dahod.

Figure 3.2
Birth Order 3 & above by District



Gujarat, DLHS-RCH, 2002-04

Table 3.8 BIRTH ORDER BY DISTRICT
Percent distribution of births during three years preceding the survey by birth order, according to district, Gujarat, 2002-04

	Birth order			
District	1	2	3	4+
Ahmedabad	35.4	32.1	17.6	14.9
Amreli	31.9	27.5	19.5	21.1
Anand	34.7	31.1	23.0	11.2
Banaskantha	21.3	23.2	17.6	37.9
Bharuch	31.4	32.7	17.6	18.3
Bhavnagar	32.3	29.1	19.5	19.1
Dahod	23.8	19.7	15.6	40.9
Gandhinagar	38.5	29.3	20.8	11.4
Jamnagar	33.6	27.9	13.2	25.3
Junagarh	35.3	27.3	21.7	15.7
Kachchh	27.9	24.8	21.8	25.4
Kheda	30.9	32.4	18.8	17.9
Mahesana	33.2	31.3	14.1	21.4
Narmada	33.1	30.8	18.3	17.8
Navsari	41.2	35.3	16.6	6.9
Panchmahals	29.6	29.3	18.3	22.8
Patan	27.8	27.6	19.1	25.5
Porbandar	34.2	32.7	17.4	15.7
Rajkot	31.3	35.5	13.8	19.4
Sabarkantha	32.8	26.9	16.0	24.2
Surat	42.8	33.3	11.5	12.4
Surendranagar	31.1	26.1	18.4	24.4
The Dangs	23.2	23.4	17.8	35.7
Vadodara	37.6	34.1	15.1	13.1
Valsad	40.9	31.1	13.2	14.7
Gujarat	32.5	29.4	17.0	21.2

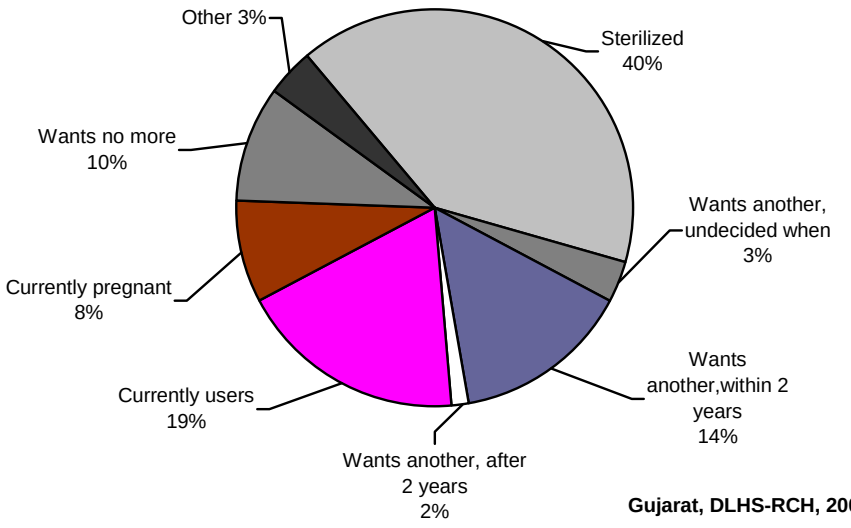
The districts, which have less than 30 percent of births of order 3 and above are Navsari & Surat (24 percent each), and Valsad & Vadodara (28 percent each). The districts, having more than half of the birth of order 3 and above, which can be classified as having higher proportion of births, are Dahod (57 percent), Banaskantha (56 percent), and The Dangs (54 percent). The remaining districts fall midway between these districts in terms of incidence of births of order 3 and above.

Overall, only two districts have 25 percent or less of births of order 3 and above, 14 districts have 25-40 percent births of older 3 and above and the remaining 9 districts have 40 or more percent of births of highest order.

3.9 Fertility Preference

The distribution of currently married women desiring additional children and preferred sex of additional children by number of living children of the women is shown vividly in Table 3.9 and Figure 3.3. Out of the 2,363 women with no living child, 28 percent are currently pregnant while 51 percent want to have children within two years and eight percent are undecided about the timing of birth and another five percent are using spacing methods. Among the currently married women, the desire for additional children dwindles down with increasing number of living children. About one-third women having one living child are using spacing methods and three percent are sterilized whereas 27 percent of them want additional children within two years, six percent after two years, seven percent are undecided about the timing of the next child and seven percent of them want no more additional children. Use of permanent as well as temporary means of contraception tends to be accelerated with number of living children.

Figure 3.3
Fertility Preference



Gujarat, DLHS-RCH, 2002-04

Table 3.9 FERTILITY PREFRENCE

Percent distribution of currently married women by desire for children, according to number of living children, Gujarat, 2002-04

Desire for children	Number of living children					Total
	0	1	2	3	4+	
Desire for additional child						
Wants another soon[1]	51.4	26.5	7.5	5.7	4.5	14.3
Wants another later[2]	0.8	5.8	1.2	0.8	0.5	1.6
Want another, undecided when	8.2	6.8	2.1	2.1	1.3	3.3
Undecided	1.0	0.8	0.5	0.3	0.5	0.6
Up to God	2.2	1.3	0.3	0.6	0.7	0.8
Want no more	1.3	7.2	10.8	8.4	14.3	9.5
Sterilized	0.3	2.8	42.9	62.3	61.2	40.6
Currently users[3]	5.4	31.9	27.2	14.1	11.0	18.6
Currently pregnant	27.5	15.6	5.6	3.0	2.6	8.3
Declared infecund	1.9	1.1	1.9	2.7	3.2	2.3
Missing	0.0	0.3	0.0	0.1	0.1	0.1
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	2,363	3,201	5,592	4,529	5,111	20,796
Preferred sex of additional children						
Boy	18.4	39.4	60.4	67.7	73.4	41.1
Girl	2.7	11.3	8.9	8.5	7.5	7.3
Doesn't matter	26.5	15.9	8.5	5.5	2.7	16.3
Upto God	52.3	33.4	22.2	18.3	16.3	35.3
Missing	0.1	0.0	0.0	0.0	0.0	0.0
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	1,501	1,319	648	429	383	4,279

Note: [1] Wants next births within 2 years. [2] Wants to delay next birth for 2 or more years. [3] Other than sterilization.

In the state of Gujarat, out of the 20,796 surveyed women, 14 percent desired to have additional children within two years, 2 percent after two years, 10 percent want no more children, eight percent are currently pregnant and 59 percent are using either terminal or temporary contraceptive methods. A total of 4,279 women want additional children irrespective of the number of living children. Out of 1501 women who have no living children and desire for additional children, 18 percent want a boy, three percent desired for girl, for 27 percent, the sex of the child is immaterial and 52 percent leave it to God. With increasing number of living children, male though is the dominating preferred sex in the community of the next child, a sizeable proportion of women desiring additional children expressed that the sex of the child was immaterial.

3.10 Pregnancy Outcomes

Table 3.10 shows distribution of pregnancy outcomes including live birth, stillbirth, induced abortion and spontaneous abortion by districts in Gujarat. For the state as a whole, 91 percent of pregnancy ends in live births, four percent each in induced abortions and in spontaneous abortion and one percent in stillbirth. More pregnancies in rural areas end in live births (93 percent) than in urban areas (87 percent), while the incidence of induced abortion is more in urban areas (8 percent) than in rural areas (2 percent).

Table 3.10 OUTCOMES OF PREGNANCY

Percent distribution of all pregnancies of currently married women aged 15-44 years by their outcomes three year preceding the survey currently married women, according to districts, Gujarat, 2002-04

Districts	Live birth	Stillbirth	Induced abortion	Spontaneous abortion	Total percent
State-Rural	92.8	1.4	2.1	3.6	100.0
State-Urban	86.5	0.7	8.1	4.8	100.0
State-Total	90.8	1.2	4.0	4.0	100.0
Ahmedabad	83.4	0.4	11.9	4.4	100.0
Amreli	92.5	2.3	1.6	3.5	100.0
Anand	82.5	2.2	10.8	4.5	100.0
Banaskantha	93.9	0.7	0.7	4.7	100.0
Bharuch	90.6	1.6	3.1	4.7	100.0
Bhavnagar	87.9	1.3	3.7	7.0	100.0
Dahod	91.1	1.6	3.1	4.1	100.0
Gandhinagar	83.9	2.0	7.9	6.1	100.0
Jamnagar	95.5	0.6	0.5	3.4	100.0
Junagarh	95.0	1.4	2.2	1.4	100.0
Kachchh	94.1	0.2	0.7	4.5	100.0
Kheda	85.6	1.5	6.1	6.7	100.0
Mahesana	90.9	0.5	4.1	4.5	100.0
Narmada	92.2	2.5	1.6	3.7	100.0
Navsari	91.1	2.0	2.9	4.1	100.0
Panchmahals	92.7	1.2	1.9	4.1	100.0
Patan	86.3	1.7	7.0	5.0	100.0
Porbandar	90.3	2.4	1.7	5.6	100.0
Rajkot	95.9	1.4	1.9	0.8	100.0
Sabarkantha	91.0	1.2	4.8	2.9	100.0
Surat	96.3	0.4	1.7	1.5	100.0
Surendranagar	91.7	0.3	3.3	4.7	100.0
The Dangs	97.0	1.2	0.0	1.8	100.0
Vadodara	83.5	2.6	6.2	7.7	100.0
Valsad	93.5	0.9	1.3	4.3	100.0

The proportion of pregnancies ending in live births ranges from about 83 percent in Anand to 97 percent in The Dangs. The districts on the lower side of pregnancies ending in live birth include Ahmedabad, Gandhinagar, Kheda, Patan, and Vadodara with 83-86 percent of pregnancies in these districts ending in live births. The incidence of stillbirth is highest in Vadodara and Narmada (about 3 percent each) followed by Amreli, Anand, Bharuch, Dahod, Gandhinagar, Navsari, Patan, Porbandar, (about 2 percent each) and almost nil in Kachchh. Induced abortion is highest in the district of Ahmedabad (12 percent), followed by Anand (11 percent), while it is nil in The Dangs. Spontaneous abortion is least in Rajkot (about one percent) and highest in Vadodara (8 percent).

CHAPTER IV

MATERNAL HEALTH CARE

Provisions of maternal health care services to ensure safe motherhood is one of the major components of the Reproductive and Child Health (RCH) programme. The RCH programme services for antenatal care, includes at least three antenatal care visits, iron prophylaxis for pregnant and lactating women, at least one dose of tetanus toxoid vaccine, detection and treatment of anaemia in mothers, and management and referral of high-risk pregnancies, natal care, that is encouragement of safe delivery, post-natal care, and management of unwanted pregnancies. In rural areas, the government delivers reproductive health and other health services through its network of Sub-Centres (SCs), Primary Health Centres (PHCs) and other health facilities. In addition, pregnant women and children can get services from private maternity homes, hospitals, private practitioners, and in some case non-governmental organisations (NGOs) and trust hospitals. In urban areas, reproductive health services are available mainly through government or municipal hospitals, Urban Health Posts (UHPs), Urban Family Welfare Centres (UFWCs), hospitals and nursing homes operated by NGOs, and private nursing and maternity homes.

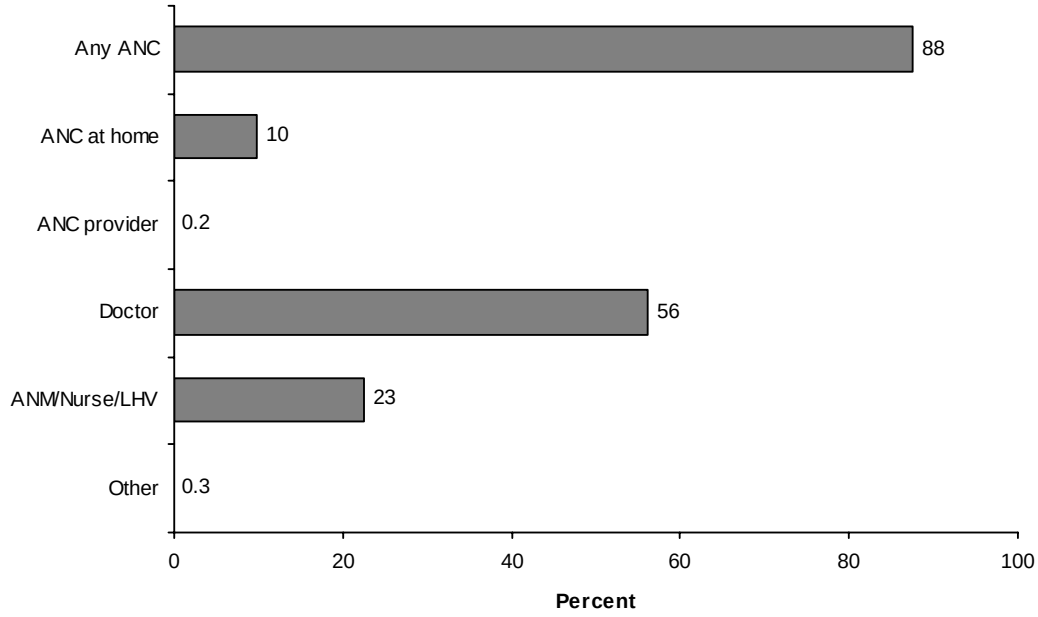
The National Population Policy (NPP), 2000 adopted by the Government of India (Ministry of Health and Family Welfare, 2000) reiterates the Government's commitments to the safe motherhood programme within the wider context of reproductive health. Among the national socio-demographic goals for 2010 specified by the policy, several goals pertain to safe motherhood, that 80 percent of all deliveries should take place in institutions by 2010, hundred percent deliveries should be attended by trained personnel, and the maternal mortality ratio should be reduced to a level below 100 per 100,000 live births. Empowering women for improved health and nutrition is one of the 12 strategic themes identified in the policy to be pursued either as stand-alone programmes or as intersectoral programmes.

In DLHS-RCH Phase-I, all the eligible women who had their last pregnancy after January 1, 1999 a separate section on the status of maternal health and utilisation of maternal health care services was canvassed. In Phase-II, the same section was canvassed to all the eligible women who had their last pregnancy after January 1, 2001. The women whose last pregnancy terminated into live/still birth were asked about the details of antenatal, natal and post-natal care they received; pregnancy, delivery and post-delivery complications they suffered from and the treatment seeking behaviour in case of complications. Women whose last pregnancy terminated into abortion, either spontaneous or induced, were asked about the utilisation of safe abortion services and the post-abortion complications they experienced. This chapter presents information on antenatal, natal and postnatal care received by women whose last pregnancy had terminated during the three years preceding the survey as live birth or as stillbirth.

4.1 Antenatal Check-Ups

Women who had given a birth during the three years preceding the survey were asked whether they had gone for antenatal check-ups outside the home, and if they had, what type of service provider had given them the check-ups. They were also asked whether any health worker had visited them at home to provide antenatal check-ups. Table 4.1 and Figure 4.1 present the percentage of women who had given birth during the three years preceding the survey and information regarding the antenatal check-ups they had by source of antenatal check-ups according to some selected background characteristics. Results show that nearly nine out of every ten women received antenatal check-ups during the three years preceding the survey, more than RCH Round I (79 percent). Fifty-six percent of women received antenatal check-ups from doctors, and 23 percent from ANM/Nurse/LHV. Only ten percent women received antenatal check-ups at the doorstep from the ANMs or health worker.

Figure 4.1
Source of Antenatal Care



Note: Based on last live/still birth, born during three years preceding the survey

Gujarat, DLHS-RCH, 2002-04

Antenatal check-ups are more common among younger women age below 35 years than among older women, and it is more common among those women who had given their first birth. The percentage of women who received antenatal check-up was comparatively higher in urban areas (94 percent) than in rural areas (85 percent), and the percentage of women who received antenatal check-ups from doctors is much higher in urban areas (77 percent) than in rural areas (47 percent). On the other hand, 26 percent of rural women received antenatal check-ups from auxiliary nurse midwife, nurse or LHVs, the same for women in urban areas is 16 percent. Seventy-seven percent of non-literate women as compared to nearly all women (99 percent) who had completed high school received antenatal check-ups for their last pregnancy that terminated into births (either live or still birth) during the three years preceding the survey.

Table 4.1 ANTENATAL CHECK-UP

Percentage of women* who received any antenatal check-up (ANC) during pregnancy by source of antenatal provider, according to selected background characteristics, Gujarat , 2002-04

Background characteristic	Any [1] antenatal check-up	Antenatal check-up only at home by ANM	Health personnel providing ANC[2]				Number of women
			Doctor	ANM/ Nurse/ LHV	Other health professional	Other[3]	
Age group							
Less than 20 years	86.6	9.1	49.5	28.7	0.2	0.4	520
20-34 years	88.0	9.6	57.2	22.4	0.2	0.3	6,559
35 years & above	81.6	15.3	48.5	18.3	0.0	0.9	410
Children ever born							
1	94.6	5.4	71.9	19.0	0.1	0.1	2,217
2	90.3	7.9	60.6	23.1	0.1	0.3	2,206
3	83.6	11.4	45.3	27.5	0.4	0.7	1,336
4+	78.1	17.1	38.7	23.1	0.2	0.4	1,698
Residence							
Rural	84.9	13.4	47.2	25.5	0.2	0.4	5,205
Urban	93.6	2.0	76.7	16.0	0.1	0.1	2,283
Education							
Non-literate	77.4	15.7	36.3	26.4	0.2	0.3	3,267
0-9 @ years	93.4	7.6	62.0	25.1	0.2	0.3	2,552
10 years & above	98.6	2.0	86.2	11.5	0.0	0.4	1,667
Religion							
Hindu	87.4	10.4	55.5	22.6	0.2	0.4	6,829
Muslim	87.7	3.3	63.2	22.6	0.2	0.2	533
Christian	93.4	16.7	42.8	40.1	0.0	0.0	66
Jain	(100.0)	(2.0)	(93.9)	(6.1)	(0.0)	(0.0)	49
Caste/tribe#							
Scheduled caste	80.3	11.6	47.2	22.1	0.3	0.7	862
Scheduled tribe	84.3	13.7	45.2	25.9	0.1	0.2	1,126
Other backward class	87.2	10.4	52.4	25.5	0.3	0.3	2,929
Other	92.6	6.8	70.0	17.7	0.1	0.2	2,364
Standard of living index							
Low	79.3	17.4	36.6	25.9	0.3	0.4	2,919
Medium	88.3	8.5	54.5	26.9	0.2	0.4	2,539
High	98.6	0.9	86.5	12.6	0.0	0.1	2,030
Availability of health facility[4] in the village							
No	81.7	16.6	43.2	22.3	0.2	0.6	2,617
Yes	88.2	10.1	51.2	28.8	0.2	0.3	2,588
Total	87.6	9.9	56.2	22.6	0.2	0.3	7,488

Note: * Women who had their last live/still birth since 1-1-1999/1-1-2001.
Total includes 31 women with zero parity, 2 with missing information on education, 10 other religion cases who were not shown separately. [1] Antenatal check-ups either at home or outside from home at health facility. [2] Antenatal check-ups outside home and percentage add more than 100.0 due to multiple responses. [3] Other also includes trained and untrained *dai*.
Total figure may not add to N due to do not know and missing cases.
@ Literate women with no years of schooling are also included. [4] Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village.
() Based on less than 50 unweighted cases.

The proportion of women who received antenatal check-ups from a doctor, increased steadily with the level of education and the standard of living index. Thirty-six percent non-literate women as compared to 86 percent having education of more than 10 years received ANC from doctors. Similarly, 37 percent women belonging to households with a low standard of living against 87 percent of that from a high standard of living fall in this category. The proportion of Hindu women who received antenatal check-ups from doctors (56 percent) was less than that of Muslim women (63 percent), and higher than Christian women (43 percent). Seventy percent of women from the 'other castes' category received

antenatal check-ups from doctors, while it was 47 percent for scheduled caste women, and 45 percent for scheduled tribe women, and for women from other backward classes, it was 52 percent. Women from scheduled tribes and other backward class were more likely to receive antenatal check-ups from auxiliary nurse midwives, or LHVs. About 26 percent of each scheduled tribe and other backward class women received antenatal check-ups from ANMs, while it was 22 percent among scheduled castes, and 18 percent of women from the 'other' castes category.

4.2 Antenatal Check-Ups at Health Facility

DLHS-RCH asked women who had a birth during the three years preceding the survey whether they had received antenatal check-ups, and if they had, from where they had availed such services.

Table 4.2 PLACE OF ANTENATAL CHECK-UP

Percentage of women* who received any antenatal check-ups (ANC) during pregnancy by source and place of antenatal check-ups, according to selected background characteristics, Gujarat, 2002-04

		Place of antenatal check-ups[1]							
						ISM[4] facility			
Background characteristic	Antenatal check-up only at home	Govern-ment [2] health facility	Private[3] health facility	PHC	SC	Govt.	Private	Other	Number of women
Age group									
Less than 20 years	9.1	30.2	38.0	16.5	8.6	0.6	1.8	12.8	520
20-34 years	9.6	22.7	48.9	8.8	5.2	0.3	3.1	7.7	6,559
35 years & above	15.3	17.4	40.7	7.1	6.8	1.8	3.2	8.3	410
Children ever born									
1	5.4	22.2	64.1	7.1	3.9	0.3	2.5	4.2	2,217
2	7.9	22.8	50.5	8.4	4.6	0.6	3.8	8.0	2,206
3	11.4	25.6	38.3	12.2	7.9	0.3	2.8	10.6	1,336
4+	17.1	21.8	29.8	11.9	7.7	0.5	2.8	13.3	1,698
Residence									
Rural	13.4	23.3	38.9	12.1	7.9	0.4	2.9	12.0	5,205
Urban	2.0	22.0	67.7	4.2	1.1	0.5	3.2	1.1	2,283
Education									
Non-literate	15.7	24.1	28.5	13.7	9.4	0.3	2.7	13.3	3,267
0-9 @ years	7.6	28.4	51.1	9.9	4.8	0.4	2.8	7.5	2,552
10 years & above	2.0	12.1	79.9	2.9	1.5	0.5	3.6	2.2	1,667
Religion									
Hindu	10.4	22.4	47.2	9.5	5.6	0.4	3.0	8.5	6,829
Muslim	3.3	29.3	50.9	6.4	4.1	0.0	3.0	4.6	533
Christian	16.7	41.0	36.6	18.5	14.3	0.2	0.0	2.5	66
Jain	(2.0)	(4.1)	(83.7)	(0.0)	(0.0)	(4.2)	(4.2)	(2.1)	49
Caste/tribe#									
Scheduled caste	11.6	26.4	35.0	11.4	4.9	0.8	3.1	8.5	862
Scheduled tribe	13.7	26.5	34.5	15.4	8.7	0.2	3.1	11.8	1,126
Other backward class	10.4	25.1	44.2	8.9	5.4	0.4	2.8	9.4	2,929
Other	6.8	16.3	64.4	6.0	4.2	0.3	3.0	4.9	2,364
Standard of living index									
Low	17.4	23.6	27.5	14.6	9.1	0.1	2.5	16.1	2,919
Medium	8.5	27.9	45.8	11.2	6.2	0.6	2.4	7.3	2,539
High	0.9	15.7	78.9	2.4	1.5	0.5	4.0	1.5	2,030
Availability of health facility[5] in the village									
No	16.6	17.4	35.4	8.8	5.1	0.5	3.7	15.1	2,617
Yes	10.1	29.3	42.3	14.8	10.4	0.3	2.2	9.3	2,588
Total	9.9	22.9	47.7	9.3	5.5	0.4	3.0	8.1	7,488

Note: * Women who had their last live/still birth since 1-1-1999/1-1-2001. Total includes 31 women with zero parity, 2 women with missing information on education and 10 other religion cases who were not shown separately. # Total figure may not add to N due to do not know and missing cases. @ Literate women with no years of schooling are also included. [1]Antenatal check-ups outside home and percentage add more than 100.0 due to multiple responses. [2] Includes sub-centre, primary health centre, community health centre or rural hospital, urban health centre/ urban health post/ urban family welfare centre, government hospital or dispensary. [3] Includes Private hospital/clinic or non-governmental hospital/ trust hospital or clinic. [4] Indian system of medicine. [5] Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village. () Based on less than 50 unweighted cases.

Table 4.2 shows the percentage of women who had received antenatal check-ups during pregnancy by place. During pregnancy, women received antenatal check-ups from multiple sources such as, health workers providing ANC at home, Government health facility, private health facility, and at Indian System of medicine etc. Women who received antenatal check-ups both at home and outside the home are categorised as having received care outside the home. Around 23 percent of women received antenatal check-ups at Government health facility, including nine percent through primary health centre and six percent through sub-centre, and 48 percent at a private health facility. Other than this, three percent of women reported that they had received antenatal check-ups at the private Indian system of medicine. As mentioned above women availed antenatal check-ups from multiple sources. Women who were visited by an ANM might have also visited government and/ or private health facilities including Indian system of medicine.

Younger women (less than 20 years) were more likely to receive antenatal-check-ups at government health facilities (30 percent) than older women aged 20-34 (23 percent) and 17 percent for age 35 and above. Almost an equal proportion of women from rural and urban areas availed government health facilities for antenatal check-ups while a much higher proportion of women (68 percent) from urban areas availed private health facilities for antenatal check-ups than women from rural areas (39 percent). It may be mentioned that only eight to nine percent of the women from rural areas received antenatal check-ups at sub-centre. This indicates that the services are not reaching the target population, particularly through the public sector.

4.3 Antenatal Check-Ups by District

Table 4.3 indicates the antenatal coverage in Gujarat that ranges from the highest of 97 percent each in Navsari and Porbandar districts to the lowest of 73 percent in The Dangs. In all the districts, except The Dangs, Banaskantha and Kachchh, more than 80 percent of women got some kind of antenatal check-ups for their last births during the three years preceding the survey. Antenatal check-ups received from doctor was lowest in The Dangs district (19 percent), and in all the remaining districts more than 40 percent of the women received antenatal check-ups from doctor and it is highest in Navsari (87 percent) followed by Gandhinagar (72 percent). In 5 out of 25 districts, Amreli (37 percent), Anand (33 percent), Junagarh (37 percent), Porbandar (38 percent) and The Dangs (33 percent) more than 30 percent of women received antenatal check-ups by ANM/Nurse/LHV.

The extent of utilisation of government health facilities for antenatal check-ups was lower than that of private health facilities. The range of antenatal check-ups coverage through government facilities was highest in Porbandar (45 percent) and the lowest of 12 percent in Banaskantha. However, in eight districts viz Ahmedabad, Gandhinagar, Mahesana, Navsari, Panchmahals, Sabarkantha, Surat and Valsad more than half of the women visited private health facility. In Gujarat, 14 percent pregnant women in Kachchh district and eight percent in Mahesana district availed the Indian system of medicine (either government or private) for an antenatal check-up. However, in rest of the districts this proportion is less than five percent.

Table 4.3 ANTENATAL CHECK-UPS BY DISTRICT

Percentage of women* who received any antenatal care (ANC), by source and place of antenatal check-ups by district, Gujarat, 2002-04

District	Any [1] antenatal check-up	Antenatal check-up only at home by ANM	Health personnel providing ANC		Place of antenatal check-ups		
			Doctor	ANM/ Nurse	Govern-ment [2] health facility	Private[3] health facility	ISM[4] facility
Ahmedabad	91.8	6.3	67.5	19.8	20.3	66.5	0.6
Amreli	96.2	3.3	56.1	36.7	42.8	44.4	2.1
Anand	93.4	5.7	57.9	32.7	35.9	48.3	1.7
Banaskantha	73.5	11.4	49.6	14.5	11.8	44.0	2.6
Bharuch	94.2	5.8	62.9	27.7	35.8	45.4	2.0
Bhavnagar	93.6	10.8	58.4	26.8	22.4	48.1	3.9
Dahod	83.6	4.8	60.2	18.3	26.0	49.2	0.3
Gandhinagar	96.0	6.2	71.8	20.2	31.5	53.2	2.7
Jamnagar	82.4	8.7	52.0	23.7	25.3	42.8	3.2
Junagarh	90.5	9.0	45.4	36.5	35.0	37.9	0.0
Kachchh	78.5	11.4	42.9	25.1	22.9	28.2	13.6
Kheda	91.9	18.9	53.4	20.5	19.7	43.9	1.5
Mahesana	83.7	8.3	59.4	16.7	12.0	53.1	8.0
Narmada	89.2	14.7	44.6	29.4	24.7	27.5	0.7
Navsari	97.2	2.5	86.8	7.8	28.0	61.8	4.4
Panchmahals	87.5	7.1	63.5	16.6	12.6	55.5	1.3
Patan	84.9	10.7	44.2	29.9	14.3	41.6	1.8
Porbandar	96.8	4.8	53.1	38.4	45.2	40.2	1.0
Rajkot	86.6	9.1	53.6	28.7	25.1	48.1	1.7
Sabarkantha	84.8	15.0	62.0	8.8	16.6	51.3	1.4
Surat	93.7	7.3	63.6	23.3	21.2	60.8	2.6
Surendranagar	89.8	19.2	47.9	23.1	24.0	37.8	1.6
The Dangs	72.7	22.3	19.0	32.9	25.3	10.5	1.4
Vadodara	92.5	7.8	61.6	24.6	28.9	44.9	4.9
Valsad	86.3	7.8	68.4	10.4	17.2	54.1	4.8
Gujarat	87.6	9.9	56.2	22.6	22.9	47.7	2.6

Note: * Women who had last live/still birth during three years preceding the survey. [1] Antenatal check-ups either at home or health facility. [2] Includes sub-centre, primary health centre, community health centre or rural hospital, urban health centre/ urban health post/ urban family welfare centre, government hospital or dispensary. [3] Includes Private hospital/clinic or non-governmental hospital/ trust hospital or clinic. [4] Either government or private Indian system of medicine.

4.4 Components of Antenatal Check-ups

Women who received any kind of antenatal check-ups were asked whether they received each of the several components of antenatal check-ups at least once during their pregnancy. Table 4.4 presents the percentage of women who received specific components of check-ups by residence. Except for X-rays (which are not recommended as a standard component of antenatal care), all of the measurements and tests are part of essential obstetric care or are required for monitoring high-risk pregnancies.

Sixty-seven percent of women had an abdominal examination, 62 percent had their blood pressure checked, 61 percent got their blood tested and 58 percent were weighed, as the part of the antenatal check-ups. Other common components of antenatal check-ups were urine test (56 percent), internal examination (41 percent), breast examination (24 percent) and the measurement of height (21 percent). About 36 percent of women had a sonography or ultrasound conducted, six percent had an X-ray and four percent of women reported that they had amniocentesis test. All of these measurements or producers were performed more often

during antenatal check-ups in urban areas than in rural areas and the rural-urban difference is substantial.

The type of advice received by women who had antenatal check-ups for last live/still births during three years preceding the survey is also presented in Table 4.4. Advice on diet was given to 86 percent of urban women as compared to 70 percent of rural women. Forty-four percent of the women received advice on danger signs of pregnancy. Women were less likely to receive advice on delivery care (39 percent), on breastfeeding (29 percent), and on newborn care (33 percent). Advice on family planning was given to 16 percent of rural women and 21 percent of urban women.

Table 4.4 COMPONENTS OF ANTENATAL CHECK-UPS

Percentage of women* who received an antenatal check-up by specific components of antenatal check-up, according to residence, Gujarat, 2002-04

Components of antenatal check-ups	Total	Rural	Urban
Antenatal measurements/tests			
Weight measured	58.4	47.5	81.0
Height measured	20.5	15.6	30.8
Blood pressure checked	61.7	51.5	82.9
Blood tested	61.4	51.0	82.9
Urine tested	56.0	44.6	79.8
Abdomen examined	66.7	59.5	81.6
Internal examined	41.0	32.8	58.0
Breast examined	24.0	20.4	31.5
X-ray	5.8	4.1	9.5
Sonography /ultrasound	35.7	26.3	54.9
Amniocentesis	3.7	3.6	3.8
Antenatal advice			
Diet	75.0	69.6	86.3
Danger signs of pregnancy	43.5	38.0	54.7
Delivery care	39.2	33.7	50.7
Breast feeding	29.2	26.7	34.3
New born care	33.0	28.6	42.2
Family planning	17.7	16.0	21.2
Number of women who received any antenatal check-up	6,557	4,419	2,138

Note: * Women who had their last live/still birth since 1-1-1999/1-1-2001

4.5 Antenatal Care Services

In India, the Reproductive and Child Health Programme includes that all pregnant women should be registered in the first 12-16 weeks (Ministry of Health and Family Welfare, 1997). Accordingly the first antenatal check-ups should take place at least during the first trimester of the pregnancy. It also includes the provision of at least three antenatal care visits, of at least one tetanus toxoid injection, and supplementary iron in the form of IFA tablets daily for 100 days. To assess whether the women had received all the care during pregnancy, information was collected regarding number of antenatal visits, timing of the first visit, doses of tetanus toxoid injection and supplement of iron folic acid tablets. The results are presented in Table 4.5. In Gujarat, 61 percent of the women received at least three antenatal check-ups and 46 percent had four or more check-ups. At least three antenatal check-ups were received by 79 percent of women in urban areas compared with 54 percent of women in rural areas. Number of visits for antenatal care varies by education, children ever born, religion, caste and standard of living index. Forty-three percent of non-literate, 67 percent literate women (educated below high school) and 89 percent of women who had 10 or more years of schooling visited for minimum three antenatal care. Parity of women is negatively associated

with antenatal check-ups. About three-fourths of women with parity one received three or more antenatal check-ups compared to 43 percent of the women with parity 4 and above.

Christian women (80 percent) were more likely to have at least three visits for antenatal check-ups than Muslim and Hindu women (61 percent each). Coverage is substantially lower for women from scheduled caste and scheduled-tribes (52 percent each) than to women of other than scheduled caste and tribe (60-72 percent). Having three or more antenatal visits also increased with the standard of living, 43 percent for women with a low standard of living, 64 percent for women with a medium standard of living and 85 percent for women with a high standard of living. Availability of health facility in the village had positive impact on to the minimum three visits for antenatal check-ups.

Data on timing of first antenatal check-ups shows that 47 percent of the women received their first antenatal check-up in the first trimester of pregnancy, and another 27 percent received their first check-up in the second trimester, and 14 percent of women received their first check-up in the third trimester. A relatively higher proportion of women in the urban areas (64 percent) as compared to those in rural areas (40 percent) had a check-up in the first trimester of pregnancy. The first antenatal check-up in the first trimester has steadily increased with education. Twenty-nine percent of non-literate women had undergone their first antenatal check-up in the first trimester, and 78 percent of women who had completed at least 10 years of schooling received their first antenatal check-up in the first trimester. Nearly two-thirds of the women (64 percent) with parity-1 visited in first trimester and only 28 percent women with parity- four and above had undergone antenatal check-up in first trimester. Christian women were more likely to go for first antenatal check-up in first trimester of their pregnancy as compared to Muslim and Hindu women. About 35 percent each of scheduled tribe and scheduled caste women visited in first trimester for first antenatal check-ups compared with 44 percent of other backward class of women and 63 percent women from ‘other’ caste category. Three out of ten women with low standard of living, 46 percent with medium standard of living, and 73 percent of women with high standard of living respectively had undergone their first antenatal check-up in the first trimester of their pregnancy period.

For the last live birth or stillbirth during the three years preceding the survey, women were asked whether they were given tetanus toxoid injection to prevent them and their baby from getting tetanus. Table 4.5 shows that seventy-three percent of the women received two or more tetanus toxoid injections. Coverage of two or more TT injection is higher in urban areas (86 percent) than that in rural areas (68 percent). The coverage of at least one tetanus toxoid injection does not differ much by different religions. Coverage of at least one tetanus toxoid injection is almost similar for schedule tribe (82 percent), schedule caste (79 percent), and other backward classes (85 percent), while it is higher for ‘other’ caste category women (93 percent). Three-fourths non-literate women received at least one tetanus toxoid injection for their last birth, whereas 92 percent literate women with 9 years of schooling, and 97 percent of women who had completed 10 years or more of schooling received at least one tetanus toxoid injection for their last birth. Ninety-seven percent of women with a high standard of living received at least one tetanus toxoid injection, and 76-88 percent women with low or medium standard of living received at least one tetanus toxoid injection for their last live/still birth. The coverage varies inversely by parity. At least one tetanus toxoid injection was received by 91 percent women of Parity-1 compared with 76 percent of Parity 4 and above.

Table 4.5 ANTENATAL CARE

Percent distribution of women who had live/still births during three years preceding the survey by number of antenatal check-ups, the stage of pregnancy at the time of first check-up, the number of tetanus toxoid injections received and were given iron folic acid (IFA) tablets/syrup during pregnancy, and percentage who received full antenatal check-ups by some selected background characteristics, Gujarat, 2002-04

		Residence		Education			Children ever born			
Antenatal care indicators	Total	Rural	Urban	Non-literate	0-9@ years	10 years & above	1	2	3	4+
Number of ANC visits										
No visit	12.4	15.1	6.4	22.6	6.6	1.4	5.4	9.7	16.4	21.9
1	9.6	11.5	5.3	13.9	8.6	2.7	7.5	7.5	10.6	14.2
2	16.5	19.6	9.4	20.2	18.2	6.8	11.5	16.4	18.7	21.5
3	15.5	17.4	11.4	16.6	18.1	9.5	13.6	14.5	18.0	17.5
4+	45.9	36.4	67.6	26.6	48.6	79.6	61.9	51.8	36.4	25.0
Stage of pregnancy at the time of the first antenatal check-up										
No antenatal check-up	12.4	15.1	6.4	22.6	6.6	1.4	5.4	9.7	16.4	21.9
First trimester	47.1	39.9	63.5	28.7	50.6	77.8	63.7	51.8	35.8	28.3
Second trimester	27.0	30.5	18.8	30.2	29.4	16.8	21.6	28.0	30.0	30.1
Third trimester	13.5	14.5	11.3	18.5	13.4	4.0	9.3	10.5	17.8	19.7
Women who received TT										
No TT	13.8	17.1	6.4	24.6	7.5	2.4	8.3	10.9	15.4	23.4
1	12.6	15.1	6.9	18.1	10.2	5.8	8.3	11.1	16.6	17.1
2+	73.2	67.5	86.2	57.0	82.2	91.2	83.0	77.6	67.9	59.2
Do not remember/missing	0.3	0.2	0.5	0.3	0.1	0.6	0.4	0.4	0.1	0.3
Women who received IFA tablets/syrup										
No IFA/syrup	19.0	21.0	14.3	29.9	12.8	7.1	13.4	16.3	20.3	28.5
Received but not consumed	5.8	6.5	4.2	6.1	6.7	3.8	6.0	5.3	7.1	5.2
Consumed one IFA per day	50.2	47.6	56.1	42.0	53.7	60.9	52.7	52.7	49.0	44.9
Received 100+ IFA tablets/syrup	30.2	25.8	40.2	18.4	33.3	48.4	39.3	34.4	24.7	17.1
Percentage of women who received full [1] antenatal check-ups	25.8	20.5	37.9	13.5	28.6	45.5	35.0	30.2	20.1	12.6
Number of women	7,488	5,205	2,283	3,267	2,552	1,667	2,217	2,206	1,336	1,698

Note: Total includes 31 women with zero parity and 2 women with missing information on education who were not shown separately. @ Literate women with no years of schooling are also included.

[1] At least three visits for antenatal check-ups, at least one TT injection received and were given adequate amount of IFA tablets/syrup.

Contd……

Table 4.5 ANTENATAL CARE (contd)

Percent distribution of women who had live/still births during three years preceding the survey by number of antenatal check-ups, the stage of pregnancy at the time of first check-up, the number of tetanus toxoid injections received and iron and were given iron folic acid (IFA) tablets/syrup during pregnancy, and percentage who received full antenatal check-ups by some selected background characteristics, Gujaratl, 2002-04

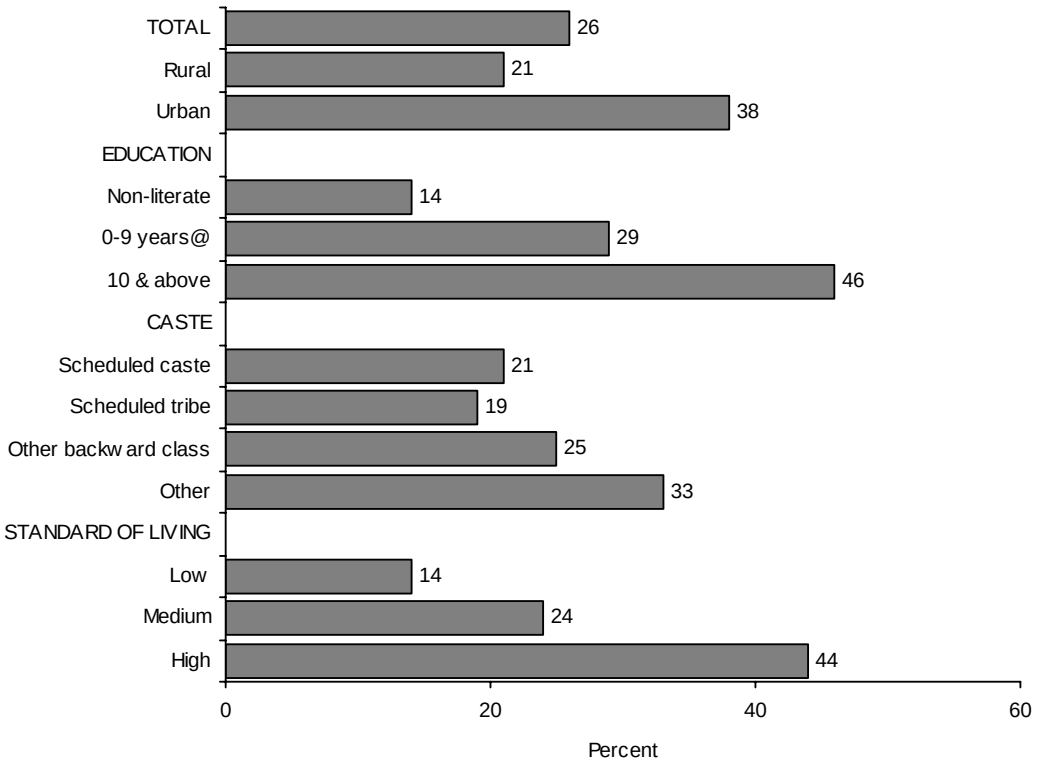
Antenatal care indicators	Religion				Caste#				Standard of living index			Availability of health facility[2] in the village	
	Hindu	Muslim	Christian	Jain	Scheduled caste	Scheduled tribe	Other backward class	Other	Low	Medium	High	No	Yes
Number of ANC visits													
No visit	12.6	12.3	6.6	(0.0)	19.7	15.7	12.8	7.4	20.7	11.7	1.4	18.3	11.8
1	9.9	6.8	5.0	(4.1)	9.1	16.0	9.5	6.9	15.2	7.1	4.7	13.2	9.8
2	16.4	20.3	9.0	(8.2)	19.4	16.5	18.0	13.4	21.0	17.7	8.6	20.2	19.1
3	15.4	16.6	22.8	(6.1)	20.3	16.8	15.4	13.2	16.2	18.5	10.8	16.7	18.0
4+	45.7	44.0	56.7	(81.6)	31.5	34.9	44.3	59.1	26.9	45.0	74.4	31.6	41.3
Stage of pregnancy at the time of the first antenatal check-up													
No antenatal check-up	12.6	12.3	6.6	(0.0)	19.7	15.7	12.8	7.4	20.7	11.7	1.4	18.3	11.8
First trimester	46.4	50.3	66.5	(85.7)	36.1	35.0	43.5	62.5	30.0	46.1	72.9	34.8	45.1
Second trimester	27.4	23.7	23.3	(8.2)	28.7	32.3	28.3	21.9	32.7	27.6	17.9	32.7	28.3
Third trimester	13.7	13.7	3.6	(6.1)	15.5	17.0	15.3	8.1	16.6	14.6	7.7	14.1	14.8
Women who received TT													
No TT	14.1	11.0	14.4	(2.0)	17.3	20.9	15.0	7.2	23.6	11.6	2.5	19.9	14.2
1	13.1	7.8	2.9	(6.1)	13.3	20.6	12.5	8.7	18.2	10.6	7.1	17.1	13.2
2+	72.5	80.5	82.7	(91.8)	69.0	58.1	72.3	83.8	57.9	77.5	90.0	62.7	72.4
Do not remember/missing	0.3	0.8	0.0	(0.0)	0.3	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.2
Women who received IFA tablets/syrup													
No IFA/syrup	19.0	21.1	11.0	(4.1)	21.2	22.5	19.8	15.2	27.2	18.2	8.1	24.4	17.5
Received but not consumed	5.7	7.1	3.3	(6.1)	8.5	2.7	6.3	5.6	5.6	6.6	5.0	6.4	6.5
Consumed one IFA per day	50.2	49.0	59.6	(57.1)	45.3	48.8	49.1	54.8	42.8	52.0	58.6	46.6	48.7
Received 100+ IFA tablets/syrup	30.1	29.2	31.4	(57.1)	26.2	23.7	28.6	36.6	19.6	28.8	47.0	21.8	29.8
Percentage of women who received full [1] antenatal check-ups	25.7	24.3	28.7	(51.0)	21.0	19.0	24.6	32.6	14.4	24.0	44.4	16.2	24.8
Number of women	6,829	533	66	49	862	1,126	2,929	2,364	2,919	2,539	2,030	2,617	2,588

Note: # Total figure may not add to N due to don't know and missing cases. [1] At least three visits for antenatal check-ups, at least one TT injection received and was given adequate amount of IFA tablets/syrup. [2] Includes sub-center, primary health center, community health center or referral hospital, government hospital, and government dispensary within the village () Based on less than 50 unweighted cases Total includes 10 other religion cases were not shown separately.

Nutritional deficiencies among women are often exacerbated during pregnancy because of the additional nutrient requirements of foetal growth; therefore a pregnant woman needs six times more iron than a non-pregnant woman. The information on receiving iron folic acid tablets/syrup during pregnancy is also collected. Table 4.5 shows that 81 percent of women in Gujarat received IFA supplements for the last birth during three years preceding the survey. The coverage of IFA tablets is relatively higher in urban areas (86 percent) than in rural areas (79 percent). IFA coverage is much lower among the non-literate women, scheduled caste-tribe women, and women of higher parity. IFA coverage is more among the Christian women (89 percent) than Hindu (81 percent) and Muslim (79 percent) women. Again, during pregnancy in the last three years preceding the survey, only 30 percent of women received 100 or more IFA, 26 percent in rural areas and 40 percent in urban areas. Intake of 100 or more IFA is positively associated with education and standard of living index and negatively associated with parity. Women from other caste and women from the villages where health facility is available received 100 or more IFA tables, more than scheduled caste/tribe/other backward class and villages with no health facility respectively.

The percentage of women who received full antenatal care, (that is, at least three antenatal check-ups, and at least one tetanus toxoid injection and supplementary iron in the form of IFA tablets daily for 100 days as recommended by the RCH programme,) has been presented in Figure 4.2 and Table 4.5. Only 26 percent of women in Gujarat received full antenatal care. Coverage of full antenatal care is low for non-literate women, women with higher parity, women from scheduled tribe, women with a low standard of living, and women from those villages where health facilities are not available. Full antenatal coverage was also lower in rural areas (21 percent) than in urban areas (38 percent).

Figure 4.2
Full Antenatal Care by Background Characteristic



@ Literate mothers with no years of schooling are also included

Gujarat, DLHS-RCH, 2002-04

4.6 Antenatal Care Indicator by District

Table 4.6 shows the percentage of women who had given live/still birth during the three years preceding the survey who received different types of antenatal care; (the percentage who received antenatal check-up in the first trimester of pregnancy, the percentage who received at least three antenatal check-ups, the percentage who received at least one tetanus toxoid injection, the percentage given 100 or more iron folic acid tablets/syrup, and the percentage who received full antenatal care services) by district.

The utilisation of antenatal care services differs from district to district. In 2 out of 25 districts, Ahmedabad and Navsari, more than 60 percent of the women received their first antenatal check-up in the first trimester of pregnancy. The percentage of women who received at least three visits for antenatal check-ups ranges from 37 percent in The Dangs to 88 percent in Navsari. In five districts namely Banaskantha, Dahod, Kachchh, Surendranagar, and The Dangs, the coverage of at least three visits of ANC were less than 50 percent (see Map-3). There has been good coverage of tetanus toxoid injection in all the districts, ranging from 71 to 96 percent, but on the other hand, performance regarding receipt of 100 or more IFA is poor. In all the districts, the value ranges from 12 to 60 percent, and it is lowest in Banaskantha and Surendranagar.

Table 4.6 ANTENATAL CARE INDICATORS BY DISTRICT

Percentage of women* who received different type of antenatal care by district, Gujarat, 2002-04

District	Percentage that received an antenatal check-up in the first trimester of pregnancy	Percentage that received three or more antenatal check-ups	Percentage that received at least one tetanus toxoid injection	Percentage that received adequate amount of IFA[1]	Percentage that received full[2] antenatal check-ups
Ahmedabad	62.6	77.6	89.4	29.1	28.3
Amreli	44.3	62.5	94.5	26.1	19.3
Anand	50.1	67.1	89.8	49.8	39.2
Banaskantha	30.0	38.5	71.3	11.8	8.4
Bharuch	47.9	70.5	87.9	36.6	31.9
Bhavnagar	46.2	61.5	91.7	34.4	29.0
Dahod	28.2	41.7	73.3	13.9	12.8
Gandhinagar	56.6	69.8	93.0	26.1	22.0
Jamnagar	42.9	60.2	88.4	34.6	30.4
Junagarh	45.1	61.5	90.5	22.2	19.9
Kachchh	44.5	47.8	86.9	24.1	16.0
Kheda	49.8	69.7	85.6	39.8	36.8
Mahesana	48.8	58.2	84.0	36.9	27.6
Narmada	46.4	62.7	85.3	38.2	35.8
Navsari	68.3	87.5	95.8	59.5	54.2
Panchmahals	41.6	58.4	81.5	27.9	22.7
Patan	41.2	57.0	83.2	35.1	26.6
Porbandar	53.5	70.5	93.9	39.4	34.9
Rajkot	52.4	61.4	93.4	30.4	28.0
Sabarkantha	48.9	63.5	85.0	28.5	23.0
Surat	57.5	71.6	92.9	33.1	30.4
Surendranagar	38.8	48.6	83.4	11.8	8.8
The Dangs	29.8	37.3	79.5	27.4	16.1
Vadodara	54.8	71.1	89.9	52.9	46.5
Valsad	53.3	73.9	76.8	40.4	34.8
Gujarat	47.1	61.4	85.8	30.2	25.8

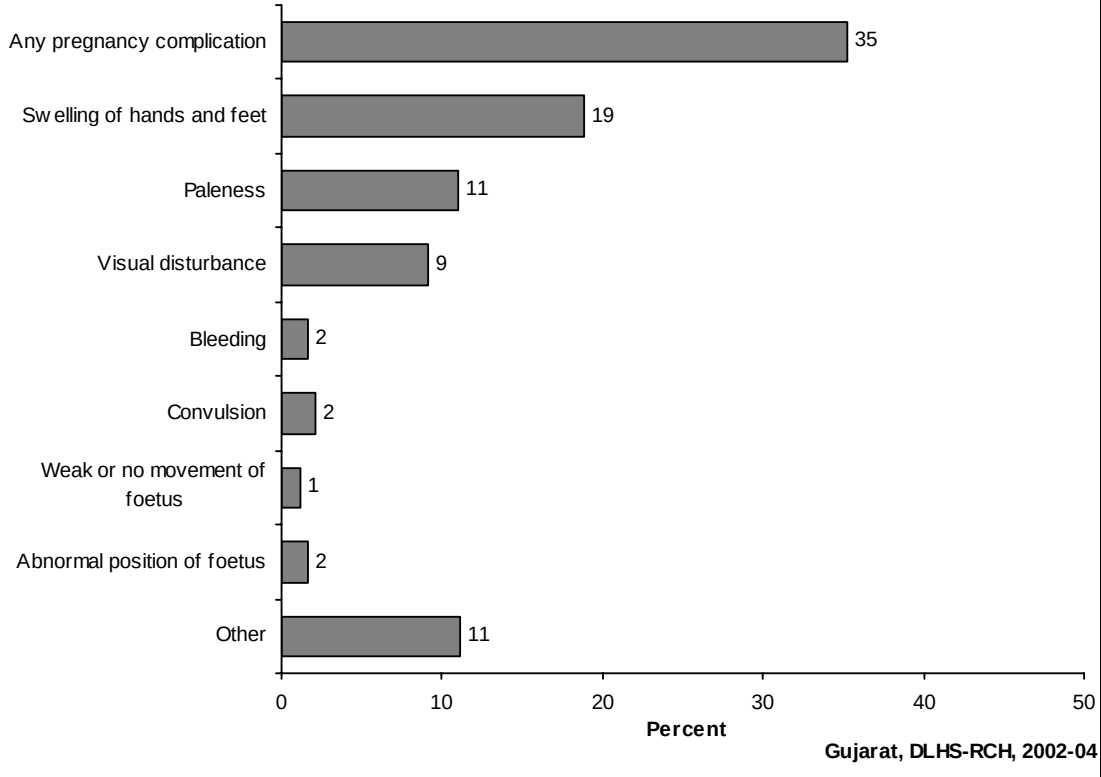
Note: * Women who had their last live/still birth since 1-1-1999/1-1-2001 [1] 100 or more iron folic acid tablets including syrup
[2] At least three visits for antenatal check-ups, at least one TT injection received and adequate amount of IFA

The percentage of women who received full antenatal care ranges from eight percent in Banaskantha to 54 percent in Navsari. In 10 out of 25 districts, Amreli, Banaskantha, Dahod, Gandhinagar, Junagarh, Kachchh, Panchmahals, Sabarkantha, Surendranagar, and The Dangs the coverage rate of full antenatal care is below than that of the state average of 26 percent.

4.7 Pregnancy Complications and Treatment

Complications during pregnancy may affect both women's health and the outcome of the pregnancy adversely. Early detection of complications during pregnancy and their management are important components of the safe motherhood programme. In the survey, all the eligible women who had given last live or still birth during the three years preceding the survey were asked if at any time during the pregnancy, they had experienced any of the following pregnancy-related problems such as swelling of hands and feet, paleness, visual disturbance, vaginal bleeding, convulsions, weak or no movement of foetus, abnormal position of foetus, and other problems. All the information is based on women's self-reporting which is presented in Table 4.7 and Figure 4.3.

Figure 4.3
Percentage of Women with Pregnancy Complication and by Symptoms



About 35 percent of the women experienced at least one pregnancy related problem. The proportion is more or less similar among rural women (35 percent) and urban women (37 percent). Women aged 40 years and above, and women with higher parity face at least one pregnancy related problem more than younger women and women with low parity do. This proportion is relatively high among women who had received some kind of antenatal care during the pregnancy. About 37 percent of women who had an antenatal check-up reported that they had experienced at least one problem during their pregnancy while 24 percent of women who did not receive any antenatal check-up during their pregnancy still fall in this category. The major problems reported were swelling of hand and feet (19 percent), paleness (11 percent), and visual disturbance (9 percent). Only about two percent each reported convulsions, abnormal position of foetus, and vaginal bleeding. Other problems related to pregnancy were reported by 11 percent of women. Swelling of hands and feet is more common among older women, women with parity-1, women from urban areas, and women with high standard of living. The percentage of women who were more anaemic belonged to the age group 40-44 years, women from rural areas, and women with a low standard of living. Anaemia, visual disturbance, and convulsion increased steadily with increase of parity, whereas women with parity-1 reported vaginal bleeding, weak or no movement of foetus and abnormal position of foetus more.

Women who reported at least one pregnancy related complication were asked whether they had consulted someone or had sought treatment for their problem and also the source of treatment. Table 4.8 shows the percentage of women who had pregnancy complications who obtained advice or had sought treatment by source of treatment according to residence and availability of health facility in the village. More than half (54 percent) of women reported that they had obtained advice or consulted someone for their problem. The proportion was much higher in urban areas (70 percent) than rural areas (47 percent), and 49 percent of women from those villages where health facility was available sought treatment as compared to 45 percent of women with non-availability of health facility within the village.

Table 4.7 PREGNANCY COMPLICATIONS

Percentage of women who had live/still births during three years preceding the survey by pregnancy complication and type of complication during pregnancy by some selected background characteristics, Gujarat, 2002-04

Background characteristic	Percentage of women with any pregnancy complication	Type of pregnancy complication;								Number of women
		Swelling of hands and feet	Paleness	Visual disturbances	Excessive Bleeding	Convulsion	Weak or no movement of foetus	Abnormal position of foetus	Other	
Age group (years)										
15-19	38.4	15.6	14.0	17.9	2.7	2.6	0.9	2.1	13.3	520
20-24	34.7	18.3	10.4	8.5	1.5	2.2	0.9	1.5	10.6	2,976
25-29	35.4	20.0	11.3	8.4	1.2	2.2	1.1	1.6	11.1	2,487
30-34	33.3	17.6	9.4	6.3	2.2	1.5	1.4	1.6	11.6	1,096
35-39	36.8	24.1	13.1	12.3	2.1	2.3	4.2	1.7	10.4	339
40-44	44.6	30.5	19.2	24.0	3.5	3.4	0.0	1.1	10.5	70
Children ever born										
1	39.7	23.7	12.4	8.0	2.1	1.8	1.3	2.2	11.8	2,217
2	35.0	18.2	9.7	6.8	1.2	2.4	1.1	1.3	11.7	2,206
3	31.6	14.0	10.2	10.2	1.1	2.2	0.9	1.1	10.1	1,336
4+	32.2	17.3	11.2	12.7	2.0	2.3	1.2	1.6	10.1	1,698
Residence										
Rural	34.5	17.0	11.9	11.3	1.8	2.7	1.4	1.6	10.6	5,205
Urban	36.7	23.3	9.0	4.1	1.3	0.8	0.7	1.6	12.2	2,283
Standard of living index										
Low	35.5	16.9	12.7	15.0	2.0	3.0	1.2	1.6	10.4	2,919
Medium	32.8	17.0	10.7	7.1	1.5	1.8	1.6	1.3	11.7	2,539
High	37.8	24.4	8.9	3.1	1.1	1.3	0.7	1.9	11.4	2,030
Received any ANC										
Yes	36.8	19.9	11.1	9.0	1.6	2.2	1.2	1.7	12.0	6,557
No	23.6	12.5	10.4	10.0	2.0	2.1	1.3	0.9	4.4	931
Total	35.2	18.9	11.0	9.1	1.6	2.1	1.2	1.6	11.1	7,488

Note: Total include 31 women with zero parity who were not shown separately
@ Literate women with no years of schooling are also included

Among women who sought treatment for pregnancy complications, 21 percent visited a government health facility including a primary health centre (6 percent) and sub-centre (2 percent). Nearly three-fourths of them visited a private health facility, and three percent had gone to a facility with the Indian system of medicine, while another four percent obtained advice from another health facility. The proportion of women who visited a private health facility is higher in urban areas (82 percent) than in rural areas (67 percent). Among women who sought treatment, 87 percent went to a doctor and 12 percent to an auxiliary nurse midwife or nurse or LHV. Ninety-four percent women in urban areas and 83 percent in rural areas were examined by the doctor whereas ANM/Nurse/LHV examined 16 percent women in rural areas and six percent in urban areas.

Table 4.8 TREATMENT FOR PREGNANCY COMPLICATIONS

Percentage of women* who had any pregnancy complication, sought treatment and source of treatment according to residence and availability of health facility in the village, Gujarat, 2002-04

Treatment and source	Total	Residence		Availability of health facility[5] in the village	
		Rural	Urban	No	Yes
Percentage of women sought treatment who had any pregnancy complication	54.3	47.0	70.0	44.9	49.1
Number of women	2,634	1,796	838	903	893
Percentage sought treatment at health facility					
Government health facility[1]	20.7	25.2	14.4	21.1	28.9
Primary health centre	6.0	8.8	2.0	5.6	11.8
Sub centre	2.3	3.7	0.3	3.0	4.5
Private health facility[2]	73.3	67.1	82.2	69.2	65.1
ISM[3] facility	2.8	3.1	2.4	3.9	2.4
Other	3.6	5.1	1.4	6.7	3.6
Percent distribution of women who obtained treatment from					
Doctor	87.2	82.7	93.7	81.5	83.8
ANM/nurse/midwife/LHV	11.7	15.7	6.0	16.4	15.0
Other[4]	1.1	1.6	0.4	2.1	1.2
Total percent	100.0	100.0	100.0	100.0	100.0
Number of women	1,431	844	587	406	439

Note: [1] Include municipal hospital, dispensary, urban health centre/urban health post/urban family welfare centre, community health centre/rural hospital, primary health centre and sub centre. [2] Include private hospital/clinic and non-governmental organization/ trust hospital. [3] Either government or private Indian system of medicine. [4] Other include Dai trained or untrained, other health professional and ISM practitioner. [5] Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village.

4.8 Delivery Care

4.8.1 Place of Delivery

One of the important thrusts of the Reproductive and Child Health Programme is to encourage deliveries under proper hygienic conditions under the supervision of trained health professionals. The provision of delivery services in the government health institutions is one of the components of the RCH programme. For each live/still birth during three years

preceding the survey, DLHS-RCH asked the women where (place) their children were born, who assisted during the deliveries in case of home deliveries, characteristics of delivery, and any problems that occurred during the delivery. Table 4.9 and Figure 4.4 present the place of delivery. About 13 percent of the birth took place in government health institutions, 40 percent in private health institutions, and a large proportion of births (48 percent) took place at home. About three-fourths of the deliveries in urban areas and two-fifths of the deliveries in rural areas took place in health institutions. Deliveries in health facilities in Gujarat rose from 41 percent in Round-I to 52 percent in Round-II.

Table 4.9 PLACE OF DELIVERY

Percent distribution of women who had given live/still births during three years preceding the survey, by place of delivery, according to selected background characteristics, Gujarat, 2002-04

Background characteristics	Health institutions		Home	Other	Total percent	Number of women
	Public	Private				
Age group (in years)						
Below 20	15.2	28.8	55.9	0.0	100.0	520
20-34	12.5	40.4	46.8	0.3	100.0	6,559
35 and above	12.9	39.0	47.9	0.2	100.0	410
Children ever born						
1	16.5	53.2	30.1	0.1	100.0	2,217
2	12.9	42.1	44.7	0.4	100.0	2,206
3	10.7	31.8	56.9	0.6	100.0	1,336
4+	9.2	24.1	66.5	0.2	100.0	1,698
Residence						
Rural	10.9	30.3	58.4	0.4	100.0	5,205
Urban	17.0	60.4	22.5	0.1	100.0	2,283
Education						
Non-literate	10.1	24.5	65.0	0.4	100.0	3,267
0-9@ years	16.2	37.7	45.8	0.2	100.0	2,552
10 years & above	12.6	71.6	15.5	0.2	100.0	1,667
Religion						
Hindu	12.4	39.2	48.1	0.3	100.0	6,829
Muslim	19.1	41.4	39.2	0.2	100.0	533
Christian	5.5	15.1	79.4	0.0	100.0	66
Jain	(6.1)	(87.8)	(6.1)	(0.0)	(100.0)	49
Caste#						
Scheduled caste	14.9	32.9	52.0	0.1	100.0	862
Scheduled tribe	9.6	22.8	66.9	0.7	100.0	1,126
Other backward class	13.5	37.0	49.1	0.3	100.0	2,929
Other	12.1	53.4	34.3	0.2	100.0	2,364
Standard of living index						
Low	9.7	20.9	68.9	0.5	100.0	2,919
Medium	15.4	37.2	47.3	0.2	100.0	2,539
High	13.8	69.2	16.9	0.1	100.0	2,030
Number of antenatal check-ups						
No check-up	5.7	15.8	78.0	0.6	100.0	931
1	11.8	23.2	64.7	0.4	100.0	719
2	12.4	23.3	63.9	0.4	100.0	1,237
3	14.0	33.0	52.5	0.5	100.0	1,163
4+	14.5	57.4	28.0	0.1	100.0	3,438
Delivery characteristics						
Normal	12.1	34.8	52.8	0.3	100.0	6,668
Caesarean	14.9	83.9	1.2	0.0	100.0	663
Assisted	28.7	52.1	17.7	1.5	100.0	157
Availability of health facility[1] in the village						
No	9.0	26.5	63.9	0.6	100.0	2,617
Yes	12.7	34.2	52.9	0.2	100.0	2,588
Total	12.7	39.5	47.5	0.3	100.0	7,488

Note: Total includes 31 women with zero parity,2 cases with missing information on education, 10 other religion cases who were not shown separately. # Total figure may not add to N due to do not know and missing cases. @ Literate women with no years of schooling are also included.

[1] Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village

() Based on less than 50 unweighted cases

The proportion of births occurring in health institutions is higher for women aged 20 years and above (52-53 percent) than for women aged below 20 years (44 percent). Institutional deliveries, particularly in private health facilities, increase sharply with education and the standard of living. Thirty-five percent of the births to non-literate women and 84 percent births to literate women who had completed at least 10 or more years of schooling took place at health institutions. Women with a high standard of living were more likely to give birth in health institutions than women with a low standard of living (Figure 4.4). The proportion of institutional deliveries decreases as parity increases from parity one (70 percent) to parity four and above (33 percent). Institutional delivery is much lower for Christian women (21 percent) than for Hindus (52 percent) and Muslim women (61 percent). Only 32 percent births of women from scheduled-tribes are institutional deliveries as compared to 48 percent of births to women from scheduled-castes, 51 percent to other backward classes and 66 percent of births to women from the 'other' caste category. Institutional deliveries are more common among women who had four or more antenatal check-ups than among those who had fewer antenatal check-ups. Institutional deliveries are least prevalent among births to women who did not receive any antenatal check-ups (22 percent). As expected, a large proportion of births occurred by caesarean section (84 percent), and assisted deliveries (52 percent) took place at private health institutions. At the same time, 18 percent of assisted deliveries took place at home. Nearly half (47 percent) of births took place at health institutions in the village with availability of health facility compared to 36 percent of births from villages without any health facility.

4.8.2 Assistance During Home Delivery

Table 4.10 shows distribution of assistance during home delivery by selected background characteristics. Generally, assistance during delivery can be provided by medical staff (doctors, ANM/nurse/LHV), TBA, un-trained *dai*, and relatives/friends. If more than one type of attendant assisted during the delivery, then only the most qualified person is considered. In the last three years, only 10 percent of home deliveries each were attended by doctors and ANM or nurse or LHV, 19 percent by trained birth attendants, 49 percent by untrained *dais*, 10 percent were attended by relatives and friends and one percent of home deliveries were not attended by anyone (Figure 4.4). Overall, health professionals attended 20 percent of deliveries that took place at home. The percentage of births (home delivery) attended by health professionals do not differ much by age of the women. In rural areas, 18 percent of births were attended by health professionals as compared to 36 percent of that in urban areas. The percentage of births attended by health professionals decreased steadily with the increase in parity of women.

Births to literate women who had completed 10 or more years of schooling which were attended by health professionals is more than two times higher than those among non-literate women. The proportion of home deliveries attended by health professionals to women with a high standard of living (44 percent) is more than three times higher than the women with a low standard of living (13 percent). Home deliveries are more likely to be attended by health professionals among the Hindu and Muslim women (21 percent each) than Christian women (10 percent).

Table 4.10 ASSISTANCE DURING HOME DELIVERY AND SAFE DELIVERY

Percent distribution of women who had given live/still births during three years preceding the survey, by assistance during home delivery, and percentage of safe delivery, according to selected background characteristics, Gujarat, 2002-04

	Attendant assisting during home delivery[1]							
Background characteristics	Doctor	ANM/ Nurse/ LHV	TBA	Un-trained *dai*	Relative/ friends	None	Number of women	Percentage of safe[2] delivery
Age group (in years)								
Below 20	10.5	10.7	20.1	49.1	8.7	0.9	291	55.9
20-34	10.5	10.6	18.8	49.1	10.0	1.1	3,068	62.7
35 and above	8.7	7.2	20.4	50.5	11.1	2.1	196	59.5
Children ever born								
1	13.8	15.6	20.9	42.4	6.0	1.3	668	78.6
2	12.1	12.5	20.6	45.9	7.7	1.1	985	66.0
3	7.9	8.8	21.2	51.7	9.4	1.1	759	52.0
4+	8.6	6.6	15.0	54.5	14.3	1.1	1,130	43.4
Residence								
Rural	10.7	7.6	18.4	52.2	10.2	0.9	3,041	51.9
Urban	8.6	27.3	22.3	31.1	8.1	2.6	514	85.4
Education								
Non-literate	8.6	6.2	15.6	56.8	11.7	1.1	2,125	44.2
0-9@ years	13.3	14.7	24.2	39.3	7.6	0.9	1,170	66.8
10 years & above	12.2	25.2	23.5	31.6	5.5	2.0	259	90.1
Religion								
Hindu	10.6	10.3	18.1	49.6	10.2	1.1	3,288	61.6
Muslim	7.0	14.4	30.2	39.5	7.4	1.5	209	69.0
Christian	9.7	0.2	30.1	56.8	3.3	0.0	53	28.5
Caste#								
Scheduled caste	13.7	8.4	19.1	46.2	12.2	0.4	449	59.4
Scheduled tribe	5.2	2.6	21.6	60.0	9.6	1.1	753	37.6
Other backward class	11.9	10.5	14.4	50.8	11.5	0.8	1,438	61.6
Other	10.7	19.5	24.8	36.7	6.6	1.8	810	75.9
Standard of living index								
Low	8.5	4.4	16.5	57.3	12.0	1.3	2,011	39.4
Medium	11.0	16.4	22.5	43.0	6.3	0.8	1,200	65.5
High	19.4	24.5	21.1	23.4	10.1	1.5	344	90.4
Number of antenatal check-ups								
No check-up	7.1	5.4	16.9	57.4	12.4	0.8	726	31.2
1	6.6	6.9	19.0	54.0	12.0	1.4	465	43.7
2	9.0	12.7	15.6	51.5	10.8	0.3	790	49.6
3	16.2	9.4	19.4	44.9	8.4	1.6	610	60.4
4+	12.2	14.6	23.0	41.5	7.3	1.6	964	79.4
Delivery characteristics								
Normal	9.9	10.5	19.2	49.4	9.9	1.1	3,520	57.7
Caesarean	*	*	*	*	*	*	8	99.7
Assisted	(73.0)	(2.7)	(0.0)	(18.9)	(5.4)	(0.0)	28	91.3
Availability of health facility[3] in the village								
No	10.8	4.9	16.4	56.4	10.9	0.6	1,672	45.6
Yes	10.6	10.8	20.9	47.1	9.4	1.3	1,369	58.2
Total	10.4	10.4	19.0	49.2	9.9	1.1	3,555	62.1

Note: Total includes 13 women with zero parity and 1 women with missing information on education who were not shown separately. Total includes 4 and 1 cases for Jain and other religion who were not shown separately. @ Literate women with no years of schooling are also included.

Total figure may not add to N due to do not know and missing cases

[1] If the respondent mentioned more than one attendant, only the most qualified attendant is shown

[2] Either institutional delivery or home delivery assisted by doctor/ANM/Nurse/LHV

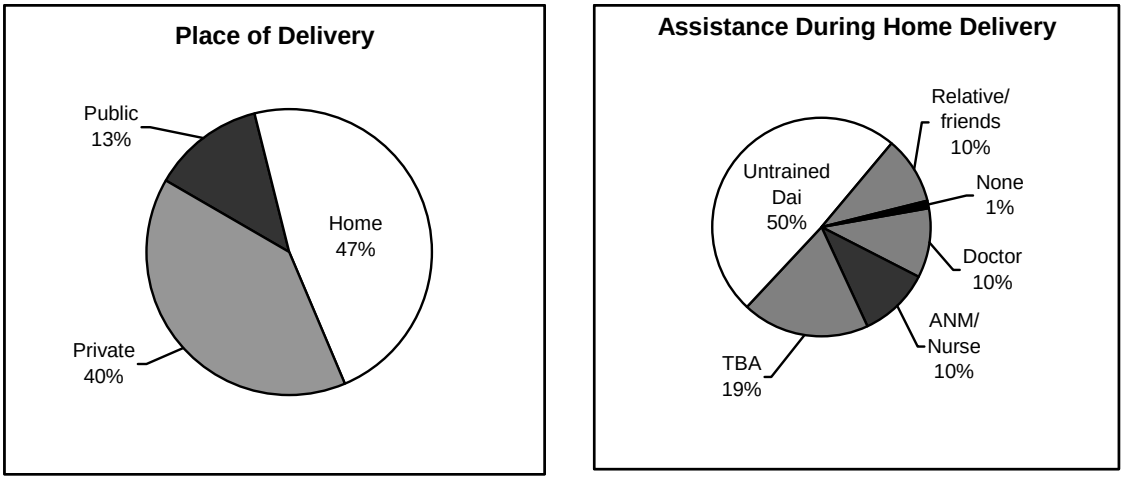
[3] Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village

( ) Based on less than 50 unweighted cases* Percentage not shown based on few cases.

Only eight percent of births to women from scheduled tribes were attended by health professionals as compared to scheduled castes, other backward classes (22 percent each) and women belonging to 'other castes' category (30 percent). About 13 percent of home deliveries to women who did not have any antenatal check-ups were attended by health professionals compared to 27 percent of home deliveries to women who had four or more

antenatal check-ups. One-fifth of home deliveries that were normal were attended by health professionals. About 21 percent home deliveries were attended by health professionals in villages where health facility is available compared to 16 percent in villages with non-availability of a health facility.

Figure 4.4
Place of Delivery and Assistance During Delivery



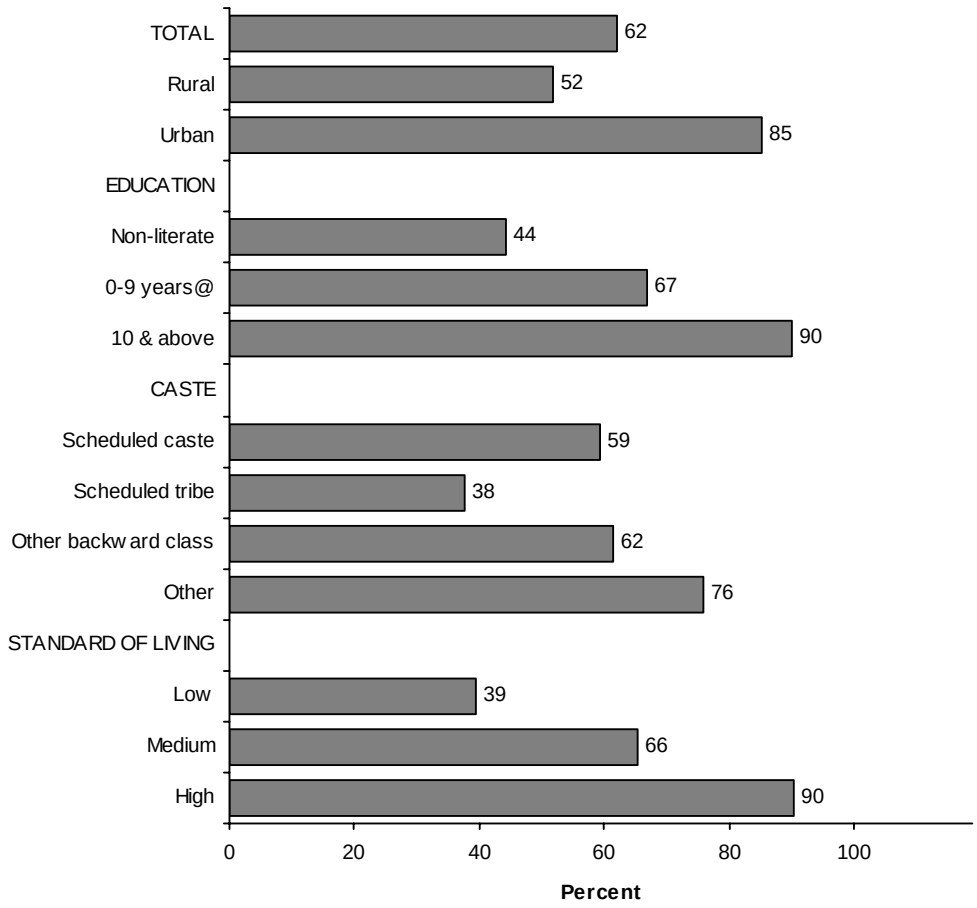
Note: Percentage may add more than 100.0 due to rounding

Gujarat, DLHS-RCH, 2002-04

4.8.3 Delivery Assisted by Skilled Persons

The extent of safe deliveries varied substantially by background characteristics of women (Table 4.10 and Figure 4.5). About 62 percent of the births were safe in Gujarat. In urban areas, 85 percent of the deliveries were safe as against little more than half (52 percent) in rural areas. About 56 percent of the deliveries were safe for younger women aged below 20 years than elderly women (around 60 percent). The proportion of safe deliveries was much lower among Christian women (29 percent) than among Hindu women (62 percent) and Muslim women (69 percent). Only 38 percent of births to women from scheduled-tribe were safe deliveries, compared to 59 percent to women from scheduled-castes, 62 percent to women from other backward classes, and 76 percent of births to women from 'other castes' category. Proportion of safe deliveries decreases as parity rises from 1 (79 percent) to 4 and above (43 percent). Safe deliveries were least prevalent among women who did not receive any antenatal check-ups (31 percent), and it is most prevalent among women who had four or more antenatal check-ups (79 percent). The proportion of safe deliveries increased sizeably with women's education and standard of living. Only 44 percent of non-literate women had safe deliveries whereas its prevalence is 90 percent among women who had completed at least high school. Women with a high standard of living had 90 percent safe deliveries compared to 66 percent of women with a medium standard of living and 39 percent with a low standard of living. As compared to women who had caesarean and assisted deliveries only 58 percent of women with normal deliveries are safe deliveries. The proportion of safe deliveries was higher in villages with a health facility than to women from those villages where health facilities are not available.

Figure 4.5
Delivery Assisted by Skilled Person by Background Characteristic



@ Literate mothers with no years of schooling are also included.

Gujarat, DLHS-RCH, 2002-04

4.9 Reasons for Not Going to Health Institutions for Delivery

Table 4.11 shows main reason for not going to health institutions for women who did not deliver in health institutions in the three years preceding the survey according to residence and availability of health facility in the village. About 61 percent of the women stated that it was not necessary to deliver in health institutions. This proportion is higher among rural women (62 percent) than among urban women (53 percent). Also, 65 percent of women, belonging to health facility villages, stated that it was not necessary to deliver in health institutions, compared to 60 percent of women from villages where a health facility is not available. Other factors contributing for not going to health institutions for delivery were, 'it cost too much' (9 percent), 'no time to go' and 'better care at home' (6 percent each), 'no transportation' or 'health facility is too far' (4 percent), and 'other' (11 percent). About 11 percent of women from urban areas reported no time to go as a reason for not having delivery at health institution. The corresponding figure in rural areas was five percent.

Table 4.11 REASONS FOR NOT GOING TO HEALTH INSTITUTIONS FOR DELIVERY

Percent distribution of women who had given last live/still birth at home during three years preceding the survey by the main reason for not going to health institution for delivery, according to residence and availability of health facility in the village, Gujarat, 2002-04

Reason	Total	Residence		Availability of health facility[1] in the village	
		Rural	Urban	No	Yes
Not Necessary	60.9	62.3	52.7	59.8	65.3
Not customary	2.5	2.7	1.6	2.7	2.6
Cost too much	8.6	8.6	8.5	9.4	7.6
Health facility too far/ No transport	4.0	4.4	1.9	5.1	3.5
Poor quality service	0.2	0.1	0.9	0.0	0.3
No time to go	5.7	4.8	11.1	4.9	4.6
Family did not allow	0.9	1.0	0.6	0.5	1.5
Better care at home	5.7	5.5	7.0	5.7	5.3
Lack of knowledge	0.3	0.4	0.0	0.7	0.1
Other	11.1	10.3	15.7	11.2	9.2
Total percent	100.0	100.0	100.0	100.0	100.0
Number of women	3,555	3,041	514	1,672	1,369

Note: [1] Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village.

4.10 Delivery Characteristics by District

Table 4.12 shows the delivery characteristics by district; institutional delivery (delivery in government or private health institutions), home delivery and attendant assistance during home delivery for last live/still births to women during the three years preceding the survey. The proportion of institutional delivery is lowest in The Dangs district (11 percent) followed by Narmada (27 percent) and it is highest in Mahesana and Gandhinagar districts (about 75 percent each).

Table 4.12 DELIVERY CHARACTERISTICS BY DISTRICT

Place of delivery, assistance during home deliveries, and percentage of safe deliveries by district, Gujarat, 2002-04

Districts	Percentage of women who had institutional delivery	Percentage of women who had delivery at home	Home delivery assisted by skilled[1] persons	Percentage of safe[2] delivery
Ahmedabad	71.7	28.3	29.7	80.1
Amreli	40.2	58.8	49.3	69.1
Anand	69.2	30.5	13.7	73.4
Banaskantha	53.7	46.0	15.3	60.7
Bharuch	38.7	61.3	6.9	42.9
Bhavnagar	43.6	56.4	29.2	60.1
Dahod	46.5	51.3	6.0	49.6
Gandhinagar	73.6	26.4	10.0	76.2
Jamnagar	49.7	50.0	41.3	70.3
Junagarh	37.1	62.1	40.6	62.4
Kachchh	40.3	59.5	18.7	51.5
Kheda	53.4	46.1	14.1	59.9
Mahesana	74.6	24.7	24.7	80.7
Narmada	26.9	72.6	7.4	32.2
Navsari	72.4	27.6	11.0	75.4
Panchmahals	40.2	59.5	11.6	47.1
Patan	53.0	46.5	10.2	57.7
Porbandar	50.4	49.3	43.3	71.7
Rajkot	55.7	44.2	38.3	72.7
Sabarkantha	62.6	36.9	26.3	72.3
Surat	56.5	43.5	20.9	65.6
Surendranagar	40.7	59.0	18.5	51.6
The Dangs	10.7	89.3	8.7	18.4
Vadodara	55.8	44.2	5.8	58.4
Valsad	57.2	42.8	8.4	60.8
Gujarat	52.2	47.5	20.8	62.1

Note: *Table includes last live/still birth since 1-1-1999/1-1-2001.
[1] Includes Doctor/ANM/Nurse. [2] Either institutional delivery or home delivery assisted by skilled person.

A little more than half of births are institutional in the state, but in 11 of 25 districts, more than half of the births took place at home while Narmada (73 percent) and The Dangs (89 percent) districts had majority of home deliveries. Except Amreli, Jamnagar, Junagarh, Porbandar, and Rajkot districts, less than one-third of home deliveries were attended by a health professional. The extent of safe deliveries also varies by district, in 13 of 25 districts, the proportion of safe deliveries are below state average, it however, ranges from 18 percent in The Dangs to 80-81 percent in Ahmedabad and Mahesana districts. The proportion of safe deliveries is less than 50 percent in five districts i.e. Bharuch, Narmada, Panchmahals, Dahod and The Dangs (see Map-4).

4.11 Complications During Delivery

Complications during delivery include premature labour, obstructed labour, prolonged labour (more than 12 hours), breech presentations, excessive bleeding during delivery and other problems at the time of delivery reported by women during the three years preceding the survey. More than two-fifths (43 percent) of the women experienced at least one problem during delivery (Table 4.13 and Figure 4.6).

Table 4.13 DELIVERY COMPLICATIONS

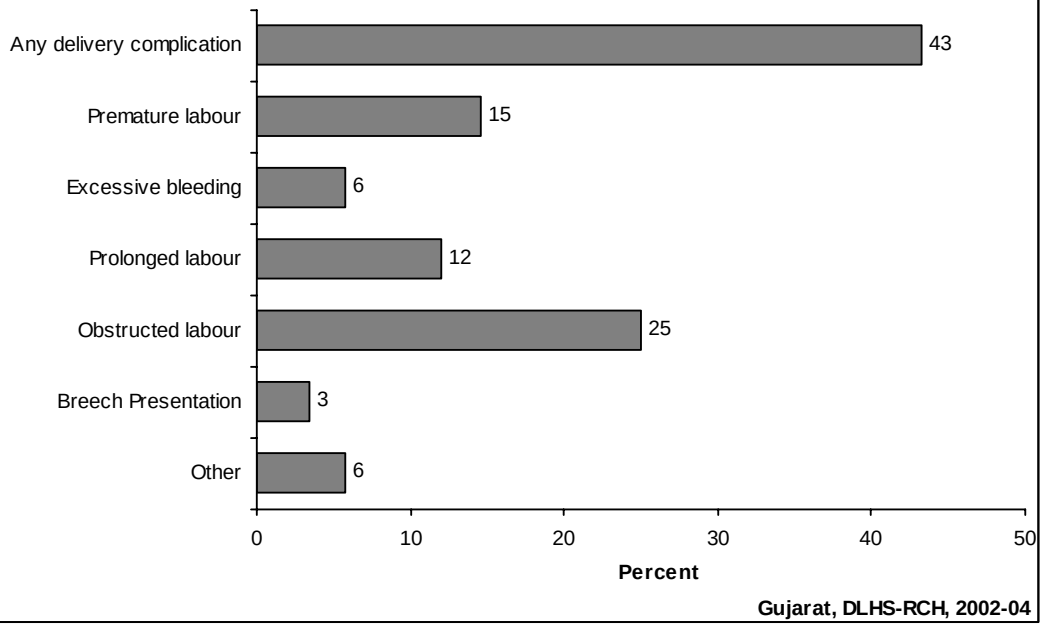
Percentage of women who had given last live/still births during three years preceding the survey by delivery complication, according to selected background characteristics, Gujarat, 2002-04

Background characteristics	Any delivery complic-ation	Type of delivery complication; Premature labour	Excessi-ve bleeding	Prolong-ed labour	Obstruct-ed labour	Breech presnta-tion	Other	Number of women
Age group (in years)								
Below 20	46.6	15.2	7.5	14.5	29.0	2.3	4.7	520
20-34	43.3	14.5	5.6	11.6	25.0	3.5	5.8	6,559
35 and above	40.2	15.4	6.4	14.5	20.1	2.4	6.7	410
Children ever born								
1	51.4	18.2	7.0	15.4	29.7	5.1	8.7	2,217
2	42.0	12.3	4.8	10.2	24.1	2.1	5.4	2,206
3	41.0	14.8	5.5	9.5	22.9	4.3	3.5	1,336
4+	36.0	12.5	5.4	11.4	21.6	1.9	4.2	1,698
Residence								
Rural	42.2	13.4	5.9	11.9	25.7	2.5	4.8	5,205
Urban	46.0	17.2	5.6	12.1	23.3	5.4	8.0	2,283
Number of antenatal check-ups								
No check-up	38.0	15.0	5.3	9.2	20.1	2.4	5.4	931
1	38.2	14.7	4.6	12.2	23.4	1.2	3.3	719
2	38.5	12.9	6.7	12.2	23.1	2.1	3.1	1,237
3	43.3	14.8	5.1	12.5	27.1	2.7	4.5	1,163
4+	47.6	15.0	6.1	12.4	26.6	4.8	7.9	3,438
Delivery characteristics								
Normal	39.2	13.9	5.4	10.1	24.6	1.5	3.4	6,668
Caesarean	78.7	22.6	7.7	23.8	26.8	22.2	24.1	663
Assisted	69.2	11.4	15.0	39.9	34.4	5.1	32.1	157
Place of delivery								
Government sector	49.0	17.2	8.3	14.1	24.9	4.1	7.6	953
Private sector	53.6	18.1	6.0	15.3	29.1	6.3	10.4	2,957
Home	33.4	11.0	4.9	8.6	21.6	0.8	1.5	3,555
Total	43.3	14.6	5.8	12.0	25.0	3.4	5.8	7,488

Note: Total include 31 women with zero parity and 23 cases on place of delivery, in other category who were not shown separately.

The proportion of delivery complications is slightly more among urban women (46 percent) than rural women (42 percent). Younger women below the age of 20 years, and women with low parity reported more (at least one) delivery related problem than older women and women with higher parity. This proportion is relatively high among women who had received some kind of antenatal care during their pregnancy. Thirty-eight percent of women who had not had any antenatal check-up reported that they experienced at least one problem during their pregnancy compared to 48 percent of women who had received four or more antenatal check-up. Among women who had caesarean delivery or else were assisted with the help of instruments to conduct delivery, 69-79 percent reported experiencing such problems, and 39 percent women with normal deliveries also cited complications during delivery. A relatively higher proportion of women who delivered in health institutions (49-54 percent) faced at least one delivery complication compared to those who delivered at home (33 percent).

Figure 4.6
Percentage of Women with Delivery Complication and by Symptoms



Gujarat, DLHS-RCH, 2002-04

The major problems reported were 'obstructed labour' (25 percent), 'premature labour' (15 percent), 'prolonged labour' (12 percent), and 'excessive bleeding (6 percent). Only three percent reported 'breech presentation', and 6 percent reported 'other' problems related to delivery. Younger women, women from rural areas and those who had more number of ANC check-ups were more likely to report obstructed labour whereas premature labour and breech presentations are more prevalent among urban women. Premature labour, prolonged labour, obstructed labour and excessive bleeding are more common among women with low parity. Excessive bleeding, prolonged labour, obstructed labour and other health problems related to delivery were more among women whose last delivery was assisted with instruments, and premature labour and breech presentation was more likely among those who had a caesarean, than by women with normal delivery during the three years preceding the survey. Women whose recent delivery was performed in medical institutions were more likely to report these complications compared with home delivery.

4.12 Post Delivery Complications and Treatment

Table 4.14 and Figure 4.7 present information about women who faced complications after delivery according to some selected background characteristics. The incidence of post delivery complications judged by any of the following during the first six-weeks of delivery-high fever, lower abdominal pain, foul smelling vaginal discharge, excessive bleeding, convulsion, severe headache, and other problems. One-fourth of women reported that they faced some problems during the first six weeks after their delivery. The proportion of women who cited at least one post delivery complication is higher in rural areas (29 percent) than in urban areas (17 percent). Younger women aged below 20 years, women with higher parity of 4 and over, who had deliveries assisted with instruments, and those whose deliveries took place at Government institution and at home are more prone to report at least one post delivery related problem.

Table 4.14 POST DELIVERY COMPLICATIONS

Percentage of women who had given last live/still births during three years preceding the survey by post delivery complication, according to selected background characteristics, Gujarat I, 2002-04

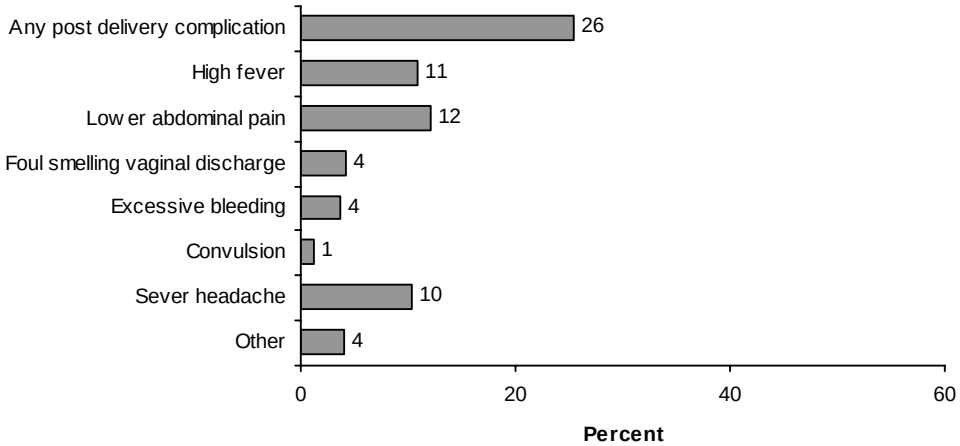
Background characteristics	Any post delivery complic-ation	Type of post delivery complication; High fever	Lower abdom-inal pain	Foul smelling vaginal discharge	Excess-ive bleeding	Convul-sion	Severe head-ache	Other	Number of women
Age group (in years)									
Below 20	28.4	14.6	16.2	5.4	4.2	1.0	11.5	3.5	520
20-34	25.4	10.4	11.9	4.1	3.7	1.3	10.2	4.1	6,559
35 and above	23.0	13.4	10.0	3.5	3.2	1.9	10.9	4.8	410
Children ever born									
1	23.5	9.6	9.4	3.5	3.2	0.8	9.1	4.6	2,217
2	23.3	8.8	10.8	4.4	3.6	1.2	8.8	4.3	2,206
3	26.3	12.0	13.9	3.4	3.3	1.5	10.7	3.2	1,336
4+	29.6	14.4	15.6	5.3	4.6	1.9	13.7	3.9	1,698
Residence									
Rural	29.1	12.8	14.5	4.9	4.1	1.6	12.0	4.4	5,205
Urban	17.2	6.4	6.6	2.5	2.6	0.5	6.4	3.5	2,283
Delivery characteristics									
Normal	25.2	10.9	12.3	4.2	3.6	1.3	9.8	4.1	6,668
Caesarean	26.5	10.2	10.1	3.4	3.5	0.8	14.8	3.5	663
Assisted	31.1	12.6	11.1	7.0	6.2	1.9	13.5	9.7	157
Place of delivery									
Government sector	28.6	9.7	11.0	4.9	3.8	0.6	11.0	7.1	953
Private sector	20.1	8.9	8.6	3.0	3.2	1.2	8.5	3.2	2,957
Home	29.1	12.8	15.3	4.9	4.1	1.6	11.7	4.1	3,555
Assistance during home delivery									
Doctor	32.8	16.8	16.4	2.6	4.4	3.2	13.3	6.4	369
ANM/Nurse/LHV	18.8	9.7	5.7	3.0	1.7	0.4	5.6	2.7	370
TBA	31.3	11.4	18.2	9.1	4.9	1.8	11.7	4.5	675
Untrained *dai*	30.7	13.7	16.3	4.5	4.5	1.5	13.3	3.9	1,749
Relative/friends	23.3	10.5	12.7	3.4	3.1	1.2	8.0	3.3	352
None	(37.1)	(11.4)	(20.0)	(5.7)	(0.0)	(0.0)	(20.0)	(5.7)	40
Total	25.5	10.9	12.1	4.2	3.7	1.3	10.3	4.1	7,488

Note: Total includes 31 women with zero parity and 23 cases of place of delivery in other category who were not shown separately. ( ) Based on less than 50 unweighted cases

Women mainly reported lower abdominal pain (12 percent), high fever (11 percent), and severe headache (10 percent), as post delivery complications. Foul smelling vaginal

discharge and excessive vaginal bleeding each were also mentioned by four percent of the women. A rural-urban difference is observed in all the symptoms of postpartum complications. All the postpartum complications, except convulsions, are more prevalent among the women below 20 years of age. The symptoms of postpartum complications were increasing steadily with increased parity. Those women delivered in the private sector are less likely to report symptoms in the postpartum period compared to government and those women who had delivery at home. Women who had the last delivery at home and were not assisted by anyone were more likely to have high fever, lower abdominal pain and other postpartum problems during the first six weeks of delivery. These symptoms are less common for women who delivered at home assisted by an ANM/nurse/LHV.

Figure 4.7
Percentage of Women with Post Delivery Complication and by Symptoms



Gujarat, DLHS-RCH, 2002-04

Women who reported at least one complication during the postpartum period were asked, whether they had consulted or sought treatment for their problems and also the source of treatment. Table 4.15 shows the percentage of women who had post delivery complications and who sought treatment by source of treatment according to residence and availability of health facility in the village. More than half (55 percent) of the women reported that they had obtained advice or had consulted someone for their problems. The proportion was higher among urban women (66 percent) than among rural women (52 percent), and 56 percent of women sought treatment from those villages where health facility was available as compared to 49 percent of women who did not have a health facility within the village.

Among women who sought treatment for complications in the postpartum period, only one-fifth visited a government health facility including primary health centre (6 percent) and sub-centre (2 percent). Two-thirds of women visited a private health facility, and three percent went to a facility with the Indian system of medicine (either government or private) and another 12 percent obtained advice from other health facilities. The proportion of women who visited a government health facility is relatively higher in rural areas (22 percent) than in urban areas (13 percent). Similarly, the proportion of women (26 percent) seeking treatment from a government health facility is more (26 percent) among women who belonged to villages where health facility is available against 19 percent where health facility is not

available in the village. Among women who sought treatment, 85 percent preferred to go to a doctor and 11 percent visited an auxiliary nurse midwife or nurse or LHV, and four percent went to some one else. Eighty-nine percent of these women in urban areas, and 83 percent in rural areas went to a doctor, whereas a visit to an ANM/nurse/LHV was 12 percent in rural areas and nine percent in urban areas. There are also differences by availability of health facilities and non-availability of health facilities in the village.

Table 4.15 TREATMENT FOR POST DELIVERY COMPLICATIONS

Percentage of women who had last live/still births during three years preceding the survey and who had any post delivery complication, sought treatment for the problems, and source of treatment according to residence and availability of health facility in the village, Gujarat, 2002-04

Treatment and source	Total	Residence		Availability of health facility[5] in the village	
		Rural	Urban	No	Yes
Percentage of women sought treatment who had any post delivery complication	55.3	52.4	66.2	48.6	56.3
Number of women	1,908	1,514	394	759	755
Percentage sought treatment at health facility					
Government health facility[1]	20.1	22.4	13.2	18.5	25.7
Primary health centre	6.4	8.2	1.1	5.5	10.6
Sub centre	1.8	2.3	0.4	1.3	3.1
Private health facility[2]	65.9	61.3	79.7	60.2	62.3
ISM[3] facility	2.7	3.0	2.0	3.9	2.2
Other	11.9	14.1	5.0	18.0	10.8
Percent distribution of women who obtained treatment from					
Doctor	84.6	83.1	89.0	86.3	80.3
ANM/nurse/midwife/LHV	11.0	11.8	8.7	8.8	14.5
Other health professionals[4]	0.4	0.6	0.0	0.3	0.8
Other	3.7	4.2	2.3	4.5	4.0
Missing	0.2	0.3	0.0	0.2	0.4
Total percent	100.0	100.0	100.0	100.0	100.0
Number of women	1,054	794	260	369	425

Note: [1] Include municipal hospital, dispensary, urban health centre/urban health post/urban family welfare centre, community health centre/rural hospital, primary health centre and sub centre

[2] Include private hospital/clinic and non-governmental organization/ trust hospital

[3] Either government or private Indian system of medicine

[4] Other health professionals include Dai (trained or untrained), relative/friends and ISM practitioner

[5] Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village

4.13 Obstetric Morbidity by District

The extent of health problems/complications women suffer during pregnancy, delivery and post delivery period indicates the state of obstetric morbidity. Table 4.16 presents the incidence of pregnancy, delivery and post-delivery complications and treatment seeking behaviour in case of pregnancy and post delivery complications by district. As mentioned earlier, in the state, 35 percent, 43 percent and 26 percent of the women experienced pregnancy, delivery and post delivery complications respectively. About 54 percent of the women sought treatment for pregnancy complications and 55 percent for post delivery

complications. In all the districts, a minimum of one-fourth women experienced at least one of the symptoms of pregnancy complications.

Table 4.16 PREGNANCY, DELIVERY AND POST DELIVERY COMPLICATIONS

Extent of pregnancy, delivery and post delivery complications and treatment seeking behaviour by districts, Gujarat, 2002-04

	Percentage of women[1]				
District	Who had complication during pregnancy	Sought [2] treatment for pregnancy complication	Who had delivery complication	Who had post delivery complication	Sought [3] treatment for post delivery complication
Ahmedabad	26.6	57.8	51.7	14.8	56.3
Amreli	37.0	61.9	31.4	30.0	69.0
Anand	44.7	58.4	55.4	33.4	62.6
Banaskantha	35.2	47.7	42.7	23.2	40.1
Bharuch	45.5	56.9	65.5	39.8	56.5
Bhavnagar	37.2	51.0	29.7	28.5	61.9
Dahod	46.4	44.5	26.7	39.8	51.6
Gandhinagar	29.4	62.4	48.1	19.6	59.1
Jamnagar	36.9	64.0	42.9	22.8	63.5
Junagarh	33.8	63.4	37.8	21.9	58.0
Kachchh	27.8	55.9	33.6	28.0	54.9
Kheda	38.6	44.0	48.1	29.1	54.5
Mahesana	34.4	61.9	47.9	21.4	67.3
Narmada	36.8	49.4	47.8	35.3	50.7
Navsari	29.5	79.8	43.9	20.9	64.6
Panchmahals	51.9	46.2	40.9	34.8	53.6
Patan	48.1	61.5	52.4	42.7	59.9
Porbandar	41.2	67.8	35.0	26.6	57.5
Rajkot	30.7	66.9	27.6	13.2	65.8
Sabarkantha	29.1	52.5	43.8	19.5	52.3
Surat	32.7	58.9	39.8	15.5	53.8
Surendranagar	32.1	48.2	44.1	23.3	57.8
The Dangs	30.3	43.6	48.4	33.2	28.3
Vadodara	43.7	50.0	59.8	42.4	55.9
Valsad	36.8	62.3	60.1	25.7	49.5
Gujarat	35.2	54.3	43.3	25.5	55.3

Note: [1] Women who had last live/still birth during three years preceding the survey. [2] Women who reported at least one complication of pregnancy. [3] Women who reported at least one post delivery complication.

In some of the districts like, Anand, Bharuch, Dahod, Panchmahals, Patan, Porbandar, and Vadodara the incidence of pregnancy complications is comparatively higher at more than 40 percent than other districts. The incidence of delivery complication is higher than that of pregnancy and post delivery complications. The percentage of women who experienced at least one type of delivery complication ranges from 27 percent in Dahod to 66 percent in Bharuch, and incidence of post delivery complication varies from 13 percent in Rajkot to 43 percent in Patan.

In most of the districts of Gujarat more than 70 percent of the women received some kind of antenatal care. In spite of a large proportion of women having contact with a doctor or any other health workers during the antenatal period, in all districts (except Navsari, Porbandar and Rajkot) less than two-thirds of the women sought treatment for pregnancy complication. Similarly, among women who experienced at least one symptoms of postpartum complication, the proportion seeking treatment also varies across the districts, ranging from 28 percent in The Dangs to 69 percent in Amreli.

CHAPTER V

CHILD CARE AND IMMUNIZATION

Child health services under the Reproductive and Child Health (RCH) programme include health education to mothers on breast-feeding and services for immunization, Vitamin A supplements and Iron prophylaxis, treatment of diarrhoea and Acute Respiratory Infections (ARIs). The District Level Household Survey (DLHS) covered all the currently married women whose last surviving child was born during the three years preceding the survey, and information on those breastfeeding currently and duration of breastfeeding. They were also asked about their awareness of diarrhoea management and danger signs of pneumonia and practices followed in case of episodes of diarrhoea and ARI among the children. Data on immunization, administering Vitamin A supplements and Iron prophylaxis was collected for the last two living children born after January 1, 1999/2001. This chapter presents an analysis of the data collected on the above aspects.

5.1 Breastfeeding

Educating mothers on correct breastfeeding practices and child nutrition is one of the components of the RCH programme. Infant feeding practices have significant effects on the health of both mothers and children. Mothers are affected through the influences of breastfeeding on the period of postpartum infertility, and hence on fertility levels and the length of birth intervals. These effects vary according to the duration and intensity of breastfeeding. Proper infant feeding, starting from the time of birth, is important for the physical and mental development of the child. Breastfeeding improves the nutritional status of young children and reduces morbidity and mortality. Breast milk not only provides important nutrients, but also protects the child against infection. The timing and type of supplementary foods introduced in an infant's diet have significant effects on the child's nutritional status.

As recommended by the World Health Organization (WHO), breastfeeding should be initiated immediately after birth and should be continued upto a minimum of six months. The WHO also suggests that the yellowish milk, known as colostrums, should be given to the baby because it provides protection against certain infections. Afterwards, it has to be supplemented with other semi-solid and solid foods at the proper time intervals.

Table 5.1 shows the breastfeeding practices among children born during the three years preceding the survey in Gujarat. Although, the practice of breastfeeding is common in Gujarat, the initiation of breastfeeding within two hours of the birth of the child is not always followed. Twenty-four percent of the children were breastfed within two hours of birth, and 44 percent were breastfed within one day of birth (including those who were breastfed within two hours of birth), while 55 percent of children were breastfed after one day of birth. As shown in Figure 5.1, about one-fifth of the children were breastfed within one day of birth but after two hours of birth, 41 percent were breastfed after the first day of birth but before 3 days, and 14 percent of the children were put to the breast after three days. Rest of the children were never breastfed. Data by socio-economic groups shows that women who reside in urban areas, women who have had high school education & above, women from Christian

community and women who live in households with a high standard of living are more likely to start breastfeeding their children within two hours of birth than their counterparts. Twenty-seven percent of children from scheduled tribe were breastfed within two hours of birth, and 46 percent of children from scheduled castes were breastfed within one day of birth. A large proportion of children from urban areas (47 percent), children of better educated mothers (46 percent), children from other caste (51 percent), and children from households with a high standard of living (44 percent) were put to the breast after one day of birth.

Table 5.1 INITIATION OF BREASTFEEDING

Percentage of children under age 3 whose mother started breastfeeding within two hours of births, within one day of birth, and after one day of birth and percentage whose mother squeezed the first milk from her breast before breastfeeding by selected background characteristics, Gujarat , 2002-04

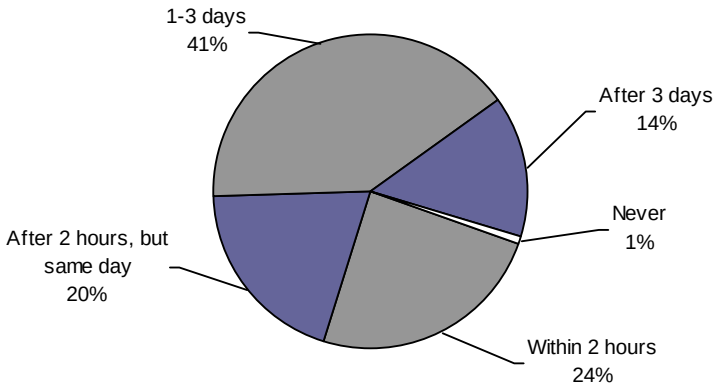
Background characteristic	Percentage started breastfeeding			Percentage whose mother squeezed first milk from breast	Number of children
	Within two hours of birth	Within one day of birth[1]	After one day of birth		
Residence					
Rural	22.8	39.9	59.1	64.3	4,474
Urban	27.7	52.4	47.3	63.4	2,025
Mother's education					
Non-literate	20.1	36.3	62.9	68.6	2,795
0-9@ years	26.8	47.0	52.0	63.3	2,260
10 and above	28.6	53.4	46.4	56.3	1,443
Religion					
Hindu	23.6	43.0	56.3	64.1	5,898
Muslim	28.9	49.2	50.2	64.0	488
Christian	55.8	73.2	26.8	55.6	59
Jain	(53.8)	(69.2)	(30.8)	(46.2)	47
Caste/tribe#					
Scheduled caste	22.0	45.7	53.5	67.2	747
Scheduled tribe	27.1	45.0	54.6	68.1	972
Other backward class	23.4	39.8	59.6	63.7	2,532
Other	25.5	47.7	51.2	60.6	2,066
Standard of living index					
Low	19.3	34.2	65.0	70.0	2,463
Medium	24.3	45.2	53.7	63.9	2,260
High	31.3	55.3	44.4	56.0	1,776
Total	24.3	43.8	55.4	64.0	6,499

Note: Table based on youngest living child born during the three years preceding the survey
Total includes one child with missing information on mother's education, 7 other religion cases were not shown separately
[1] Includes children whose mother started breastfeeding within two hours of births
@ Literate mother with no years of schooling are included. #Total figure may not add to N due to do not know and missing cases.
( ) Based on less than 50 unweighted cases.

Nearly two-thirds of the women (64 percent) who gave birth to children during the three years preceding the survey squeezed the first milk from the breast before they began breastfeeding. The custom of squeezing the first milk from the breast before breastfeeding is widely practised in every group, but it is slightly higher among the children whose mothers are non-literate, children with Hindu and Muslim religions, mothers of scheduled tribe and scheduled caste. Children who live in households with a high standard of living are less likely than children in other households to have mothers who squeezed the first milk from the breast before breastfeeding. There is no rural-urban differential of the custom of squeezing the first milk from the breast before breastfeeding. Mothers of children born in the three years preceding the survey were asked whether the child had been fed breast milk exclusively and if so, what the duration was. Here it needs to be mentioned that, exclusive breastfeeding

includes breastfeeding the child without giving it anything including water. Results are shown in Table 5.2.

Figure 5.1
Initiation of Breastfeeding



Gujarat, DLHS-RCH, 2002-04

Table 5.2 EXCLUSIVE BREASTFEEDING BY CHILD'S AGE

Percentage of children under age 3 years by exclusive breastfeeding and child's age in month, Gujarat, 2002-04

Age in months	Status of exclusive breastfeeding			Number of children
	Exclusive breastfeeding	At least 4 months	At least 6 months	
<2	69.2	*	*	339
2-3	42.4	*	*	449
4-5	15.1	30.5	*	453
6-7	6.4	33.4	10.7	414
8-9	4.7	32.5	14.1	458
10-11	1.7	24.9	6.7	452
12-13	4.0	33.9	14.8	482
14-15	3.0	24.9	9.9	382
16-17	3.6	26.8	11.7	395
18-19	3.5	41.8	17.6	358
20-21	1.6	22.0	7.3	355
22-23	2.7	24.1	9.0	322
24-25	1.1	23.6	10.2	376
26-27	2.6	23.4	8.6	277
28-29	1.9	23.5	12.0	279
30-31	1.0	22.8	7.8	269
32-33	1.9	32.3	12.1	216
34-35	4.8	27.4	13.0	222
< 4 months	53.9	*	*	788
4-6 months	11.9	29.5	*	654
7-9 Months	5.7	34.6	14.3	671

Note: Table based on youngest living child born during the three years preceding the survey

In Gujarat, more than half (54 percent) of children under four months of age are exclusively breastfed. The percentage of infants exclusively breastfed drops steadily from 69 percent for children under 2 months of age to 15 percent for children who are 4-5 months old. About 30 percent of children in the age group 4-6 months were exclusively breastfed up to atleast 4 months and 14 percent of children in the age group 7-9 months breastfed upto atleast 6 months.

5.1.1 Breastfeeding by District

Table 5.3 shows that in all the districts of Gujarat, except The Dangs, Valsad and Navsari, not more than 40 percent of the children were put to the breast within two hours of birth. Less than 7 percent of the children were breastfed within two hours of birth in Dahod and Panchmahals districts. More than half of the children were put to the breast after one day of birth in Amreli, Anand, Bharuch, Bhavnagar, Dahod, Gandhinagar, Jamnagar, Junagarh, Kheda, Narmada, Pachmahals, Patan, Porbandar, Sabarkantha, Surendranagar and Vadodara districts. In 18 out of the 25 districts, the mothers of more than 60 percent children squeezed the first milk before breastfeeding.

Table 5.3 BREASTFEEDING BY DISTRICT

Percentage of children under age 3 whose mother started breastfeeding within two hours of births, within one day of birth and after one day of birth, percentage whose mother squeezed the first milk from her breast before breastfeeding and percentage of children who were exclusively breastfed by district, Gujarat, 2002-04

District	Percentage started breastfeeding			Percentage whose mother squeezed first milk from breast	Exclusive breastfeeding[2]
	Within two hours of birth	Within one day of birth[1]	After one day of birth		
Ahmedabad	23.7	52.3	47.6	64.3	0.2
Amreli	16.7	32.3	66.9	78.7	4.1
Anand	32.0	47.6	51.8	60.1	14.9
Banaskantha	22.2	49.2	49.5	61.6	8.8
Bharuch	20.9	28.7	70.3	69.1	19.6
Bhavnagar	20.0	28.6	69.4	67.9	2.9
Dahod	6.9	16.8	82.7	73.4	7.8
Gandhinagar	25.6	47.9	50.5	47.5	0.9
Jamnagar	29.2	43.9	53.2	74.0	10.2
Junagarh	17.0	36.4	62.3	77.7	4.0
Kachchh	39.1	55.4	44.6	83.9	35.8
Kheda	14.5	23.6	74.8	65.2	5.0
Mahesana	35.6	54.5	45.5	50.4	40.1
Narmada	21.7	40.9	59.1	69.6	8.5
Navsari	44.4	73.1	26.3	57.9	10.2
Panchmahals	6.7	14.5	85.5	73.4	4.2
Patan	25.1	41.8	57.5	60.1	14.6
Porbandar	11.9	27.1	71.5	82.7	6.4
Rajkot	25.9	57.5	42.0	53.9	7.2
Sabarkantha	16.0	28.4	70.5	52.0	23.5
Surat	27.8	57.9	42.1	56.7	12.4
Surendranagar	23.4	43.1	56.4	60.0	1.0
The Dangs	73.9	89.9	9.6	65.0	63.8
Vadodara	27.3	38.5	60.8	64.8	14.0
Valsad	54.6	81.8	18.2	62.6	15.2
Gujarat	24.3	43.8	55.4	64.0	11.1

Note: Table based on youngest living child born during the three years preceding the survey
[1] Includes children whose mother started breastfeeding within two hours of births. [2] Based on youngest children age 6 moths and older at the time of survey and breastfed exclusively 6 months or more as mother reported.

There is a great deal of variation in the extent of exclusive breastfeeding for six months. The highest proportion is reported in The Dangs at 64 percent whereas it is less than one percent in Ahmedabad.

5.2 Immunization of Children

The immunization of children against six serious but preventable diseases namely, tuberculosis, diphtheria, pertusis, tetanus, poliomyelitis and measles is the main component of the child survival programme. As part of the National Health Policy, the National Immunization Programme is being implemented on a priority basis. The Government of India initiated the Expanded Programme on Immunization (EPI) in 1978 with the objective of reducing morbidity, mortality and disabilities among children from six diseases.

The Universal Immunization Programme (UIP) was introduced in 1985-86 with the objective of covering at least 85 percent of all infants against the six vaccine preventable diseases by 1990. This scheme has been introduced in every district of the country. The standard immunization schedule developed for the child immunization programme specifies the age at which each vaccine should be administrated and the number of doses to be given. Routine vaccinations received by infants and children are usually recorded on a vaccination card that is issued for the child.

In the first phase of Round II, all the women with last and last but one living child born after January 1, 1999 were asked whether the child/children had received the vaccination against polio, tuberculosis (BCG), diphtheria, whooping cough (pertusis), tetanus (DPT) and measles, and for the second phase, the reference period was from January 1, 2001. For Polio and DPT, further information on polio at birth and number of doses was asked. Children who received BCG, three doses of DPT and polio (excluding polio 0) and measles are considered to be fully vaccinated. Information on the source of immunization for last dose and in case where immunization was not given, the reason for not giving immunization was also compiled.

Table 5.4, Figures 5.2 and 5.3 presents vaccination coverage rates for children in the age group 12-23 months. Only 54 percent of the children are fully vaccinated, and seven percent have not received any routine vaccination. Coverage of each vaccination except Polio 0 is much higher than the percentage fully vaccinated. BCG, the first and second dose of DPT and Polio vaccine has each been given to more than 80 percent of children (Figure 5.2). Only around two-third each of the children have received three doses of DPT, three drops of Polio, and have been vaccinated against measles. Moreover, not all children who begin the DPT and polio vaccination series, go on to complete them. The differences between the percentage of children receiving the first and third doses is 16-percentage point for DPT and 17 percentage points for polio.

These data indicate that immunization coverage for children in Gujarat, are still low and a large proportion of children who received some early vaccinations dropped out of the programme before receiving all of the recommended vaccinations.

The data indicates that the coverage of each type of vaccine is more in urban areas than in rural areas. Two-thirds of the children in urban areas had received all the recommended vaccinations by the time of the survey, compared with 48 percent in rural areas. Differentials in rural-urban against polio 0 is 15 percent point. Three-fourths of the children have received polio vaccine at the time of birth in urban areas whereas about 61 percent received the same in the rural areas.

Table 5.4 VACCINATION OF CHILDREN

Percentage of children age 12-23 months who received vaccination according to some selected background characteristics, Gujarat, 2002-04

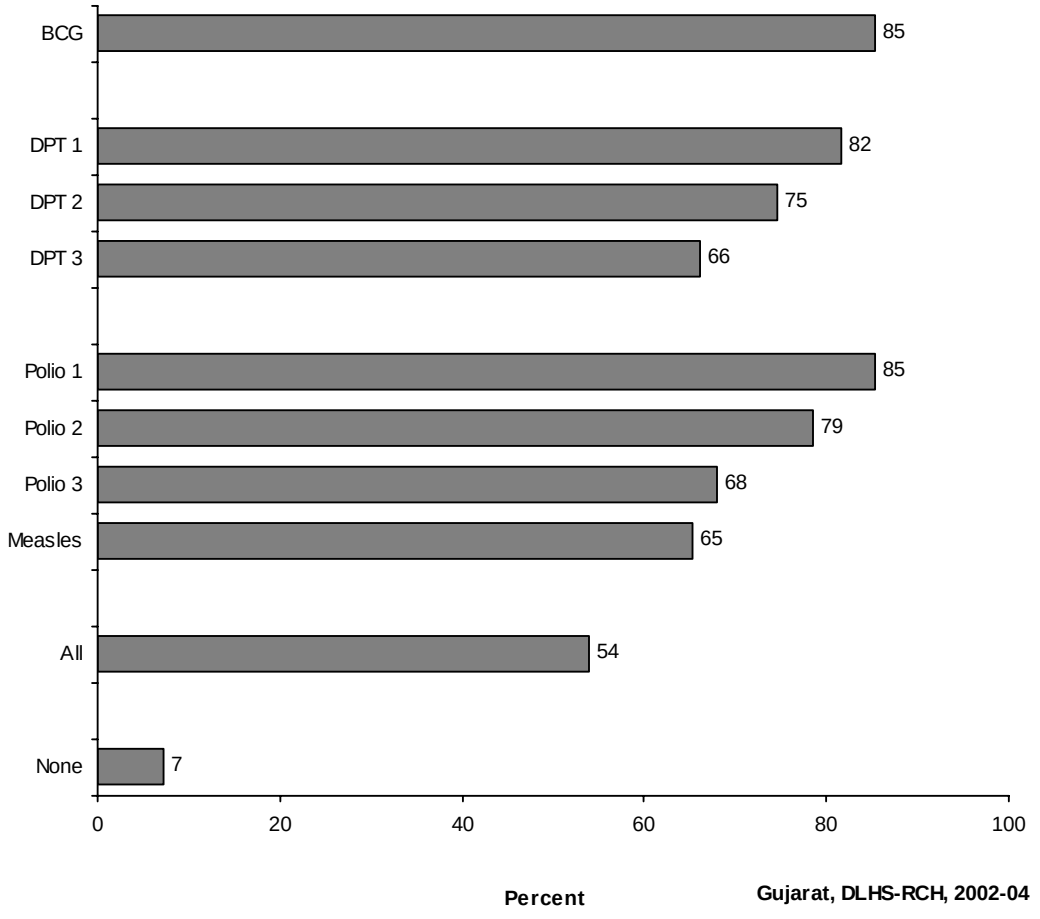
Background characteristic	Polio 0	BCG	DPT 1	DPT 2	DPT 3	Polio 1	Polio 2	Polio 3	Measles	Full [1] vaccination	No vaccination	Number of children
Residence												
Rural	60.5	83.2	77.2	70.9	61.7	82.0	74.7	64.1	59.5	48.1	9.1	1,645
Urban	75.1	89.9	90.8	81.7	74.9	92.2	86.4	75.6	76.8	66.2	3.8	808
Sex of the child												
Male	63.0	85.5	84.0	74.7	67.7	85.6	78.2	68.4	65.3	54.0	7.9	1,282
Female	67.8	85.3	79.2	74.2	64.3	85.1	78.9	67.4	65.1	54.1	6.7	1,172
Birth order												
1	75.9	87.5	85.8	82.0	75.2	89.2	84.0	76.5	69.3	61.0	4.9	725
2	70.2	88.2	89.0	80.3	71.3	90.7	82.1	73.2	72.0	61.4	4.5	828
3	54.4	84.3	77.6	71.3	62.6	81.2	75.2	66.1	60.9	51.5	10.1	378
4+	50.8	79.0	67.4	57.3	47.7	74.7	67.7	48.9	51.8	34.7	13.1	522
Mother's education												
Non-literate	49.4	74.6	69.1	59.5	49.6	75.6	65.5	52.9	49.0	37.0	13.3	1,091
0-9@ years	72.2	91.6	88.7	81.5	71.8	91.5	86.0	72.9	74.5	61.4	3.5	828
10 years and above	87.1	97.9	96.5	94.3	91.0	95.8	93.8	90.7	83.6	77.5	1.2	534
Religion												
Hindu	64.9	85.3	81.5	74.0	65.5	85.0	78.1	67.4	64.5	53.3	7.4	2,216
Muslim	74.3	88.0	84.3	79.0	70.4	88.0	83.6	72.7	71.0	60.2	5.9	187
Christian	(63.3)	(86.7)	(80.0)	(70.0)	(63.3)	(83.3)	(70.0)	(60.0)	(56.7)	(50.0)	(10.0)	31
Caste/tribe#												
Scheduled caste	73.4	92.3	84.2	80.3	68.6	86.4	82.5	72.4	65.4	53.0	2.7	278
Scheduled tribe	48.3	77.9	68.3	60.4	52.6	73.5	63.3	52.1	48.2	39.8	14.5	384
Other backward class	56.6	82.0	79.5	68.8	58.1	84.4	76.4	61.2	62.5	47.6	7.9	969
Other	81.8	92.0	91.5	87.4	83.2	93.7	88.3	84.2	78.6	71.2	3.7	750
Standard of living index												
Low	48.8	76.1	66.5	58.1	47.6	72.7	63.8	50.9	48.6	35.4	14.4	938
Medium	69.1	89.1	90.4	83.3	73.9	92.7	86.1	75.9	72.5	61.9	3.5	851
High	83.8	93.8	92.1	86.3	82.1	93.9	89.6	81.6	79.2	70.3	2.3	665
Total	65.3	85.4	81.7	74.5	66.1	85.4	78.5	67.9	65.2	54.0	7.3	2,454

Note: Table includes only last and last but one living child born since 1.1.1999/1.1.2001. Total includes 19 other religion cases were not shown separately. @ Literate mothers with no years of schooling are included. # Total figure may not add to N due to do not and missing cases.

[1] BCG, three injection of DPT, three doses of Polio (excluding Polio 0) and measles

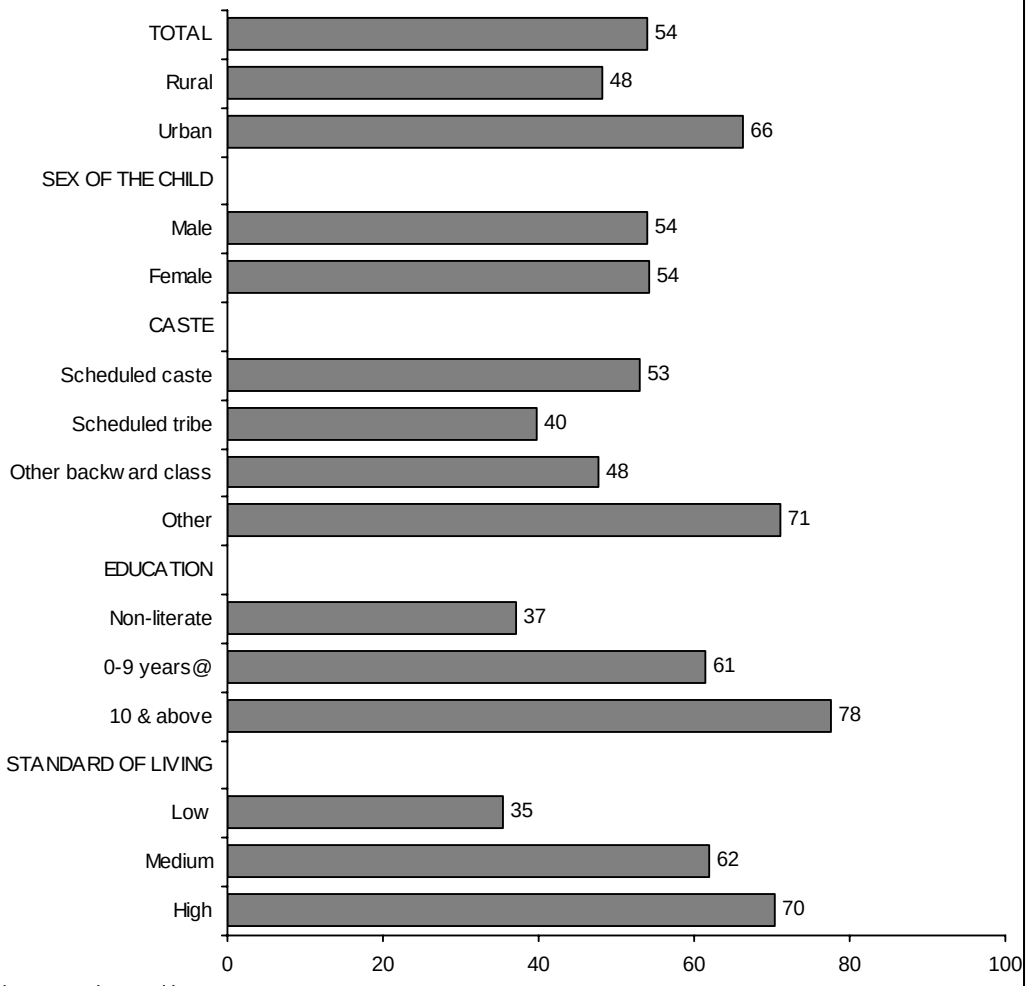
() Based on less than 50 unweighted cases.

Figure 5.2
Percentage of Children Age 12-23 Months, who have Received Specific Vaccinations



Differential by sex of the children is not observed, as an equal proportion (54 percent) of each sex are fully vaccinated. The relationship between vaccination coverage and birth order is consistently negative for almost all vaccinations. A large majority of first-order births occur to younger women who are more likely than older women to utilize child health care services. Further, there is a positive relationship between mother's education and children's vaccination coverage. Only 37 percent children of non-literate mothers are fully vaccinated compared to 61 percent of children with mothers' education below high school and 78 percent of mothers who have at least completed high school. Muslim children are much more likely than Hindu children to have received each of the recommended vaccinations. Children from Scheduled Tribe and Other backward class are less likely to have BCG, DPT, Polio, and measles vaccinations. The standard of living index of the household has a strong positive relationship with vaccination coverage. Seventy percent of children from households with a high standard of living are fully vaccinated, whereas only 35 percent of children from households with a low standard of living are fully vaccinated.

Figure 5.3
Percentage of Children Age 12-23 Months who have Received All Vaccination



@ Literate mothers with no years of schooling are also included.

Gujarat, DLHS-RCH, 2002-04

Table 5.5 shows the percentage of children in the age group 12-23 months and 24-35 months with a vaccination card, and the percentage who received various vaccinations during the first year of life by current age of children and place of residence.

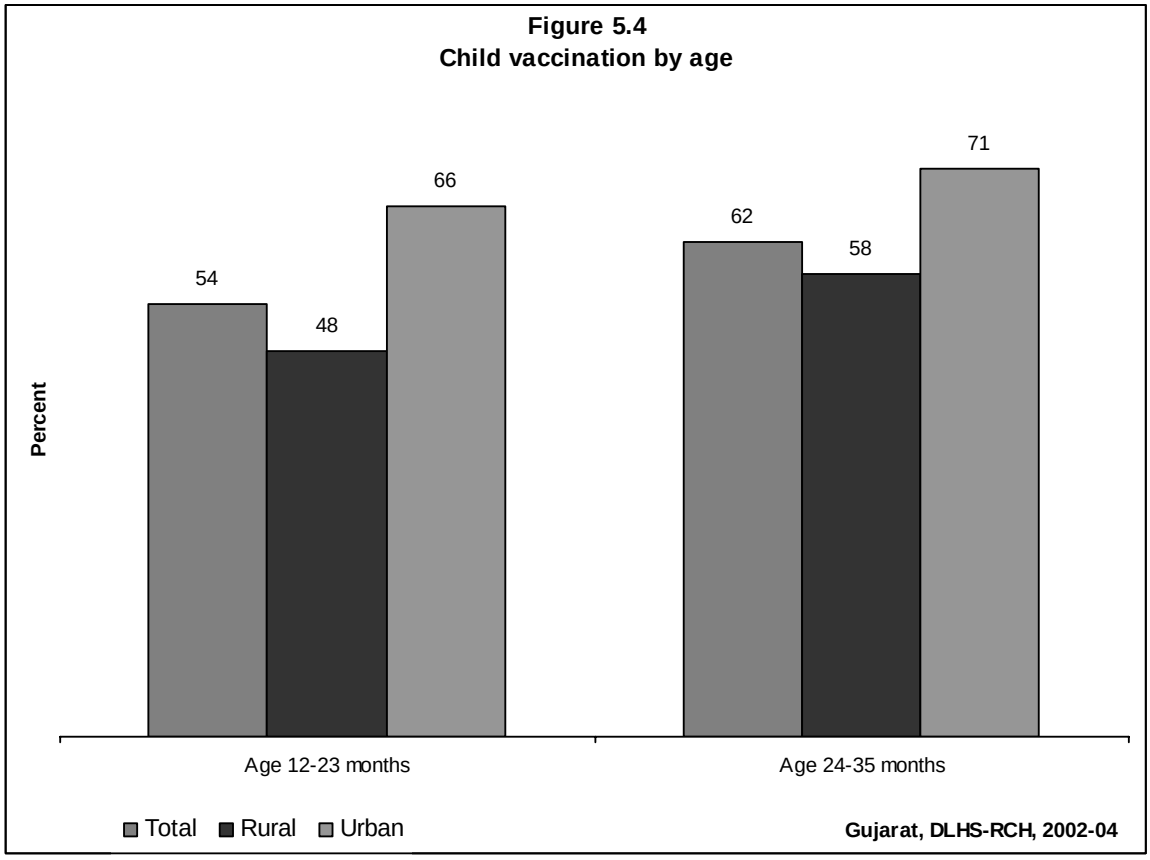
The proportion of children fully vaccinated by age 12 months increased slightly from 54 percent for children in the age group 12-23 months to 62 percent for children in the age group 24-35 months. A rural-urban differential for the coverage of full vaccination is also observed. Two-thirds children in the age group 12-23 months are fully vaccinated against 71 percent of children in the age group 24-35 months in urban areas, and this gap is much wider in rural areas (Figure 5.4). Only 48 percent of children in the age group 12-23 months have received all vaccinations in rural areas compared to 58 percent with children in the age group 24-35 months. Elder children aged 24-35 months are more likely to have received each type of vaccine.

Table 5.5 CHILDHOOD VACCINATION RECEIVED BY 12 MONTHS OF AGE

Percentage of children age 12-23 months and 24-35 months with a vaccination card that shown to the interviewer and percentage who received specific vaccinations by 12 months of age according to residence, Gujarat , 2002-04

	Total		Rural		Urban	
Vaccination status	12-23 months	24-35 months	12-23 months	24-35 months	12-23 months	24-35 months
Vaccination card shown to interviewer	35.4	20.8	30.6	18.0	45.1	27.6
Percentage vaccinated by 12 months of age						
Polio 0	65.3	65.3	60.5	59.7	75.1	78.9
BCG	85.4	87.9	83.2	86.3	89.9	91.8
DPT injection						
No DPT	17.7	16.1	21.9	19.0	9.0	9.2
1	7.2	4.5	6.3	5.7	9.1	1.7
2	8.4	6.9	9.2	7.1	6.8	6.4
3	66.1	71.8	61.7	67.7	74.9	81.8
Don't remember/missing	0.6	0.6	0.8	0.6	0.2	0.8
Polio doses						
No Polio	13.4	11.8	16.7	13.5	6.6	7.5
1	6.9	3.0	7.4	3.8	5.9	1.1
2	10.7	8.7	10.6	9.0	10.8	7.9
3	68.2	75.8	64.4	72.9	75.8	83.0
Don't remember/missing	0.9	0.8	0.9	0.8	0.9	0.5
Measles	65.2	73.8	59.5	69.5	76.8	84.2
Full [1] vaccination	54.0	61.6	48.1	57.8	66.2	70.9
No vaccination at all	7.3	6.1	9.1	7.0	3.8	4.0
Number of children	2,454	2,332	1,645	1,646	808	685

Note: Table includes only last and last but one living child born since 1.1.1999/1.1.2001
[1] BCG, three injection of DPT, three doses of Polio (excluding Polio 0) and measles



5.3 Source of Immunization

Table 5.6 gives the percent distribution of children under three years of age who have received any vaccination by the source of last vaccine, according to place of residence and availability of health facilities in the village. The community/primary health centre is the primary provider of childhood vaccinations in Gujarat.

Table 5.6 SOURCE OF CHILDHOOD VACCINATION

Percent distribution of children under age 3 who have received any vaccination by source of last vaccination, according to place of residence and availability of health facilities in the village, Gujarat, 2002-04

Source of vaccination	Total	Residence		Availability of health facility[1] in the village	
		Rural	Urban	No	Yes
Government health sector					
Government/municipal hospital	8.5	3.9	18.1	2.3	5.5
Community/primary health centre	21.0	17.1	29.2	9.8	24.0
Sub-centre	10.5	13.6	3.8	9.1	17.9
RCH/MCP camp	2.1	2.8	0.8	3.9	1.7
Private health sector					
Private hospital	10.4	5.1	21.7	4.9	5.3
Private doctor	3.1	1.5	6.5	1.6	1.3
ISM[2] health facility	1.2	0.7	2.2	0.4	1.0
Other	41.8	53.7	16.8	65.9	42.0
Do not remember	1.4	1.7	0.8	2.1	1.3
Total percent	100.0	100.0	100.0	100.0	100.0
Number of children	6,383	4,333	2,050	2,112	2,221

Note: Table includes last and last but one living children born in the three years preceding the survey
[1] Includes sub-centre, primary health centre, Community health centre or referral hospital, government hospital, and government dispensary within the village [2] Either government or private health facility of Indian System of Medicine

Majority of the children (42 percent) were immunized at the government health facilities and only 14 percent at private health facilities. Further, among the children immunized, 21 percent of them had received vaccination from the community health centre or from primary health centre, 11 percent from sub-centre, and nine percent from government/municipal hospital. Immunization of a vast majority of children (42 percent) children was also done from other sources including anganwadi. The percentage of children receiving vaccination from the private sector is considerably lower in rural areas (7 percent) than in urban areas (28 percent). Even in urban areas, however, 52 percent of children received their vaccination from the government health facility. Children from those villages where health facilities are available are slightly more likely to receive vaccination from the government health facility.

5.4 Vitamin A and IFA Supplements

Vitamin A deficiency is one of the most common nutritional deficiency disorders in the world, affecting more than 250 million children worldwide (Bolem et. al., 1997). The child survival programme also includes administration of five doses of Vitamin A for prevention of night blindness and distribution of IFA for iron supplement. In Round II, mothers of children born during the three years before the survey were asked whether their children had received a dose of Vitamin A and IFA tablets/syrup. Those who said that their children had received a dose of Vitamin A and IFA tablets/syrup were further asked how many doses were given.

Table 5.7 VITAMIN A AND IFA SUPPLEMENTATION FOR CHILDREN

Percentage of children age 12-35 months who have received at least one dose of Vitamin A and iron folic acid tablets/syrup, according to selected background characteristics, Gujarat, 2002-04

Background characteristic	Percentage who received at least one dose of vitamin A	Percentage who received iron folic acid tablets/syrup	Number of children
Age of the child			
12-23 months	28.6	20.2	2,454
24-35 months	35.0	17.9	2,332
Sex of the child			
Male	33.4	19.3	2,536
Female	29.9	18.9	2,250
Birth order			
1	34.9	23.1	1,493
2	32.7	20.6	1,468
3	33.4	13.2	789
4+	24.6	15.6	1,035
Residence			
Rural	31.7	16.4	3,292
Urban	31.8	25.1	1,494
Mother's education			
Non-literate	23.1	12.9	2,122
0-9 years@	35.1	19.9	1,624
10 years and above	44.2	30.4	1,038
Religion			
Hindu	31.0	19.2	4,321
Muslim	35.0	15.3	373
Christian	38.7	18.7	53
Jain	(73.3)	(30.0)	36
Caste/tribe #			
Scheduled caste	30.9	18.5	533
Scheduled tribe	23.8	14.1	704
Other backward class	31.8	19.1	1,890
Other	36.2	21.8	1,510
Standard of living index			
Low	24.5	13.9	1,832
Medium	31.4	16.7	1,675
High	42.5	29.7	1,279
Availability of health facility in the village[1]			
Yes	35.5	18.1	1,658
No	27.8	14.6	1,634
Total	31.7	19.1	4,786

Note: Table includes last and last but one living children born in the three years preceding the survey.
@ Literate mother with no years of schooling are also included here. # Total figure may not add to N due to do not know and missing cases. [1] Includes sub-centre, primary health centre, Community health centre or referral hospital, government hospital, and government dispensary within the village. Total includes 4 other religion cases who were not shown separately
() Based on less than 50 unweighted cases.

Table 5.7 shows the percentage of children in the age group 12-35 months who received at least one dose of Vitamin A and IFA tablets/syrup by selected background characteristics. In the state of Gujarat as a whole, 32 percent of the children received at least one dose of Vitamin A, and only 19 percent received IFA tablets/syrup. This indicates that a large number of children in Gujarat did not receive Vitamin A supplements and very few children received IFA tablets/syrup supplementation.

Children in the age group 24-35 months are more likely to receive at least one dose of Vitamin A and IFA tablets/syrup each than children in the age group 12-23 months. Male children are more likely to receive Vitamin A than female children but in case of IFA tablets/ syrup the proportion who received iron folic acid tablets/syrup of each sex is almost equal.

Children whose mother completed high school and above, children living in households with a high standard of living, and children living in those villages where health facilities are available are more likely to receive a dose of Vitamin A and IFA tablets/syrup. Children of birth order 4 or above are much less likely than children of birth order 1 to receive any dose of vitamin A and IFA tablets/syrup. Similarly, children from Schedule Tribes are less likely to receive at least one dose of Vitamin A and a dose of IFA tablets/syrup than other caste category.

Table 5.8 CHILDHOOD VACCINATION BY DISTRICT

Percentage of children who received specific vaccinations and Vitamin A supplementation by district , Gujarat, 2002-04

	Percentage vaccinated[1]							Percentage received at least one dose of Vitamin A[3]
District	Polio 0	BCG	DPT3	Polio3	Measles	Full[2]	None	
Ahmedabad	57.0	87.3	68.9	70.4	83.2	65.8	0.2	36.7
Amreli	56.8	82.2	76.4	82.9	66.8	62.6	10.0	19.2
Anand	77.8	96.8	80.2	78.8	78.1	63.8	2.3	30.9
Banaskantha	61.3	75.3	37.7	39.9	51.9	29.2	11.9	26.6
Bharuch	73.5	97.3	95.6	91.9	86.0	83.4	0.0	43.3
Bhavnagar	50.1	78.9	64.3	64.1	61.8	51.4	14.3	19.0
Dahod	37.3	61.1	25.2	34.8	24.5	19.2	26.6	7.9
Gandhinagar	66.7	91.1	57.2	59.7	68.0	48.1	2.6	48.2
Jamnagar	82.6	94.4	67.4	77.8	70.6	57.0	2.0	33.6
Junagarh	63.4	80.5	67.5	77.9	66.0	61.1	11.3	40.6
Kachchh	80.6	92.7	72.2	76.4	63.5	54.0	5.7	32.9
Kheda	59.5	87.8	74.3	74.3	70.0	62.1	10.0	39.3
Mahesana	78.0	95.1	78.1	76.3	74.2	54.3	1.4	41.7
Narmada	55.3	72.7	56.8	55.9	59.0	47.9	26.3	32.6
Navsari	89.8	98.1	95.0	93.7	93.0	91.7	0.9	54.8
Panchmahals	46.8	79.7	47.8	48.7	42.7	36.3	19.5	22.5
Patan	59.0	73.1	65.1	70.7	59.4	53.6	14.5	18.7
Porbandar	50.4	91.1	84.3	84.3	76.2	72.5	6.7	25.6
Rajkot	82.9	92.0	77.2	81.0	73.3	70.6	3.8	33.9
Sabarkantha	70.0	92.3	65.7	66.0	64.4	49.1	1.9	37.5
Surat	72.6	83.9	77.2	77.4	57.5	51.8	4.3	22.8
Surendranagar	49.9	79.3	58.5	62.6	65.9	50.5	10.0	32.4
The Dangs	64.5	87.6	54.9	45.6	60.4	31.9	5.3	26.8
Vadodara	78.6	91.0	77.2	71.7	77.8	69.6	5.9	43.0
Valsad	83.0	93.1	83.1	76.0	70.0	64.5	4.7	40.8
Gujarat	65.3	85.4	66.1	67.9	65.2	54.0	7.3	31.7

Note: Table includes only last and last but one living child born since 1.1.1999/1.1.2001

[1] Children age 12-23 months, [2] BCG, three injection of DPT, three doses of Polio (excluding Polio 0) and measles.

[3] Children age 12-35 months.

5.5 Immunization Coverage by District

The coverage of vaccination rates for all vaccines for children in the age group 12-23 months in each district is presented in Table 5.8. There are inter-district differentials in the coverage for different vaccinations, and for children receiving all vaccinations and those who did not receive any vaccination at all. The percentage of children who are fully vaccinated ranges from 19 percent in Dahod to as high as 92 percent in Navsari. In four districts, namely Dahod (19 percent), Banaskantha (29 percent), The Dangs (32 percent), and Panchmahals (36 percent) the coverage of full immunization is below 40 percent (see Map-5) and besides these four districts Narmada and Gandhinagar (48 percent each), Sabarkantha (49 percent), Surendranagar and Bhavnagar (51 percent each), Surat (52 percent) and Patan (54 percent) the coverage rate of full vaccination in the districts is below the state average of 54 percent.

More than one-fourth of the children in Dahod and Narmada districts were not vaccinated at all, and in ten districts, the percentage of children not vaccinated is higher than the state average. The coverage of polio drops at the time of birth varies from the lowest in Dahod (37 percent) to the highest in Navsari (90 percent).

District wise variations in the percentage of children who received at least one dose of Vitamin A are also shown in Table 5.8. The percentage of children in the age group 12-35 months who received at least one dose of Vitamin 'A' supplements ranges from eight percent in Dahod to 55 percent in Navsari. Patan, Bhavnagar, Amreli, Panchmahals, Surat, Porbandar, Banaskantha, The Dangs and Anand districts stand out as having below the state average to receive at least one dose of Vitamin A.

5.6 Child Morbidity and Treatment

This section discusses the awareness, prevalence and treatment of diarrhoea and acute respiratory infection (ARI). Mothers of surviving children born during the three years preceding the survey were asked if their children suffered from cough and cold or diarrhoea during the two weeks preceding the survey, and if so, the type of treatment that had been given. Accuracy of all these measures is affected by the reliability of the mother's recall of when the diseases occurred.

5.6.1 Awareness of Diarrhoea

Diarrhoea is a major killer disease of children under five years of age. Deaths from acute diarrhoea are mostly due to dehydration resulting from loss of water and electrolytes. An attempt was made to collect data on awareness of diarrhoea management and the practices followed during the episode of diarrhoea. This has been presented in Table 5.9.

In Gujarat, 93 percent of the mothers with births three years preceding the survey were aware of what to do when a child had diarrhoea, as compared to 81 percent in Round I, and 28 percent were aware of ORS, which was 18 percent in Round I. Fourteen percent of the women were aware of salt and sugar solution. Some of the women also reported that they would continue normal food (4 percent), continue breastfeeding (3 percent), and give plenty of fluids (4 percent), and about seven percent of women did not know what to give a child who had diarrhoea. As expected, knowledge of ORS is higher among urban women (32 percent) than rural women (26 percent), and among high school and above educated women (41 percent) as compared to non-literate women (19 percent). Women belonging to Schedule Caste-Tribes, and other backward class are less likely to know about ORS than women belonging to other caste groups. Thirty-five percent of women with children having a high standard of living know about ORS and it declines to 28 percent for women with a medium standard of living and 23 percent with a low standard of living. Knowledge of ORS is more among middle age groups and among older women than among younger women. Women from villages with availability of health facilities are more aware of ORS than women from other villages.

Table 5.9 AWARENESS OF DIARRHOEA

Percentage of women who are aware of diarrhoea management, type of practice followed if child gets diarrhoea, and percentage of women whose child suffered[1] from diarrhoea by selected background characteristics, Gujarat, 2002-04

Background characteristic	Knowledge of diarrhoea manage-ment	Type of practices to be followed if child gets diarrhoea*						Number of women
		Give ORS	Salt and sugar solution	Continue normal food	Continue breast-feeding	Give plenty of fluids	Do not know	
Age								
15-24	92.1	24.9	11.1	3.6	3.6	2.7	7.9	3,419
25-34	94.8	30.7	16.4	4.1	3.3	4.1	5.2	3,581
35-44	91.9	28.5	12.3	4.5	3.7	7.6	8.1	394
Residence								
Rural	92.4	25.9	10.1	3.0	2.7	2.6	7.6	5,076
Urban	95.5	32.2	21.8	5.9	5.0	5.9	4.5	2,317
Mother's education								
Non-literate	91.7	18.9	7.2	2.5	2.1	2.5	8.3	3,189
0-9@ years	94.6	30.3	14.2	3.2	3.2	2.8	5.4	2,516
10 and above	94.9	41.4	25.3	7.6	6.4	7.0	5.2	1,686
Religion								
Hindu	93.4	27.9	13.4	3.9	3.4	3.5	6.6	6,726
Muslim	94.1	24.5	15.4	3.0	3.5	4.3	5.7	538
Christian	80.1	26.2	12.2	0.9	1.1	3.7	19.9	65
Jain	98.0	55.4	37.9	18.8	15.7	17.0	2.0	54
Caste/tribe#								
Scheduled caste	92.3	24.6	13.1	2.5	1.3	4.3	7.8	857
Scheduled tribe	92.9	25.8	8.7	2.1	3.1	1.9	7.1	1,081
Other backward class	92.9	26.7	12.3	4.1	3.3	3.0	7.1	2,878
Other	94.8	32.5	18.7	5.1	4.8	5.0	5.2	2,377
Standard of living index								
Low	92.1	22.6	7.1	2.2	2.3	1.7	7.9	2,802
Medium	93.1	28.1	14.7	3.7	3.1	3.4	6.9	2,526
High	95.6	34.8	21.6	6.6	5.5	6.4	4.4	2,065
Availability of health facility[2] in the village								
Yes	92.8	30.2	11.3	3.7	3.0	3.1	7.3	2,537
No	92.1	21.7	8.9	2.3	2.5	2.1	7.9	2,539
Total	93.4	27.9	13.7	3.9	3.4	3.6	6.6	7,393

Note: Table based on women with living children born since 01.01.1999 for phase - I /01.01.2001 for phase - II.
[1] Last two weeks prior to survey.
@ Literate mother with no years of schooling are included. # Total figure may not add to N due to do not know and missing cases.
[2] Includes sub-centre, primary health centre, Community health centre or referral hospital, government hospital, and government dispensary within the village. Total includes 10 other religion and 2 women with missing information on education who are not shown separately

5.6.2 Treatment of Diarrhoea

During the two weeks before the survey, 13 percent of the women reported that their children suffered from diarrhoea (Table 5.10). Women, whose children had diarrhoea, were further asked about treatment with ORS, any other medical treatment and source of treatment. About 24 percent of the women mentioned that they gave ORS therapy, and 68 percent of the women said that their child had been treated at health facility. Use of ORS for the treatment of childhood diarrhoea in Gujarat is relatively high among urban women than among rural women.

It was observed that a relatively higher proportion of women from those villages where health facilities are available within the village, sought treatment (71 percent) of childhood diarrhoea than other villages (59 percent).

Among those mothers whose children suffered from diarrhoea during the last two weeks before the survey and those women who consulted or obtained advice, about 63 percent of women visited private hospitals/clinics and 17 percent of women treated their children through the Government health facility.

Table 5.10 TREATMENT OF DIARRHOEA

Percentage of women who sought treatment whose child suffered from diarrhoea and by source of treatment, according to place of residence and availability of health facility in the village, Gujarat, 2002-04

Sought treatment/ source of treatment	Total	Residence		Availability of health fcaility[2] in the village	
		Rural	Urban	Yes	No
Percentage of women whose child suffered[1] from diarrhoea	13.2	15.3	8.5	15.6	15.0
Number of women	7,393	5,076	2,317	2,537	2,539
Percentage of women whose child suffered[1] from diarrhoea treated with ORS	24.4	22.6	31.5	22.1	23.1
Percentage of women whose child suffered[1] from diarrhoea sought treatment	67.6	65.2	77.2	71.3	58.8
Number of women	975	777	197	396	381
Source of treatment					
Government health facility					
Hospital/dispensary	3.8	3.2	5.8	3.9	2.5
UHC/UHP/UFWC	0.3	0.4	0.1	0.7	0.0
CHC/ Rural hospital	2.8	2.8	2.8	2.7	3.0
Primary health centre	6.4	8.0	0.9	10.0	5.6
Sub centre	3.9	4.9	0.6	7.2	2.0
Private health facility					
NGO/Trust hospital/clinic	1.8	2.0	1.1	2.7	1.0
Private hospital clinic	63.2	58.1	80.2	54.4	62.8
ISM[3] facility	4.9	4.1	7.5	3.5	4.8
Home remedy	4.6	4.3	5.6	3.8	5.0
Other	13.7	17.1	2.4	17.5	16.6
Percent distribution of women who seek treatment by					
Doctor	79.5	75.6	92.7	73.5	78.2
ANM/Nurse/LHV	10.1	12.3	2.9	13.6	10.6
Dai	0.3	0.4	0.0	0.6	0.1
Relative/friends	3.3	3.4	3.2	2.6	4.4
Chemist/medical shop	5.5	6.8	1.1	9.0	4.0
ISM Practitioner	1.3	1.6	0.2	0.8	2.7
Total percent	100.0	100.0	100.0	100.0	100.0
Number of women	659	507	152	283	224

Table based on women with living children born since 01.01.1999 for phase - I /01.01.2001 for phase - II.
[1] Last two weeks prior to survey. [2] Includes sub-centre, primary health centre, Community health centre or referral hospital, government hospital, and government dispensary within the village. [3] Either government or private health facility of Indian System of Medicine

5.6.3 Awareness of Pneumonia

Another major killer disease among infants and children is Acute Respiratory Infections (ARI) including pneumonia. Early diagnosis and treatment with antibiotics can prevent a large proportion of ARI/pneumonia deaths. An attempt was made to understand the awareness level of pneumonia, and the proportion of children who had suffered from

pneumonia during the last two weeks before the survey and their health seeking behaviour. This is presented in Table 5.11. It was found that a low proportion (23 percent) of women with births three years preceding the survey in Gujarat were aware of danger signs of pneumonia. The figure was slightly up from 16 percent in Round I. A relatively high proportion of women in urban areas (28 percent) were aware of the danger signs of pneumonia as compared to women from rural areas (21 percent). Knowledge of danger signs of pneumonia is higher among the women of middle age group (26 percent), women from other castes category (30 percent), highly educated women (36 percent), women living with high standard of living (32 percent), and women living in those villages with health facilities (26 percent).

Women, who were aware of the danger signs of pneumonia, were further asked about different types of signs of pneumonia. Most of the women mentioned about difficulty in breathing (52 percent), pain in chest and productive cough (44 percent), rapid breathing (32 percent), chest in drawing (29 percent), excessive drowsy and difficulty in keeping awake (20 percent), wheezing/whistling and not able to drink or take a feed (14 percent each), and condition get worse than before (13 percent).

5.6.4 Treatment of Pneumonia

A little more than one-fourth (26 percent) of the women reported that their child had suffered from pneumonia during two weeks before the survey, the corresponding figures were 28 percent in rural areas and 21 percent in urban areas (Table 5.12). The incidence of pneumonia varies little with availability of health facilities in the villages.

Table 5.12 also shows that the percentage of women whose children suffered from ARI symptoms in the last two weeks before the survey who sought advice/treatment and taken to a health facility or provider. About two-thirds of women received some advice or treatment whose children were ill with ARI. This percentage is relatively low in rural areas (63 percent) than in urban areas (72 percent) and village without health facilities (55 percent) than village with health facility (69 percent).

Among those who got treatment/advice for children ill with ARI, 74 percent of women visited private hospital/clinic, and only 12 percent went to government health facility, and three percent of them obtained treatment through Indian System of Medicine.

Table 5.11 AWARENESS OF PNEUMONIA

Percentage of women who are aware of danger signs of pneumonia by signs by selected background characteristics and availability of health facility in the village, Gujarat , 2002-04

Background characteristic	Percentage of women aware of danger signs of pneumonia	Number of women	Danger signs of ARI								Number of women
			Difficulty in breathing	Chest in-drawing	Not able to drink or take a feeding	Excessive drowsy and difficulty in keeping awake	Pain in chest and productive cough	Conditions get worse than before	Wheezing/ whistling	Rapid breathing	
Age											
15- 24	20.4	3,419	47.9	27.1	13.9	20.5	43.5	10.9	17.0	35.3	699
25-34	25.9	3,581	54.0	30.8	13.0	19.1	43.7	13.3	10.2	27.7	926
35-44	20.6	394	56.5	24.8	23.0	25.6	44.7	15.8	20.2	45.3	81
Residence											
Rural	20.9	5,076	45.6	29.0	14.1	17.2	38.1	13.4	13.7	34.8	1,059
Urban	27.9	2,317	61.5	29.0	13.4	24.6	52.7	11.0	13.1	26.5	647
Mother's education											
Non-literate	15.5	3,189	39.4	33.8	19.1	16.7	32.1	13.1	8.4	37.9	495
0-9@ years	24.2	2,516	49.1	30.8	11.0	23.4	38.9	11.2	11.5	33.1	609
10 and above	35.7	1,686	64.3	23.2	12.4	19.4	57.9	13.2	19.6	25.2	601
Religion											
Hindu	22.8	6,726	51.6	28.9	14.2	20.9	42.4	12.9	13.7	32.0	1,531
Muslim	26.5	538	52.5	30.7	11.9	12.0	54.6	9.6	9.6	24.8	143
Christian	14.3	65	*	*	*	*	*	*	*	*	9
Jain	41.5	54	*	*	*	*	*	*	*	*	22
Caste/tribe#											
Scheduled caste	17.9	857	49.3	28.6	22.2	15.8	36.8	14.8	12.7	40.6	153
Scheduled tribe	14.4	1,081	42.5	25.5	10.3	14.4	35.0	14.5	7.0	29.6	155
Other backward class	22.0	2,878	48.5	33.0	14.6	19.8	41.3	12.6	11.9	33.7	632
Other	30.4	2,377	57.3	26.6	12.3	22.3	49.6	11.5	17.0	28.6	723
Standard of living index											
Low	15.4	2,802	37.8	30.4	16.4	17.8	34.9	16.1	9.6	35.4	433
Medium	24.0	2,526	49.8	31.1	14.3	22.9	37.6	13.0	10.3	32.6	606
High	32.3	2,065	62.3	26.2	11.7	18.8	54.7	9.6	18.9	28.4	667
Availability of health facility [2] in the village											
Yes	25.5	2,537	47.7	30.9	14.8	20.4	40.2	14.2	15.3	32.1	646
No	16.3	2,539	42.4	26.0	12.9	12.2	34.8	12.1	11.2	39.1	413
Total	23.1	7,393	51.6	29.0	13.8	20.0	43.6	12.5	13.5	31.7	1,706

Note: Table based on women with living children born since 01.01.1999 for phase - I /01.01.2001 for phase - II. [1] Last two weeks prior to survey. Total includes 10 cases of other religion were not shown separately. Total includes 2 women missing information on education who are not shown separately.

@ Literate mother with no years of schooling are included. # Total figure may not add to N due to do not know and missing cases.

[2] Includes sub-centre, primary health centre, Community health centre or referral hospital, government hospital, and government dispensary within the village

* Percentage not shown based on few cases.

Table 5.12 TREATMENT OF PNEUMONIA

Percentage of women who sought treatment whose child suffered[1] from cough and cold and source of treatment, according to place of residence and availability of health facility in the village, Gujarat, 2002-04

Sought treatment/ source of treatment	Total	Residence		Availability of health fcaility[2] in the village	
		Rural	Urban	Yes	No
Percentage of women whose child suffered from cough, cold and difficulty in breathing	25.7	27.9	20.7	30.3	25.5
Number of women	7,393	5,076	2,317	2,537	2,539
Percentage of women sought treatment whose child suffered from cough and cold	64.9	62.6	71.7	68.6	55.4
Number of women	1,897	1,417	480	769	648
Source of treatment					
Government health facility					
Hospital/dispensary	3.0	2.4	4.4	3.1	1.4
UHC/UHP/UFWC	0.1	0.0	0.2	0.0	0.0
CHC/ Rural hospital	1.9	2.1	1.4	2.4	1.7
Primary health centre	5.3	7.0	1.0	6.8	7.2
Sub centre	1.6	2.0	0.7	2.4	1.4
Private health facility					
NGO/Trust hospital/clinic	1.4	1.1	1.9	1.1	1.1
Private hospital clinic	73.7	70.9	80.7	71.9	69.4
ISM[3] facility	2.8	2.8	2.6	1.5	4.7
Home remedy	4.5	4.8	3.9	4.6	5.1
Other	7.1	8.2	4.1	6.9	10.1
Percent distribution of women who seek treatment by					
Doctor	87.9	86.3	92.1	87.9	84.1
ANM/Nurse/LHV	3.9	5.0	1.1	4.7	5.5
Dai (Trained/ untrained)	0.1	0.1	0.1	0.1	0.0
Relative/friends	1.0	0.8	1.7	1.1	0.3
Chemist/medical shop	2.5	2.7	2.0	2.3	3.2
ISM practitioner	0.4	0.2	0.8	0.1	0.3
Other	4.2	5.0	2.2	3.8	6.6
Total percent	100.0	100.0	100.0	100.0	100.0
Number of women	1,231	886	344	528	359

Note: Table based on women with living children born since 01.01.1999 for phase - I /01.01.2001 for phase – II.
[1] Last two weeks prior to survey.
[2] Includes sub-centre, primary health centre, Community health centre or referral hospital, government hospital, and government dispensary within the village
[3] Either government or private health facility of Indian System of Medicine

5.6.5 Awareness of Diarrhoea, ORS and Pneumonia and Incidence of Diarrhoea and Pneumonia by District

Table 5.13 presents the knowledge of diarrhoea management, knowledge of ORS, and incidence of diarrhoea by district. Although knowledge of diarrhoea management is high in almost all districts but knowledge about ORS is low. Knowledge of ORS is lowest in Bharuch (12 percent) and Patan districts (14 percent). Women in Navsari district have highest level (44 percent) of knowledge of ORS. The incidence of diarrhoea is 13 percent in the state as a whole and it varies from four percent in Surat to 26 percent in The Dangs.

Table 5.13 also shows differentials in the awareness of danger signs of pneumonia and incidence of pneumonia. In comparison with awareness about diarrhoea management, the awareness of danger signs of pneumonia is quite low. It is the lowest in The Dangs (4 percent) and highest in Bharuch (69 percent). Incidence of ARI symptoms is comparatively high in nearly all the districts in Gujarat. It is highest in Valsad district (46 percent) and lowest in Ahmedabad (13 percent).

Table 5.13 KNOWLEDGE OF DIARRHOEA MANAGEMENT AND PNEUMONIA BY DISTRICT

Percentage of women by awareness of diarrhoea management, ORS, danger signs of pneumonia and whose child had suffered from diarrhoea and pneumonia during last two weeks prior to survey by district, Gujarat, 2002-04

District	Percentage of women aware of		Percentage of women whose child suffered[1] from diarrhoea	Percentage of women aware of danger signs of pneumonia	Percentage of women whose child suffered[1] from pneumonia
	Diarrhoea Management	ORS			
Ahmedabad	98.8	35.6	4.8	25.1	13.1
Amreli	100.0	26.1	14.9	16.8	24.8
Anand	96.8	26.6	21.3	42.1	41.9
Banaskantha	91.0	26.2	16.0	24.6	21.2
Bharuch	97.3	11.5	23.1	69.3	24.9
Bhavnagar	99.0	22.2	12.7	32.7	28.2
Dahod	99.1	22.9	18.1	14.5	40.3
Gandhinagar	80.3	39.4	12.1	30.9	31.5
Jamnagar	87.6	32.0	9.6	15.6	20.9
Junagarh	94.7	31.1	9.4	6.9	19.3
Kachchh	91.0	29.9	15.4	6.0	19.9
Kheda	98.8	23.6	15.6	33.4	31.5
Mahesana	89.2	25.1	12.6	13.3	27.1
Narmada	97.4	21.7	19.6	30.8	42.3
Navsari	95.0	44.2	21.8	15.4	43.0
Panchmahals	89.9	23.6	18.9	21.1	29.7
Patan	97.3	14.2	23.2	60.0	38.0
Porbandar	99.2	27.9	16.1	21.1	37.6
Rajkot	95.8	38.9	6.3	10.9	20.7
Sabar Kantha	88.4	32.2	10.5	15.1	21.9
Surat	90.1	25.7	4.3	22.3	21.0
Surendranagar	98.3	26.2	15.5	27.8	23.1
The Dangs	73.7	33.0	26.4	3.5	22.1
Vadodara	92.7	24.7	18.3	36.6	30.3
Valsad	88.2	28.4	20.4	16.9	45.5
Gujarat	93.4	27.9	13.2	23.1	25.7

Note: Table based on women with last and last but one living children born since 01.01.1999 /01.01.2001. [1] Last two weeks prior to survey.

Under the RCH programme, the government health facilities are strengthened to provide treatment of ARI. However, the percentage of women who visited a government health facility for treatment of their children, sick with ARI symptoms, was very low.

CHAPTER VI

FAMILY PLANNING

The Reproductive and Child Health Programme has been implemented with a new philosophy and direction to meet the health care needs of women and children. It envisages the provision of couples to control their fertility and have sexual relations free from the fear of pregnancy. Provision of free contraceptive services to all the needy couples is one of the components of the RCH programme. In DLHS-RCH, a separate section on family planning was canvassed to all the eligible women to assess the knowledge and practice of various family planning methods. The information on currently adopted contraceptive method, source of supply of the method and health problems related to contraceptive use were collected from current users. The current non-users were asked about the past status of contraceptive use, reason for not using contraceptives currently and future intention to adopt a family planning method.

An attempt was made to understand why male methods of family planning especially that of vasectomy was not in common use. The husbands of sampled eligible women were asked about the contraceptive method they would recommend to a couple who was not desirous of any additional children. They were also asked about the reasons for not preferring male methods and their knowledge about the no-scalpel vasectomy. This chapter presents the results of data on contraceptive practices collected from both the sampled women and their husbands.

6.1 Knowledge of Family Planning Methods

Lack of knowledge of various contraceptive choices can be a major barrier to promotion and use of contraceptives among couples. In DLHS-RCH, information on knowledge of contraceptives was obtained by asking a question, “Which are the family planning methods you know?” to each sampled eligible women. The knowledge of no-scalpel vasectomy was also asked to the husbands of eligible women. If the respondent did not recognise the name of the family planning method, he was given a brief description on how the particular method was to be used. The DLHS-RCH assesses the knowledge of female sterilisation, male sterilisation including NSV, IUD, Pills, condom and traditional methods along similar lines.

The extent of knowledge of contraceptive methods among currently married women for specific methods and selected background characteristics are shown in Table 6.1 and Figure 6.1. Knowledge of any method including any modern contraceptive method is almost universal in the state of Gujarat. The knowledge of any method and any modern method do not vary much by residence. The knowledge of modern spacing method among currently married women is around 88 percent, and 96 percent among the women with an urban residence. There are large differentials in knowledge of all modern methods with respect to the aforesaid background characteristics. For instance, 47 percent of women from rural areas are aware about all modern methods compared to 73 percent of their urban counterparts.

Female sterilisation is the most widely known method of all contraceptive methods in Gujarat followed by Pills. Overall, 99 percent of currently married women are aware of female sterilization and 75 percent knew about male sterilization. There is no rural - urban

difference in knowledge of female sterilization but it is not the case of male sterilization. A sizable proportion of urban women (84 percent) know about male sterilization as compared to 70 percent of rural women. There are differentials in spacing methods such as IUD/Loop, pill and condom with respect to the background characteristics. The best-known spacing methods are pills (83 percent) and IUD/Loop (81 percent) respectively. Only 69 percent of women know about the condoms. There is a large differential in knowledge of spacing methods by residence only 61 percent of the rural women know condom compared to 84 percent of urban women. The modern spacing methods, Pill and IUD are known by 77 and 75 percent of rural women respectively while the corresponding figures in urban areas are 94 and 93 percent respectively of eligible women respondents. The knowledge of these spacing methods remains low as compared to knowledge of sterilization.

Table 6.1 KNOWLEDGE OF CONTRACEPTIVE METHODS

Percentage of currently married women age 15-44 years who know any contraceptive method by specific method and selected background characteristics, Gujarat, 2002-04.

Contraceptive methods	Total	Residence		Availability of health facility in the village[3]	
		Rural	Urban	No	Yes
Any method	99.1	98.9	99.5	99.0	98.9
Any modern method	99.1	98.9	99.4	98.8	98.9
Any modern spacing method[1]	87.8	83.3	96.3	79.1	87.1
All modern methods[2]	55.8	46.6	73.0	41.2	51.5
Female sterilization	98.6	98.5	98.9	98.2	98.7
Tubectomy	93.3	93.0	93.8	91.4	94.6
Laparoscopy	86.7	85.9	88.3	82.9	88.6
Male sterilization	75.1	70.4	83.9	67.9	72.7
Vasectomy	52.5	48.1	60.7	44.3	51.6
No-scalpel vasectomy	26.1	19.7	38.2	17.2	22.0
IUD/Loop	81.1	75.1	92.6	70.7	79.0
Pills	82.9	77.1	93.8	71.8	81.9
Daily	68.3	59.5	85.0	51.2	67.0
Weekly	31.6	23.6	46.6	20.9	26.0
Condom/Nirodh	68.6	60.6	83.8	54.0	66.6
Sponge (today)	10.3	6.2	18.0	6.1	6.4
Injectables	23.5	19.4	31.3	16.4	22.2
Norplant	2.4	1.7	3.7	1.6	1.8
Contraceptive herbs	8.6	7.3	10.9	6.6	8.0
Any traditional method	59.5	56.2	65.8	53.3	58.8
Any other Indian system of medicinal contraceptives	2.2	1.6	3.2	1.4	1.9
Number of women	20,796	13,591	7,205	6,464	7,126

Note: [1] Include IUD, pills and condom. [2] Include Female sterilization, Male sterilization, IUD, pills and condom
[3] Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village.

In Gujarat, about 60 percent of the women are aware of a traditional method and two percent are also aware of other contraceptives of the Indian System of Medicine. It is also observed that women from villages with a health facility are slightly more aware about modern spacing methods.

6.1.1 Knowledge of Family Planning Methods by Districts

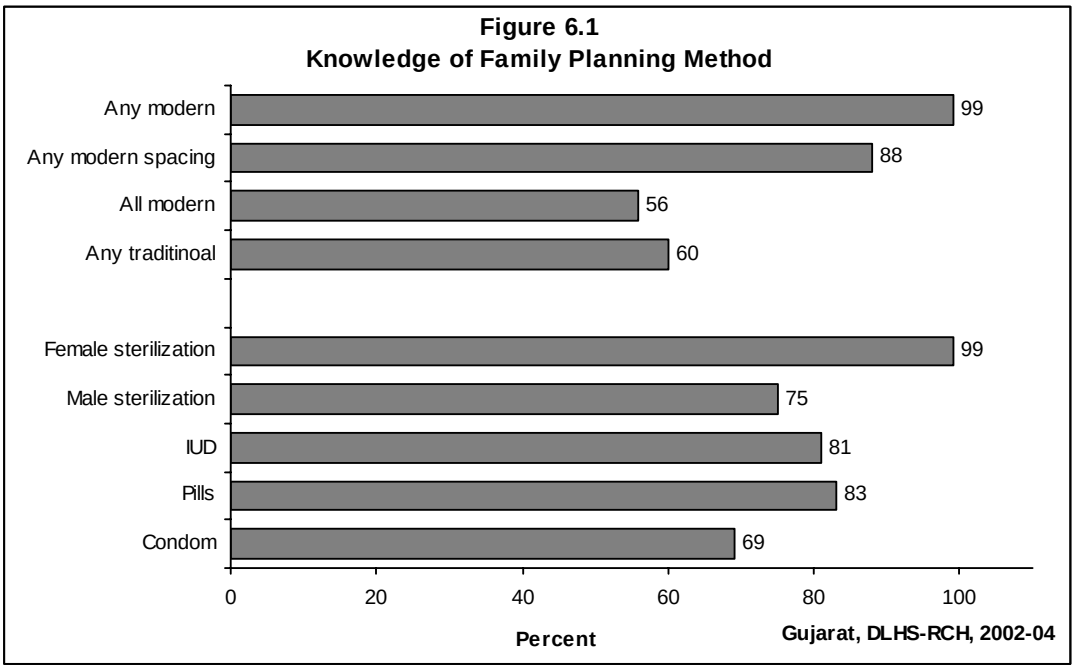
Table 6.2 shows the knowledge of contraceptive methods by districts in Gujarat. In all districts more than 90 percent of women know about contraceptives including modern methods.

Table 6.2 KNOWLEDGE OF CONTRACEPTIVE METHODS BY DISTRICT

Percentage of currently married women age 15-44 years who know any contraceptive method by specific method and district, Gujarat, 2002-04

Districts	Any method	Any modern[1] method	Any modern spacing[2] method	All modern[3] methods	Male steriliz-ation	Female steriliz-ation	IUD	Pill	Condom/ Nirodh	Any traditio-nal method
Ahmedabad	100.0	100.0	99.1	81.9	93.8	100.0	97.7	97.5	85.9	58.8
Amreli	100.0	100.0	92.6	59.1	74.0	100.0	88.8	83.2	79.3	76.1
Anand	100.0	99.9	91.1	50.8	67.7	99.5	80.2	87.6	71.6	59.8
Banaskantha	96.4	96.3	79.2	35.7	71.8	96.1	71.4	72.5	42.8	34.4
Bharuch	99.7	99.7	94.4	59.7	72.0	99.5	89.9	91.9	77.4	68.8
Bhavnagar	99.9	99.9	94.3	56.8	71.3	99.9	90.9	85.3	76.8	67.3
Dahod	98.7	98.5	66.1	36.0	55.3	98.3	54.8	61.0	46.3	66.9
Gandhinagar	99.8	99.8	96.9	66.7	94.1	99.8	89.5	94.8	73.3	53.4
Jamnagar	98.9	98.9	89.4	51.5	62.8	97.6	80.2	86.8	67.1	47.1
Junagarh	100.0	100.0	92.0	68.8	82.3	100.0	89.4	87.6	77.7	70.6
Kachchh	92.2	91.9	72.5	35.1	54.9	88.1	62.4	65.8	49.4	30.8
Kheda	99.9	99.9	90.3	63.7	83.4	99.8	82.9	86.6	77.0	80.3
Mahesana	98.7	98.7	90.2	56.3	77.1	97.4	83.3	85.9	67.5	52.2
Narmada	100.0	100.0	77.9	48.5	77.6	99.9	69.9	71.4	57.6	80.7
Navsari	99.9	99.9	87.6	56.3	84.9	99.9	79.4	81.3	65.3	69.8
Panchmahals	99.2	99.0	78.3	41.1	67.0	98.9	68.1	73.9	55.4	81.2
Patan	99.9	99.9	88.9	46.0	60.8	99.6	83.1	82.0	65.3	57.8
Porbandar	99.9	99.9	94.7	53.3	65.9	99.9	92.1	85.0	77.9	53.7
Rajkot	99.8	99.5	95.1	69.9	82.4	98.9	92.4	90.4	80.1	58.9
Sabarkantha	99.7	99.7	88.8	58.7	78.9	99.5	81.9	85.0	70.1	60.2
Surat	99.1	99.1	89.3	58.4	76.3	98.9	82.2	83.7	75.1	64.5
Surendranagar	99.9	99.9	95.7	67.6	87.3	99.9	92.8	90.4	77.5	55.6
The Dangs	90.6	90.0	54.7	19.2	69.5	86.6	42.6	47.7	24.0	26.1
Vadodara	99.5	99.5	89.1	58.3	71.4	98.0	81.0	85.8	75.0	62.5
Valsad	98.9	98.3	70.8	35.5	65.1	97.4	56.9	64.0	48.5	38.5
Gujarat	99.1	99.1	87.8	55.8	75.1	98.6	81.1	82.9	68.6	59.5

Note: [1] Includes female sterilization, male sterilization, IUD, pills and condom [2] Includes IUD pills and condom
[3] Includes female sterilization & male sterilization & IUD & pills and condom



A large differential is noticed in the knowledge of all modern methods by districts. The awareness ranges from 19 percent women in The Dangs to 82 percent in Ahmedabad district. There is not much variation in the knowledge of female sterilization, it is lowest in The Dangs district (87 percent) and 100 percent in Ahmedabad, Amreli, and Junagarh district. Knowledge about IUD/Loop and condom is least at 43 and 48 percent respectively in The Dangs districts, whereas the same is around 98 percent for each method in Ahmedabad district. As for any traditional method, awareness is more than 80 percent in Panchmahals, Narmada and Kheda districts and the least in The Dangs district (26 percent).

6.1.2 Knowledge of No-Scalpel Vasectomy (NSV)

Knowledge of no-scalpel vasectomy among the husbands of currently married women in the state of Gujarat is shown in Table 6.3. Less than half (45 percent) of the husbands know about the no-scalpel vasectomy. In rural areas, two-fifth of husbands know about NSV compared to 56 percent in urban areas. For women residing in villages with a health facility, 41 percent of their husbands are aware of No-scalpel vasectomy and it is nearly the same, that is, 39 percent for those living in villages without health facilities. Among the husbands who know about NSV, 54 percent reported that NSV is simpler than a conventional family planning method, half of them feel that it does not lead to any complication and 47 percent reported that NSV does not affect a man's sexual performance.

Table 6.3 KNOWLEDGE OF NO-SCALPEL VASECTOMY (NSV)

Husbands knowledge of NSV by residence and availability of health facility in the village, Gujarat, 2002-04

Knowledge of NSV	Total	Residence		Availability of health facility in the village[1]	
		Rural	Urban	No	Yes
Percentage of husband who had knowledge about NSV	45.3	40.2	55.6	38.9	41.3
Number of husbands	15,311	10,282	5,030	4,949	5,333
Who know that NSV is simpler than conventional vasectomy	53.5	53.6	53.2	53.3	53.9
Who feel that NSV does not lead to any complication	49.7	50.5	48.4	51.1	50.0
Who feel that NSV does not affect man's sexual performance	47.2	48.0	46.2	47.5	48.3
Number of husbands	6,930	4,132	2,798	1,927	2,205

Note: [1] Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village.

6.1.3 Knowledge of No-Scalpel Vasectomy (NSV) by Districts

Awareness of no-scalpel vasectomy by districts in Gujarat is provided in Table 6.4. In 11 districts, namely; Sabarkantha, Navsari, Ahmedabad, Amreli, Surat, Valsad, Patan, Mahesana, Gandhinagar, Porbandar and Anand more than half of the husbands know about NSV. Only 28 percent of the husbands in Jamnagar district know about the no-scalpel vasectomy. Nearly 54 percent of the husbands varying from 36 percent in Rajkot to 78 percent in Amreli said that NSV is simpler than conventional method. That NSV does not lead to any complications was reported by 72 percent of the husbands in Jamnagar district,

followed by 68 percent in Kachchh and 62 percent in Amreli, and only 29 percent in Valsad. The husbands who reported that the NSV does not affect a man's sexual performance were highest 63 percent in Amreli district and the lowest in Valsad (31 percent).

Table 6.4 NO-SCALPEL VASECTOMY BY DISTRICT

Percentage of husband of eligible women by knowledge of NSV by district, Gujarat, 2002-04

Districts	Knowledge about NSV	NSV is simpler than conventional method	Who reported NSV does not lead to any complication	Who reported NSV does not affect man's sexual performance
Ahmedabad	52.9	52.4	40.7	35.9
Amreli	54.2	77.5	61.9	62.5
Anand	73.5	53.8	53.5	51.5
Banaskantha	29.4	50.8	53.5	53.7
Bharuch	37.5	55.9	53.1	40.1
Bhavnagar	47.8	74.4	52.9	55.1
Dahod	32.3	68.0	53.7	52.9
Gandhinagar	58.7	70.0	48.4	43.9
Jamnagar	28.0	51.6	72.0	57.0
Junagarh	32.6	50.0	55.6	44.9
Kachchh	29.6	57.4	67.7	56.3
Kheda	40.4	57.9	48.7	56.2
Mahesana	57.7	48.2	46.9	46.0
Narmada	35.2	63.1	44.5	49.0
Navsari	52.6	53.2	35.1	35.7
Panchmahals	37.5	58.2	54.2	52.4
Patan	55.9	56.2	55.9	56.8
Porbandar	73.3	64.5	46.0	52.9
Rajkot	46.1	35.8	47.4	35.5
Sabarkantha	51.1	41.5	53.2	53.8
Surat	54.2	43.8	55.7	47.3
Surendranagar	41.9	57.0	52.5	57.6
The Dangs	34.6	46.0	51.3	45.4
Vadodara	45.5	61.6	44.3	55.6
Valsad	55.7	44.6	29.0	30.7
Gujarat	45.3	53.5	49.7	47.2

6.2 Current use of Family Planning Methods

Table 6.5 and Figure 6.2 provide the information on current use of family planning methods for currently married women in Gujarat. At the time of DLHS-RCH, 59 percent of currently married women were using some method of contraception, 2 percentage points up from Round I. Current contraceptive use is slightly higher in urban areas (65 percent) than in rural areas (56 percent). Use of modern methods is reported by 52 percent of the women, the breakdown of which is 41 percent for permanent methods and 12 percent for spacing methods. Among the users of sterilization methods most prefer female sterilization, which invalidates the use of male sterilization (1 percent). The use of traditional methods is reported by seven percent of the women.

The rural-urban differential is visible in the case of modern spacing methods, where 22 percent of the urban women are using these means of contraception compared to only six percent of the rural women.

Table 6.5 CONTRACEPTIVE PREVALENCE RATE

Percentage of currently married women age 15-44 years currently using any contraceptive method by selected background characteristics, Gujarat, 2002-04

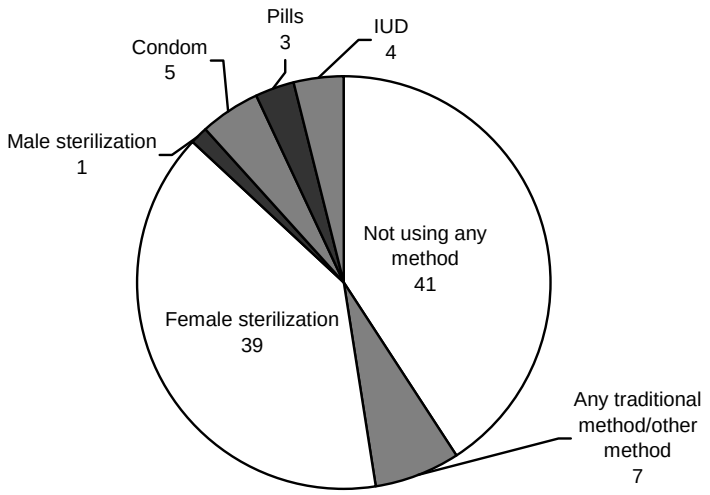
Method	Any method	Any modern[1] method	Any modern spacingmethod[2]	Any steriliza-tion	Male steriliza-tion	Female steriliza-tion	IUD/ Loop	Pill	Condom / Nirodh	Any traditio-nal method[3]	Rhythm/ periodic abstinence	Withdr-awal	Number of women
Residence													
Rural	56.4	50.6	6.3	44.3	1.4	42.9	2.1	1.8	2.4	5.8	4.6	1.0	13,591
Urban	64.6	55.7	22.0	33.6	1.3	32.4	7.0	5.8	9.1	8.9	6.7	2.1	7,205
Education													
Non-literate	57.4	52.2	3.0	49.2	1.6	47.6	0.9	1.0	1.1	5.2	4.6	0.4	9,051
0-9@ years	58.6	51.8	11.5	40.3	1.3	39.0	3.4	4.0	4.1	6.7	4.8	1.8	7,269
10 years & above	64.0	53.5	29.6	23.7	1.0	22.8	10.1	6.4	13.2	10.5	7.8	2.6	4,473
Religion													
Hindu	59.5	52.5	11.0	41.5	1.2	40.2	3.5	3.0	4.4	7.0	5.5	1.4	18,940
Muslim	52.3	47.5	17.9	29.6	0.8	28.8	4.8	6.0	7.1	4.8	3.8	1.0	1,399
Christian	71.3	66.0	5.5	60.6	17.2	43.4	3.4	0.1	2.0	5.3	5.3	0.0	179
Jain	64.7	55.8	34.1	21.7	1.0	20.7	13.9	4.7	15.5	8.9	5.9	2.9	228
Other	(67.3)	(61.2)	(26.5)	(34.7)	(2.0)	(32.7)	(12.2)	(4.1)	(10.2)	(6.1)	(2.0)	(4.1)	49
Caste/tribe#													
Scheduled caste	54.3	48.2	8.0	40.1	0.9	39.2	1.7	2.3	4.1	6.1	5.1	0.9	2,108
Scheduled tribe	51.8	46.2	2.4	43.7	4.5	39.2	0.5	0.8	1.1	5.6	4.9	0.4	2,767
Other backward class	57.5	51.7	9.2	42.5	0.7	41.8	2.4	3.3	3.5	5.9	4.8	1.0	7,924
Other	65.9	57.3	19.2	38.0	1.1	37.0	7.1	4.3	7.8	8.6	6.1	2.4	7,510
Standard of living index													
Low	50.7	45.6	2.3	43.2	1.8	41.3	0.5	0.9	1.0	5.1	4.5	0.4	6,745
Medium	59.8	53.1	9.5	43.6	1.2	42.5	2.8	3.3	3.4	6.6	5.0	1.5	6,851
High	66.7	58.0	22.6	35.4	1.1	34.3	7.8	5.2	9.6	8.7	6.4	2.2	7,200
Availability of health facility in the village[4]													
No	55.9	50.7	5.0	45.7	1.9	43.8	1.9	1.2	1.9	5.1	3.8	1.1	6,464
Yes	56.9	50.5	7.4	43.0	0.9	42.1	2.2	2.3	2.9	6.4	5.4	1.0	7,126
Total	59.2	52.4	11.7	40.6	1.3	39.3	3.8	3.2	4.8	6.9	5.4	1.4	20,796

Note: [1] Include Female sterilization, Male sterilization, IUD, Pills and Condom. [2] Include IUD, Pills and Condom. [3] Include Rhythm/Periodic abstinence, Withdrawal and Other traditional method.

@ Literate women with no years of schooling are also included. #Total figure may not add to N due to don't know and missing cases. [4] Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village.

Total includes 3 cases with missing information on women education, who were not shown separately. () Based on less than 50 unweighted cases.

Figure 6.2
Practice of family planning method



Note: Total percent may add more than 100.0 due to rounding

Gujarat, DLHS-RCH, 2002-04

Current use of contraception is high among women of other castes (66 percent). The current use is also high among the women who have 10 or more years of schooling (64 percent) than the women who have less than 10 years of schooling (59 percent) and also among non-literate women (57 percent). Similarly, current contraceptive use varies positively with respect to the standard of living of the women, increasing the prevalence rate from 51 percent to 67 percent for women from the lowest to the highest standard of living. The availability of the health facility in the village does not seem to be an important factor in motivating eligible women to use contraceptives. The current use of the traditional method is also higher among women with a higher education level and with a high standard of living than their counterparts not on par with these categories of women.

6.2.1 Current Use of Family Planning Methods by Districts

Table 6.6 presents a picture of current contraceptive use in the districts of Gujarat. The contraceptive use is a couple concepts as family planning methods can be used either by women or by their husbands. The current use of contraception is highest in Surat (70 percent) while it is only 41 percent in the district of Banaskantha. Along with Banaskantha in the districts of Dahod (44 percent), The Dangs (46 percent) and Kachchh (47 percent), the use of contraception is less than 50 percent. In almost half of the districts, the current use of contraception exceeds 60 percent of eligible women (see Map-6). The state figure of female sterilization is 39 percent and it ranges from 24 percent in The Dangs district to 56 percent in Navsari. The variation in contraceptive prevalence at district level is basically due to the variation in the use of permanent methods.

Table 6.6 CONTRACEPTIVE PREVALENCE RATES BY DISTRICT

Percentage of currently married women age 15-44 years currently using any contraceptive method by district, Gujarat, 2002-04

Districts	Any method	Any modern[1] method	Any modern spacing[2] method	Male steriliz-ation	Female steriliz-ation	IUD	Pill	Condom/ Nirodh	Any traditio-nal[3] method
Ahmedabad	56.4	50.3	22.5	1.0	26.8	5.6	8.1	8.7	6.1
Amreli	67.6	59.4	7.9	0.1	51.2	3.6	1.9	2.4	8.3
Anand	61.1	54.7	8.0	0.3	46.4	2.9	1.8	3.3	6.4
Banaskantha	41.2	37.8	9.5	0.2	28.0	3.2	4.1	2.2	3.4
Bharuch	62.7	58.4	7.7	0.5	50.0	2.5	1.7	3.5	4.4
Bhavnagar	67.0	59.5	13.8	0.6	44.9	5.6	2.6	5.6	7.5
Dahod	43.7	32.5	6.2	0.5	25.8	0.9	2.0	3.2	11.2
Gandhinagar	56.9	53.9	14.2	0.3	39.4	4.5	3.9	5.7	3.0
Jamnagar	64.5	58.0	20.4	1.3	36.3	6.2	6.9	7.3	6.3
Junagarh	63.0	56.9	11.6	0.5	44.8	4.1	2.1	5.4	6.0
Kachchh	47.4	45.4	12.9	1.5	31.0	4.2	3.0	5.8	1.8
Kheda	65.2	54.3	9.5	1.3	43.6	4.0	1.5	4.0	10.9
Mahesana	58.3	49.7	15.9	1.5	32.3	4.9	5.7	5.2	8.6
Narmada	67.4	59.6	5.5	1.0	53.1	1.2	1.9	2.4	7.8
Navsari	68.7	65.5	6.4	2.8	56.2	1.5	1.0	3.8	3.3
Panchmahals	55.3	42.4	6.9	0.1	35.3	3.0	1.7	2.2	12.9
Patan	54.6	48.2	14.4	0.1	33.6	5.7	5.1	3.7	6.4
Porbandar	62.2	53.5	16.3	0.4	36.7	6.5	4.0	5.8	8.7
Rajkot	66.9	55.4	20.5	2.8	32.1	9.2	3.2	8.1	11.5
Sabarkantha	58.7	51.1	13.8	0.3	37.0	5.7	3.1	5.0	7.6
Surat	69.8	60.3	9.6	4.5	46.2	3.0	1.9	4.7	9.5
Surendranagar	56.2	53.3	14.4	0.4	38.5	4.4	4.2	5.8	3.0
The Dangs	45.8	42.6	3.3	15.1	23.9	0.2	2.4	0.7	3.2
Vadodara	61.5	55.5	10.5	0.7	44.1	2.1	2.5	5.9	6.0
Valsad	55.2	52.9	5.7	0.8	46.3	2.5	0.8	2.4	2.3
Gujarat	59.2	52.4	11.7	1.3	39.3	3.8	3.2	4.8	6.9

Note: [1] Include Female sterilization, Male sterilization, IUD, Pills and Condom
[2] Include IUD, Pills and Condom
[3] Include Rhythm/Periodic abstinence, Withdrawal and Other traditional method

The pattern of using IUD, Pill and Condom in Gujarat is almost uniform. The use of IUD is highest in Rajkot district (9 percent) and use of oral pills and condom is maximum in the district of Ahmedabad (8-9 percent), while the prevalence of these spacing methods are least in The Dangs (0.2 percent to 2 percent).

6.2.2 Current Use and Ever Use of Family Planning Methods by Women

Table 6.7 provides information on current contraceptive use and ever use of contraception by age and number of surviving children, living sons and daughters. The current use of any method of contraception among currently married women in the 15-19 years age group is just nine percent and this attains a peak of 80 percent in the age group, 40-44 years. A similar age pattern of contraceptive use is also observed in case of modern method. The use of modern methods ranges from five percent for women in the age group 15-19 years to 75 percent for women in the age group 40-44 years.

Table 6.7 USE OF CONTRACEPTION BY WOMEN

Percentage of currently married women in 15-44 years by current use and ever use of contraception according to selected demographic characteristics, Gujarat, RCH, 2002-04

Demographic Characteristic	Percentage of women/husbands using				Percentage of women/husbands by contraceptive status		Number of women
	Any modern[1] method	Any traditional[2] method	Any method	Not using any method	Ever used	Never used	
Age-group							
15-19	4.9	4.4	9.3	90.7	12.5	87.5	1,297
20-24	24.8	7.7	32.5	67.5	38.6	61.4	4,295
25-29	49.3	7.0	56.4	43.6	65.0	34.9	4,436
30-34	65.8	7.6	73.4	26.6	77.5	22.5	3,951
35-39	71.4	7.5	78.9	21.1	83.4	16.6	3,645
40-44	74.7	4.8	79.5	20.5	82.6	17.4	3,172
Surviving children							
0	3.2	2.5	5.7	94.3	9.8	90.2	2,526
1	26.1	10.3	36.4	63.6	47.5	52.5	3,541
2	62.2	8.6	70.8	29.2	76.2	23.8	6,190
3 or more	70.6	5.5	76.1	23.9	79.4	20.6	8,539
Surviving sons							
0	14.1	6.3	20.4	79.6	28.6	71.4	5,319
1	52.6	10.3	63.0	37.0	69.0	31.0	7,867
2 or more	78.9	3.6	82.5	17.5	85.0	14.9	7,610
Surviving daughters							
0	39.9	5.3	45.2	54.8	50.1	49.9	7,235
1	60.1	7.7	67.8	32.2	73.8	26.2	7,571
2 or more	57.7	7.6	65.4	34.6	70.3	29.7	5,990
All women	52.4	6.9	59.2	40.8	64.5	35.4	20,796

Note: [1] Include Female sterilization, Male sterilization, IUD, Pills and Condom.
[2] Include Rhythm/Periodic abstinence, Withdrawal and Other traditional method.

It is crucial to understand the association between the number of living children and contraceptive use. The contraceptive use is high among the women who have three or more surviving children in Gujarat. The use of any method of contraception is 83 percent for the women who have two or more sons and is much higher than the women who have two or more daughters (65 percent). The same trend can be observed in the case of use of any modern method, which is 79 percent for the women who have two or more surviving sons and it is higher than the women who have two or more daughters (58 percent).

6.2.3 Current Use and Ever Use of Family Planning Methods as Reported by Husbands

Information pertaining to current use of family planning methods among the husbands of currently married women in Gujarat by age and number of surviving children, sons and daughters are given in Table 6.8**.** The current use of any method of contraception among the husbands (aged below 25 years) of currently married women is 25 percent and it gradually picks up with the age of husband, to a peak of 79 percent in the age group, 35-44 years. Similar patterns of contraceptive use is observed also in the case of modern methods. Among the husbands in the age group, 45 years and above the use of modern methods is 73 percent and it is least at 15 percent among the husbands in the younger age group of below 25 years. The use of traditional methods ranges from five percent for husbands above 45 years of age to 10 percent for the husbands below 25 years of age.

Table 6.8 USE OF CONTRACEPTION BY MEN

Percentage of husband of currently married women by current use and ever use of contraception by selected demographic variables, Gujarat, 2002-04

Demographic Characteristic	Percentage of husbands/women using: Any modern[1] method	Any traditional[2] method	Any method	Not using any method	Number of men
Age-group					
<25	14.8	10.3	25.1	74.9	1,791
25-34	49.5	9.3	58.8	41.2	5,766
35-44	71.2	7.4	78.6	21.4	5,479
45+	73.3	4.8	78.1	21.9	2,276
Surviving children					
0	5.0	3.6	8.6	91.4	1,770
1	34.3	10.8	45.1	54.9	2,438
2	64.0	11.0	75.0	25.0	4,541
3 or more	74.0	6.2	80.2	19.8	6,561
Surviving sons					
0	18.4	6.8	25.2	74.8	3,726
1	57.7	12.2	69.9	30.1	5,687
2 or more	80.0	4.9	84.9	15.1	5,899
Surviving daughters					
0	44.2	6.6	50.8	49.2	5,210
1	63.9	9.3	73.2	26.8	5,547
2 or more	62.4	8.2	70.6	29.4	4,555
All men	56.7	8.1	64.8	35.2	15,311

Note: [1] Include Female sterilization, Male sterilization, IUD, Pills and Condom.
[2] Include Rhythm/Periodic abstinence, Withdrawal and Other traditional method.

6.3 Reasons for Not Using Male Methods

The DLHS-RCH asked husbands of currently married women about the contraceptive methods that he or his wife was using currently. The husbands who were not using male methods were further asked the reasons for it. Table 6.9 provides information about reasons for not using male contraceptive methods in Gujarat. Among all the husbands interviewed, 74 percent reported about female methods. Reporting of female methods is higher in rural areas (78 percent) than in urban areas (65 percent). The main reasons cited for not preferring the male methods are greater popularity of female methods (51 percent), and fear of weakness (32 percent). Only one percent reported fear of impotency as one of the reasons for not using male methods and two percent mentioned about lack of sexual pleasure. However, there is not much rural-urban differential in the reasons for not using male methods, except in the case of fear of weakness. The expression for fear of weakness is higher in rural areas (34 percent) than in urban areas (26 percent). Popularity of female methods as a reason for not using male methods of contraception is more in urban areas (54 percent) than in rural areas (50 percent).

Table 6.9 REASONS FOR NOT USING MALE METHODS

Percentage of husbands with their choice of family planning methods and reasons for not accepting male methods according to residence, Gujarat, 2002-04

Female method users and reason for not accepting male methods	Total	Residence: Rural	Urban
Percentage of husband who have reported female methods	73.5	78.2	64.8
Number of men	9,922	6,453	3,469
Reasons for not accepting male methods*			
Fear of impotency	1.2	1.3	1.1
Lack of sexual pleasure	2.0	1.7	2.7
Fear of method failure	1.5	1.3	2.1
Fear of operation	2.0	2.2	1.3
Fear of weakness	31.8	34.4	25.9
Female methods are more popular	51.0	49.5	54.3
Other	21.3	21.8	20.2
Number of men	7,294	5,046	2,248

Note: * Percentages may add to more than 100.0 because multiple responses could be recorded.

6.4 Source of Contraceptive Methods

To assess the various sources of contraceptive methods, DLHS-RCH collected information on source of obtaining methods. Table 6.10 and Figure 6.3 show the percent distribution of current users of modern contraceptives by source of contraceptives. Family planning methods and services in Gujarat are provided primarily through a network of government hospitals. The services are also provided by private hospitals and clinics, as well as non-governmental organisations (NGOs). Modern spacing methods like IUD, pill and condom are available through both the government and private sectors. Government facilities are the main source for female (81 percent) and male sterilization (77 percent). Among the IUD users, one-fourth reported the source as government facilities and 72 percent private facilities. It is found that the chemist is the main source for pills (72 percent) and condom (76 percent).

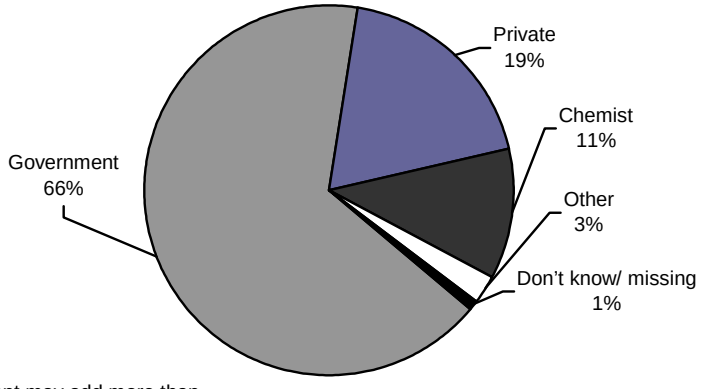
Table 6.10 SOURCE OF MODERN CONTRACEPTIVE METHODS

Percent distribution of current users of modern contraceptive methods by method and source of supply, Gujarat, 2002-04

Source	Contraceptive method					
	Female sterilization	Male sterilization	IUD/ Loop	Pills	Condom/ Nirodh	All modern methods[1]
Government medical centre	80.9	76.6	25.3	15.7	11.6	66.5
Government/Municipal hospital	20.2	26.1	11.5	4.6	2.1	17.1
CHC/PHC	29.4	35.5	10.1	6.1	4.3	24.5
Sub-centre	0.2	1.0	1.7	1.3	1.5	0.5
Government doctor	0.2	2.0	0.5	0.2	0.1	0.3
Government nurse/ ANM	0.0	0.0	1.3	3.0	3.4	0.6
Family planning/RCH camp	30.8	11.9	0.1	0.1	0.0	23.4
Out reach/MCP clinic in village	0.0	0.0	0.1	0.0	0.0	0.0
Mobile clinic	0.0	0.0	0.0	0.4	0.3	0.1
Private medical centre	17.3	21.8	71.6	3.1	0.4	18.9
Private hospital	16.3	17.6	58.9	2.5	0.3	17.1
Private doctor	1.0	3.2	8.8	0.7	0.1	1.5
Private nurse	0.0	1.0	3.9	0.0	0.1	0.3
Chemist	NA	NA	NA	71.7	76.1	11.3
Other	1.6	1.4	2.8	8.2	5.8	2.5
Do not know	0.2	0.2	0.3	1.2	5.6	0.8
Missing	0.0	0.0	0.0	0.1	0.5	0.1
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of users	8,166	280	781	663	989	10,879

Note: [1] Includes female sterilization, male sterilization, IUD, Pills or condom. CHC: Community health centre, PHC: Primary health centre. NA: Not applicable.

Figure 6.3
Source of family planning among current users of modern contraceptive methods



Note: Total percent may add more than 100.0 due to rounding

Gujarat, DLHS-RCH, 2002-04

6.5 Problems with Current Use of Contraceptive Methods

Women who were using a modern contraceptive method were asked if they had experienced any problems related with the current methods they are using. Table 6.11 shows the percentage of current contraceptive users who reported specific health problems, treatment seeking behaviour and their satisfaction about the method. The analysis of the method specific problems reveals that 14 percent of the sterilized women have problem with the contraceptive methods in use. The most common problems experienced by sterilized women are body ache or backache (49 percent), white discharge (40 percent) and weakness or inability to work (27 percent). With regard to the modern spacing methods, 12 percent and nine percent of women had problems in using Pills and IUD respectively. The most common problems of Pill users were weakness or inability to work (45 percent), body ache or backache (22 percent), white discharge (15 percent), cramps (14 percent) and nausea or vomiting (12 percent). Similarly IUD user reported mainly body ache or backache (35 percent), white discharge (34 percent), excessive bleeding (24 percent) and weakness or inability to work (20 percent).

Table 6.11 HEALTH PROBLEMS WITH CURRENT USE OF CONTRACEPTION

Percentage of women informed about side effects, had side effects with the method by use of method, Gujarat, 2002-04

Health problems/side effect	Type of method		
	Female sterilizations	IUD/loop	Pill
Women who were informed about all the available methods	23.5	NA	NA
Women who were informed about the side effects before adoption of the method	39.2	50.7	30.8
Women who had side effect/health problem due to use of contraceptive method	13.8	8.8	12.4
Number of current users	8,166	781	663
Type of health problems/side effects[1]			
Weakness/inability to work	27.1	20.4	45.1
Body ache/ backache	48.5	35.0	22.1
Cramps	4.4	2.6	14.0
Weight gain	4.0	3.6	3.9
Dizziness	8.1	1.6	8.2
Nausea/vomiting	5.2	3.2	12.0
Breast tenderness	1.6	1.1	5.5
Irregular periods	8.3	9.1	10.3
Excessive bleeding	8.6	24.4	5.8
Spotting	3.1	1.0	0.7
White discharge	40.1	34.0	14.8
Number of users with side effects	1,125	69	82

Note: [1] Percentages may add to more than 100.0 because multiple problems could be recorded. NA: Not applicable

6.6 Treatment for Health Problems with Current Use of Contraception

The study of respondents who sought treatment for contraceptive related health problems reveals that 62 percent of the sterilized women sought treatment, 58 percent and 35 percent in the case of IUD and Pills respectively. Regarding the satisfaction about the method, 97 percent of the sterilized women reported satisfaction with sterilization. In the case of spacing methods, 93 percent of women using Pills and almost all (99 percent) women using IUD were satisfied with the respective methods.

Those women who had sought treatment for contraceptive use related problems, majority of them have taken treatment from private hospitals/clinics. For female sterilization related health problems, 45 percent had taken treatment from private hospitals/clinics, 40 percent from government facilities, four percent from Indian System of Medicine health facilities and 13 percent got treatment from other sources. Private hospital/clinic is the source of treatment for 74 percent of women who had health problem in using IUD. In case of IUD, interpretation should read with caution due to the small number of women who sought treatment.

Table 6.12 FOLLOW-UP VISIT AND SOUGHT TREATMENT FOR HEALTH PROBLEMS WITH CURRENT USE OF CONTRACEPTION

Percentage of women who had follow-up visit, satisfied with current method, and sought treatment with side effect with the method by use of method, Gujarat, 2002-04

	Type of method		
Health problems/side effect	Female sterilizations	IUD/loop	Pill
Women who had follow up visit by health worker after adoption of method	50.4	10.8	11.0
Women who are satisfied with method of current use	96.5	98.5	92.8
Number of current users	8,166	781	663
Women who sought treatment for the health problem	61.7	58.3	23.4
Number of women with side effects	1,125	69	82
Source of treatments			
Government health facility			
Government hospital/dispensary	13.3	(9.3)	*
UHC/UHP/UFWC	0.4	(0.0)	*
CHC/Rural hospital	10.9	(5.6)	*
PHC	12.6	(5.6)	*
Sub-centre	1.8	(3.7)	*
Out reach/MCP clinic in village	0.7	(0.0)	*
Private health facility			
NGO/trust hospital clinic	3.4	(0.0)	*
Private hospital/clinic	44.6	(74.1)	*
ISM health facility[1]	3.8	(0.0)	*
Chemist/Medical shop	2.5	(0.0)	*
Home remedy	1.0	(0.0)	*
Other	9.1	(1.9)	*
Number of women who sought treatment	694	40	19

Note: [1] Either government or Private. * Percentage not shown based on very few cases.
() Based on less than 50 unweighted cases.

6.7 Advice to Non-Users to Use Contraception

Information about non-users who were advised by the ANM/health worker to adopt contraceptives and their future intention to use contraception by preferred method according to their background characteristics are presented in Table 6.13. In DLHS-RCH, currently married women who were not using any method of contraception, were asked about advice given by ANM/health worker for adoption of any contraceptive method. It is evident that 16 percent of the women were advised by ANM/health worker to adopt any family planning

method in Gujarat. Among rural women, 17 percent were advised by ANM/health worker to adopt any method and it is more than the urban women (14 percent) who were advised so.

Table 6.13 ADVICE ON CONTRACEPTIVE USE

Percentage of current non-users* who were advised by the ANM/health worker to use contraception by suggested method according to place of residence and availability of health facility in the village, Gujarat, 2002-04

		Residence		Availability of health facility in the village[1]	
Advise/future intension to use	Total	Rural	Urban	No	Yes
Percentage of current non-users advised by ANM/health worker to use of contraceptive method	16.3	17.4	13.8	17.6	17.2
Number of non-users	8,010	5,594	2,416	2,700	2,894
Percent distribution of women who were advised by method					
Female sterilization	57.8	64.1	39.3	69.1	59.2
Male sterilization	2.5	2.5	2.2	2.6	2.5
IUD/loop	24.4	18.4	42.0	15.6	21.1
Pill	11.3	10.6	13.5	8.9	12.1
Condom/Nirodh	2.7	3.0	1.6	2.7	3.3
Rhythmic /periodic abstinence	0.5	0.3	0.9	0.1	0.4
Other	0.8	1.0	0.3	0.8	1.3
Missing	0.1	0.0	0.1	0.0	0.1
Total percent	100.0	100.0	100.0	100.0	100.0
Number of non-users	1,308	974	333	476	498

Note: * Exclude women in menopause or those who have undergone hysterectomy.
[1] Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village.

The recommended contraceptive methods by ANM/health worker are dominated by female sterilization (58 percent), IUD (24 percent) and Pill (11 percent). Rural-urban differential is also observed by the method of advice. Around two-thirds of the women from rural areas are advised for female sterilization, 18 percent for IUD and 11 percent for Pills whereas in case of urban women along with the sterilization (39 percent) women were equally advised for IUD (42 percent) and 14 percent were advised for Pills. Only three percent were advised to adopt Condom/Nirodh and male sterilization. Same pattern of advice for male methods also emerges irrespective of residence and availability of health facility in the village.

6.7.1 Future Intentions

Among the non-users, 47 percent of women expressed their intention to use any method of contraception in the future. The intention to use any method of contraception is more in rural areas (48 percent) than in urban areas (43 percent).

Among the women who intended to use permanent methods of contraception, a vast majority (85 percent) preferred female sterilization whereas only less than one percent of the women preferred male sterilization. In case of temporary methods, the preferred methods by women are IUD (6 percent), oral pills (4 percent), rhythm/periodic abstinence and condoms about one percent.

Fifty-five percent of the husbands intended to use contraception in the future, among them 57 percent belong to rural areas and 50 percent from urban areas. Method wise choice in intention to use contraception is dominated by female sterilization being reported by 82 percent, followed by condom (5 percent).

Table 6.14 FUTURE INTENTION TO USE

Percentage of current non-users* who were intended to use contraception in future by preferred method according to place of residence, Gujarat, 2002-04

Future intention to use/method	Women			Husband		
	Total	Rural	Urban	Total	Rural	Urban
Percentage of respondents who intend to use contraceptive in future	46.5	48.0	43.0	54.5	56.5	49.7
Number of non-users	8,010	5,594	2,416	5,260	3,731	1,529
Percent distribution of non-user who were preferred to use family methods by preferred method						
Female sterilization	85.1	87.5	79.2	82.0	85.2	73.0
Male sterilization	0.7	0.9	0.2	1.5	1.1	2.5
IUD/copper-T/loop	6.4	5.2	9.3	2.3	2.0	3.3
Oral pills	3.5	3.3	3.8	1.3	1.5	0.9
Condom/Nirodh	1.3	0.8	2.8	4.5	3.8	6.6
Rhythm/periodic abstinence	0.8	0.9	0.5	2.3	2.7	1.1
Withdrawal	0.0	0.0	0.1	0.2	0.2	0.2
Other	2.0	1.4	3.8	5.9	3.5	12.5
Missing	0.2	0.1	0.3	0.0	0.0	0.0
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of non-users	3,716	2,676	1,039	2,867	2,108	760

Note: * Exclude women who are in menopause or those who have undergone hysterectomy.

6.7.2 Future Intention to Use Contraception by Number of Living Children

Currently married women who were not using any contraceptive method at the time of survey were asked about their intentions to use a method in the future. Those women who intended to use contraceptives in the future were further asked about preferred methods. This type of information aids the managers and programmers to identify the potential groups of future users and to provide the type of contraceptives that are likely to be in demand. Table 6.15 provides the information on intention to use contraception in future according to number of living children and residence background in Gujarat. Among the current non-users, 13 percent of the women intended to use contraception within the next twelve months. Only six percent of women wanted to use within one to two years whereas 27 percent reported their intention to use contraceptives after two years. About 32 percent are not sure of their intention to use, where as 21 percent reported no intention to use. The intention of using contraception within two years is high among the women who have two or more living children compared to the women who have either one or no living children. Little more than half (54 percent) of the women, who have no living children, reported that they are yet to decide about the use of contraceptives.

Table 6.15 FUTURE USE OF CONTRACEPTION BY NUMBER OF LIVING CHILDREN

Percent distribution of currently married women* who were not currently using any contraceptive method by intention to use in the future, according to number of living children and residence, Gujarat, 2002-04

Intention to use in the future	Number of living children					Total
	0	1	2	3	4+	
			Total			
Intends to use in next 12 months	3.2	11.8	18.8	24.5	20.9	13.2
One to two years	2.3	6.3	8.6	10.3	8.3	6.3
More than two years	25.5	35.5	27.1	22.7	14.9	27.0
Does not intend to use	15.4	16.3	23.7	26.7	38.8	21.3
Not yet decided	53.6	30.1	21.8	15.7	17.2	32.2
Missing	0.0	0.0	0.1	0.0	0.0	0.0
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	2,329	2,209	1,687	845	940	8,010
			Rural			
Intends to use in next 12 months	2.8	10.2	18.9	26.5	22.2	13.5
One to two years	2.1	7.7	9.6	10.7	9.1	7.0
More than two years	26.4	37.2	28.3	21.4	15.9	27.5
Does not intend to use	16.2	15.1	20.0	24.8	34.8	20.3
Not yet decided	52.5	29.8	23.2	16.6	18.1	31.7
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	1,573	1,428	1,156	661	776	5,594
			Urban			
Intends to use in next 12 months	4.0	14.9	18.6	17.5	14.8	12.5
One to two years	2.9	3.8	6.6	8.9	4.3	4.5
More than two years	23.6	32.3	24.3	27.6	10.2	26.0
Does not intend to use	13.6	18.5	31.7	33.4	57.6	23.7
Not yet decided	55.9	30.5	18.6	12.6	13.1	33.3
Missing	0.0	0.0	0.2	0.0	0.0	0.0
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	756	781	531	183	164	2,416

Note: * Exclude women who are in menopause or those who have undergone hysterectomy.

6.8 Reasons for Discontinuation and Non-Use of Contraception

Currently married non-pregnant women who were not using any contraceptive method at the time of survey were categorised as past users and never users according to their contraceptive experience. In DLHS-RCH, women who had discontinued contraceptive use were asked about the main reason for discontinuation. The survey also asked women who had never used contraceptives about the main reason for not doing so. Table 6.16 shows the main reason for not using contraceptives among both the past never users and current non-users. Among the past users, 51 percent of the women mentioned that they discontinued the use because they wanted child, followed by excessive bleeding (6 percent), and weakness/inability to work (4 percent). One-fifth of the women mentioned some other reasons for discontinuation. In urban areas higher proportion of excessive bleeding (10 percent), weakness/inability to work (6 percent), and spotting (5 percent) as the reasons for discontinuation of contraception was reported as compared to 0.2 to 3 percent in rural areas.

Table 6.16 REASONS FOR DISCONTINUATION OF CONTRACEPTION

Percent distribution of women who were past users (current non-users) by reason for discontinuation of the contraceptive method according to place of residence, Gujarat, 2002-04

Reasons	Total	Place of residence	
		Rural	Urban
Reason for discontinuation			
Wanted child	51.2	57.8	44.6
Method failed/became pregnant	1.8	2.4	1.2
Supply not available	0.4	0.3	0.4
Difficult to get method	1.0	1.8	0.2
Weakness/inability to work	4.4	2.3	6.4
Body ache/ Backache	1.8	0.5	3.1
Cramps	0.3	0.3	0.2
Weight gain	0.7	0.3	1.1
Dizziness	1.1	1.5	0.6
Nausea/vomiting	0.2	0.2	0.2
Breast tenderness	0.8	1.6	0.0
Irregular periods	1.4	1.2	1.6
Excessive bleeding	6.3	3.1	9.5
Spotting	2.6	0.2	5.1
White discharge	2.3	3.8	0.7
Lack of pleasure	1.2	0.6	1.8
Method was inconvenient	1.7	1.2	2.2
Other	20.4	19.8	21.0
Missing	0.6	1.0	0.2
Total percent	100.0	100.0	100.0
Number of past users	1,105	553	553

6.8.1 Reasons for Not Using Contraceptive Methods

DLHS asked women and husbands, who are currently not using any contraception, the main reasons why they were not currently using a method. The reported main reasons for not using contraceptives are, opposed to family planning (6 percent), difficult to become pregnant, health does not permit, and afraid of sterilization (5 percent each), worry about side effect, and do not like existing method and against the religion (4 percent each). About 63 percent of the women reported other reasons for not using contraception. As far as rural-urban differentials are concerned, a little variation is observed in the reasons for not using any contraceptive.

Table 6.17 REASON FOR NOT USING CONTRACEPTIVE METHOD

Percentage of current non-users who were currently not using contraceptive method by reason according to place of residence, Gujarat, 2002-04

Reason	Women			Husband*		
	Total	Rural	Urban	Total	Rural	Urban
Lack of Knowledge about FP method	1.9	2.5	0.6	3.9	5.0	1.7
Against the Religion	2.7	2.7	2.7	3.3	3.0	3.7
Opposed to family planning	5.5	5.4	5.7	1.6	1.1	2.9
Not like existing method	3.7	3.5	4.0	2.6	2.2	3.3
Afraid of sterilization	4.7	4.7	4.6	1.9	2.7	0.2
Can not work after sterilization	3.0	3.8	1.2	2.8	3.2	1.8
Worry about side effects	4.0	2.8	6.6	1.4	0.7	3.0
Costs too much	0.4	0.4	0.3	1.1	0.9	1.5
Health does not permit	4.6	4.3	5.1	6.5	6.4	6.7
Hard/inconvenient to get method	0.4	0.3	0.5	0.7	0.7	0.7
Inconvenient to use method	1.0	0.8	1.5	0.4	0.4	0.5
Difficult to become pregnant	5.2	4.7	6.2	3.6	3.7	3.2
Wife is pregnant[1]	-	-	-	1.2	1.1	1.4
Other	62.8	63.7	60.8	69.0	68.8	69.4
Missing	0.3	0.4	0.1	0.0	0.0	0.0
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of current non-users	3,399	2,317	1,083	1,631	1,118	513

Note: [1] Not applicable for women. * Excluding not decided cases on timing of next child.

6.9 Unmet Need for Family Planning Services

Unmet need for family planning is one of the indicators to assess the effectiveness of the family planning programme. Policy makers and family planning programme planners use this to know the demand for family planning services/supplies. Unmet need is defined in this report separately for limiting and spacing. Unmet need for spacing includes the proportion of currently married women who are neither in menopause nor had hysterectomy nor are currently pregnant and who want more children after two years or later and are currently not using any family planning method. The women who are not sure about whether and when to have next child, are also included in unmet need for spacing. The women who are not sure about the timing of the next child are also included in the unmet need for spacing. Unmet need for limiting includes the proportion of currently married women who are neither in menopause nor had hysterectomy nor are currently pregnant and do not want any more children but are currently not using any family planning method. Total unmet need refers to the totality of unmet for limiting and spacing. Table 6.18 provides the information about unmet need for limiting and spacing in Gujarat by background characteristics.

Table 6.18 UNMET NEED FOR FAMILY PLANNING SERVICES
Percentage of currently married women with unmet need for family planning (FP) services by selected background characteristics, Gujarat, 2002-04

Background Characteristic	Unmet need for FP			Number of women
	Spacing[1]	Limiting[2]	Total	
Age				
15-19	19.4	3.1	22.4	1,297
20-24	14.9	7.6	22.5	4,295
25-29	7.2	11.3	18.5	4,436
30-34	3.7	9.8	13.4	3,951
35-39	1.2	11.0	12.2	3,645
40-44	0.5	10.2	10.7	3,172
Residence				
Rural	7.3	9.7	17.0	13,591
Urban	5.9	9.2	15.0	7,205
Education				
Illiterate	7.5	11.1	18.6	9,051
0-9 @ years	6.5	8.2	14.7	7,269
10 years and above	5.9	8.5	14.3	4,473
Religion				
Hindu	6.6	9.4	16.1	18,940
Muslim	9.9	11.7	21.6	1,399
Christian	4.0	6.2	10.2	179
Jain	2.0	7.5	9.4	228
Others	(10.2)	(12.2)	(22.4)	49
Caste/tribe#				
Scheduled caste	7.4	12.2	19.6	2,108
Scheduled tribe	7.8	11.1	18.9	2,767
Other backward class	7.0	9.5	16.5	7,924
Others	5.8	8.1	13.8	7,510
Number of living children				
0	12.4	1.5	13.9	2,526
1	16.1	7.4	23.5	3,541
2	4.5	11.0	15.6	6,190
3	2.9	8.6	11.6	4,657
4+	3.0	15.3	18.2	3,882
Standard of living Index				
Low	8.8	11.4	20.2	6,745
Medium	7.8	8.9	16.7	6,851
High	4.0	8.3	12.3	7,200
All women	6.8	9.5	16.3	20,796

[1] Unmet need for spacing includes the proportion of currently married women who are neither in menopause or had hysterectomy nor are currently pregnant and who want more children after two years or later and are currently not using any family planning method. The women who are not sure about whether and when to have next child are also included in unmet need for spacing. [2] Unmet need for limiting includes the proportion of currently married women who are neither in menopause or had hysterectomy nor are currently pregnant and do not want any more children but are currently not using any family planning method. Total unmet need refers to unmet for limiting and spacing. @ Literate women with no years of schooling are also included. # The total figure may not add to N due to do not know and missing cases.
() Based on less than 50 unweighted cases. Total includes 3 missing cases on education were not shown separately.

The unmet need is high for women below 20 years, mainly for spacing rather than for limiting. Unmet need is also relatively high for women aged 20-24 years (23 percent) for both spacing and limiting. Among the older women of age 25-29 years, 18 percent have unmet need, and majority for limiting. Among the women age 30 years and above, unmet need is mainly for limiting. The rural women have a little higher unmet need (17 percent) than the urban women (15 percent). The unmet need for family planning is higher (19 percent) among the non-literate women than among the women with 0-9 years of schooling (15 percent) and 10 or more years of schooling (14 percent). Muslim women have higher unmet need for family planning (22 percent) compared to the Hindu women (16 percent), Christian women (10 percent) or Jain women (9 percent). Unmet need for family planning is higher for Scheduled caste and tribe (about one-fifth each) followed by other backward class (17 percent) and other caste (14 percent) women.

Women in low standard of living have high (20 percent) unmet need than the women of medium (17 percent) and high standard of living (12 percent). Unmet need is much higher for the women with one living child (24 percent) than women with either no children (14 percent) or two children (16 percent). Among the women with no children or one child the unmet need is mainly for spacing, where as for women with two children or more unmet need is mainly for limiting.

6.9.1 Unmet Need for Family Planning Services by Districts

Table 6.19 provides the information about unmet need for limiting, spacing and total by district. The unmet need for family planning services for state is 16 percent and it ranges from 8 percent in Amreli to 32 percent in Kachchh. In 12 out of 25 districts, unmet need for family planning is more than state average. Unmet need for limiting was found lowest in Amreli and Bhavnagar (5 percent each) and highest in Kachchh (16 percent). Similarly, unmet need for spacing was lowest to three percent each in Gandhinagar and Kheda to 16 percent in Kachchh. It may also observe that except Jamnagar, Kachchh, and Patan districts, in all the districts of Gujarat unmet need for limiting is more than spacing.

Table 6.19 UNMET NEED BY DISTRICT

Percentage of currently married women with unmet need by district, Gujarat, 2002-04

Districts	Unmet need for		
	Spacing	Limiting	Total
Ahmedabad	6.9	9.9	16.8
Amreli	3.6	4.7	8.3
Anand	7.9	8.9	16.8
Banaskantha	11.0	13.9	24.9
Bharuch	5.2	7.2	12.4
Bhavnagar	5.2	5.2	10.4
`Dahod	7.9	14.6	22.5
Gandhinagar	3.3	11.5	14.8
Jamnagar	9.2	8.4	17.6
Junagarh	6.2	6.9	13.1
Kachchh	15.9	15.6	31.5
Kheda	3.3	6.5	9.9
Mahesana	7.5	12.7	20.2
Narmada	5.9	8.6	14.5
Navsari	5.7	7.8	13.6
Panchmahals	6.4	8.5	14.9
Patan	10.4	10.2	20.6
Porbandar	6.2	8.4	14.6
Rajkot	6.6	8.3	14.8
Sabarkantha	8.4	11.3	19.7
Surat	4.1	6.5	10.5
Surendranagar	5.1	13.3	18.4
The Dangs	12.9	14.3	27.2
Vadodara	4.5	11.1	15.6
Valsad	7.6	11.5	19.1
Gujarat	6.8	9.5	16.3

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CHAPTER VII

ACCESSIBILITY AND PERCEPTION ABOUT GOVERNMENT HEALTH FACILITIES

The government health facilities at all the levels provide various RCH services. Auxiliary Nurse Midwife (ANM), family planning worker or male health worker play a key role in delivering the services to the community. Health workers are expected to make regular visits to all the households in their assigned area. During these contacts, the health workers are supposed to monitor various aspects of the health of women and children, provide information related to health and family planning, counsel and motivate to adopt appropriate health and family planning practices, and deliver other selected services. These contacts are also important as they enhance the creditability of services and establish necessary rapport with the clients. In order to assess the extent of utilisation of government health facilities by all eligible women and to find out whether ANM/health workers reach the households for providing RCH services, a separate section in the women's questionnaire was canvassed to all the eligible women. This chapter deals with the accessibility and the opinion of women about the services provided by the government health workers. The quality of care offered by the government health programme as perceived by currently married women is also presented.

7.1 Home Visit by Health Workers

Table 7.1 shows the percentage of currently married women visited by health workers at home during the three months prior to the survey. Thirteen percent of the women in Gujarat reported that the health provider visited them at their residence at least once in last three months preceding the survey. Younger women seemed more likely to report a home visit than older women. Fifteen percent of women in the age group 15-24 years reported at least one home visit compared to only 10 percent of women in the age group 35 years and older. The percentage of women in Gujarat receiving home visits is higher in rural areas (15 percent) than in urban areas (8 percent). Women who were non-literate (13 percent) and women with a low standard of living (16 percent) seemed more likely to report home visits. More Christian women (23 percent) reported home visits than Hindu women (13 percent) and Muslim (10 percent). One-fifth women from Schedule tribe reported to have home visit as compared to 9 to 14 percent women from other than Schedule tribe. There was no variation by women residing in the villages with a health facility or without a health facility.

Women who reported a home visit during the three months preceding the survey were asked who visited their household during the past three months and whether they were satisfied with the kind of services/advice received, and the time spent by these health workers. Among women who received services at home, 89 percent received services from ANM/LHV, 15 percent from male health worker and two percent from a doctor. Male health workers are more likely to visit in urban areas whereas it is reverse in case of ANM/LHV. About 84 percent of women who received services at home were satisfied with the time spent with them and 88 percent of women were satisfied with the services or advice given to them.

Table 7.1 HOME VISIT BY HEALTH WORKER

Percentage of women who had home visit by a doctor, ANM/LHV, or male health worker in the 3 months preceding the survey, among women who had home visit, satisfied with time spent by health workers and with services provided by selected background characteristics, Gujarat, 2002-04

Background characteristic	Percentage with home visit	Number of women	Home visit by[1]			Percentage of women satisfied with		Number of women
			Doctor	ANM / LHV	Male health worker	Amount of time	Services/ advices	
Age								
15.24	15.1	5,592	1.6	92.8	10.6	83.6	86.5	847
25-34	13.8	8,387	3.3	87.7	16.0	83.3	88.6	1,159
35-44	9.6	6,816	1.5	86.1	18.5	87.5	90.1	652
Residence								
Rural	15.2	13,591	2.6	92.1	12.6	88.1	90.8	2,071
Urban	8.1	7,205	1.5	78.1	23.1	71.5	79.5	587
Education								
Non-literate	13.0	9,051	2.8	89.7	13.4	85.0	89.4	1,174
0-9@ years	13.5	7,269	2.1	91.8	12.7	87.1	91.3	982
10 and above	11.2	4,473	1.7	81.8	22.8	77.9	80.0	501
Religion								
Hindu	13.1	18,940	2.4	89.2	14.3	84.4	88.4	2,472
Muslim	9.6	1,399	1.1	89.7	16.1	87.6	89.1	134
Christian	22.6	179	(0.0)	(92.3)	(20.5)	(82.1)	(84.6)	40
Jain	1.9	228	*	*	*	*	*	4
Other	(10.2)	49	*	*	*	*	*	7
Caste/tribe#								
Scheduled caste	12.2	2,108	4.7	88.1	19.4	80.3	84.6	258
Scheduled tribe	20.4	2,767	2.2	92.7	15.4	92.2	94.1	563
Other backward class	13.9	7,924	1.9	89.5	12.3	85.4	89.5	1,099
Other	9.0	7,510	2.1	85.5	17.4	77.4	82.5	678
Standard of living index								
Low	16.2	6,745	2.6	91.1	12.9	88.3	90.8	1,096
Medium	13.0	6,851	2.4	90.6	13.0	84.4	89.6	891
High	9.3	7,200	1.9	83.4	20.8	78.1	82.5	671
Availability of health facility[2] in the village								
No	15.2	6,629	3.8	89.6	17.1	87.3	90.4	1,008
Yes	15.3	6,962	1.4	94.4	8.3	88.9	91.2	1,063
Total	12.8	20,796	2.3	89.0	14.9	84.4	88.3	2,658

Note: Total includes 3 women with missing information on education were not shown separately. [1] Percentage adds to more than 100.0 due to multiple responses. @ Literate mother with no years of schooling are included. # Total number may not add to N due to do not know and missing cases.
[2] Includes sub-center, primary health center, Community health center or referral hospital, government hospital, and government dispensary within the village. ( ): Based on les than 50 unweighted cases.
* Percentage not shown based on few cases.

The proportion of women who were satisfied with the amount of time spent, and advices provided by health workers varied across various background characteristics. As compared to older women younger women were less likely to report about satisfaction with amount of time spent by the health workers during home visits. Around 83 percent of women in the age group, 15-24 years and 25-34 years reported satisfaction with the time spent by health workers as compared to 88 percent of women aged 35 years and older. Urban women (72 and 80 percent) were less likely than rural women (88 and 91 percent) to report satisfaction with the time spent by health workers during home visits and with service/ advices received respectively. Women who were highly literate, women from Hindu religion and other caste women, and women with a high standard of living are less likely to report satisfaction with amount of time spent by health workers during home visits. Availability of

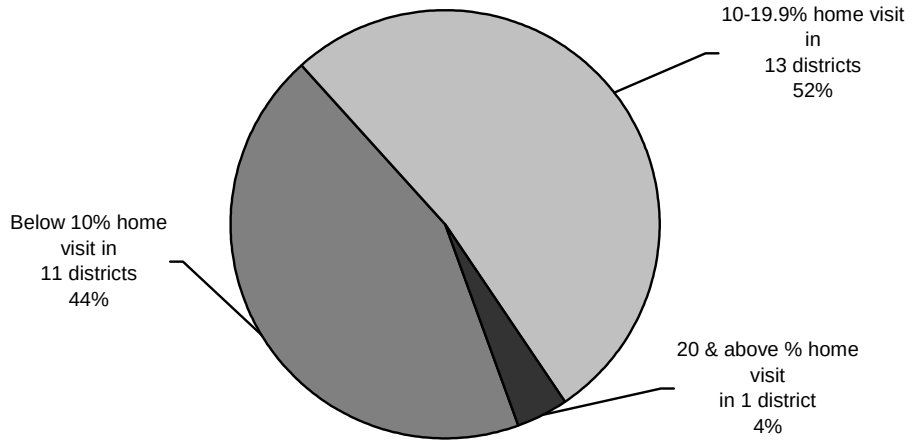
health facility in the village does not seem to influence satisfaction of women with the time spent and services/advices given by the health providers.

7.2 Home Visit by Health Workers by Districts

In 11 out of the 25 districts of Gujarat, health workers visited less than 10 percent of the women at home (Table 7.2 and Figure 7.1). There is only one district, Navsari, in which 29 percent of women received home visits. In the remaining districts, 10-19 percent of the women were visited by the health workers. Among women who were visited by health worker at home, 89 percent of them were approached by ANM/LHV, varying across the districts. Male workers approaching clients at home is lowest in Patan (1 percent)) district and highest in Surat (44 percent) district, and except Bhavnagar (18 percent), Mahesana and Narmada (6 percent each) percentage of women visited by doctor at home was below five percent in all the districts.

Only in the district of Surat, least (70 percent) number of the women said that the worker had spent enough time with them. On the other hand, more than 90 percent women in Amreli, Bharuch, Dahod, Gandhinagar, Junagarh, Kheda, Mahesana, Narmada, Navsari, Pachmahals, Patan, Porbandar, Rajkot, Surendranagar, Vadodara and Valsad districts reported satisfaction with services/advices given by health workers.

Figure 7.1
Distribution of Districts by Home Visit by Health Worker



Gujarat, DLHS-RCH, 2002-04

Table 7.2 HOME VISIT BY HEALTH WORKER BY DISTRICT

Percentage of women who had home visit by a doctor, ANM/LHV, or male health worker in the 3 months preceding the survey, among women who had home visit, satisfied with time spent by health workers and with services provided by district, Gujarat, 2002-04

District	Percentage with home visit	Home visit by[1]			Percentage of women satisfied with	
		Doctor	ANM / LHV	Male health worker	Time spent	Service
Ahmedabad	14.1	0.0	96.5	10.1	77.9	88.5
Amreli	18.6	3.0	90.9	7.9	75.6	94.3
Anand	9.2	2.5	94.5	3.8	75.7	85.3
Banaskantha	9.8	3.6	76.7	24.8	81.9	84.5
Bharuch	19.2	0.9	96.1	4.9	87.5	91.1
Bhavnagar	6.0	18.0	87.0	1.4	87.6	87.0
Dahod	14.9	1.0	95.2	9.6	91.5	93.7
Gandhinagar	9.5	2.1	89.2	10.4	83.5	90.6
Jamnagar	7.9	0.0	97.6	14.9	81.8	80.7
Junagarh	9.4	1.5	88.6	16.5	94.0	94.6
Kachchh	3.4	0.0	84.5	8.6	85.5	80.7
Kheda	17.0	2.5	94.9	5.1	96.2	95.4
Mahesana	8.5	6.2	82.8	23.0	93.1	93.1
Narmada	16.4	6.1	89.6	10.9	96.4	98.6
Navsari	28.6	4.1	96.0	5.9	92.5	95.8
Panchmahals	13.9	3.4	90.7	5.9	93.5	95.6
Patan	11.1	1.0	97.9	1.0	92.5	92.6
Porbandar	7.0	1.4	92.6	7.3	85.6	96.0
Rajkot	6.0	0.8	85.0	27.7	92.0	96.4
Sabar Kantha	12.5	3.3	85.9	15.3	77.7	83.2
Surat	17.1	0.7	69.2	44.3	69.7	69.7
Surendranagar	11.5	0.0	88.4	17.9	84.1	90.8
The Dangs	16.2	2.4	87.0	19.1	83.0	87.6
Vadodara	8.4	4.1	92.7	5.2	86.1	90.1
Valsad	18.3	2.5	96.8	5.5	87.1	93.7
Gujarat	12.8	2.3	89.0	14.9	84.4	88.3

Note: [1] Percentage add to more than 100.0 due to multiple responses

7.3 Matters Discussed during Home visits or Visits to Health Facilities

Women who were visited at home by a family planning worker, as well as those who visited government health facility or other health facility during the three months preceding the survey were asked about the different topics discussed with the workers during any of these visits. Table 7.3 shows the percentage of women who discussed the health and family planning or any health related matters to the health workers during home visits or visits to a health facility during the past three months. There are 1,497 pregnant women or women with children born during the reference period, and other women includes 928 current users and 233 current non-users, who were visited by health workers at home.

The major focus of discussion during home visits was immunization (40 percent), disease prevention (24 percent), and treatment of health problems (22 percent). In addition, discussions were also made on family planning (13 percent), antenatal care (9 percent), and childcare (8 percent). As expected, pregnant women or women with child born within reference period were much more likely than other women to report that they discussed on immunization and childcare. A higher proportion of current contraceptive users and current non-users discussed, disease prevention and treatment of health problems during the home visit by health workers during the past three months preceding the survey.

Table 7.3 MATTER DISCUSSED DURING CONTACT WITH A HEALTH WORKER

Percentage of women who were visited by health worker in the three months preceding the survey, and percentage of women who visited health facility, and the percentage of women[1] who discussed specific topics with the health worker, Gujarat, 2002-04

Topic discussed	Pregnant women or women with children after reference period[2]	Other women		Total
		Current contraceptive users	Current nonusers	
During home visit				
Family planning	15.4	10.0	10.1	13.1
Breastfeeding	3.2	0.8	0.4	2.1
Supplementary feeding	2.7	1.6	0.3	2.1
Immunization	52.7	20.8	28.8	39.5
Nutrition	5.8	4.7	4.5	5.3
Diseases prevention	14.3	38.8	31.0	24.3
Treatment of health problem	12.4	36.3	24.8	21.8
Antenatal care	12.3	2.8	12.5	9.0
Delivery care	1.9	0.9	3.3	1.7
Postpartum care	3.4	0.5	1.7	2.2
Childcare	9.6	5.2	3.7	7.5
Sanitation / cleanliness	2.0	4.1	3.0	2.8
Oral rehyderation	1.6	1.0	0.5	1.3
Other	8.9	11.8	18.9	10.8
Number of women	1,497	928	233	2,658
During visit to health facility				
Family planning	6.2	4.2	1.8	5.2
Breastfeeding	2.5	0.1	1.1	1.6
Supplementary feeding	2.4	1.1	0.2	1.8
Immunization	30.8	4.4	3.7	20.1
Nutrition	4.5	4.6	4.5	4.5
Diseases prevention	3.4	9.4	15.5	6.3
Treatment of health problem	17.4	51.6	51.2	31.1
Antenatal care	21.0	8.2	6.2	15.7
Delivery care	8.4	0.8	3.5	5.5
Postpartum care	3.8	0.8	1.2	2.7
Childcare	16.2	11.8	13.3	14.6
Sanitation / cleanliness	1.6	5.0	7.9	3.2
Oral rehyderation	1.9	0.2	0.1	1.2
Other	5.6	14.6	17.1	9.4
Number of women	952	504	133	1,589

Note: Percentage add to more than 100.0 due to multiple responses.
[1] Women who visited private health facility are not included.
[2] Reference period for phase I, January 1st 1999 and for phase II, January 1st .2001

The topic discussed most often during visits to health facility by women was treatment of health problems (31 percent), immunization (20 percent), antenatal care (16 percent), and childcare (15 percent). Only five percent women reported that they discussed family planning during the visit. During visit to health facility 31 percent of the pregnant women or women with children born during reference period discussed on immunization, 21 percent discussed about antenatal care, 17 percent discussed treatment of a health problem, and 16 percent discussed about childcare. A few pregnant women or women with children born during reference period also discussed about delivery care, postpartum care, breastfeeding, nutrition, oral re-hydration and supplementary feeding during visit to health facility. A higher proportion of current users and non-users discussed on treatment of health problems, disease prevention, and other health related problems during visit to health facility in three months prior to survey.

7.4 Visit to Health Facility

Table 7.4 presents the percentage of currently married women who needed to visit health facility and visited the health facility by residence and availability of health facility in the village. About 16 percent of the women needed to visit health facility but did not visit in comparison with 31 percent of women who needed to visit health facility and visited in past three months of the survey. The proportion of such women who visited was slightly more in urban areas (33 percent) than in rural areas (30 percent). Among them who visited any health facility, half of the women reported that they had visited a private hospital, (43 percent in rural areas and 62 percent in urban areas) and nearly one-fourth of them mentioned private dispensary.

Table 7.4 VISIT TO HEALTH FACILITY

Percentage of women who need to visit health facility and visited, and percent distribution of women visited health facility by type of health facility and according to place of residence and availability of health facilities in the village, Gujarat, 2002-04

		Residence		Availability of health facility[1] in the village	
Health facility	Total	Rural	Urban	No	Yes
Percentage of women who needed to visit health facility and not visited	16.4	17.3	14.6	19.9	14.9
Percentage of women who needed to visit health facility and visited	31.2	30.4	32.6	29.3	31.4
Number of women	20,796	13,591	7,205	6,629	6,962
Government health facility					
Hospital / CHC / FRU /RH	8.2	7.1	10.0	6.6	7.5
Dispensary	1.0	0.6	1.7	0.4	0.7
Primary health center	8.0	11.5	1.8	8.4	14.3
Sub-center	2.2	3.4	0.2	1.8	4.8
Private health facility					
Hospital	50.2	43.4	62.3	44.5	42.3
Dispensary	24.2	26.9	19.5	29.5	24.6
ISM[2] hospital/dispensary	1.3	1.0	1.8	1.3	0.7
Other	4.9	6.2	2.5	7.5	5.1
Total percent	100.0	100.0	100.0	100.0	100.0
Number of women	6,479	4,128	2,351	1,941	2,187

Note: CHC: Community health center, FRU: First referral unit, RH: Referral Hospital
[1] Includes sub-center, primary health center, Community health center or referral hospital, government hospital, and government dispensary within the village [2] Either government or private health facility of Indian System of Medicine.

Nearly one-fifth of the women visited a government health facility, of which eight percent each visited government health facility such as, hospital/CHC/FRU/RH, and primary health centre, two percent visited sub-centres, and only one percent visited government dispensary. One percent of the women reported that they visited Indian system of medicine hospital/dispensary either government or private. There are not much differences in visit to any health facility according to availability of health facility in the village in the past three months of the survey.

7.5 Visit to Health Facility by Districts

Table 7.5 presents the percentage of currently married women who needed to visit health facility and visited the health facility by districts. More than two-fifth (43 percent) of currently married women in Kachchh and 38 percent in The Dangs, needed to visit a health

facility, but they did not visit. Out of 25, in 5 districts i.e. Amreli, Dahod, Narmada, Navsari and Porbandar more than two-fifths of the women visited health facility for their health problems. In Kachchh only 12 percent of women visited health facility when needed. Among those who visited health facility, more than a quarter of the women visited government health facility in 5 districts (Amreli, Anand, Jamnagar, Kachchh, and The Dangs), and except Jamnagar and The Dangs, in all districts more than 60 percent of the women visited private health facility in past three months before the survey.

Table 7.5 VISIT TO HEALTH FACILITY BY DISTRICT

Percentage of women who needed to visit health facility, but not visited and percentage of women who visited health facility by type of health facility by district, Gujarat, 2002-04

Districts	Percentage of women who need to visit health facility, but not visited	Percentage of women who need to visit health facility and visited	Percentage of women who visited to	
			Government health facility	Private health facility
Ahmedabad	12.3	37.9	10.5	86.2
Amreli	15.0	49.2	28.7	61.9
Anand	17.2	30.6	26.6	70.8
Banaskantha	16.3	28.1	19.8	74.2
Bharuch	15.0	35.9	22.4	73.4
Bhavnagar	19.4	37.7	16.5	78.3
Dahod	20.8	46.6	21.5	70.9
Gandhinagar	9.6	33.4	16.9	81.2
Jamnagar	29.2	19.1	37.8	57.1
Junagarh	8.5	28.1	24.5	67.0
Kachchh	42.7	11.9	29.3	67.6
Kheda	11.8	37.1	17.3	76.6
Mahesana	13.6	22.4	20.4	75.2
Narmada	16.9	40.2	20.7	70.6
Navsari	8.7	46.0	23.6	73.5
Panchmahals	22.7	38.1	13.7	81.7
Patan	17.0	35.3	18.4	67.9
Porbandar	7.5	42.3	22.9	68.0
Rajkot	22.3	23.3	20.9	73.6
Sabar Kantha	12.5	26.1	20.8	77.4
Surat	16.3	23.5	13.0	83.5
Surendranagar	9.6	28.0	19.5	79.3
The Dangs	38.1	17.4	43.1	49.9
Vadodara	13.9	29.9	23.6	72.6
Valsad	9.8	39.3	20.6	78.0
Gujarat	16.4	31.2	19.6	75.4

7.6 Client's Perception of Quality of Government Health Services

Utilization of services is an essential indicator reflecting the quality of services. Better quality of services would have a higher utilization rate, which is very important from the policy point of view. Unless clients are satisfied with the services provided by the government, efforts made by the government will be wasted. In order to assess the utilization of government health facilities, a question was asked whether they had visited any health facility for their health problem during past three months to the survey. Those who visited the government health facility were asked questions regarding their perceptions about quality of services, (personal manner like courtesy, respect, sensitivity, and friendliness of the physician and staff, technical skills and quality like thoroughness, carefulness, and competence and waiting time for receiving the services) and the same is presented in Table 7.6. Women in general perceived that the quality of services, personal manner as well technical skills and quality of physician, ANM/nurse and other staff was good. Majority of the respondents perceived that

personal manner (courtesy, respect, sensitivity, and friendliness) and technical skills (thoroughness, carefulness, and competence) of the physician, nurses and other staff were good, some of the respondents mentioned that personnel manner of doctor (35 percent), nurse (22 percent), and other staff including paramedical staff (16 percent) was excellent.

Table 7.6 QUALITY OF GOVERNMENT HEALTH FACILITY

Percentage of women who visited government health facility and rated quality and availability of services during most recent visit to a government health facility in the three months proceeding the survey, Gujarat, 2002-04

Quality indicator	Poor	Good	Excellent
The convenience of the health facility location	15.8	57.4	24.0
Length[1] of time spend towards waiting	20.9	54.3	21.6
Personal manner[2] of the physician[5]	10.4	51.5	34.9
The technical skills and quality[3] of the physician[5]	10.6	52.8	33.1
Personal manner[2] of nurse	12.9	57.1	22.4
The technical skills and quality[3] of nurse	12.9	60.1	19.3
Personal manner of other staff[5]	13.5	67.4	15.8
The technical skills and quality of other[4] staff	14.9	63.3	12.8
The explanation of what was done to her	13.2	60.3	22.3
Medical, surgical and diagnostic equipment	15.8	55.3	16.3
General comfort	14.2	58.9	19.3

Note: [1] Poor indicate long waiting time, good indicate average waiting time, and excellent indicate short waiting time
[2] Courtesy, respect, sensitivity, friendliness [3]Thoroughness, carefulness, competence [4] Including paramedical staff
[5]Includes hospital/community health center/ first referral unit/ referral hospital, dispensary, and primacy health center last visit made by women

7.7 Reasons for not visiting Government Health Centre

Women who visited the private health centre were asked the main reason for not visiting the government health centre and the results are presented in Table 7.7. About one-fifth of the women in each rural and urban areas reported that they did not visit the government health centre due to poor quality of services and 16 percent (20 percent rural and 11 percent urban) women reported non-availability or bad quality of medicine as the reason. Fifteen percent of the currently married women reported inconvenient location of the centre as one of the reason for not visiting the government health centre for their health problems. Other reasons for not visiting government health centres were: time is not suited (11 percent), heavy rush (7 percent), doctor/ health workers do not examine properly (4 percent), and non-availability or rare availability of doctors/ health workers (3 percent).

Table 7.7 REASON FOR NOT PREFERRING GOVERNMENT HEALTH FACILITY

Percent distribution of women visited private health facility by reason for not visiting government health facility and according to residence and availability of health facilities in the village, Gujarat, 2002-04

		Residence		Availability of health facility[1] in the village	
Reason	Total	Rural	Urban	No	Yes
Not conveniently located	15.1	14.5	15.8	16.4	12.7
Time is not suited	11.4	9.2	14.8	9.5	8.9
Poor quality of services	20.7	20.7	20.8	21.4	20.0
Heavy rush	6.9	6.0	8.2	6.0	6.0
Non/rare-availability of doctors/health workers	3.0	3.8	1.9	4.1	3.5
Doctors/health workers do not examine properly	3.7	3.0	4.7	2.2	3.8
Medicine not/rarely given or of bad quality	16.4	20.0	10.9	18.1	22.0
Doctors/paramedical staff does not behave properly	0.6	0.6	0.6	0.4	0.7
Services are charged	0.7	1.0	0.2	1.3	0.7
Referred by government doctor	0.9	0.6	1.3	0.6	0.5
Other	20.7	20.6	20.9	19.9	21.4
Total percent	100.0	100.0	100.0	100.0	100.0
Number of women	4,889	2,932	1,957	1,458	1,474

[1] Includes sub-center, primary health center, Community health center or referral hospital, government hospital, and government dispensary within the village

7.8 Family Planning Information and Advice Received

Women who are currently not using any contraceptive method were asked whether they were ever advised by ANM or family planning health worker to adopt family planning method and method advised during any of the contact. Sixteen percent of currently non-users said that they had the advice or discussion on method of family planning with ANM or family planning health worker (Table 7.8). The most frequently discussed method was female sterilization (58 percent) and IUD (24 percent). Only three percent each of women received advice to adopt condom and male sterilization as a contraceptive method. Discussions about traditional method, was rare. In rural areas majority of women (64 percent) received advice on female sterilization whereas in urban areas majority of women (42 percent) received advice to adopt IUD followed by female sterilization (39 percent). Only 11 percent of the women received advice on condom.

Table 7.8 ADVISE TO ADOPT FAMILY PLANNING METHOD

Percentage of current non-users who reported ever advised to adopt family planning method by method of family planning by ANM/health worker, according to residence, Gujarat, 2002-04

Method	Total	Rural	Urban
Percentage of non-users who were advised to adopt family planning method	16.3	17.4	13.8
Number of women	8,010	5,594	2,416
Method			
Female sterilization	57.8	64.1	39.3
Male sterilization	2.5	2.5	2.2
IUD	24.4	18.4	42.0
Pills	11.3	10.6	13.5
Condom	2.7	3.0	1.6
Rhythm/ Periodical absence	0.5	0.3	0.9
Other	0.8	1.0	0.3
Missing	0.1	0.0	0.1
Total percent	100.0	100.0	100.0
Number of women	1,308	974	333

7.9 Availability of Pills and Condom

To explore difficulties faced in the procurement of condoms and pills, current users of these methods were asked whether they had been able to get their supply whenever needed. The results are presented in Table 7.9. Only eight percent of condom users and 12 percent of pills users reported that they had a problem in getting these methods. A little higher proportion of rural than urban women had problems in getting supply of condom while it is reverse in case of pills.

Table 7.9 AVAILABILITY OF REGULAR SUPPLY OF CONDOMS/PILLS

Percentage of current condom or pill users who ever had a problem getting a supply of condoms/pills by residence, Gujarat, 2002-04

Method/residence	Percentage who had a problem getting supply	Number of users
Condom		
Rural	11.0	242
Urban	6.8	421
Total	8.3	663
Pills		
Rural	9.6	330
Urban	12.4	659
Total	11.5	989

7.10 Quality of Care of Family Planning Services

Several aspects of quality of care of family planning services were also investigated. Current user of a sterilization was asked whether the person or centre where sterilization had been performed, informed her about other alternative methods of family planning; and further it was asked whether she was told by an ANM or a health worker about possible side effects of the modern method at the time she accepted the method; whether she received any follow-up care after accepting the method. Tables 7.10 and 7.11 present the results of this investigation.

Around one-fourth of sterilized women reported that ANM or health worker informed them about alternative methods that they could use (Table 7.10) before adopting sterilization. One-fourth of sterilized women received such information by a ANM or health worker in the government health facilities as well as in private health facilities, and one-fifth of women received this information in the family planning or RCH camp or out reach/ MCH clinic in village at the time of accepting the sterilization.

Table 7.10 INFORMATION OF OTHER MODERN METHOD BEFORE STERILIZATION

Percentage of current users of sterilization who were informed about other modern method by the source where they get sterilized, according to the source of sterilization and residence, Gujarat, 2002-04

Source of sterilization	Total	Rural	Urban	Number of users
Government health facility	25.3	26.6	22.0	4270
Family planning or RCH camp/ village session	20.2	20.6	16.3	2547
Private health facility	24.7	24.1	25.1	1475
Total	23.8	24.2	22.9	8446

Note: Total includes 1, 134 and 19 women who said that they sterilized at mobile clinic, and by chemist, and by other sources and who do not know including missing information of place/source of sterilization, are not shown separately.

Another important facet of informed contraceptive choice is being fully informed about any side effects and any other problems associated with the method. In Gujarat, only 37 percent of users of any modern method were informed about possible side effects or health problems associated with their current method. Forty-two percent of acceptors of sterilization in rural area and 31 percent in urban area reported that they were informed about side effects. Among users of modern method other than sterilization, 39 percent of rural users and 27 percent of urban users were informed about side effects. It is clear from the result that ANM or health workers in Gujarat are not providing sufficient information to couples who need to make an informed choice about contraceptive methods. The situation with respect to follow-up services is also not encouraging. Follow-up services among sterilization users are much higher than user of other modern methods. About 60 percent of sterilization users in rural

area and 24 percent in urban area reported that they received follow-up services by ANM or health worker. Only nine percent of the users of other modern method received follow-up services. In total, 55 percent of the users of any modern method in rural area and only 16 percent in urban areas received follow-up services.

Table 7.11 INFORMATION ON SIDE EFFECT AND FOLLOW-UP FOR CURRENT METHOD

Percentage of current users of modern contraceptive methods who were told about side effects or other problems of current method by a health worker or ANM/Nurse at the time of accepting the method and percentage who received follow-up services after accepting the method by current method and residence, Gujarat I, 2002-04

Information/follow-up	Total	Rural	Urban
Told about side effects			
Sterilization	38.8	42.0	30.8
Other modern method	31.3	39.4	27.0
Any modern method	37.2	41.7	29.3
Received follow-up			
Sterilization	49.6	59.8	24.1
Other modern method	8.7	18.7	3.3
Any modern method	40.4	54.7	15.9

7.11 Quality of Care Indicators for Contraceptive Users by District

Table 7.12 shows inter-district variations in the percentage of users of sterilization who were told about alternative methods before adopting sterilization and about side effects or other problems related to the current method or users of modern contraceptive methods, and the percentage of users who received follow-up services.

Table 7.12 QUALITY OF CARE INDICATORS FOR CONTRACEPTIVE USERS BY DISTRICT

Among currently married women who are current users of modern contraceptive methods, quality of care indicators related to the use of their current contraceptive method by district, Gujarat, 2002-04

District	Percentage informed about other methods before getting sterilization[1]	Percentage told about side effects or other problems with method[2]		Percentage who received follow –up[2]		Percentage non-user told ever had advised to adopt contraceptive method
		Sterilization	Other modern method	Sterilizat-ion	Other modern method	
Ahmedabad	13.2	34.8	27.0	36.7	1.2	18.9
Amreli	14.2	60.6	50.8	58.7	33.6	13.5
Anand	27.1	32.7	32.5	46.4	10.4	23.6
Banaskantha	21.4	30.5	34.1	43.5	7.1	14.0
Bharuch	24.1	40.8	42.1	50.7	6.2	16.7
Bhavnagar	19.7	41.5	48.7	61.4	9.7	13.0
Dahod	13.3	50.2	33.5	57.8	4.8	10.4
Gandhinagar	24.3	40.5	30.0	44.5	13.7	17.1
Jamnagar	27.5	28.3	28.9	44.1	16.8	16.0
Junagarh	25.4	38.1	33.6	54.1	15.0	18.4
Kachchh	36.2	29.7	10.0	47.7	5.2	14.1
Kheda	31.2	70.2	54.6	49.1	9.0	13.0
Mahesana	29.1	27.0	23.0	36.0	10.7	16.6
Narmada	20.4	62.6	44.6	71.8	12.9	14.8
Navsari	23.5	52.7	33.2	65.9	7.6	23.2
Panchmahals	15.6	63.5	58.0	69.0	8.8	11.1
Patan	13.2	30.5	36.4	56.2	12.7	26.0
Porbandar	18.4	25.4	23.3	42.7	8.9	21.4
Rajkot	25.3	23.6	24.1	35.4	9.6	12.7
Sabar Kantha	33.4	29.5	30.0	40.7	10.4	18.2
Surat	31.5	22.1	18.9	36.0	6.7	14.0
Surendranagar	22.7	36.9	32.8	55.9	11.4	22.3
The Dangs	29.2	36.9	14.7	43.2	17.5	28.0
Vadodara	20.7	52.6	45.2	48.5	2.3	13.6
Valsad	23.0	31.2	44.0	57.2	6.0	16.1
Gujarat	23.8	38.8	31.3	49.6	8.7	16.3

Note: [1] At the time of accepting the current method. [2] By a health worker or ANM/Nurse after accepting the current method.

The percentage of sterilization-users who were told about alternate method is lowest in Ahmedabad, Dahod and Patan districts (13 percent each) but it is highest in Kachchh (36 percent). There are also large inter-district variations in the percentage of sterilization-acceptors and users of modern contraceptive methods who were told about the possible side effect. In case of sterilization, the proportion varied from lowest of 22 percent in Surat to as high as of 70 percent in Kheda. For other modern contraceptive methods, more than half of the users in Amreli, Kheda and Panchmahals and a minimum of 10 percent of users in Kachchh were told about the side effects of the method. Follow-up services are much better for acceptors of sterilization than for other modern methods in most of the districts of Gujarat. Table 7.12 also shows district wise variation in the percentage of current non-users who were ever advised to adopt contraceptive methods, which varies from a low of 10 percent in Dahod to a high of 28 percent in The Dangs.

Overall, the quality of care for family planning and health services is far from satisfactory in many of the districts of Gujarat; almost all districts need to work much more to improve their health and family planning services, particularly services that are provided by the government sector.

7.12 Quality of Care of Maternal Health Care

Information on few other aspects of quality of care in terms of maternal care was also collected. Women with last live/still births during three years preceding the survey were asked whether the Doctor/ANM/health worker advised them to go to health facility for delivery when they were pregnant, and received any follow-up care after delivering the baby within 2 weeks of delivery and received follow-up care of at least one visit within six weeks of delivery. The same information is presented in Table 7.13.

Table 7.13 ADVISED TO HAVE DELIVERY AT HEALTH FACILITY AND FOLLOW-UP SERVICES FOR POSTPARTUM CHECK-UP

Percentage of women* who were advised to have delivery at health facility by doctor/ health worker and percentage who receive follow-up services within 2 weeks and within 6 weeks of delivery by ANM, according to residence, Gujarat, 2002-04

Advise/follow-up service	Total	Rural	Urban
Percentage of women who were advised to have delivery at health facility	50.6	44.9	63.4
Percentage of women who were visited within 2 weeks of delivery	17.7	21.7	8.6
Percentage of women who were visited at least once within 6 weeks of delivery	20.5	25.0	10.1
Number of women	7,488	5,205	2,283

Note: * Women who had live birth/still birth after 1.1.1999/2001

A little more than half of the women with last live/still births during three years preceding the survey reported that they were advised by doctor or health worker to have delivery in health facility. Women from urban areas (63 percent) were more likely than rural areas (45 percent) to get advised to deliver their child at health facility. Only less than one-fifth (18 percent) of women reported that they were visited within two weeks of their last delivery and 21 percent reported within six weeks of delivery. Data by the residence of women shows that rural women were more likely to get follow-up services than urban women.

In district wise variation, the percentage of women who were advised by the doctor or health worker to deliver at health facility varies from as low as 35 percent in The Dangs to as high as 78 percent in Navsari (Table 7.14). In ten of the 25 districts, less than half women were advised to deliver their child in health facility.

Table 7.14 QUALITY OF CARE INDICATORS FOR MATERNAL CARE

Among currently married women* who are given live/still birth three years preceding the survey, quality of care indicators related to delivery care by district, Gujarat, 2002-04

District	Percentage of women		
	Advised to have delivery at health facility by doctor/ health worker	Visited within 2 weeks of delivery by ANM	Visited at least one within 6 weeks of delivery by ANM
Ahmedabad	58.4	9.6	11.4
Amreli	55.3	28.6	30.9
Anand	70.8	20.5	23.2
Banaskantha	38.5	12.5	16.1
Bharuch	57.6	25.4	26.1
Bhavnagar	54.9	24.1	28.2
Dahod	41.2	9.1	13.2
Gandhinagar	56.6	12.3	13.1
Jamnagar	50.9	12.1	11.8
Junagarh	45.9	21.0	23.3
Kachchh	38.0	14.1	14.7
Kheda	53.1	25.3	30.6
Mahesana	59.1	14.6	15.3
Narmada	44.8	23.4	29.9
Navsari	77.8	26.5	30.6
Panchmahals	46.9	15.1	20.0
Patan	48.1	20.9	24.6
Porbandar	54.0	18.8	20.9
Rajkot	44.1	21.7	26.3
Sabar Kantha	54.4	15.4	18.9
Surat	52.6	14.4	15.0
Surendranagar	43.0	21.7	24.3
The Dangs	35.2	26.3	30.2
Vadodara	59.3	19.0	21.6
Valsad	60.3	16.9	20.1
Gujarat	50.6	17.7	20.5

Note: * Women who had live birth/still birth after 1.1.1999/2001

Around 18 percent of the women received postpartum check-up within 2 weeks of delivery in any district of Gujarat, and it varies from nine percent in Dahod district to 29 percent in Amreli district. Similarly the proportion of women who had at least one postpartum check-up within six weeks of delivery varied from a low of 11 percent in Ahmedabad to high of 31 percent in Amreli, Kheda, and Navsari districts (Table 7.14).

CHAPTER – VIII

REPRODUCTIVE HEALTH PROBLEMS AND AWARENESS OF RTIs/STIs AND HIV/AIDS

One of the important components of the Reproductive and Child Health Programme is to have a healthy sexual life without any fear of contracting disease. With this approach the RCH programme places a lot of emphasis on promoting and encouraging healthy sexual behaviour among couples through various Information, Education and Communication (IEC) activities. Health workers are also expected to educate women and men about Reproductive Tract Infections (RTIs) and Sexually Transmitted Infections (STIs) and motivate those people with RTI/STI problems to seek medical help. The DLHS-RCH has made an attempt to collect information on awareness and prevalence of RTI/STI. Apart from this, information on knowledge of HIV/AIDS, source of information and way of avoiding AIDS were also collected.

8.1 Awareness of RTI/STI

An attempt was made to assess whether couples were aware of RTI/STI. Currently married women and their husbands were asked about their awareness of RTI/STI, and if they were aware, they were further questioned about the source of information and mode of transmission of the disease.

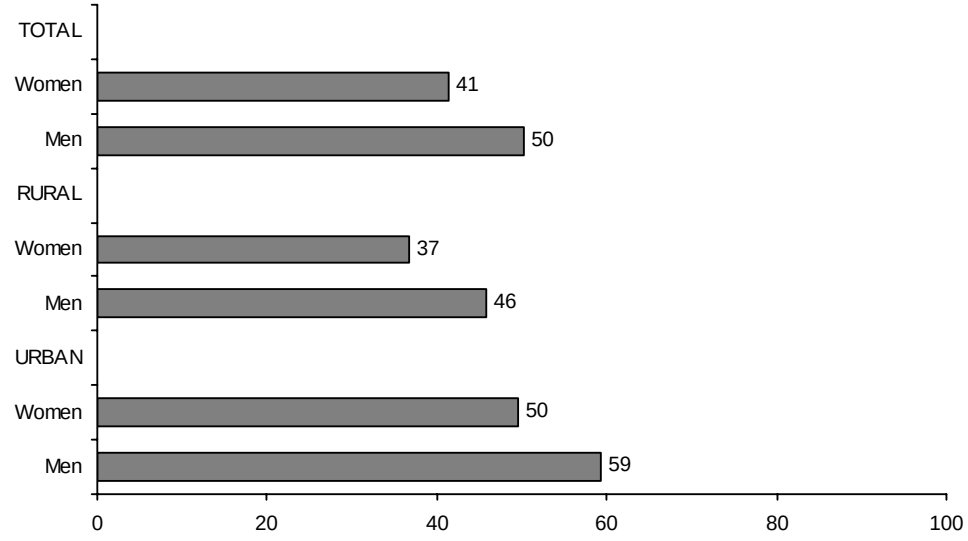
Table 8.1 shows the percentage of women who have heard about RTI/STI by background characteristics. About 41 percent of the women in Gujarat had heard about RTI/STI. The proportion of women who were aware of RTI/STI is higher in urban areas (50 percent) than in rural areas (37 percent) Figure 8.1. Awareness of RTI/STI is much lower among younger women, non-literate women, women from Christian religions, scheduled caste women and women from households with a low standard of living. Awareness of RTI/STI increases from 26 percent among non-literate women to 69 percent among women who have completed 10 or more years of schooling. The standard of living index shows a positive relationship with awareness of RTI/STI, ranging from 29 percent among women with a low standard of living to 57 percent among women with a high standard of living.

Those women who had heard of RTI/STI were further asked about the source of information of RTI/STI, which is presented in Table 8.1. More than three-quarters of the women (77 percent) reported that they received information of RTI/STI from friends or relatives. Other sources of information of RTI/STI as reported by women were television (19 percent), newspaper or books or magazines (18 percent), and slogans or posters or pamphlets or wall hoardings (11 percent). Only five percent each of women received this information from doctors and from health workers, and about eight percent of the women reported that they had heard of RTI/STI from other sources.

Table 8.2 shows the percentage of husbands of currently married women who heard of RTI/STI by specific source of information according to some selected background characteristics. In Gujarat, the percentage of men who heard of RTI/STI is more than that of women (Figure 8.1). Half of the men had heard of RTI/STI. Men from urban areas and men in the age group of 25-34 years were more aware of RTI/STI. Men who belong to Hindu and

Muslim religion and mainly from scheduled caste-tribes are less likely to report awareness of RTI/STI. The level of awareness of RTI/STI increases with an increase in education level and standard of living. Twenty-two percent of non-literate men were aware of RTI/STI as compared to 74 percent of men who had completed 10 or more years of schooling. Thirty-six percent of men from households with a low standard of living were aware of RTI/STI as compared to 66 percent of men with a high standard of living.

Figure 8.1
Awareness of RTI/STI by Sex According to Residence



Gujarat, DLHS-RCH, 2002-04

Relatives or friends are the most prominent source of RTI/STI for men in Gujarat. More than half (53 percent) of men who knew about RTI/STI received information from relatives or friends. Other important sources of information about RTI/STI are newspaper or books or magazines (43 percent) followed by television (32 percent), and slogans or posters or pamphlets or wall hoardings (27 percent). Only nine percent of the men received this information from a doctor, five percent from health workers, four percent from community meetings and three percent mentioned that they had received information about RTI/STI from the school teachers. Seven percent each of the men reported that they heard of RTI/STI from radio and other sources. Relatives or friends are the most important source of information of RTI/STI in all the groups. Men from rural areas, non-literate men, Muslim men, and those from scheduled-tribes, with a low standard of living and younger men are more prone to receive information from relatives or friends. Electronic media such as 'television' is also an important source of information of RTI/STI for men who are from urban areas and belong to 'other' castes category. The differences in the knowledge of RTI/STI from television as a source of information by educational level and standard of living household are quite visible. Only 13 percent of non-literate men had heard of RTI/STI from television, which increased to 44 percent for men who have completed 10 or more years of schooling. Similarly only 14 percent of men from low standard of living reported television as a source of information compared to 41 percent men from a high standard of living.

Table 8.1 SOURCE OF KNOWLEDGE ABOUT RTI/STI AMONG WOMEN

Percentage of currently married women age 15 - 44 who have heard about RTI/STI and among women who have heard about RTI/STI, percentage who received information from specific sources by selected background characteristics, Gujarat, 2002-04.

Background Characteristic	Percentage who have heard about RTI/STI	Number of Women	Among those who have heard about RTI/STI, percentage who received information from.										Number of women who have heard about RTI/STI
			Radio	Television	Newspaper/ Books/ Magazines	Slogan/ Pamphlets/ Posters/ Wall Hoardings	Doctor	Health worker	School teacher	Community Meeting	Relative/ Friends	Others	
Age group (years)													
15-19	28.8	1,297	1.3	7.4	7.3	8.7	2.0	0.9	2.1	0.8	79.9	9.6	374
20-24	37.9	4,295	4.5	21.0	20.7	13.8	3.8	6.4	4.4	2.7	76.3	8.6	1,626
25-29	41.4	4,436	2.3	20.8	20.7	12.0	4.9	4.8	1.5	1.6	74.1	7.5	1,836
30-34	44.2	3,951	2.6	20.6	20.6	12.6	6.4	4.3	0.9	2.2	75.1	7.2	1,745
35-39	45.1	3,645	3.5	17.1	16.8	9.2	3.8	4.2	0.9	2.9	79.1	8.1	1,644
40-44	42.6	3,172	2.0	14.5	14.6	6.8	3.8	4.1	0.5	2.5	83.0	7.1	1,352
Residence													
Rural	36.8	13,591	2.1	12.1	10.8	7.0	3.6	6.4	1.7	2.5	83.2	8.5	5,003
Urban	49.6	7,205	4.0	27.5	29.0	16.5	5.8	2.1	1.6	2.0	69.1	6.8	3,575
Education													
Non-literate	25.7	9,051	1.1	3.9	2.3	0.6	2.4	3.4	0.1	1.4	89.9	10.1	2,327
0-9@ years	43.3	7,269	2.2	16.2	14.0	7.1	3.3	5.4	1.1	1.9	80.9	7.6	3,148
10 and above	69.3	4,473	4.9	31.8	35.0	22.6	7.3	4.7	3.5	3.4	64.3	6.2	3,102
Religion													
Hindu	41.0	18,940	2.9	18.6	18.4	10.8	4.4	4.6	1.7	2.3	77.5	7.8	7,765
Muslim	40.6	1,399	2.6	15.0	14.6	9.2	4.0	3.5	1.2	2.2	78.0	7.9	569
Christian	33.1	179	5.2	20.9	21.6	26.7	17.6	19.6	0.2	5.8	80.1	11.9	59
Jain	70.7	228	3.2	21.1	24.8	15.1	4.5	0.9	1.9	2.1	70.1	5.1	161
Other	(52.3)	44	*	*	*	*	*	*	*	*	*	*	23
Caste/tribe[#]													
Scheduled caste	29.3	2,108	3.6	16.9	15.9	7.2	8.2	5.3	1.9	2.1	79.5	9.3	618
Scheduled tribe	33.9	2,767	1.0	10.8	9.2	5.9	3.3	7.2	1.0	2.3	82.3	9.7	939
Other backward class	36.9	7,924	2.9	13.7	13.6	8.0	3.9	5.2	1.6	2.4	81.6	8.1	2,921
Other	52.8	7,510	3.4	24.4	24.9	15.1	4.7	3.5	1.9	2.3	72.8	6.5	3,964
Standard of living index													
Low	28.5	6,745	0.5	3.2	2.6	1.5	2.5	4.6	0.5	1.8	88.6	10.2	1,923
Medium	37.3	6,851	2.6	15.6	12.9	8.1	3.1	5.2	0.6	2.2	81.1	7.8	2,553
High	57.0	7,200	4.3	27.5	29.2	17.2	6.3	4.3	2.9	2.6	69.7	6.6	4,102
Total	41.3	20,796	2.9	18.5	18.4	10.9	4.5	4.6	1.7	2.3	77.3	7.8	8,578

Note:# Total figure may not add to N due to do not know and missing cases. @ Literate women with no year of schooling are also included.
Total includes 3 missing cases of women education were not shown separately. () Based on less than 50 unweighted cases. * Percentage not shown: Based on few cases.

Table 8.2 SOURCE OF KNOWLEDGE ABOUT RTI/STI AMONG MEN

Percentage of husband of eligible women who have heard about RTI/STI and among men who have heard about RTI/STI, percentage who received information from specific sources by selected background characteristics, Gujarat, 2002-04.

			Among those who have heard about RTI/STI, percentage who received information from.										
Background characteristic	Percentage who have heard about RTI/STI	Number of men	Radio	Televi-sion	Newspaper/ Books/ Magazines	Slogan/ Pamphlets/ Posters/ Wall Hoardings	Doctor	Health worker	School teacher	Community Meeting	Relative/ Friends	Others	Number of men who have heard about RTI/STI
Age group (years)													
< 25	48.3	1,791	6.2	26.4	37.6	27.2	8.8	4.7	4.4	5.2	56.3	7.1	865
25-34	53.6	5,766	7.5	35.5	42.9	28.5	9.5	4.1	3.1	3.3	52.9	6.7	3,089
35-44	50.0	5,479	7.1	31.4	44.5	26.0	9.5	5.6	2.1	4.4	50.9	6.7	2,742
45+	44.5	2,276	8.3	29.9	41.6	24.0	9.2	5.9	3.4	4.5	54.5	11.1	1,013
Residence													
Rural	45.9	10,282	8.1	28.0	34.4	21.3	8.7	5.8	2.5	4.7	59.2	8.5	4,724
Urban	59.4	5,030	6.1	39.1	55.9	35.7	10.5	3.6	3.6	3.0	42.7	5.4	2,985
Education													
Non-literate	21.9	3,256	3.9	12.7	5.5	2.7	5.2	3.0	0.6	4.0	78.3	10.7	712
0-9@ years	47.5	7,196	6.5	23.7	32.0	22.1	7.8	5.6	0.9	3.7	61.4	7.2	3,418
10 and above	73.6	4,858	8.8	44.4	60.3	36.2	11.7	4.7	5.3	4.4	39.6	6.7	3,577
Religion													
Hindu	50.1	14,037	7.3	32.2	42.4	27.3	9.2	4.9	2.9	4.0	52.9	7.1	7,029
Muslim	50.4	961	9.0	34.6	44.1	23.5	9.1	6.9	2.5	4.3	55.1	8.8	485
Christian	62.3	156	1.8	23.7	30.1	11.0	22.2	1.7	6.6	7.7	41.1	16.4	97
Jain	64.2	123	3.0	38.9	63.8	26.6	10.5	0.0	2.8	1.3	47.1	5.4	79
Other	(53.1)	32	*	*	*	*	*	*	*	*	*	*	17
Caste/tribe#													
Scheduled caste	43.6	1,580	7.4	26.8	36.7	23.6	12.0	7.4	2.5	5.0	51.8	7.3	688
Scheduled tribe	44.5	2,163	6.5	24.7	25.4	14.6	7.9	4.8	2.1	2.8	59.8	13.5	962
Other backward class	48.4	5,668	6.5	27.3	36.5	25.0	9.5	5.3	2.7	4.1	58.9	7.5	2,744
Other	57.3	5,585	8.2	40.1	55.0	33.0	9.2	4.2	3.4	4.3	45.7	5.3	3,201
Standard of living index													
Low	36.2	5,197	5.3	13.6	23.5	16.4	8.7	5.0	1.4	3.8	66.9	11.1	1,881
Medium	49.2	4,943	9.2	34.2	36.8	23.4	8.1	5.2	2.4	4.5	59.4	6.6	2,432
High	65.7	5,171	7.1	41.2	57.5	35.1	10.7	4.7	4.1	3.9	40.3	5.7	3,396
Total	50.3	15,311	7.3	32.3	42.7	26.9	9.4	4.9	2.9	4.1	52.8	7.3	7,709

Note: Total includes 1 missing cases on education were not shown separately. # Total figure may not add to N due to do not know and missing cases.
@ Literate men with no year of schooling are also included. . () Based on less than 50 unweighted cases.* Percentage not shown based on few cases.

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8.1.1 Knowledge of Mode of Transmission of RTI/STI

Women who were aware of RTI/STI were asked about the mode of transmission. This is presented in Table 8.3. Among women who reported knowledge of RTI/STI, 28 percent of them did not know anything further about the mode of transmission of this disease. This proportion is relatively higher among rural women, young women, non-literate women, and those from Hindu religion, women from scheduled-tribes and women coming from households with low standard of living. Thirty-two percent of rural women do not know about the mode of transmission of RTI/STI compared to 23 percent of urban women. Heterosexual intercourse was mentioned by 43 percent of women as one of the modes of transmission of RTI/STI followed by lack of personnel hygiene (32 percent). Only two percent of the women reported homosexual intercourse and 26 percent reported other modes of transmission of RTI/STI.

Table 8.3 SOURCE OF KNOWLEDGE ABOUT MODE OF TRANSMISSION OF RTI/STI AMONG WOMEN
Percentage of currently married women age 15-44 who have heard of RTI/STI, knowledge of mode of transmission by selected background characteristics, Gujarat, 2002-04

Background characteristic	Percentage by knowledge of mode of transmission					Number of women who have heard of RTI/STI
	Homosexual intercourse	Heterosexual intercourse	Lack of personnel hygiene	Other	Do not know	
Age						
15-19	0.6	33.5	22.2	33.6	31.6	374
20-24	2.8	44.2	33.0	22.9	28.9	1,626
25-29	2.2	45.9	34.1	22.4	26.2	1,836
30-34	1.9	43.2	33.3	25.1	27.5	1,745
35-39	1.7	42.3	32.0	27.0	28.0	1,644
40-44	1.7	41.6	29.4	30.5	29.4	1,352
Residence						
Rural	1.5	34.7	29.0	28.0	31.6	5,003
Urban	2.7	54.9	36.4	22.5	23.2	3,575
Education						
Non-literate	0.7	24.2	23.8	33.8	35.6	2,327
0-9@ years	1.3	38.9	30.7	25.0	30.5	3,148
10 years and above	3.6	61.6	39.6	20.3	19.9	3,102
Religion						
Hindu	1.9	42.5	31.7	25.8	28.4	7,765
Muslim	2.6	45.7	28.5	27.0	26.4	569
Christian	5.2	53.8	51.3	42.5	21.8	59
Jain	3.0	59.6	54.0	16.3	18.7	161
Caste/tribe#						
Scheduled caste	1.9	39.1	32.9	28.3	26.6	618
Scheduled tribe	1.0	29.0	23.2	26.4	37.1	939
Other backward class	1.6	40.0	29.8	28.6	29.9	2,921
Other	2.6	50.4	36.0	23.0	24.2	3,964
Standard of living index						
Low	0.5	22.7	23.2	31.0	38.3	1,923
Medium	1.6	40.9	29.6	27.9	28.4	2,553
High	2.9	54.1	37.8	21.9	23.1	4,102
Total	2.0	43.1	32.1	25.7	28.1	8,578

Note: # Total figure may not add to N due to do not know and missing cases
@ Literate women with no year of schooling are also included. Total includes 1 missing on women education and 23 other religion cases were not shown separately.

Table 8.4 presents the knowledge of mode of transmission of RTI/STI among men. Among men who had heard of RTI/STI, 15 percent of them mentioned that they did not know any thing about the mode of transmission of this disease. The percentage of men who did not know about the mode of transmission is higher among younger men, non-literate men, and men from households with a low standard of living. Among the men who new the modes of

transmission of RTI/STI, two-thirds mentioned heterosexual intercourse, 24 percent reported lack of personnel hygiene, and only 3 percent mentioned homosexual intercourse, and 15 percent reported other modes of transmission.

Table 8.4 SOURCE OF KNOWLEDGE ABOUT MODE OF TRANSMISSION OF RTI/STI AMONG MEN

Percentage of husbands of currently married women who have heard of RTI/STI, knowledge of mode of transmission by selected background characteristics, Gujarat, 2002-04

Background characteristic	Percentage by knowledge of mode of transmission					Number of men who have heard of RTI/STI
	Homosexual intercourse	Heterosexual intercourse	Lack of personnel hygiene	Other	Do not know	
Age						
<25	2.8	63.1	23.8	14.4	19.0	865
25-34	4.6	63.8	26.0	13.6	15.2	3,089
35-44	2.1	68.9	22.7	14.8	14.6	2,742
45+	2.9	69.4	24.1	17.7	10.5	1,013
Residence						
Rural	2.7	63.6	21.8	16.9	15.9	4,724
Urban	4.3	70.4	28.4	11.1	13.1	2,985
Education						
Non-literate	1.2	50.3	20.8	22.5	22.3	712
0-9@ years	2.5	63.7	18.2	14.9	17.9	3,418
10 years and above	4.5	71.9	30.9	12.9	10.3	3,577
Religion						
Hindu	3.0	66.2	24.3	14.8	14.9	7,029
Muslim	3.4	71.8	20.4	13.8	12.9	485
Christian	20.2	58.6	22.6	16.7	13.5	97
Jain	4.1	47.4	44.9	4.5	18.2	79
Caste/tribe#						
Scheduled caste	2.2	66.9	20.5	15.1	15.0	688
Scheduled tribe	1.4	57.1	28.8	20.0	16.2	962
Other backward class	2.6	67.7	20.2	14.5	15.2	2,744
Other	4.7	67.6	27.8	13.1	13.8	3,201
Standard of living index						
Low	1.6	56.3	21.1	20.7	20.0	1,881
Medium	3.0	68.3	21.8	12.5	13.9	2,432
High	4.5	70.3	27.9	12.8	12.6	3,396
Total	3.3	66.2	24.3	14.7	14.8	7,709

Note: # Total figure may not add to N due to do not know and missing cases. Total includes 1 case missing on education and 17 other religion cases were not shown separately. @ Literate men with no years of schooling are also included.

8.2 Prevalence of RTI/STI

In DLHS-RCH, information was collected on the common symptoms of reproductive tract infections and sexually transmitted infections from women and their husbands, and information on menstruation related problems in the three months immediately preceding the survey.

The prevalence of reproductive tract infections and sexually transmitted tract infections is judged by their symptoms. All the respondents were told about symptoms of RTI/STI, and were asked whether they had any of them. In case of the presence of at least one symptom, they were further asked whether they sought treatment for such problems, and if they had sought treatment, details regarding the source of treatment also recorded. The topic of RTI/STI is quite sensitive. The culture of silence prevents people from discussing such topics in front of others. In spite of intensive training of the investigators, the respondent might have hesitated in reporting the symptoms of RTI/STI. What gets reported in the survey though may not have given the exact prevalence, but may have given the lower limit for it.

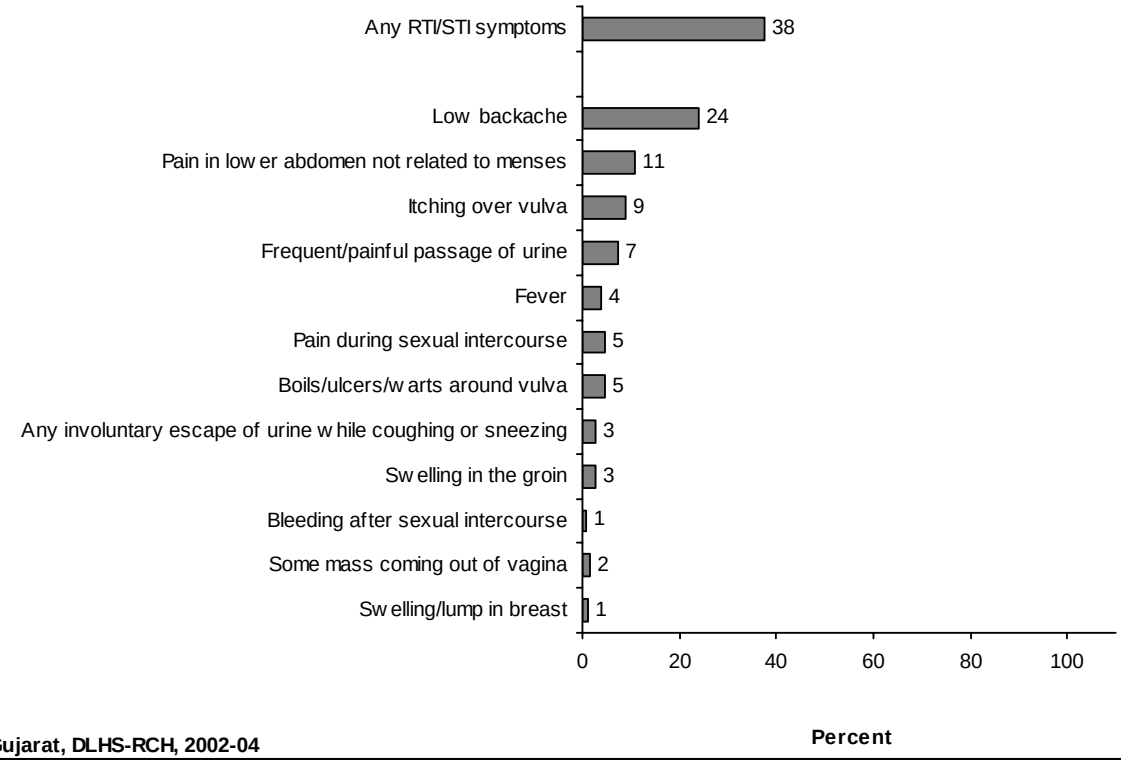
Table 8.5 SYMPTOMS OF RTI/STI AMONG WOMEN

Percentage of currently married women age 15-44 who reported any symptoms RTI/STI and specific symptoms during three months prior to survey, according to residence, Gujarat, 2002-04

Symptoms	Total	Residence	
		Rural	Urban
Percentage of women reported any RTI/STI symptoms	37.6	38.7	35.7
Symptoms			
Itching over vulva	8.9	9.5	7.9
Boils/ ulcers/ warts around vulva	4.6	5.3	3.3
Pain in lower abdomen not related to menses	10.7	11.8	8.8
Low backache	24.0	24.1	24.0
Pain during sexual intercourse	4.5	5.3	2.9
Bleeding after sexual intercourse	0.7	0.8	0.4
Swelling in the groin	2.9	3.3	2.2
Frequent / painful passage of urine	7.3	8.6	4.8
Fever	3.9	4.5	2.9
Some mass coming out of vagina	1.7	2.0	1.3
Any involuntary escape of urine while coughing or sneezing	2.9	3.5	1.6
Swelling / lump in breast	1.3	1.6	0.6
Number of women	20,796	13,591	7,205

Table 8.5 and Figure 8.2 show that nearly two-fifth (38 percent) of currently married women reported at least one reproductive health problem. The problems reported by women were 'low backache' (24 percent), 'pain in lower abdomen' (11 percent), 'itching over vulva' (9 percent), and 'frequent/painful passage of urine' (7 percent). Other symptoms of reproductive health reported by women were 'boils/ ulcers/ warts around vulva', 'painful sexual intercourse, (5 percent each), and 'fever' (4 percent).

Figure 8.2
Symptoms of RTI/STI among Women

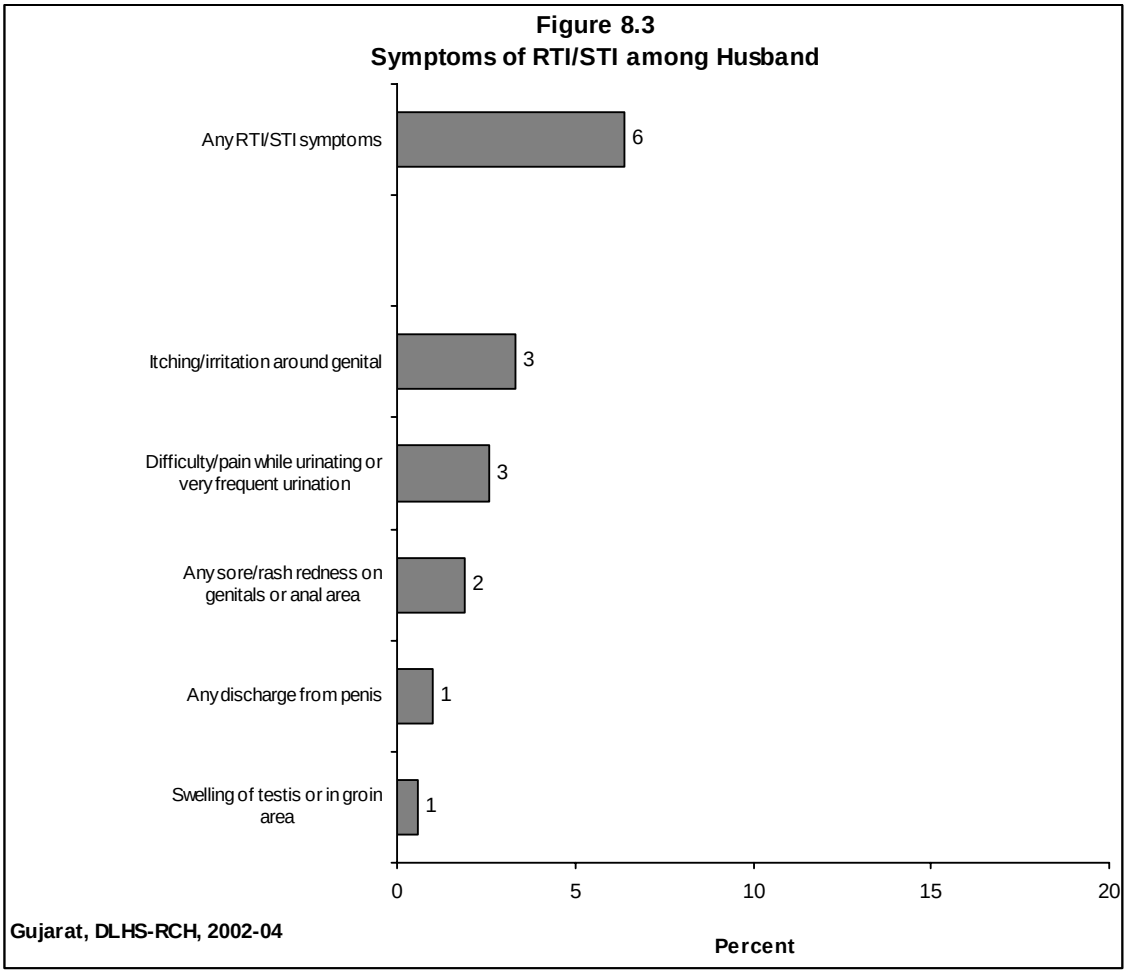


Gujarat, DLHS-RCH, 2002-04

Very few women reported 'swelling in the groin', 'involuntary escape of urine while coughing or sneezing', 'some mass coming out of vagina', 'swelling/lump in breast' and 'bleeding after sexual intercourse'. The prevalence of reproductive health problems is slightly more among the rural women than urban women.

Table 8.6 and Figure 8.3 show the prevalence of reproductive health problems among husbands of currently married women. The prevalence of RTI/STI among men was judged by the reporting of symptoms. Six percent of men reported experiencing at least one symptom of reproductive health problem in the last three months preceding the survey. The prevalence of reproductive health problems is more among rural men (8 percent) than among urban men (4 percent). The specific problem of reproductive health experienced by men is 'difficulty/pain while urinating or very frequent urination' and 'itching/irritation around genital' (3 percent each), 'sore/rash/redness on genitals or anal area' (2 percent), and 'any discharge from penis' and 'swelling of tests or in groin area' (1 percent each).

Figure 8.3
Symptoms of RTI/STI among Husband



Among men who reported reproductive health problems, two-fifths of them sought treatment and it is more common in rural areas (41 percent) compared to urban areas (35 percent). Among them only 24 percent visited a government health facility, including a primary health centre (1 percent) and sub-centre (3 percent) and 55 percent visited a private health facility. About 13 percent obtained treatment from a chemist or medical shop and 5

percent of men were treated by the Indian system of medicine, and eight percent of the men reported that they were treated at other sources. A relatively higher proportion of men from rural areas utilised private health facility, whereas chemist or medical shop and Indian system of medicine are more common among urban men. Most (76 percent) of men sought treatment from a doctor, (77 percent in rural areas and 71 percent in urban areas). Seven percent of men in urban areas and one percent in rural areas obtained treatment from relatives and friends. Two percent of the men used home remedies for their treatment.

Table 8.6 SYMPTOMS OF RTI/STI AMONG MEN

Percentage of husbands of currently married women who reported any symptoms RTI/STI and specific symptoms during three months prior to survey and sought treatment for RTI/STI by source of treatment, according to residence, Gujarat, 2002-04

Symptoms and treatment	Total	Residence	
		Rural	Urban
Percentage of men reported any RTI/STI symptoms	6.4	7.7	3.8
Symptoms			
Any discharge from penis	1.0	1.4	0.3
Any sore / rash / redness on genitals or anal area	1.9	1.8	2.0
Difficulty / pain while urinating or very frequent urination	2.6	3.4	0.9
Swelling of testis or in groin area	0.6	0.9	0.2
Itching / irritation around genital	3.3	4.0	1.7
Number of men	15,311	10,282	5,030
Percentage of men sought treatment for any RTI/STI[1]	39.5	40.5	35.2
Number of men	982	791	192
Percentage sought treatment at health facility[2]			
Government health facility[3]	24.4	24.2	25.4
Primary health centre	0.7	0.8	0.1
Sub centre	3.0	3.2	2.0
Private health facility[4]	54.9	56.1	49.5
ISM[5] facility	4.7	4.2	7.2
Chemist/ medical shop	12.5	11.1	18.8
Other	8.4	8.7	7.0
Percentage obtained treatment from[2]			
Doctor	76.0	77.2	70.5
Male health worker	0.5	0.6	0.0
Traditional healer	0.1	0.1	0.0
Relative/friends	2.3	1.4	6.7
ISM practitioner	0.3	0.0	1.7
Home remedy	2.0	2.0	2.2
Chemist medical shop	13.5	12.8	16.5
Other	7.9	8.6	4.5
Number of men	388	320	68

Note: [1] Based on men with any symptoms of RTI/STI
[2] Percentage may add more than 100.0 due to multiple responses
[3] Includes Government municipal hospital, dispensary, UHC/ UHP /UWFC, CHC/ rural hospital, Primary health centre, sub-centre. [4] Includes private hospital/ clinic, non-governmental / trust hospital/clinic,. [5] Either government or private hospital/clinic of Indian system of medicine.

The DLHS-RCH also collected information from currently married women on symptoms of RTIs, that is, on abnormal vaginal discharge, texture, colour and odour of discharge in the three months immediately preceding the survey. The prevalence of reproductive health problems among currently married women is estimated from women's experiences. Table 8.7 shows the asymptotic prevalence of vaginal discharge related

problems among currently married women in Gujarat during the three months preceding the survey according to residence. Seventeen percent of the women reported problems related to vaginal discharge. The prevalence of vaginal discharge problem is relatively more among rural women (19 percent) than among urban women (13 percent).

Table 8.7 ABNORMAL VAGINAL DISCHARGE

Percentage of currently married women age 15-44 who reported had any abnormal vaginal discharge during three months prior to survey and percentage who sought treatment and source of treatment according to residence, Gujarat, 2002-04

Symptoms and treatment	Total	Residence	
		Rural	Urban
Percentage of women reported abnormal vaginal discharge	17.2	19.4	13.0
Number of women	20,796	13,591	7,205
Percentage of women sought treatment for vaginal discharge[1]	25.1	23.6	29.4
Number of women	3,569	2,633	937
Percentage sought treatment at health facility [2]			
Government health facility[3]	19.1	22.4	11.7
Primary health centre	5.2	7.0	1.1
Sub centre	0.9	1.2	0.1
Private health facility[4]	63.8	58.3	76.2
ISM[5] facility	7.7	9.1	4.6
Home remedy	7.1	7.6	6.0
Other	4.5	5.2	3.0
Percent distribution of women who obtained treatment from [2]			
Doctor	78.2	77.0	80.9
ANM/nurse/midwife/LHV	13.4	13.8	12.6
Other health professionals[6]	4.9	5.2	4.1
Other	3.4	3.9	2.4
Total percent	100.0	100.0	100.0
Number of women	896	621	275

Note: [1] Based on women who reported having vaginal discharge. [2] Based on women who sought treatment for vaginal discharge. [3] Includes Government municipal hospital, dispensary, UHC/ UHP /UWFC, CHC/ rural hospital, Primary health centre, sub-centre and out reach/ MCP clinic in village. [4] Includes private hospital/ clinic, non-governmental / trust hospital/clinic, chemist/ medical shop. [5] Either government or private hospital/clinic of Indian system of medicine, [6] Includes *dai* (trained or untrained), relative or friends and chemist/ medical shop.

Among the women who had reported symptoms of vaginal discharge, one-fourth went for treatments, more from urban areas (29 percent) compared to their rural counterparts (24 percent). Around two-thirds (64 percent) visited private health facilities and only 19 percent went to a government health facility, including five percent to the Primary Health Centre and one percent to Sub Centre. About eight percent visited ISM facility, seven percent took home remedies and five percent of the women visited other places for treatment. The proportion of women who visited a private health facility is higher in urban areas (76 percent) than in urban areas (58 percent), and the proportion of women who visited a government facility is higher in rural areas (22 percent) than in urban areas (12 percent). A much higher proportion (78 percent) of women in the state of Gujarat obtained treatment from doctors for their problems.

About 13 percent women were treated by ANM/Nurse/Midwife /LHV and five percent by other health professionals.

8.3 Menstruation Related Problems

Table 8.8 shows the percentage of women who had menstruation problems and who sought treatment during the three months preceding the survey. The Table shows that 17 percent women in Gujarat had menstruation problems, and the figures are 19 percent and 15 percent in the rural and urban areas respectively.

Table 8.8 MENSTRUATION RELATED PROBLEMS

Percentage of currently married women age 15-44 who had any menstruation related problem during three months prior to survey and percentage who sought treatment and source of treatment according to residence, Gujarat, 2002-04

Symptoms and treatment	Total	Residence	
		Rural	Urban
Percentage of women with any menstruation related problem	17.3	18.9	14.5
Number of women	16,093	10,147	5,946
Symptoms[1]			
No period	3.6	3.2	4.3
Painful period	43.5	47.3	35.1
Frequent or short period	6.7	6.0	8.1
Delayed period	15.8	14.7	18.3
Prolonged bleeding	5.7	4.5	8.6
Excessive bleeding	16.1	15.7	17.0
Continuous bleeding	2.5	2.6	2.2
Scanty bleeding	25.7	23.7	30.0
Inter-menstrual bleeding	6.2	6.8	4.8
Percentage of women sought treatment who had any menstruation related problems	27.0	23.6	34.4
Number of women	2,781	1,919	862
Percentage sought treatment at health facility[6]			
Government health facility[2]	21.0	23.2	17.5
Primary health centre	5.9	8.4	2.0
Sub centre	1.0	1.6	0.1
Private health facility[3]	71.1	68.4	75.3
ISM[4] facility	3.9	3.0	5.3
Other	4.8	4.8	4.7
Percentage of women obtained treatment from[6]			
Doctor	84.5	82.2	88.2
ANM/nurse/midwife/LHV	9.3	11.1	6.5
Other health professionals[5]	4.2	4.6	3.6
Other	4.2	4.6	3.5
Number of women	750	454	296

Note: [1] Based on women who reported any menstruated related problems.
[2] Includes Government municipal hospital, dispensary, UHC/ UHP /UWFC, CHC/ rural hospital, Primary health centre, sub-centre and out reach/ MCP clinic in village. [3] Includes private hospital/ clinic, non-governmental / trust hospital/clinic, chemist/ medical shop. [4] Either government or private hospital/clinic of Indian system of medicine, [6] Includes *dai* (trained or untrained), relative or friends and chemist/ medical shop. [6] Multiple responses.

Among the women who had reported menstrual problems in Gujarat, majority (44 percent) of them mentioned painful periods, followed by scanty bleeding (26 percent),

delayed periods and excessive bleeding (16 percent each). The magnitude of painful period is reported more by the women of rural areas whereas scanty bleeding, delayed period and excessive bleeding are the more prevalent menstrual problems in urban Gujarat. Among the women who had menstrual problems, 27 percent sought treatment in the state, and the figures for urban and rural areas are 34 percent and 24 percent respectively. The private health facility and ISM facility are the main sources of treatment for menstrual problems. Most (71 percent) of the women sought treatment at a private facility and 21 percent sought treatment at government health facility. Four percent of the women were treated at an ISM facility. Most of the women went to a doctor for treatment (85 percent). The figures for urban and rural areas are 88 and 82 percent respectively.

8.4 Prevalence of RTIs/STIs by District

Table 8.9 presents the prevalence of RTIs/STIs among currently married women and their husbands by districts. The reported symptom of RTIs/STIs among the women is lowest in Navsari district (20 percent) and highest in The Dangs (53 percent). The problems related to abnormal vaginal discharge ranges from nine percent in The Dangs to 27 percent in Anand.

Table 8.9 REPRODUCTIVE HEALTH CARE INDICATORS BY DISTRICT

Percentage of currently married women and their husbands who reported reproductive health problems and percentage who sought treatment for the problems by district, Gujarat, 2002-04

	Percentage of women			Percentage of men	
District	With any symptoms of RTI/STI	Reported any abnormal vaginal discharge	Sought treatment for abnormal vaginal discharge	With any symptoms of RTI/STI	Sought treatment for RTI/STI problems
Ahmedabad	50.5	13.7	11.9	4.7	18.3
Amreli	23.3	17.4	22.0	4.7	36.7
Anand	37.7	27.4	24.3	10.5	47.1
Banaskantha	50.4	17.5	25.5	5.5	52.5
Bharuch	25.3	21.8	31.9	8.5	31.5
Bhavnagar	23.7	19.9	21.1	6.4	23.5
Dahod	29.4	20.3	23.9	10.1	52.3
Gandhinagar	49.7	19.4	25.8	2.8	33.9
Jamnagar	38.8	13.0	29.8	2.7	34.7
Junagarh	40.7	14.1	31.8	3.9	49.9
Kachchh	43.2	11.1	23.8	3.6	14.2
Kheda	26.8	22.3	18.3	5.2	40.2
Mahesana	46.5	20.5	22.1	7.2	29.4
Narmada	31.1	20.4	23.5	14.8	57.2
Navsari	19.9	14.5	28.3	8.7	34.1
Panchmahals	26.7	15.4	20.1	11.7	49.6
Patan	31.7	21.8	25.6	9.9	43.6
Porbandar	21.4	18.0	24.6	6.4	45.0
Rajkot	32.0	14.9	26.5	6.8	22.0
Sabarkantha	44.2	21.2	29.7	5.4	56.2
Surat	45.5	11.2	47.2	3.8	37.2
Surendranagar	42.0	21.6	19.1	4.1	54.8
The Dangs	52.9	9.3	20.2	9.3	52.3
Vadodara	26.3	16.9	28.4	5.9	59.4
Valsad	31.1	16.1	26.0	8.9	25.8
Gujarat	37.6	17.2	25.1	6.4	39.5

In comparison with women, fewer men from all districts of Gujarat reported symptoms of RTIs/STIs. Men from Ahmedabad, Amreli, Jamnagar, Gandhinagar, Junagarh, Kachchh, Kheda, Sabarkantha, Surat and Surendranagar (3-5 percent) reported the lowest prevalence of symptoms of RTIs/STIs and men from Narmada (15 percent) reported the highest prevalence.

The percentage of women who have sought treatment for RTIs (abnormal vaginal discharge) ranges from 12 percent in Ahmedabad to 47 percent in Surat, and for men who have sought treatment; it ranges from 14 percent in Kachchh to 59 percent in Vadodara.

8.5 HIV/AIDS

Acquired Immune Deficiency Syndrome (AIDS) is an illness caused by the Human Immune Virus (HIV), which weakens the immune system and leads to death through secondary infection such as tuberculosis or pneumonia. The virus is generally transmitted through sexual contact, through the placenta of HIV-infected women to their children, or through contact with contaminated needle (injections) or blood. Prevalence of HIV and AIDS has been on the rise for more than a decade in India and has reached alarming proportions in recent years. To prevent HIV transmission, the government has been making various efforts.

DLHS-RCH has collected information on the general state of awareness of HIV/AIDS, its transmission, its prevention and common misconceptions about HIV/AIDS. All the currently married women in the age group 15-44, and their husbands were first asked if they had ever heard of an illness called HIV/AIDS. Respondents who had heard of HIV/AIDS were further asked about their source of information, mode of transmission, and correct knowledge of HIV/AIDS transfusion.

8.5.1 Knowledge of HIV/AIDS

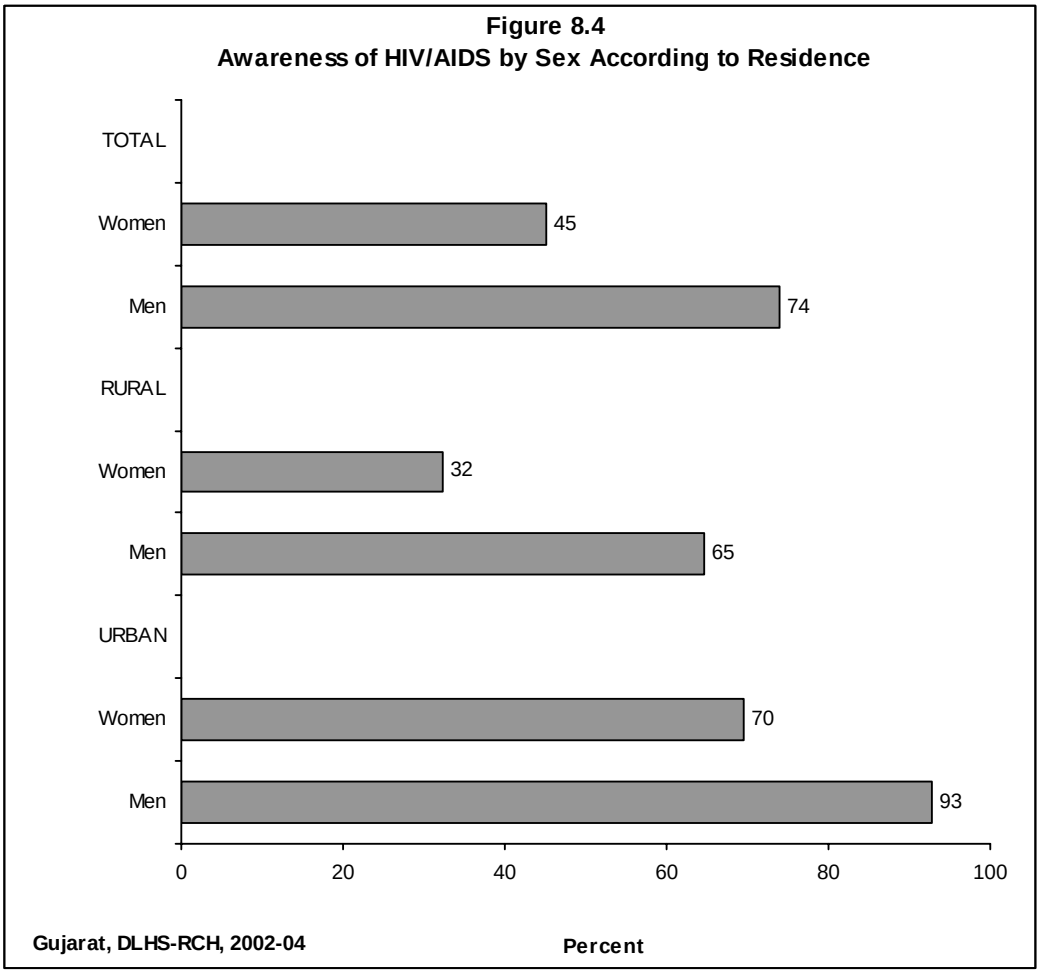
Table 8.10 shows the percentage of women who had heard about HIV/AIDS by some selected background characteristics. Less than half (45 percent) of currently married women in Gujarat have heard of HIV/AIDS, which is higher than RCH Round – I. In Round-I, only 31 percent of currently married women were aware of HIV/AIDS.

Knowledge of HIV/AIDS is much lower among the younger women, rural women, non-literate women, Christian women, women from scheduled tribes, and women from households with a low standard of living. Seventy percent of urban women had heard about HIV/AIDS compared to only 32 percent of rural women. Knowledge of HIV/AIDS steadily increased with increase in educational level and household standard of living. Only 14 percent of non-literate women had heard of HIV/AIDS against as high as 93 percent of women who had completed 10 or more years of schooling. Similarly 14 percent of the women with a low standard of living had heard of HIV/AIDS against 78 percent of women with a high standard of living. Only in the age group of 25-29, more than 50 percent of the women have knowledge of HIV/AIDS. Christian women (36 percent) were less aware of HIV/AIDS compared to women from Hindu (45 percent), Muslim (49 percent) and Jain religion (84 percent). Women from other caste category were more knowledgeable about of HIV/AIDS (65 percent) than women belonging to other backward classes (38 percent), scheduled-caste (34 percent) and scheduled tribe women (26 percent).

The government has been using mass media, such as television, radio, and newspaper extensively to increase awareness among the general public about HIV/AIDS and its prevention. Table 8.10 shows the percentage of currently married women who were aware of HIV/AIDS from different sources. The most prominent source of information about HIV/AIDS is television. About 68 percent of women reported that television was their source of information about HIV/AIDS, followed by relatives or friends (53 percent), newspapers, books or magazines (37 percent), slogans or pamphlets/posters or wall hoardings (28 percent) and radio (7 percent). Only five percent of the women reported that a health worker had informed them about HIV/AIDS and four percent of them had received information of HIV/AIDS from a doctor. A comparatively high proportion of rural women received information about HIV/AIDS from the doctor, health worker, community meetings and relatives or friends.

Table 8.11 shows the percentage of husbands of currently married women who had heard about HIV/AIDS. In Gujarat, the proportion of men who had heard about HIV/AIDS is much higher than that of women. Around three-fourths (74 percent) of the men had heard of HIV/AIDS as compared to 45 percent of women (Figure 8.4).

Figure 8.4
Awareness of HIV/AIDS by Sex According to Residence



About ninety-three percent of urban men had heard about HIV/AIDS as compared to only 65 percent of rural men. Knowledge of HIV/AIDS varies by men's age, and it is highest for the age group, 25-34 years (80 percent). Awareness of HIV/AIDS is much lower among non-literate men, Hindu men, men from scheduled tribes, and men who belong to households with a low standard of living. A more or less similar trend is observed in the case of women. About 29 percent of non-literate men had heard of HIV/AIDS, and it increased up to 78 percent for literate men and up to 98 percent of men who had completed 10 or more years of schooling. Similarly, it is positively associated with standard of living.

Table 8.11 also shows the percentage of husbands of currently married women who were aware of HIV/AIDS by different sources. As reported by the men of Gujarat, the most prominent source of information of HIV/AIDS was television (57 percent) followed by newspapers, books or magazines (51 percent), relatives or friends (49 percent) and slogans or pamphlets, posters or wall hoardings (42 percent). Radio as a source of information of HIV/AIDS was reported only 11 percent of the men. Nine percent of men reported that a doctor had informed them about HIV/AIDS and only five percent men had received information of HIV/AIDS from a health worker.

Four percent reported that they were informed through community meetings and two percent received such information from a school teacher. The information on awareness of HIV/AIDS through mass media, such as television and newspapers, and books or magazines, was received more by urban men, with at least 10 years of schooling, men from Jain religion and 'other castes' category, and men from households with a high standard of living. On the other hand, relative or friends was the main source of information for rural men, younger men below age 25, non-literate men, Hindu and Muslim men, and men from households with a low standard of living.

Table 8.10 SOURCE OF KNOWLEDGE ABOUT HIV/AIDS AMONG WOMEN

Percentage of currently married women age 15 - 44 who have heard about HIV/AIDS and among women who have heard about HIV/AIDS, percentage who received information from specific sources by selected background characteristics, Gujarat, 2002-04.

Background characteristic	Percentage who have heard about HIV/AIDS	Number of Women	Among those who have heard about HIV/AIDS, percentage who received information from.										Number of women who have heard about HIV/AIDS
			Radio	Televi-sion	Newspaper/ Books/ Magazines	Slogan/ Pamphlets/ Posters/ Wall Hoardings	Doctor	Health worker	School teacher	Community Meeting	Relative/ Friends	Others	
Age group (years)													
15-19	29.8	1,297	5.1	57.6	30.0	22.4	1.3	3.3	6.2	7.3	47.9	4.3	387
20-24	47.4	4,295	8.3	69.9	38.0	28.2	3.6	5.1	5.1	5.2	51.6	5.8	2,036
25-29	50.5	4,436	6.8	70.4	36.4	28.2	3.9	4.2	1.8	4.2	53.6	5.2	2,239
30-34	45.2	3,951	8.0	66.2	37.6	29.1	5.9	6.3	1.2	4.5	50.3	5.3	1,787
35-39	45.8	3,645	7.9	66.6	37.3	29.2	4.3	4.4	1.9	5.4	55.8	7.8	1,670
40-44	40.6	3,172	5.9	67.7	38.1	28.0	4.8	3.8	3.6	6.7	53.6	6.7	1,288
Residence													
Rural	32.4	13,591	6.4	55.5	25.8	22.8	4.6	7.7	2.7	6.1	58.5	7.1	4,400
Urban	69.5	7,205	8.2	78.9	47.1	33.1	4.0	2.1	3.0	4.4	47.6	5.0	5,007
Education													
Non-literate	13.8	9,051	6.4	45.0	4.2	3.3	3.3	4.3	0.6	6.4	61.5	8.2	1,250
0-9@ years	54.8	7,269	5.6	60.8	24.0	21.2	2.8	5.3	1.1	4.9	56.8	6.3	3,980
10 and above	93.3	4,473	9.3	81.6	59.4	42.5	6.0	4.3	5.1	5.0	46.2	4.9	4,175
Religion													
Hindu	44.5	18,940	7.4	67.8	36.9	28.1	4.3	4.9	2.9	5.2	53.0	6.0	8,427
Muslim	49.0	1,399	6.4	64.5	30.3	23.3	2.1	2.3	1.7	3.5	50.8	5.2	685
Christian	35.6	179	6.7	71.6	44.2	57.3	28.3	25.0	2.6	26.8	60.7	12.3	64
Jain	84.4	228	10.6	81.2	67.9	45.5	3.3	0.0	2.1	2.0	47.8	2.3	193
Other	(65.9)	44	(10.3)	(86.2)	(48.3)	(17.2)	(6.9)	(3.4)	(3.4)	(3.4)	(41.4)	(6.9)	34
Caste/tribe#													
Scheduled caste	33.6	2,108	8.9	64.0	31.6	27.6	8.2	6.7	2.9	6.0	49.3	7.5	709
Scheduled tribe	25.6	2,767	5.9	58.5	27.1	23.3	6.5	12.9	3.1	7.3	54.9	2.9	708
Other backward class	38.2	7,924	6.5	64.1	28.9	24.0	3.6	4.7	2.7	3.9	57.7	5.5	3,025
Other	64.5	7,510	8.0	72.4	44.9	32.0	3.9	3.3	2.9	5.5	49.9	6.3	4,848
Standard of living index													
Low	13.5	6,745	4.3	30.9	12.7	13.2	4.8	8.4	1.9	6.2	64.3	7.4	913
Medium	42.0	6,851	6.7	58.7	24.4	21.5	4.0	6.5	1.5	5.0	54.7	6.3	2,876
High	78.0	7,200	8.2	78.7	47.6	34.2	4.4	3.2	3.7	5.1	49.8	5.6	5,618
Total	45.2	20,796	7.4	67.9	37.1	28.3	4.3	4.7	2.8	5.2	52.7	6.0	9,407

Note: Total includes 3 cases missing information on education were not shown separately. # Total figure may not add to N due to do not know and missing cases
@ Literate women with no year of schooling are also included. () Based on less than 50 unweighted cases.

Table 8.11 SOURCE OF KNOWLEDGE ABOUT HIV/AIDS AMONG MEN

Percentage of husband of currently married women who have heard about RTI/STI and among men who have heard about RTI/STI, percentage who received information from specific sources by selected background characteristics, Gujarat, 2002-04.

Background Characteristic	Percentage who have heard about HIV/AIDS	Number of men	Among those who have heard about HIV/AIDS, percentage who received information from.										Number of men who have heard about HIV/AIDS
			Radio	Televi-sion	Newspaper/ Books/ Magazines	Slogan/ Pamphlets/ Posters/ Wall Hoardings	Doctor	Health worker	School teacher	Commun-ity Meeting	Relative/ Friends	Others	
Age group (years)													
< 25	72.8	1,791	15.5	55.4	47.1	44.0	5.8	3.2	5.7	4.0	52.3	5.3	1,303
25-34	79.9	5,766	11.1	59.3	49.8	42.0	8.2	4.6	2.3	3.9	49.8	5.8	4,606
35-44	71.6	5,479	10.9	55.4	53.3	42.3	8.7	4.9	1.7	4.4	47.1	5.9	3,925
45+	65.2	2,276	9.9	52.8	53.3	39.8	11.6	6.9	1.6	4.2	48.2	6.9	1,484
Residence													
Rural	64.7	10,282	11.1	46.3	43.6	37.3	8.1	6.1	2.7	4.3	53.7	6.7	6,655
Urban	92.7	5,030	11.8	71.4	61.9	48.7	9.3	3.2	1.9	4.0	42.2	4.9	4,664
Education													
Non-literate	29.0	3,256	7.1	25.7	9.5	6.4	5.0	4.3	0.5	2.0	73.8	8.3	945
0-9@ years	77.8	7,196	10.1	46.7	40.9	37.1	6.8	4.2	1.2	3.5	53.2	5.5	5,598
10 and above	98.3	4,858	13.7	74.5	71.4	54.9	11.2	5.7	4.1	5.3	39.1	6.1	4,775
Religion													
Hindu	73.0	14,037	11.5	56.6	51.0	42.3	8.6	4.8	2.5	4.2	49.2	5.9	10,253
Muslim	82.1	961	10.8	54.6	49.8	37.6	7.1	4.8	1.2	3.7	49.7	5.2	789
Christian	82.2	156	4.6	53.8	47.4	34.9	6.5	10.7	1.8	5.4	42.4	5.6	128
Jain	96.3	123	15.9	68.9	68.5	52.3	10.1	6.2	1.6	2.2	29.3	6.3	118
Other	(87.5)	32	(3.8)	(80.8)	(69.2)	(46.2)	(15.4)	(3.8)	(3.8)	(0.0)	(38.5)	(15.4)	28
Caste/tribe#													
Scheduled caste	65.1	1,580	11.1	49.7	42.5	37.8	9.5	5.6	1.5	3.6	47.5	5.6	1,028
Scheduled tribe	53.0	2,163	8.8	44.0	40.4	36.4	6.2	6.3	2.4	3.4	50.8	8.5	1,145
Other backward class	70.9	5,668	12.5	52.6	46.9	40.3	7.7	4.5	2.3	3.6	51.1	5.4	4,021
Other	88.2	5,585	11.3	64.6	59.5	46.1	9.7	4.8	2.6	4.8	46.7	6.0	4,927
Standard of living index													
Low	46.7	5,197	9.7	28.3	31.6	31.8	5.0	4.7	2.3	3.4	59.8	7.1	2,428
Medium	79.7	4,943	12.1	51.1	44.0	37.4	7.4	5.4	1.9	4.0	51.8	5.1	3,941
High	95.7	5,171	11.7	75.0	66.4	50.7	11.2	4.6	2.8	4.6	41.4	6.1	4,950
Total	73.9	15,311	11.4	56.6	51.1	42.0	8.6	4.9	2.4	4.1	48.9	5.9	11,319

Note: Total includes 1 case missing information on education is not shown separately. @ Literate men with no year of schooling are also included. # Total figure may not add to N due to do not know and missing cases. () Based on less than 50 unweighted cases.

8.5.2 Knowledge of Mode of Transmission about HIV/AIDS

Women who were aware of HIV/AIDS were asked about the mode of transmission and this is presented in Table 8.12. Among women who reported awareness of HIV/AIDS, 21 percent of them did not know about the mode of transmission. This proportion is relatively higher among non-literate women, Muslim women, and women with a low standard of living. About 23 percent of the rural women do not know about the mode of transmission of HIV/AIDS compared to 20 percent of urban women.

Table 8.12 SOURCE OF KNOWLEDGE ABOUT MODE OF TRANSMISSION OF HIV/AIDS AMONG WOMEN

Percentage currently married women age 15-44 who have heard of HIV/AIDS , knowledge of mode of transmission by selected background characteristics, Gujarat, 2002-04

	Percentage by knowledge of mode of transmission							
Background characteristic	Homo sexual intercourse	Hetero sexual intercourse	Needles/ blade/ skin puncture	Mother to child	Transfusion of infected blood	Other	Do not know	Number of women who have heard of HIV/AIDS
Age								
15-19	1.2	75.2	16.3	9.6	19.7	2.1	21.9	387
20-24	3.9	73.6	31.4	17.0	27.5	4.0	21.4	2,036
25-29	3.5	76.4	31.6	14.8	30.1	3.5	20.9	2,239
30-34	3.5	75.3	30.7	13.7	29.7	3.0	21.6	1,787
35-39	3.6	76.3	29.5	12.0	29.5	2.9	20.6	1,670
40-44	5.6	73.6	31.4	12.1	27.2	3.6	22.3	1,288
Residence								
Rural	3.1	73.5	23.5	11.2	23.7	3.1	22.8	4,400
Urban	4.4	76.6	36.3	16.5	32.7	3.6	20.0	5,007
Education								
Non-literate	2.2	61.1	12.6	4.7	10.7	2.4	35.0	1,250
0-9@ years	2.1	69.8	21.5	8.8	20.6	3.7	26.8	3,980
10 years and above	5.9	84.4	44.1	21.7	41.4	3.3	12.0	4,175
Religion								
Hindu	3.8	75.4	30.4	14.1	28.6	3.4	21.0	8,427
Muslim	2.9	69.3	22.1	9.7	20.7	3.2	27.5	685
Christian	7.8	87.2	52.2	25.7	58.9	0.1	12.8	64
Jain	6.3	81.5	43.0	18.3	43.8	2.9	16.0	193
Others	(10.3)	(79.3)	(55.2)	(24.1)	(48.2)	(0.0)	(13.8)	34
Caste/tribe#								
Scheduled caste	3.6	73.0	24.4	8.7	22.3	4.1	22.7	709
Scheduled tribe	3.1	71.1	20.8	9.1	20.8	3.1	26.4	708
Other backward class	2.2	71.8	25.2	10.8	24.3	2.9	25.6	3,025
Other	5.0	78.3	36.3	17.6	33.4	3.6	17.7	4,848
Standard of living index								
Low	1.9	66.3	12.7	5.5	13.3	3.3	30.6	913
Medium	2.7	71.1	23.7	9.8	20.9	3.5	25.6	2,876
High	4.7	78.6	36.6	17.5	34.9	3.3	17.6	5,618
Total	3.8	75.1	30.3	14.0	28.5	3.3	21.3	9,407

Note: Total includes 2 cases missing information on education are not shown separately. @ Literate women with no year of schooling are also included. # Total figure may not add to N due to do not know and missing cases () Based on less than 50 unweighted cases.

Among women who reported different ways of transmission of HIV/AIDS, a large proportion (75 percent) mentioned heterosexual intercourse as a mode of transmission. All the socio-economic groups reported that heterosexual intercourse was the main mode of transmission of HIV/AIDS. Other modes reported by women were transmission through needle or blade or skin puncture (30 percent), transfusion of infected blood (29 percent), mother to child, if pregnancy occurs during a stage of HIV (14 percent); only four percent of

the women mentioned that homosexual intercourse could also be a mode of transmission. Three percent stated that there were other ways of transmission of HIV/AIDS.

Table 8.13 SOURCE OF KNOWLEDGE ABOUT MODE OF TRANSMISSION OF HIV/AIDS AMONG MEN

Percentage of husbands of currently married women who have heard of HIV/AIDS , knowledge of mode of transmission by selected background characteristics, Gujarat, 2002-04

Background characteristic	Percentage by knowledge of mode of transmission							Number of men who have heard of HIV/AIDS
	Homo-sexual intercourse	Heterosexual intercourse	Needles/ blade/ skin puncture	Mother to child	Transfusion of infected blood	Other	Do not know	
Age								
<25	5.8	84.5	26.5	3.8	25.9	4.2	12.8	1,303
25-34	5.0	88.0	31.0	4.9	31.7	3.9	9.1	4,606
35-44	2.9	86.7	29.4	3.5	30.1	4.5	10.5	3,925
45+	2.9	86.0	31.2	4.6	30.9	2.8	11.7	1,484
Residence								
Rural	2.2	84.5	22.3	2.6	21.8	4.2	12.8	6,655
Urban	6.8	90.3	40.9	6.6	42.6	3.7	7.0	4,664
Education								
Non-literate	3.0	76.1	9.5	0.4	6.1	2.3	21.2	945
0-9@ years	2.1	83.4	20.7	1.7	19.4	3.4	13.8	5,598
10 years and above	6.7	93.1	44.9	8.0	48.1	5.1	4.2	4,775
Religion								
Hindu	4.1	87.2	30.2	4.3	30.6	3.9	10.3	10,253
Muslim	1.6	84.5	22.3	2.3	21.3	4.8	12.7	789
Christian	9.0	76.1	33.4	1.7	40.5	0.3	13.2	128
Jain	7.6	89.5	45.0	7.7	53.9	5.7	5.7	118
Other	(15.4)	(96.2)	(42.3)	(11.5)	(46.2)	(11.5)	(0.0)	28
Caste/tribe#								
Scheduled caste	4.0	84.4	22.5	2.6	24.6	4.7	12.2	1,028
Scheduled tribe	2.2	85.8	19.3	1.1	24.2	2.8	11.6	1,145
Other backward class	3.0	86.0	25.5	3.2	23.4	3.8	11.3	4,021
Other	5.6	89.0	38.2	6.3	39.3	4.3	8.4	4,927
Standard of living index								
Low	1.9	79.9	11.2	1.1	10.1	3.7	17.1	2,428
Medium	1.8	85.9	23.0	2.7	22.3	3.7	12.0	3,941
High	7.0	91.0	44.7	7.0	46.7	4.4	5.8	4,950
Total	4.1	86.9	30.0	4.3	30.4	4.0	10.4	11,319

Note: Total includes 1 case missing information on education is not shown separately. @ Literate men with no year of schooling are also included. # Total figure may not add to N due to do not know and missing cases . () Based on less than 50 unweighted cases.

Table 8.13 presents the knowledge about mode of transmission of HIV/AIDS among men. Ten percent of the men who had heard about HIV/AIDS mentioned that they do not know the mode of transmission. The percentage of men not knowing the mode of transmission is higher among younger men, rural men, non-literate men, and men from households with a low standard of living. Among whose men who reported ways of transmission of HIV/AIDS, 87 percent of them mentioned heterosexual intercourse as a mode of transmission. All the groups reported that heterosexual intercourse was the main mode of transmission of HIV/AIDS. Other modes reported by men are transmission through needle or blade or skin puncture and transfusion of infected blood (30 percent each). Only four percent of men each mentioned that mother to child, if pregnancy occurs during a stage of HIV and homosexual intercourse could be a mode of transmission of HIV/AIDS. Four percent also stated that there were other ways of transmission of HIV/AIDS.

8.5.3 How to avoid HIV/AIDS

All the respondents, male and female, were asked about how to prevent HIV/AIDS. The percentage of women who said that HIV/AIDS could be avoided by various ways has been presented in Table 8.14 by some selected background characteristics.

Among women who reported about awareness of HIV/AIDS, more than one-fifth of them did not know how to avoid becoming infected by HIV/AIDS. This percentage is more among rural women than among urban women. The percentage of women who did not know of any way to avoid infection decreases with increasing levels of education and household standard of living. Nearly two-fifths of non-literate women reported that they did not know of any way to avoid infection as compared to 13 percent of women who had completed ten or more years of schooling. Similarly, 34 percent of women with low standard of living stated that they did not know of any way to avoid infection as compared to 19 percent of women with a high standard of living. The percentage of women who did not know ways to avoid infection is also high among Muslim women and scheduled-caste women.

Table 8.14 KNOWLEDGE ABOUT AVOIDANCE OF HIV/AIDS AMONG WOMEN

Among currently married women age 15-44 who have heard about HIV/AIDS, the percentage of women reported HIV/AIDS can be avoided in specific ways by selected background characteristics, Gujarat, 2002-04

Background characteristic	Percentage reported HIV/AIDS can be avoided by: Sex With Only one partner	Using condoms correctly during each sexual intercourse	Checking blood prior to transfusion	Sterilizing needles and syringes for injection	Avoiding pregnancy when having HIV/AIDS	Other	Do not know To avoid HIV/AIDS	Number of women
Age								
15-19	71.8	17.9	17.6	13.0	1.9	8.8	22.8	387
20-24	69.7	24.4	33.2	24.3	7.6	7.5	23.8	2,036
25-29	71.6	22.8	32.4	26.7	6.4	8.8	21.2	2,239
30-34	71.1	24.6	32.8	25.0	7.6	9.3	22.2	1,787
35-39	70.5	19.9	31.2	22.2	5.7	10.5	23.3	1,670
40-44	71.0	17.5	31.5	26.2	6.3	8.5	23.7	1,288
Residence								
Rural	69.3	17.5	25.7	18.6	4.1	9.0	24.0	4,400
Urban	72.1	26.1	37.0	29.5	8.7	8.7	21.6	5,007
Education								
Non-literate	56.9	7.7	10.7	7.9	1.4	6.2	38.8	1,250
0-9@ years	65.0	15.3	22.9	16.0	2.4	10.0	27.4	3,980
10 years and above	80.6	32.9	46.4	37.5	12.0	8.6	13.4	4,175
Religion								
Hindu	71.0	22.3	32.0	24.5	6.4	9.0	22.4	8,427
Muslim	66.9	15.0	21.8	17.4	5.2	8.6	28.3	685
Christian	78.6	29.9	41.1	43.4	18.2	12.2	14.5	64
Jain	74.6	32.0	47.0	37.6	13.7	3.3	17.5	193
Other	(79.3)	(31.0)	(51.7)	(34.5)	(13.8)	(3.4)	(13.8)	34
Caste/tribe#								
Scheduled caste	67.3	20.1	22.3	20.5	3.1	10.4	26.8	709
Scheduled tribe	65.6	18.0	21.2	16.1	3.6	6.2	29.8	708
Other backward class	68.0	18.0	27.6	19.2	4.0	10.4	25.5	3,025
Other	74.0	25.7	37.5	29.8	9.2	8.2	19.3	4,848
Standard of living index								
Low	61.1	8.2	12.3	9.3	1.8	8.8	34.0	913
Medium	66.6	15.7	23.7	18.4	4.1	9.4	26.2	2,876
High	74.5	27.6	39.0	30.0	8.6	8.6	19.1	5,618
Total	70.8	22.1	31.7	24.4	6.6	8.9	22.7	9,407

Note: Total includes 2 cases missing information on education, 19 women with other category in religion were not shown separately.
@ Literate women with no year of schooling are also included. # Total figure may not add to N due to do not know and missing cases
( ): Based on less than 50 unweighted cases.

Among women who mentioned ways to avoid HIV/AIDS, a much higher proportion of women (71 percent) said that "sex with only one partner is the way to avoid it". Other ways to prevent HIV/AIDS mentioned by women were 'checking blood prior to transfusion' (32 percent), 'sterilizing needles and syringe before injecting' (24 percent), 'using a condom correctly during each sexual intercourse' (22 percent), and seven percent of the women reported that the pregnancy should be avoided if couples were infected by HIV/AIDS. All the specific ways to avoid becoming infected by HIV/AIDS reported by women are proportionally higher in urban areas, among Christian and Jain women, women who belong to 'other castes' category, women with a high level of education and women with a high standard of living.

Table 8.15 shows the percentage of men who reported that HIV/AIDS could be avoided by some selected background characteristics. Among men who are aware of HIV/AIDS, 12 percent of them did not know of any method to avoid infection, compared to 23 percent women in the state.

Table 8.15 KNOWLEDGE ABOUT AVOIDANCE OF HIV/AIDS AMONG MEN

Among husbands of currently married women who have heard about HIV/AIDS, the percentage of men reported HIV/AIDS can be avoided in specific ways by selected background characteristics, Gujarat, 2002-04

	Percentage reported HIV/AIDS can be avoided by:							
Background characteristic	Sex with only one partner	Using condoms correctly during each sexual intercourse	Checking blood prior to transfusion	Sterilizing needles and syringes for injection	Avoiding pregnancy when having HIV/AIDS	Other	Do not know to avoid HIV/AIDS	Number of men
Age								
<25	71.4	33.5	26.0	23.0	2.7	14.6	12.7	1,303
25-34	77.0	38.0	29.6	26.5	2.5	12.0	10.6	4,606
35-44	75.4	30.1	27.9	24.8	2.1	13.9	11.9	3,925
45+	74.9	28.3	29.4	26.5	2.7	13.4	15.2	1,484
Residence								
Rural	72.9	29.9	21.0	18.8	1.3	15.0	14.0	6,655
Urban	79.2	38.6	39.3	34.9	3.9	10.6	8.9	4,664
Education								
Non-literate	63.8	10.0	5.1	7.3	0.2	16.3	22.7	945
0-9@ years	72.2	24.2	17.2	16.3	1.0	14.7	15.6	5,598
10 years and above	81.7	49.0	46.5	39.8	4.4	10.8	5.4	4,775
Religion								
Hindu	75.3	33.6	28.6	25.7	2.4	13.0	11.9	10,253
Muslim	76.8	29.4	21.2	17.4	1.4	14.8	12.8	789
Christian	70.9	34.2	32.7	37.0	0.9	7.6	12.7	128
Jain	88.3	36.0	54.3	40.4	2.5	14.2	6.1	118
Other	(80.8)	(46.2)	(53.8)	(34.6)	(11.5)	(15.4)	(3.8)	28
Caste/tribe#								
Scheduled caste	70.1	28.1	23.1	21.5	3.1	14.9	14.0	1,028
Scheduled tribe	75.2	28.4	21.1	17.1	0.4	9.3	16.3	1,145
Other backward class	77.4	29.4	22.5	20.6	1.9	14.0	12.3	4,021
Other	75.9	39.5	37.0	32.8	3.2	12.9	9.7	4,927
Standard of living index								
Low	69.7	21.6	9.9	9.8	0.7	17.0	17.9	2,428
Medium	72.6	28.7	21.0	18.5	1.2	14.3	14.0	3,941
High	80.7	43.1	43.7	38.8	4.1	10.4	7.3	4,950
Total	75.5	33.5	28.5	25.5	2.4	13.2	11.9	11,319

Note: Total includes 1case missing information on education were not shown separately. @ Literate men with no year of schooling are also included. # Total figure may not add to N due to do not know and missing cases. () Based on less than 50 unweighted cases.

In Gujarat a much higher proportion of women reported that 'sex with only one partner' is the way to avoid HIV/AIDS, a majority of men (76 percent) also reported the same, and this was the most commonly reported way to avoid HIV/AIDS in all the groups.

Other ways to prevent HIV/AIDS mentioned by men are 'using a condom correctly during each sexual intercourse' (34 percent), 'checking blood prior to transfusion' (29 percent), and 'sterilizing needles and syringe before injecting' (26 percent). All the specific ways to avoid becoming infected by HIV/AIDS reported by men are proportionally higher in urban areas, among men who belong to 'other caste' category, men with a high level of education and men with a high standard of living.

8.5.4 Misconception about HIV/AIDS

People generally have misconceptions about the ways of transmission of HIV/AIDS, such as 'shaking hands with a person having AIDS', hugging and kissing with them, sharing their clothes or sharing eating utensils, stepping on urine/stool, through insect bites, for example, being bitten by mosquitoes, fleas and bedbugs. All these questions were asked to the respondents who had heard of HIV/AIDS.

Table 8.16 MISCONCEPTION ABOUT TRANSMISSION OF HIV/AIDS AMONG WOMEN

Among currently married women age 15-44 who have heard about HIV/AIDS, the percentage of women having misconception about the transmission of HIV/AIDS by selected background characteristics, Gujarat, 2002-04

	Percentage having misconception about the transmission of HIV/AIDS							
Background characteristic	Shaking hands	Hugging	Kissing	Sharing clothes	Sharing eating utensils	Stepping on Urine / stool	Mosquito, flea, or bedbugs biting	Number of women
Residence								
Rural	19.8	23.4	30.1	27.0	31.1	26.6	28.9	4,400
Urban	11.2	13.0	22.2	17.0	19.0	15.2	19.5	5,007
Education								
Non-literate	21.6	24.8	32.7	30.5	35.5	28.1	31.5	1,250
0-9@ years	18.0	21.2	28.0	24.3	27.8	23.6	25.7	3,980
10 years and above	10.6	12.6	21.7	16.5	18.4	15.3	20.0	4,175
Religion								
Hindu	15.4	18.2	26.4	21.9	25.3	21.0	24.5	8,427
Muslim	16.1	17.8	23.7	20.8	21.0	17.2	18.6	685
Christian	10.4	11.8	21.6	24.4	20.6	20.8	23.4	64
Jain	7.0	7.9	14.0	17.3	15.5	14.1	18.8	193
Other	(10.3)	(6.9)	(24.1)	(13.8)	(10.3)	(17.2)	(27.6)	34
Caste/tribe#								
Scheduled caste	17.3	21.5	25.0	24.0	27.6	24.1	28.4	709
Scheduled tribe	16.4	17.4	22.0	23.7	26.6	23.2	23.7	708
Other backward class	17.4	19.0	28.2	21.3	25.5	21.0	25.0	3,025
Other	13.3	16.6	25.1	21.2	23.3	19.3	22.7	4,848
Standard of living index								
Low	25.6	29.1	32.3	31.6	37.1	31.2	31.9	913
Medium	17.8	20.8	26.8	23.4	27.8	24.1	24.9	2,876
High	12.2	14.5	24.3	19.1	21.0	16.9	22.1	5,618
Total	15.2	17.9	25.9	21.6	24.6	20.5	23.9	9,407

Note: Total includes 2 cases missing information on education were not shown separately. () Based on less than 50 unweighted cases. @ Literate women with no year of schooling are also included.
Total figure may not add to N due to do not know and missing cases

Table 8.16 shows the percentage of women with misconceptions about spreading HIV/AIDS through specific ways by selected background characteristics. Kissing is the commonly reported as the way of getting HIV/AIDS infection by women, and this percentage is higher in the rural areas (30 percent) than in urban areas (22 percent). Non-literate women, and women from households with a low standard of living, were more likely to report sharing eating utensils to get an infection. Other misconceptions about the spreading of HIV/AIDS were 'mosquito, flea, or bedbugs biting' (24 percent), 'sharing clothes' (22 percent), 'stepping on urine/stool' (21 percent), 'hugging' (18 percent), and 'shaking hands' (15 percent). The percentage of all these misconceptions is higher among rural women, non-literate women and women with a low standard of living.

Table 8.17 MISCONCEPTION ABOUT TRANSMISSION OF HIV/AIDS AMONG MEN

Among husbands currently married women who have heard about HIV/AIDS, the percentage of men having misconception about the transmission of HIV/AIDS by selected background characteristics, Gujarat, 2002-04

	Percentage having misconception about the transmission of HIV/AIDS							
Background characteristic	Shaking hands	Hugging	Kissing	Sharing clothes	Sharing eating utensils	Stepping on urine/ stool	Mosquito, flea, or bedbugs biting	Number of men
Residence								
Rural	28.1	32.6	46.3	40.8	42.7	34.9	48.3	6,655
Urban	11.5	13.1	30.2	19.8	21.8	17.2	35.2	4,664
Education								
Non-literate	32.5	39.9	49.2	51.6	50.1	41.3	47.7	945
0-9@ years	26.9	30.4	46.2	39.0	41.0	31.6	47.8	5,598
10 years and above	12.5	14.7	30.2	20.3	22.9	20.2	36.3	4,775
Religion								
Hindu	21.3	24.8	39.8	32.2	34.4	27.9	43.4	10,253
Muslim	22.2	24.2	38.9	33.4	32.6	23.1	37.6	789
Christian	22.8	21.9	47.2	35.1	37.6	41.4	53.7	128
Jain	17.9	19.5	32.0	20.2	18.8	22.0	30.6	118
Other	(15.4)	(19.2)	(30.8)	(26.9)	(23.1)	(15.4)	(42.3)	28
Caste/tribe#								
Scheduled caste	24.0	28.0	40.3	38.2	39.6	32.1	44.5	1,028
Scheduled tribe	29.8	34.3	47.5	42.7	45.6	36.8	49.7	1,145
Other backward class	24.2	27.6	43.9	35.3	38.3	29.9	45.7	4,021
Other	16.3	19.0	34.3	25.6	26.6	22.6	38.9	4,927
Standard of living index								
Low	36.5	41.3	54.7	50.4	53.3	42.7	54.9	2,428
Medium	23.8	28.7	42.7	36.8	38.5	29.6	43.3	3,941
High	11.9	13.2	29.9	19.5	21.2	18.6	36.8	4,950
Total	21.3	24.6	39.7	32.2	34.1	27.6	42.9	11,319

Note: Total includes 1 case missing information on education were not shown separately. @ Literate men with no year of schooling are also included. # Total figure may not add to N due to do not know and missing cases. () Based on less than 50 unweighted cases.

Table 8.17 presents the percentage of men with misconceptions about the spreading of HIV/AIDS through specific ways by selected background characteristics. The men in almost all the categories reported that HIV/AIDS is transmitted through insect bites, mosquitoes, flea or bedbugs. Forty-three percent of the men in India felt so. The percentage who reported that HIV/AIDS could be transmitted through the biting by mosquitoes or flees or bedbugs was much higher among rural men (48 percent) than among urban men (35 percent). Non-literate and literate men who have completed nine years of schooling, Christian men, and scheduled tribe men, and men from households with a low standard of living, are of the impression that HIV/AIDS spreads when one is bitten by mosquitoes, fleas or bedbugs. Other misconceptions about the spread of HIV/AIDS are 'kissing' (40 percent), 'sharing eating utensils' (34

percent), 'sharing clothes' (32 percent), 'stepping on urine/stool' (28 percent), 'hugging' (25 percent), and 'shaking hands' (21 percent). All the misconceptions reported by men are relatively higher than those reported by women. The percentage of all these misconceptions is also higher among men who belong to scheduled-tribe, non-literate men and men with a low standard of living.

8.5.5 Knowledge of Curability of HIV/AIDS

Table 8.18 shows the percentage distribution of currently married women and their husbands who have heard about HIV/AIDS by knowledge of curability of the same, according to some selected background characteristics. About 27 percent women and 33 percent men have the notion that HIV/AIDS is curable, whereas 45 percent women and 46 percent men replied that the disease is not curable. Twenty-eight percent women and 21 percent men do not have any idea regarding the curability of the disease. It can be safely asserted from the figures that higher proportion of men and women having high level of education, belonging to Jain religion and other caste and from households of high standard of living have correct knowledge about the curability of HIV/AIDS.

Table 8.18 KNOWLEDGE OF CURABILITY ABOUT HIV/AIDS

Among currently married women and their husband, who have heard about HIV/AIDS, Percent distribution of respondents by knowledge of curability about HIV/AIDS, according to some selected background characteristics, Gujarat, 2002-04

Background characteristic	Percent distribution of women			Number of women	Percent distribution of men			Number of men
	Yes	No	Do not know		Yes	No	Do not know	
Residence								
Rural	26.4	45.6	28.0	4,400	36.1	41.3	22.5	6,655
Urban	28.1	44.5	27.4	5,007	28.6	52.6	18.9	4,664
Education								
Non-literate	26.3	40.8	33.0	1,250	31.1	31.9	37.0	945
0-9@ years	24.2	42.3	33.5	3,980	32.1	43.3	24.6	5,598
10 years and above	30.5	49.0	20.5	4,175	34.5	51.8	13.7	4,775
Religion								
Hindu	27.4	45.6	27.0	8,427	32.8	46.0	21.2	10,253
Muslim	26.8	35.8	37.5	685	36.2	44.8	19.0	789
Christian	37.4	44.0	18.6	64	37.3	36.3	26.5	128
Jain	23.3	54.3	22.3	193	31.9	52.9	15.2	118
Other	(20.7)	(55.2)	(24.1)	34	(23.1)	(57.7)	(19.2)	28
Caste/tribe#								
Scheduled caste	28.2	39.2	32.6	709	33.8	40.1	26.1	1,028
Scheduled tribe	32.0	38.0	30.0	708	40.0	33.7	26.3	1,145
Other backward class	27.5	41.1	31.4	3,025	34.2	45.2	20.6	4,021
Other	26.4	49.5	24.1	4,848	30.4	51.1	18.5	4,927
Standard of living index								
Low	31.0	38.9	30.2	913	39.8	34.5	25.7	2,428
Medium	26.5	44.0	29.5	2,876	32.8	42.9	24.3	3,941
High	27.1	46.6	26.3	5,618	29.8	54.1	16.1	4,950
Total	27.3	45.0	27.7	9,407	33.0	46.0	21.0	11,319

Note: Total includes 2 women and 1 men are missing information on education were not shown separately.
Total figure may not add to N due to do not know and missing cases
@ Literate persons with no year of schooling are also included. () Based on less than 50 unweighted cases.

8.6 Awareness of RTI/STI and HIV/AIDS by District

Table 8.19 shows the percentage distribution of currently married women and their husbands who are aware of RTI/STI and HIV/AIDS by districts.

According to DLHS, 41 and 45 percent of women were aware of RTI/STI and HIV/AIDS respectively and the corresponding figures for husbands of eligible women are 50 and 74 percent respectively. The awareness of RTI/STI and HIV/AIDS among men is higher than that among women by 9 and 29 percentage points respectively.

In general, except Junagarh, Kheda, and Navsari districts where women are more aware of RTI/STI, in all of the districts men are more aware of RTI/STI and HIV/AIDS than women. The highest level of awareness about RTI/STI among women was reported in Bharuch (76 percent), followed by Kheda (71 percent) to the lowest in The Dangs (10 percent). Among men the highest level of awareness of RTI/STI was reported in Porbandar (81 percent), and the lowest in The Dangs (19 percent).

Table 8.19 AWARENESS OF RTI/STI AND HIV/AIDS BY DISTRICT

Percentage of currently married women and their husbands aware of RTI/STI and HIV/AIDS by district, Gujarat, 2002-04

	Percentage of women		Percentage of men	
District	Aware of RTI/STI	Aware of HIV/AIDS	Aware of RTI/STI	Aware of HIV/AIDS
Ahmedabad	36.6	59.8	59.5	88.3
Amreli	64.3	47.3	71.5	81.0
Anand	51.6	52.2	75.6	86.7
Banaskantha	18.2	34.8	35.9	67.3
Bharuch	75.5	48.8	77.6	75.7
Bhavnagar	59.7	44.2	69.6	81.2
Dahod	45.0	29.9	51.2	51.9
Gandhinagar	42.9	66.4	52.3	86.3
Jamnagar	26.5	42.0	29.0	71.6
Junagarh	30.6	41.9	25.3	64.6
Kachchh	22.1	33.6	32.2	56.7
Kheda	70.5	41.3	67.0	76.6
Mahesana	25.9	46.7	37.1	76.9
Narmada	65.2	33.8	68.1	65.0
Navsari	67.3	57.4	58.5	75.2
Panchmahals	57.3	31.7	67.3	62.4
Patan	51.1	44.8	72.5	78.2
Porbandar	52.6	48.9	80.6	88.5
Rajkot	29.8	45.5	33.8	80.1
Sabarkantha	27.1	48.1	47.1	74.2
Surat	37.6	64.8	38.8	86.2
Surendranagar	25.9	40.6	41.1	73.2
The Dangs	9.9	12.7	19.1	32.4
Vadodara	57.0	46.0	59.3	74.1
Valsad	45.4	51.9	55.2	67.4
Gujarat	41.3	45.2	50.3	73.9

The proportion of husbands of eligible women for currently married women ages 15-44 who are aware of HIV/AIDS in the districts of Gujarat is also presented in Table 8.19. Among women the awareness about HIV/AIDS ranges from the highest of around two-thirds each in Gandhinagar and Surat, to the lowest of 13 percent in The Dangs. With the exception of Banaskantha, Dahod, Kachchh, Narmada, Pachmahals and The Dangs in every district a minimum of two-fifth of women reported awareness of HIV/AIDS. A high level of awareness of HIV/AIDS among men exceeding 75 percent was reported in Ahmedabad, Amreli, Anand, Bharuch, Bhavnagar, Gandhinagar, Kheda, Mahesana, Navsari, Patan, Porbandar, Rajkot, and Surat districts.

Sampling errors, Gujarat, 2002-04

District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
Contraceptive Prevalence Rate (Currently Married Women age 15-44)							
Ahmadabad	0.564	0.037	771	768	6.6	0.492	0.636
Amreli	0.676	0.016	913	913	2.4	0.644	0.708
Anand	0.611	0.019	896	896	3.1	0.574	0.648
Banaskanta	0.412	0.020	688	676	4.9	0.373	0.452
Bharuch	0.627	0.017	921	921	2.7	0.594	0.661
Bhavnagar	0.670	0.016	962	962	2.4	0.639	0.701
Dohad	0.437	0.016	988	987	3.7	0.405	0.469
Gandhinagar	0.569	0.019	799	795	3.3	0.532	0.606
Jamnagar	0.645	0.024	719	715	3.7	0.598	0.692
Junagarh	0.630	0.019	787	787	3.0	0.592	0.667
Kachchh	0.474	0.023	686	682	4.9	0.428	0.519
Kheda	0.652	0.017	932	932	2.6	0.619	0.686
Mehasana	0.583	0.021	701	698	3.6	0.542	0.624
Narmada	0.674	0.019	929	929	2.8	0.637	0.711
Navsari	0.687	0.017	853	853	2.5	0.655	0.720
Panchmahal	0.553	0.017	944	944	3.1	0.520	0.586
Patan	0.546	0.018	856	856	3.3	0.511	0.581
Porbandar	0.622	0.017	937	937	2.7	0.589	0.655
Rajkot	0.669	0.024	728	724	3.6	0.621	0.717
Sabarkanta	0.587	0.019	771	767	3.2	0.549	0.624
Surat	0.698	0.021	781	776	3.0	0.657	0.739
Surendra Nagar	0.562	0.019	724	720	3.4	0.525	0.600
The Dangs	0.458	0.020	765	760	4.4	0.419	0.496
Vadodra	0.615	0.018	859	859	2.9	0.580	0.650
Valsad	0.552	0.018	886	886	3.3	0.518	0.587

Sampling errors, Gujarat, 2002-04

District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
Unmet Need (Currently Married Women age 15-44)							
Ahmadabad	0.168	0.026	771	769	15.5	0.117	0.219
Amreli	0.083	0.009	913	913	10.8	0.065	0.101
Anand	0.168	0.014	896	896	8.3	0.140	0.197
Banaskanta	0.249	0.018	688	676	7.2	0.215	0.284
Bharuch	0.124	0.012	921	921	9.7	0.101	0.147
Bhavnagar	0.104	0.010	962	962	9.6	0.084	0.125
Dohad	0.225	0.014	988	988	6.2	0.198	0.251
Gandhinagar	0.148	0.013	799	795	8.8	0.122	0.175
Jamnagar	0.176	0.017	719	716	9.7	0.142	0.209
Junagarh	0.131	0.014	787	786	10.7	0.104	0.157
Kachchh	0.315	0.022	686	682	7.0	0.272	0.358
Kheda	0.099	0.011	932	932	11.1	0.077	0.120
Mehasana	0.202	0.017	701	697	8.4	0.169	0.235
Narmada	0.145	0.015	929	929	10.3	0.116	0.174
Navsari	0.136	0.013	853	853	9.6	0.111	0.160
Panchmahal	0.149	0.012	944	944	8.1	0.126	0.173
Patan	0.206	0.015	856	856	7.3	0.178	0.235
Porbandar	0.146	0.012	937	937	8.2	0.122	0.171
Rajkot	0.148	0.019	728	724	12.8	0.111	0.185
Sabarkanta	0.197	0.015	771	768	7.6	0.167	0.227
Surat	0.105	0.012	781	777	11.4	0.083	0.128
Surendra Nagar	0.184	0.016	724	720	8.7	0.153	0.214
The Dangs	0.272	0.018	765	761	6.6	0.238	0.307
Vadodra	0.156	0.013	859	859	8.3	0.130	0.182
Valsad	0.191	0.014	886	886	7.3	0.163	0.218

Sampling errors, Gujarat, 2002-04

District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
Received Any Antenatal Check up (last live/still birth of past 3 years)							
Ahmadabad	0.918	0.028	253	260	3.1	0.863	0.974
Amreli	0.962	0.014	252	253	1.5	0.934	0.989
Anand	0.934	0.017	270	275	1.8	0.901	0.967
Banaskanta	0.735	0.027	326	328	3.7	0.683	0.787
Bharuch	0.942	0.014	291	285	1.5	0.914	0.970
Bhavnagar	0.936	0.015	306	316	1.6	0.907	0.965
Dohad	0.836	0.018	428	420	2.2	0.800	0.871
Gandhinagar	0.960	0.013	259	249	1.4	0.933	0.986
Jamnagar	0.824	0.038	277	272	4.6	0.750	0.898
Junagarh	0.905	0.019	275	284	2.1	0.869	0.942
Kachchh	0.785	0.032	285	299	4.1	0.723	0.848
Kheda	0.919	0.017	311	301	1.8	0.886	0.953
Mehasana	0.837	0.025	268	257	3.0	0.787	0.886
Narmada	0.892	0.026	301	298	2.9	0.842	0.942
Navsari	0.972	0.011	244	244	1.1	0.950	0.993
Panchmahal	0.875	0.018	342	351	2.1	0.839	0.911
Patan	0.849	0.020	325	326	2.4	0.810	0.888
Porbandar	0.968	0.011	317	311	1.1	0.947	0.989
Rajkot	0.866	0.032	256	275	3.7	0.803	0.928
Sabarkanta	0.848	0.022	296	289	2.6	0.804	0.892
Surat	0.937	0.018	259	270	1.9	0.902	0.972
Surendra Nagar	0.898	0.019	274	286	2.1	0.860	0.936
The Dangs	0.727	0.025	381	384	3.4	0.679	0.776
Vadodra	0.925	0.017	240	240	1.8	0.891	0.958
Valsad	0.863	0.020	313	316	2.3	0.823	0.903

Sampling errors, Gujarat, 2002-04

District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
Received 3+ Antenatal Check up (last live/still birth of past 3 years)							
Ahmadabad	0.776	0.041	260	260	5.3	0.696	0.857
Amreli	0.625	0.033	254	254	5.3	0.561	0.689
Anand	0.671	0.033	275	275	4.9	0.607	0.735
Banaskanta	0.385	0.029	329	329	7.5	0.329	0.441
Bharuch	0.705	0.029	285	285	4.1	0.649	0.761
Bhavnagar	0.615	0.029	315	315	4.7	0.559	0.671
Dohad	0.417	0.025	420	420	6.0	0.369	0.465
Gandhinagar	0.698	0.031	249	249	4.4	0.637	0.759
Jamnagar	0.602	0.042	272	272	7.0	0.520	0.685
Junagarh	0.615	0.032	284	284	5.2	0.552	0.679
Kachchh	0.478	0.036	300	300	7.5	0.407	0.549
Kheda	0.697	0.028	301	301	4.0	0.642	0.751
Mehasana	0.582	0.034	257	257	5.8	0.516	0.648
Narmada	0.627	0.036	298	298	5.7	0.557	0.697
Navsari	0.875	0.022	243	243	2.5	0.832	0.918
Panchmahal	0.584	0.028	351	351	4.8	0.530	0.638
Patan	0.570	0.028	326	326	4.9	0.514	0.625
Porbandar	0.705	0.027	312	312	3.8	0.652	0.757
Rajkot	0.614	0.046	275	275	7.5	0.524	0.703
Sabarkanta	0.635	0.030	289	289	4.7	0.576	0.694
Surat	0.716	0.036	270	270	5.0	0.645	0.788
Surendra Nagar	0.486	0.031	286	286	6.4	0.424	0.548
The Dangs	0.373	0.027	385	385	7.2	0.321	0.425
Vadodra	0.711	0.031	240	240	4.4	0.650	0.771
Valsad	0.739	0.026	317	317	3.5	0.688	0.790

Sampling errors, Gujarat, 2002-04

District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
Institutional Delivery (last live/still birth of past 3 years)							
Ahmadabad	0.717	0.050	253	262	7.0	0.620	0.815
Amreli	0.402	0.032	252	253	8.0	0.338	0.466
Anand	0.692	0.033	270	275	4.8	0.628	0.756
Banaskanta	0.537	0.030	326	328	5.6	0.479	0.595
Bharuch	0.387	0.030	291	284	7.8	0.327	0.446
Bhavnagar	0.436	0.029	306	316	6.7	0.379	0.494
Dohad	0.465	0.025	428	420	5.4	0.416	0.514
Gandhinagar	0.736	0.029	259	250	3.9	0.678	0.793
Jamnagar	0.497	0.042	277	272	8.5	0.414	0.579
Junagarh	0.371	0.031	275	284	8.4	0.310	0.433
Kachchh	0.403	0.036	285	299	8.9	0.334	0.473
Kheda	0.534	0.031	311	299	5.8	0.474	0.595
Mehasana	0.746	0.030	268	256	4.0	0.687	0.806
Narmada	0.269	0.030	301	296	11.2	0.211	0.327
Navsari	0.724	0.030	244	245	4.1	0.665	0.782
Panchmahal	0.402	0.028	342	350	7.0	0.347	0.456
Patan	0.530	0.029	325	327	5.5	0.473	0.586
Porbandar	0.504	0.030	317	310	6.0	0.445	0.562
Rajkot	0.557	0.046	256	276	8.3	0.467	0.648
Sabarkanta	0.626	0.030	296	289	4.8	0.567	0.686
Surat	0.565	0.039	259	270	6.9	0.489	0.642
Surendra Nagar	0.407	0.031	274	286	7.6	0.347	0.468
The Dangs	0.107	0.017	381	384	15.9	0.073	0.140
Vadodra	0.558	0.035	240	241	6.3	0.490	0.626
Valsad	0.572	0.029	313	316	5.1	0.514	0.629

Sampling errors, Gujarat, 2002-04

District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
Safe Delivery (last live/still birth of past 3 years)							
Ahmadabad	0.801	0.039	253	261	4.9	0.726	0.877
Amreli	0.691	0.031	252	254	4.5	0.630	0.753
Anand	0.734	0.032	270	276	4.4	0.672	0.796
Banaskanta	0.607	0.029	326	329	4.8	0.550	0.664
Bharuch	0.429	0.031	291	284	7.2	0.369	0.490
Bhavnagar	0.601	0.029	306	316	4.8	0.544	0.658
Dohad	0.496	0.025	428	420	5.0	0.447	0.545
Gandhinagar	0.762	0.028	259	249	3.7	0.706	0.818
Jamnagar	0.703	0.032	277	271	4.6	0.640	0.767
Junagarh	0.624	0.033	275	284	5.3	0.560	0.687
Kachchh	0.515	0.037	285	299	7.2	0.442	0.587
Kheda	0.599	0.030	311	300	5.0	0.540	0.659
Mehasana	0.807	0.028	268	256	3.5	0.753	0.862
Narmada	0.322	0.032	301	297	9.9	0.260	0.385
Navsari	0.754	0.029	244	244	3.8	0.697	0.811
Panchmahal	0.471	0.028	342	350	5.9	0.416	0.526
Patan	0.577	0.028	325	327	4.9	0.521	0.632
Porbandar	0.717	0.026	317	311	3.6	0.665	0.769
Rajkot	0.727	0.042	256	275	5.8	0.645	0.808
Sabarkanta	0.723	0.028	296	289	3.9	0.668	0.779
Surat	0.656	0.037	259	270	5.6	0.584	0.729
Surendra Nagar	0.516	0.031	274	286	6.0	0.455	0.578
The Dangs	0.184	0.022	381	383	12.0	0.142	0.227
Vadodra	0.584	0.035	240	241	6.0	0.516	0.652
Valsad	0.608	0.029	313	316	4.8	0.551	0.665

Sampling errors, Gujarat, 2002-04

District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
Received BCG Vaccination (last and last but one living children, age 12-23 months)							
Ahmadabad	0.873	0.093	82	94	10.6	0.692	1.055
Amreli	0.822	0.047	74	78	5.8	0.729	0.915
Anand	0.968	0.022	93	97	2.2	0.925	1.010
Banas Kantha	0.753	0.045	94	99	6.0	0.664	0.841
Bharuch	0.973	0.015	85	86	1.6	0.943	1.003
Bhavnagar	0.789	0.041	102	104	5.2	0.708	0.869
Dohad	0.611	0.041	139	137	6.7	0.530	0.691
Gandhinagar	0.911	0.035	68	66	3.9	0.842	0.980
Jamnagar	0.944	0.023	79	76	2.5	0.898	0.989
Junagarh	0.805	0.055	67	65	6.8	0.698	0.912
Kachchh	0.927	0.028	110	117	3.0	0.872	0.981
Kheda	0.878	0.035	84	83	4.0	0.810	0.946
Mahesana	0.951	0.023	80	78	2.4	0.907	0.995
Narmada	0.727	0.073	80	81	10.0	0.584	0.870
Navsari	0.981	0.014	74	75	1.4	0.954	1.007
Panch Mahals	0.797	0.042	98	102	5.2	0.715	0.878
Patan	0.731	0.043	100	96	5.8	0.647	0.815
Porbandar	0.911	0.027	103	100	2.9	0.859	0.963
Rajkot	0.920	0.035	66	87	3.8	0.851	0.989
Sabar Kantha	0.923	0.030	86	84	3.2	0.865	0.981
Surat	0.839	0.061	81	76	7.3	0.719	0.958
Surendranagar	0.793	0.048	71	76	6.1	0.699	0.887
The Dangs	0.876	0.031	123	128	3.6	0.815	0.937
Vadodara	0.910	0.037	56	56	4.1	0.837	0.982
Valsad	0.931	0.024	105	107	2.6	0.884	0.979

Sampling errors, Gujarat, 2002-04

District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
Received Measles (last and last but one living children, age 12-23 months)							
Ahmadabad	0.832	0.092	82	94	11.0	0.652	1.012
Amreli	0.668	0.056	74	78	8.3	0.559	0.777
Anand	0.781	0.047	93	97	6.0	0.689	0.873
Banas Kantha	0.519	0.052	94	99	10.1	0.416	0.622
Bharuch	0.860	0.036	85	86	4.2	0.789	0.931
Bhavnagar	0.618	0.048	102	104	7.8	0.523	0.713
Dohad	0.245	0.037	139	137	15.0	0.173	0.318
Gandhinagar	0.680	0.060	68	66	8.8	0.564	0.797
Jamnagar	0.706	0.071	79	76	10.1	0.566	0.845
Junagarh	0.660	0.061	67	65	9.2	0.541	0.780
Kachchh	0.635	0.057	110	117	9.0	0.523	0.748
Kheda	0.700	0.051	84	83	7.3	0.600	0.800
Mahesana	0.742	0.053	80	78	7.2	0.637	0.846
Narmada	0.590	0.069	80	81	11.8	0.454	0.726
Navsari	0.930	0.029	74	75	3.1	0.873	0.988
Panch Mahals	0.427	0.050	98	102	11.8	0.328	0.526
Patan	0.594	0.048	100	96	8.1	0.499	0.688
Porbandar	0.762	0.041	103	100	5.4	0.681	0.844
Rajkot	0.733	0.081	66	87	11.1	0.574	0.893
Sabar Kantha	0.644	0.052	86	84	8.1	0.542	0.747
Surat	0.575	0.071	81	76	12.4	0.435	0.715
Surendranagar	0.659	0.056	71	76	8.5	0.549	0.769
The Dangs	0.604	0.046	123	128	7.6	0.514	0.693
Vadodara	0.778	0.056	56	56	7.2	0.669	0.887
Valsad	0.700	0.045	105	107	6.5	0.611	0.789

Sampling errors, Gujarat, 2002-04

District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
Birth order 3+ (birth in last three years)							
Ahmadabad	0.325	0.061	251	253	18.8	0.206	0.444
Amreli	0.406	0.031	282	286	7.6	0.345	0.467
Anand	0.343	0.032	302	310	9.3	0.279	0.406
Banaskanta	0.554	0.029	335	340	5.2	0.498	0.611
Bharuch	0.359	0.029	332	328	8.1	0.303	0.415
Bhavnagar	0.386	0.027	348	355	7.0	0.333	0.438
Dohad	0.565	0.024	448	432	4.2	0.517	0.612
Gandhinagar	0.322	0.031	265	260	9.6	0.261	0.382
Jamnagar	0.385	0.039	299	303	10.1	0.308	0.461
Junagarh	0.374	0.033	273	281	8.8	0.310	0.439
Kachchh	0.473	0.035	315	342	7.4	0.403	0.542
Kheda	0.367	0.029	320	314	7.9	0.310	0.424
Mehasana	0.354	0.033	261	249	9.3	0.290	0.418
Narmada	0.361	0.033	309	309	9.1	0.295	0.426
Navsari	0.235	0.029	247	252	12.3	0.179	0.291
Panchmahal	0.411	0.027	362	367	6.6	0.358	0.463
Patan	0.446	0.026	379	381	5.8	0.394	0.498
Porbandar	0.330	0.027	341	335	8.2	0.278	0.383
Rajkot	0.332	0.042	262	280	12.7	0.249	0.414
Sabarkanta	0.403	0.031	291	285	7.7	0.342	0.463
Surat	0.239	0.029	267	269	12.1	0.181	0.296
Surendra Nagar	0.428	0.030	292	306	7.0	0.369	0.487
The Dangs	0.534	0.026	422	427	4.9	0.483	0.586
Vadodra	0.283	0.029	253	253	10.2	0.226	0.340
Valsad	0.280	0.026	322	320	9.3	0.228	0.331

Sampling errors, Gujarat, 2002-04

Variables	Estimate (R)	Sampling error (SE)	Number of cases		Design Effect	Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted			R-1.96 SE	R+1.96 SE
Contraceptive Prevalence Rate (Currently Married Women age 15-44)								
Total	0.592	0.006	20,796	20,796	2.970	1.0	0.581	0.604
Rural	0.564	0.006	13,591	13,591	1.808	1.0	0.553	0.575
Urban	0.646	0.013	7,205	7,205	5.404	2.0	0.620	0.671
Unmet Need (Currently Married Women age 15-44)								
Total	0.163	0.004	20,796	20,795	2.673	2.6	0.155	0.171
Rural	0.170	0.004	13,591	13,590	1.631	2.4	0.162	0.178
Urban	0.150	0.009	7,205	7,205	4.836	6.2	0.132	0.168
Received Any Antenatal Check up (last live/still birth of past 3 years)								
Total	0.876	0.006	7,349	7,489	2.446	0.7	0.864	0.887
Rural	0.849	0.007	5,143	5,205	1.829	0.8	0.836	0.862
Urban	0.936	0.012	2,206	2,284	5.279	1.3	0.913	0.959
Received 3+ Antenatal Check up (last live/still birth of past 3 years)								
Total	0.614	0.009	7,349	7,489	2.682	1.5	0.596	0.633
Rural	0.538	0.009	5,143	5,205	1.871	1.8	0.519	0.556
Urban	0.790	0.017	2,206	2,284	4.124	2.2	0.756	0.823
Institutional Delivery (last live/still birth of past 3 years)								
Total	0.522	0.010	7,349	7,488	2.924	1.9	0.503	0.542
Rural	0.412	0.009	5,143	5,205	1.892	2.3	0.394	0.430
Urban	0.773	0.019	2,206	2,283	4.942	2.5	0.735	0.812
Safe Delivery (last live/still birth of past 3 years)								
Total	0.621	0.009	7,349	7,488	2.610	1.5	0.603	0.639
Rural	0.519	0.009	5,143	5,204	1.860	1.8	0.500	0.537
Urban	0.854	0.015	2,206	2,284	4.362	1.8	0.824	0.884
Received BCG Vaccination (last and last but one living children, age 12-23 months)								
Total	0.854	0.014	2,400	2,453	3.850	1.7	0.827	0.882
Rural	0.832	0.013	1,675	1,645	2.067	1.6	0.807	0.858
Urban	0.899	0.034	725	808	9.180	3.8	0.832	0.965
Received Measles (last and last but one living children, age 12-23 months)								
Total	0.652	0.017	2,400	2,453	3.113	2.6	0.618	0.685
Rural	0.595	0.017	1,675	1,645	1.943	2.8	0.562	0.628
Urban	0.768	0.038	725	808	5.767	4.9	0.694	0.842
Birth order 3+ (birth in last three years)								
Total	0.381	0.009	7,778	7,810	2.739	2.4	0.364	0.399
Rural	0.428	0.009	5,531	5,552	1.786	2.1	0.410	0.445
Urban	0.267	0.023	2,247	2,258	5.856	8.4	0.223	0.312

Appendix – A

Sampling Error Estimation

The accuracy of programme indicators such as contraceptive prevalence rate, unmet need and institutional delivery, antenatal coverage etc. estimated from DLHS-RCH can be assessed in terms of stability of the estimated indicators as measured by the standard errors. Standard errors reflect only the appropriateness and suitability of sampling design adopted for RCH survey. However, the accuracy of estimated programme indicator are also affected to a great extent by non-sampling errors arising from lack of proper operationalisation and non-response cases, and is inherent in large scale surveys. The estimation producers of District Level Reproductive & Child Health survey takes into consideration design appropriateness and non-response rates. DLHS-RCH estimator of programme indicators is design as

$$r = \frac{\sum_h \sum_j \sum_i w_{hji} y_{hji}}{\sum_h \sum_j \sum_i w_{hji} x_{hji}} = \frac{y}{x} \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (1)$$

where the cell (h, j, i) stands for i^{th} observational unit in j^{th} primary sampling unit (PSU) in h^{th} stratum, basically rural-urban areas of a district are taken as strata. W_{hij} is the sampling weight of (h, j, i)th cell inflated by response rates. The variables y and x denote the main and the auxiliary characteristics required for computation of proportion or ratios.

The equation for estimation of variance of programme indicator (r) is obtained after Taylor series linearisation as

$$var(r) = \frac{1}{x^2}[\, var(y) + r^2\, var(x) - 2\, r\, cov(y, x)] \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (2)$$

$$var(y) = \sum_h \frac{n_h}{n_h - 1} \left[\sum_j \sum_i (w_{hji} y_{hij})^2 - \frac{\left(\sum_j \sum_i w_{hji} y_{hji} \right)^2}{n_h} \right] \quad \ldots\ldots\ldots\ldots\ldots (3)$$

$$cov(y, x) = \sum_h \frac{n_h}{n_h - 1} \left[\sum_j \sum_i w_{hji}^2 y_{hji} x_{hji} - \frac{(\sum_j \sum_i w_{hji} y_{hji})(\sum_j \sum_i w_{hji} x_{hji})}{n_h} \right] \quad \ldots\ldots\ldots\ldots (4)$$

and n_h is the number of sampled PSUs representing rural or urban areas of a district.

List of Selected Programme Variables for Sampling Errors, RCH 2002-04

Variable	Estimate	Base Population
CPR (Any Method)	Proportion	Currently married women age 15-44 years
Unmet Need	Proportion	Currently married women age 15-44 years
Any ANC	Proportion	Last live/still births in the past three years
ANC3+	Proportion	Last live/still births in the past three years
Institutional Delivery	Proportion	Last live/still births in the past three years
Safe Delivery	Proportion	Last live/still births in the past three years
BCG	Proportion	Children age 12-23 months
Measles	Proportion	Children age 12-23 months
Birth order 3+	Proportion	Currently married women age 15-44 years with births in past three years

Sampling errors, Gujarat, 2002-04

Variables	Estimate (R)	Sampling error (SE)	Number of cases Unweighted	Number of cases Weighted	Design Effect	Relative Error (%)	95% Conf. Interval R-1.96 SE	95% Conf. Interval R+1.96 SE
Contraceptive Prevalence Rate (Currently Married Women age 15-44)								
Total	0.592	0.006	20,796	20,796	2.970	1.0	0.581	0.604
Rural	0.564	0.006	13,591	13,591	1.808	1.0	0.553	0.575
Urban	0.646	0.013	7,205	7,205	5.404	2.0	0.620	0.671
Unmet Need (Currently Married Women age 15-44)								
Total	0.163	0.004	20,796	20,795	2.673	2.6	0.155	0.171
Rural	0.170	0.004	13,591	13,590	1.631	2.4	0.162	0.178
Urban	0.150	0.009	7,205	7,205	4.836	6.2	0.132	0.168
Received Any Antenatal Check up (last live/still birth of past 3 years)								
Total	0.876	0.006	7,349	7,489	2.446	0.7	0.864	0.887
Rural	0.849	0.007	5,143	5,205	1.829	0.8	0.836	0.862
Urban	0.936	0.012	2,206	2,284	5.279	1.3	0.913	0.959
Received 3+ Antenatal Check up (last live/still birth of past 3 years)								
Total	0.614	0.009	7,349	7,489	2.682	1.5	0.596	0.633
Rural	0.538	0.009	5,143	5,205	1.871	1.8	0.519	0.556
Urban	0.790	0.017	2,206	2,284	4.124	2.2	0.756	0.823
Institutional Delivery (last live/still birth of past 3 years)								
Total	0.522	0.010	7,349	7,488	2.924	1.9	0.503	0.542
Rural	0.412	0.009	5,143	5,205	1.892	2.3	0.394	0.430
Urban	0.773	0.019	2,206	2,283	4.942	2.5	0.735	0.812
Safe Delivery (last live/still birth of past 3 years)								
Total	0.621	0.009	7,349	7,488	2.610	1.5	0.603	0.639
Rural	0.519	0.009	5,143	5,204	1.860	1.8	0.500	0.537
Urban	0.854	0.015	2,206	2,284	4.362	1.8	0.824	0.884
Received BCG Vaccination (last and last but one living children, age 12-23 months)								
Total	0.854	0.014	2,400	2,453	3.850	1.7	0.827	0.882
Rural	0.832	0.013	1,675	1,645	2.067	1.6	0.807	0.858
Urban	0.899	0.034	725	808	9.180	3.8	0.832	0.965
Received Measles (last and last but one living children, age 12-23 months)								
Total	0.652	0.017	2,400	2,453	3.113	2.6	0.618	0.685
Rural	0.595	0.017	1,675	1,645	1.943	2.8	0.562	0.628
Urban	0.768	0.038	725	808	5.767	4.9	0.694	0.842
Birth order 3+ (birth in last three years)								
Total	0.381	0.009	7,778	7,810	2.739	2.4	0.364	0.399
Rural	0.428	0.009	5,531	5,552	1.786	2.1	0.410	0.445
Urban	0.267	0.023	2,247	2,258	5.856	8.4	0.223	0.312

Sampling errors, Gujarat, 2002-04

District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
Contraceptive Prevalence Rate (Currently Married Women age 15-44)							
Ahmedabad	0.564	0.037	771	768	6.6	0.492	0.636
Amreli	0.676	0.016	913	913	2.4	0.644	0.708
Anand	0.611	0.019	896	896	3.1	0.574	0.648
Banaskantha	0.412	0.020	688	676	4.9	0.373	0.452
Bharuch	0.627	0.017	921	921	2.7	0.594	0.661
Bhavnagar	0.670	0.016	962	962	2.4	0.639	0.701
Dahod	0.437	0.016	988	987	3.7	0.405	0.469
Gandhinagar	0.569	0.019	799	795	3.3	0.532	0.606
Jamnagar	0.645	0.024	719	715	3.7	0.598	0.692
Junagarh	0.630	0.019	787	787	3.0	0.592	0.667
Kachchh	0.474	0.023	686	682	4.9	0.428	0.519
Kheda	0.652	0.017	932	932	2.6	0.619	0.686
Mahesana	0.583	0.021	701	698	3.6	0.542	0.624
Narmada	0.674	0.019	929	929	2.8	0.637	0.711
Navsari	0.687	0.017	853	853	2.5	0.655	0.720
Panchmahals	0.553	0.017	944	944	3.1	0.520	0.586
Patan	0.546	0.018	856	856	3.3	0.511	0.581
Porbandar	0.622	0.017	937	937	2.7	0.589	0.655
Rajkot	0.669	0.024	728	724	3.6	0.621	0.717
Sabarkantha	0.587	0.019	771	767	3.2	0.549	0.624
Surat	0.698	0.021	781	776	3.0	0.657	0.739
Surendranagar	0.562	0.019	724	720	3.4	0.525	0.600
The Dangs	0.458	0.020	765	760	4.4	0.419	0.496
Vadodara	0.615	0.018	859	859	2.9	0.580	0.650
Valsad	0.552	0.018	886	886	3.3	0.518	0.587

Sampling errors, Gujarat, 2002-04

District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
Unmet Need (Currently Married Women age 15-44)							
Ahmedabad	0.168	0.026	771	769	15.5	0.117	0.219
Amreli	0.083	0.009	913	913	10.8	0.065	0.101
Anand	0.168	0.014	896	896	8.3	0.140	0.197
Banaskantha	0.249	0.018	688	676	7.2	0.215	0.284
Bharuch	0.124	0.012	921	921	9.7	0.101	0.147
Bhavnagar	0.104	0.010	962	962	9.6	0.084	0.125
Dahod	0.225	0.014	988	988	6.2	0.198	0.251
Gandhinagar	0.148	0.013	799	795	8.8	0.122	0.175
Jamnagar	0.176	0.017	719	716	9.7	0.142	0.209
Junagarh	0.131	0.014	787	786	10.7	0.104	0.157
Kachchh	0.315	0.022	686	682	7.0	0.272	0.358
Kheda	0.099	0.011	932	932	11.1	0.077	0.120
Mahesana	0.202	0.017	701	697	8.4	0.169	0.235
Narmada	0.145	0.015	929	929	10.3	0.116	0.174
Navsari	0.136	0.013	853	853	9.6	0.111	0.160
Panchmahals	0.149	0.012	944	944	8.1	0.126	0.173
Patan	0.206	0.015	856	856	7.3	0.178	0.235
Porbandar	0.146	0.012	937	937	8.2	0.122	0.171
Rajkot	0.148	0.019	728	724	12.8	0.111	0.185
Sabarkantha	0.197	0.015	771	768	7.6	0.167	0.227
Surat	0.105	0.012	781	777	11.4	0.083	0.128
Surendranagar	0.184	0.016	724	720	8.7	0.153	0.214
The Dangs	0.272	0.018	765	761	6.6	0.238	0.307
Vadodara	0.156	0.013	859	859	8.3	0.130	0.182
Valsad	0.191	0.014	886	886	7.3	0.163	0.218

Sampling errors, Gujarat, 2002-04

District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
Received Any Antenatal Check up (last live/still birth of past 3 years)							
Ahmedabad	0.918	0.028	253	260	3.1	0.863	0.974
Amreli	0.962	0.014	252	253	1.5	0.934	0.989
Anand	0.934	0.017	270	275	1.8	0.901	0.967
Banaskantha	0.735	0.027	326	328	3.7	0.683	0.787
Bharuch	0.942	0.014	291	285	1.5	0.914	0.970
Bhavnagar	0.936	0.015	306	316	1.6	0.907	0.965
Dahod	0.836	0.018	428	420	2.2	0.800	0.871
Gandhinagar	0.960	0.013	259	249	1.4	0.933	0.986
Jamnagar	0.824	0.038	277	272	4.6	0.750	0.898
Junagarh	0.905	0.019	275	284	2.1	0.869	0.942
Kachchh	0.785	0.032	285	299	4.1	0.723	0.848
Kheda	0.919	0.017	311	301	1.8	0.886	0.953
Mahesana	0.837	0.025	268	257	3.0	0.787	0.886
Narmada	0.892	0.026	301	298	2.9	0.842	0.942
Navsari	0.972	0.011	244	244	1.1	0.950	0.993
Panchmahals	0.875	0.018	342	351	2.1	0.839	0.911
Patan	0.849	0.020	325	326	2.4	0.810	0.888
Porbandar	0.968	0.011	317	311	1.1	0.947	0.989
Rajkot	0.866	0.032	256	275	3.7	0.803	0.928
Sabarkantha	0.848	0.022	296	289	2.6	0.804	0.892
Surat	0.937	0.018	259	270	1.9	0.902	0.972
Surendranagar	0.898	0.019	274	286	2.1	0.860	0.936
The Dangs	0.727	0.025	381	384	3.4	0.679	0.776
Vadodara	0.925	0.017	240	240	1.8	0.891	0.958
Valsad	0.863	0.020	313	316	2.3	0.823	0.903

Sampling errors, Gujarat, 2002-04

District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
Received 3+ Antenatal Check up (last live/still birth of past 3 years)							
Ahmedabad	0.776	0.041	260	260	5.3	0.696	0.857
Amreli	0.625	0.033	254	254	5.3	0.561	0.689
Anand	0.671	0.033	275	275	4.9	0.607	0.735
Banaskantha	0.385	0.029	329	329	7.5	0.329	0.441
Bharuch	0.705	0.029	285	285	4.1	0.649	0.761
Bhavnagar	0.615	0.029	315	315	4.7	0.559	0.671
Dahod	0.417	0.025	420	420	6.0	0.369	0.465
Gandhinagar	0.698	0.031	249	249	4.4	0.637	0.759
Jamnagar	0.602	0.042	272	272	7.0	0.520	0.685
Junagarh	0.615	0.032	284	284	5.2	0.552	0.679
Kachchh	0.478	0.036	300	300	7.5	0.407	0.549
Kheda	0.697	0.028	301	301	4.0	0.642	0.751
Mahesana	0.582	0.034	257	257	5.8	0.516	0.648
Narmada	0.627	0.036	298	298	5.7	0.557	0.697
Navsari	0.875	0.022	243	243	2.5	0.832	0.918
Panchmahals	0.584	0.028	351	351	4.8	0.530	0.638
Patan	0.570	0.028	326	326	4.9	0.514	0.625
Porbandar	0.705	0.027	312	312	3.8	0.652	0.757
Rajkot	0.614	0.046	275	275	7.5	0.524	0.703
Sabarkantha	0.635	0.030	289	289	4.7	0.576	0.694
Surat	0.716	0.036	270	270	5.0	0.645	0.788
Surendranagar	0.486	0.031	286	286	6.4	0.424	0.548
The Dangs	0.373	0.027	385	385	7.2	0.321	0.425
Vadodara	0.711	0.031	240	240	4.4	0.650	0.771
Valsad	0.739	0.026	317	317	3.5	0.688	0.790

Sampling errors, Gujarat, 2002-04

District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
Institutional Delivery (last live/still birth of past 3 years)							
Ahmedabad	0.717	0.050	253	262	7.0	0.620	0.815
Amreli	0.402	0.032	252	253	8.0	0.338	0.466
Anand	0.692	0.033	270	275	4.8	0.628	0.756
Banaskantha	0.537	0.030	326	328	5.6	0.479	0.595
Bharuch	0.387	0.030	291	284	7.8	0.327	0.446
Bhavnagar	0.436	0.029	306	316	6.7	0.379	0.494
Dahod	0.465	0.025	428	420	5.4	0.416	0.514
Gandhinagar	0.736	0.029	259	250	3.9	0.678	0.793
Jamnagar	0.497	0.042	277	272	8.5	0.414	0.579
Junagarh	0.371	0.031	275	284	8.4	0.310	0.433
Kachchh	0.403	0.036	285	299	8.9	0.334	0.473
Kheda	0.534	0.031	311	299	5.8	0.474	0.595
Mahesana	0.746	0.030	268	256	4.0	0.687	0.806
Narmada	0.269	0.030	301	296	11.2	0.211	0.327
Navsari	0.724	0.030	244	245	4.1	0.665	0.782
Panchmahals	0.402	0.028	342	350	7.0	0.347	0.456
Patan	0.530	0.029	325	327	5.5	0.473	0.586
Porbandar	0.504	0.030	317	310	6.0	0.445	0.562
Rajkot	0.557	0.046	256	276	8.3	0.467	0.648
Sabarkantha	0.626	0.030	296	289	4.8	0.567	0.686
Surat	0.565	0.039	259	270	6.9	0.489	0.642
Surendranagar	0.407	0.031	274	286	7.6	0.347	0.468
The Dangs	0.107	0.017	381	384	15.9	0.073	0.140
Vadodara	0.558	0.035	240	241	6.3	0.490	0.626
Valsad	0.572	0.029	313	316	5.1	0.514	0.629

Sampling errors, Gujarat, 2002-04

District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
Safe Delivery (last live/still birth of past 3 years)							
Ahmedabad	0.801	0.039	253	261	4.9	0.726	0.877
Amreli	0.691	0.031	252	254	4.5	0.630	0.753
Anand	0.734	0.032	270	276	4.4	0.672	0.796
Banaskantha	0.607	0.029	326	329	4.8	0.550	0.664
Bharuch	0.429	0.031	291	284	7.2	0.369	0.490
Bhavnagar	0.601	0.029	306	316	4.8	0.544	0.658
Dahod	0.496	0.025	428	420	5.0	0.447	0.545
Gandhinagar	0.762	0.028	259	249	3.7	0.706	0.818
Jamnagar	0.703	0.032	277	271	4.6	0.640	0.767
Junagarh	0.624	0.033	275	284	5.3	0.560	0.687
Kachchh	0.515	0.037	285	299	7.2	0.442	0.587
Kheda	0.599	0.030	311	300	5.0	0.540	0.659
Mahesana	0.807	0.028	268	256	3.5	0.753	0.862
Narmada	0.322	0.032	301	297	9.9	0.260	0.385
Navsari	0.754	0.029	244	244	3.8	0.697	0.811
Panchmahals	0.471	0.028	342	350	5.9	0.416	0.526
Patan	0.577	0.028	325	327	4.9	0.521	0.632
Porbandar	0.717	0.026	317	311	3.6	0.665	0.769
Rajkot	0.727	0.042	256	275	5.8	0.645	0.808
Sabarkantha	0.723	0.028	296	289	3.9	0.668	0.779
Surat	0.656	0.037	259	270	5.6	0.584	0.729
Surendranagar	0.516	0.031	274	286	6.0	0.455	0.578
The Dangs	0.184	0.022	381	383	12.0	0.142	0.227
Vadodara	0.584	0.035	240	241	6.0	0.516	0.652
Valsad	0.608	0.029	313	316	4.8	0.551	0.665

Sampling errors, Gujarat, 2002-04

District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
Received BCG Vaccination (last and last but one living children, age 12-23 months)							
Ahmedabad	0.873	0.093	82	94	10.6	0.692	1.055
Amreli	0.822	0.047	74	78	5.8	0.729	0.915
Anand	0.968	0.022	93	97	2.2	0.925	1.010
Banaskantha	0.753	0.045	94	99	6.0	0.664	0.841
Bharuch	0.973	0.015	85	86	1.6	0.943	1.003
Bhavnagar	0.789	0.041	102	104	5.2	0.708	0.869
Dahod	0.611	0.041	139	137	6.7	0.530	0.691
Gandhinagar	0.911	0.035	68	66	3.9	0.842	0.980
Jamnagar	0.944	0.023	79	76	2.5	0.898	0.989
Junagarh	0.805	0.055	67	65	6.8	0.698	0.912
Kachchh	0.927	0.028	110	117	3.0	0.872	0.981
Kheda	0.878	0.035	84	83	4.0	0.810	0.946
Mahesana	0.951	0.023	80	78	2.4	0.907	0.995
Narmada	0.727	0.073	80	81	10.0	0.584	0.870
Navsari	0.981	0.014	74	75	1.4	0.954	1.007
Panchmahals	0.797	0.042	98	102	5.2	0.715	0.878
Patan	0.731	0.043	100	96	5.8	0.647	0.815
Porbandar	0.911	0.027	103	100	2.9	0.859	0.963
Rajkot	0.920	0.035	66	87	3.8	0.851	0.989
Sabarkantha	0.923	0.030	86	84	3.2	0.865	0.981
Surat	0.839	0.061	81	76	7.3	0.719	0.958
Surendranagar	0.793	0.048	71	76	6.1	0.699	0.887
The Dangs	0.876	0.031	123	128	3.6	0.815	0.937
Vadodara	0.910	0.037	56	56	4.1	0.837	0.982
Valsad	0.931	0.024	105	107	2.6	0.884	0.979

Sampling errors, Gujarat, 2002-04

District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
Received Measles (last and last but one living children, age 12-23 months)							
Ahmedabad	0.832	0.092	82	94	11.0	0.652	1.012
Amreli	0.668	0.056	74	78	8.3	0.559	0.777
Anand	0.781	0.047	93	97	6.0	0.689	0.873
Banaskantha	0.519	0.052	94	99	10.1	0.416	0.622
Bharuch	0.860	0.036	85	86	4.2	0.789	0.931
Bhavnagar	0.618	0.048	102	104	7.8	0.523	0.713
Dahod	0.245	0.037	139	137	15.0	0.173	0.318
Gandhinagar	0.680	0.060	68	66	8.8	0.564	0.797
Jamnagar	0.706	0.071	79	76	10.1	0.566	0.845
Junagarh	0.660	0.061	67	65	9.2	0.541	0.780
Kachchh	0.635	0.057	110	117	9.0	0.523	0.748
Kheda	0.700	0.051	84	83	7.3	0.600	0.800
Mahesana	0.742	0.053	80	78	7.2	0.637	0.846
Narmada	0.590	0.069	80	81	11.8	0.454	0.726
Navsari	0.930	0.029	74	75	3.1	0.873	0.988
Panchmahals	0.427	0.050	98	102	11.8	0.328	0.526
Patan	0.594	0.048	100	96	8.1	0.499	0.688
Porbandar	0.762	0.041	103	100	5.4	0.681	0.844
Rajkot	0.733	0.081	66	87	11.1	0.574	0.893
Sabarkantha	0.644	0.052	86	84	8.1	0.542	0.747
Surat	0.575	0.071	81	76	12.4	0.435	0.715
Surendranagar	0.659	0.056	71	76	8.5	0.549	0.769
The Dangs	0.604	0.046	123	128	7.6	0.514	0.693
Vadodara	0.778	0.056	56	56	7.2	0.669	0.887
Valsad	0.700	0.045	105	107	6.5	0.611	0.789

Sampling errors, Gujarat, 2002-04

District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
Birth order 3+ (birth in last three years)							
Ahmedabad	0.325	0.061	251	253	18.8	0.206	0.444
Amreli	0.406	0.031	282	286	7.6	0.345	0.467
Anand	0.343	0.032	302	310	9.3	0.279	0.406
Banaskantha	0.554	0.029	335	340	5.2	0.498	0.611
Bharuch	0.359	0.029	332	328	8.1	0.303	0.415
Bhavnagar	0.386	0.027	348	355	7.0	0.333	0.438
Dahod	0.565	0.024	448	432	4.2	0.517	0.612
Gandhinagar	0.322	0.031	265	260	9.6	0.261	0.382
Jamnagar	0.385	0.039	299	303	10.1	0.308	0.461
Junagarh	0.374	0.033	273	281	8.8	0.310	0.439
Kachchh	0.473	0.035	315	342	7.4	0.403	0.542
Kheda	0.367	0.029	320	314	7.9	0.310	0.424
Mahesana	0.354	0.033	261	249	9.3	0.290	0.418
Narmada	0.361	0.033	309	309	9.1	0.295	0.426
Navsari	0.235	0.029	247	252	12.3	0.179	0.291
Panchmahals	0.411	0.027	362	367	6.6	0.358	0.463
Patan	0.446	0.026	379	381	5.8	0.394	0.498
Porbandar	0.330	0.027	341	335	8.2	0.278	0.383
Rajkot	0.332	0.042	262	280	12.7	0.249	0.414
Sabarkantha	0.403	0.031	291	285	7.7	0.342	0.463
Surat	0.239	0.029	267	269	12.1	0.181	0.296
Surendranagar	0.428	0.030	292	306	7.0	0.369	0.487
The Dangs	0.534	0.026	422	427	4.9	0.483	0.586
Vadodara	0.283	0.029	253	253	10.2	0.226	0.340
Valsad	0.280	0.026	322	320	9.3	0.228	0.331

APPENDIX B

DLHS-RCH STAFF, GUJARAT

CORT, VADODARA

Project Director
Prof. M. M. Gandotra

Project Coordinator
Dr. Bella Patel Uttekar

Field Officer
Ms. Jashoda Sharma
Mr. Amit Nag
Mr. Jawahar Vishwakarma
Mr. Prakash Bachharwal

Field Manager
Mr. Wajahat Ullah Khan

Team Supervisors
Mr. Adhik Kharva
Mr. Anand Garodia
Mr. Arvind Mishra
Mr. Bhalchandra Jadhav
Mr. Bhavesh Patel
Mr. Chintan Patel
Mr. Dharmesh Patel
Mr. Digish Shah
Mr. Jabir Shaikh
Mr. Jigar Shah
Mr. Ketan Patel
Mr. Ketan G Makwana
Mr. Pankaj Basera
Mr. Prashant Parmar
Mr. Shaikh Mohammad A.
Mr. Shravan S. Gain

Field Editors
Ms. Anjum Shaikh
Ms. Gayatri Raulji
Ms. Krupali Shah
Mr. Manish Dave
Ms. Neela Jariwala
Mr. Nikhil Mehta
Ms. Priti Naik
Ms. Purnima Shah
Ms. Samina Shaikh
Ms. Shivani V. Desai
Ms. Tejal Patel

Health Investigators

Mr. Bhavesh M. Jethva
Mr. Harish N. Patel
Mr. Harshad Dabhi
Ms. Hema Parmar
Mr. Jigar Brahmbhatt
Mr. Maheshbhai Vankar
Mr. Nihir Shah
Mr. Pratik Dave
Mr. Vikram Kharchikar

Ms. Deepa Rana
Ms. Dolly Darji
Ms. Kavita Godse
Ms. Manisha Jangam
Ms. Pravina D. Chauhan
Ms. Varsha Parmar

Interviewers

Mr. Amit Tamboli
Mr. Anil Patel
Mr. Babubhai Parmar
Mr. Bhavnesh Parekh
Mr. Chimanbhai Jadav
Mr. Deepak Patil
Mr. Gaurang Pathak
Mr. Jigar Pandya
Mr. Kaushik Parmar
Mr. Mayur Shah
Mr. Mehul S. Patel
Mr. Navneet Bhai
Mr. Prakash Ghorpade
Mr. Pritesh Patel
Mr. Punam L. Makwana
Mr. Rajnikant Makwana
Mr. Rakesh Yadav
Mr. Satish Patel
Mr. Shailesh Chapaneriya
Mr. Shashikant A. Patel
Mr. Sujit Brahmbhatt
Mr. Vikram Khidkikar
Mr. Virendra G. Patel
Mr. Vishal Patel

Ms. Anita Budhwani
Ms. Anjana Trivedi
Ms. Anju Chaudhari
Ms. Bharati khatri
Ms. Bhavika Patel
Ms. Chitra Dave
Ms. Daxaben S. Vasaiya
Ms. Drashti Jadav
Ms. Gayatri Mishra
Ms. Hasuben Chaudhari
Ms. Ila Chaudhari
Ms. Jayshree M. Tandel
Ms. Jayshree Trivedi
Ms. Kumud H. Patel
Ms. Malti D. Patel
Ms. Minakshi Chauhan
Ms. Neha Mistry
Ms. Neha Patel
Ms. Nilam Panchal
Ms. Nutan K. Patel
Ms. Pratima Bele
Ms. Reena Mahida
Ms. Rekha Khatri
Ms. Renuka Patil
Ms. Roshni Mistry
Ms. Rukhsana Pathan
Ms. Sandhya Kadam
Ms. Sandita C Chaudhari
Ms. Sangita B Chaudhari
Ms. Sangita Gamit
Ms. Sheela M. Tandel
Ms. Shila P. Raul
Ms. Shilpa Jadeja
Ms. Shilpa M. Patel
Ms. Sunanda Pargi
Ms. Sunita Budhwani
Ms. Sushma Jungum
Ms. Tejal Amin
Ms. Tejal M. Patel
Ms. Trupti Pandya
Ms. Vaishali Jadhav
Ms. Vaishali Shah
Ms. Vanita J. Tandel
Ms. Vasmitaben Chavda

Household listing Supervisors

Mr. Jabir Shaikh
Mr. Mukesh Chawda
Mr. Santosh More
Mr. Tushar Jadhav

Household Listers and Mappers

Mr. Ajit Parmar
Mr. Alkesh Pawar
Mr. Amit M. Purohit
Mr. Amit P. Patel
Mr. Asif Malik
Mr. Bhavnesh Parekh
Mr. Brugunath Bhagat
Mr. Chaitanya Dharmesh
Mr. Chirag Mochi
Mr. Dharmesh Patel
Mr. Dhaval D. Parmar
Mr. Gaurang Dabhi
Mr. Gautam
Mr. Hasmukh R. Parmar
Mr. Jitendra Shinde
Mr. Kanubhai Rohit
Mr. Mahesh M. Vanja
Mr. Manish Patil
Mr. Manish Shah
Mr. Manoj Parmar
Mr. Manoj Raj
Mr. Nilesh Rana
Mr. Nimesh Gandhi
Mr. Prashant Parmar
Mr. Praveen Kumar
Mr. Rajnikant D. Makwana
Mr. Sajid A. Vora
Mr. Samir Pandya
Mr. Sukhdev J Baria
Mr. Thakorbhai Rana
Mr. Varis Mansuri
Mr. Vinay Kumar Bhatt
Mr. Vishal Kalagude
Mr. Vishubhai Jambu

Office Editors

Ms. Jagruti R. Stampwala
Ms. Trupti Joshi
Ms. Yagna Gaikwad
Ms. Ranjana Pawade
Ms. Sabita Prasad

Data Entry Operators

Mr. Afzal Ahmed
Mr. Ashok Chauhan
Mr. Kalpesh Mistry
Mr. Ketan Soni
Mr. Naren Chauhan
Ms. Parul Parmar
Ms. Reena Shah
Ms. Trupti Joshi
Ms. Yagna Gaikwad

International Institute for Population Sciences, Mumbai

Project Coordinators	Dr. F. Ram Dr. B. Paswan Dr. L. Ladu Singh
Senior Research Officers	Mr. Rajiv Ranjan Mr. K.C.Lakhara Mr. Nizamuddin Khan

Research Officers

Mr. M. Nagavara Prasad
Mr. Akash N. Wankhede
Mr. Uttam J Sonkamble
Mr. Ashok Kumar
Ms. Jigna Thacker
Ms. Baishali Goswami
Ms. Sancheeta Ghosh
Ms. Kirti Mishra
Ms. Sucharita Pujari
Ms. Preeti Chauhan
Mrs. Santhi N.S.
Ms. Sanjeeta Gupta
Ms. Reshmi R.S.
Ms. Rinki Saha
Mr. Arnendu Kumar Jha
Mr. Atanu Ghosh
Mr. Manas Pradhan
Mr. Suhas Narkhede
Mr. Pramod Kumar Gupta
Mr. Bipul Hazarika
Dr. Manoj Alagarajan
Dr. Kalyan Saha
Dr. N Anbazhaham
Dr. Saithya Susaman
Mr. Manoj Kumar
Mr. Dibya L Mohanta
Mr. Mohan Tiwari
Mr. Battala Madhusudana
Mr. Bardanwala S.I.
Mr. Jiten Kumar Singh
Mr. Manoranjan Barik
Mr. Laxmi Prasad Sonwani
Mr. Nimakwala M. I.

Accounts and Administrative staff

Mr. Sunil Adavede (Sr. Accountant)
Mr. Jeba Kumar (Data Entry Operator)
Ms. Pratima P. Zore (Data Entry Operator)
Ms. Preeti S. Kharat (Data Entry Operator)
Ms. Sayali Shivalkar (Data Entry Operator)
Mrs. Seema V. Zagade (Office Assistant)
Mrs. Deepa J. Nair (Office Assistant)
Mr. Chandra D. Singh (Office Boy)
Mr. Ravindra P. Gawade (Office Boy)
Mr. Sanjay P. Kadam (Office Boy)

LIST OF CONTRIBUTORS

Dr. Bella Patel Uttekar, Associate Director, Center for Operations Research and Training, 402, Woodland Apartment, Race Course, Vadodara–390 007

Dr. Nayan Kumar, Manager-Field Operations, Center for Operations Research and Training, 402, Woodland Apartment, Race Course, Vadodara–390 007

Mr. Wajahat Ullah Khan, Senior Research Executive, Center for Operations Research and Training, 402, Woodland Apartment, Race Course, Vadodara–390 007

Dr. F. Ram, Professor & Head, Department of Fertility Studies, International Institute for Population Sciences, Govandi Station Road, Deonar, Mumbai-400 088.

Dr. B. Paswan, Reader, Department of Population Policy and Programme, International Institute for Population Sciences, Govandi Station Road, Deonar, Mumbai-400 088.

Dr. L. Ladu Singh, Professor & Head, Department of Mathematical Demography and Statistics, International Institute for Population Sciences, Govandi Station Road, Deonar, Mumbai-400 088.

Mr. Akash N. Wankhede, Research Officer, DLHS-RCH, International Institute for Population Sciences, Govandi Station Road, Deonar, Mumbai-400 088.

Mr. Rajiv Ranjan, Senior Research Officer, DLHS-RCH, International Institute for Population Sciences, Govandi Station Road, Deonar, Mumbai-400 088.

RCH – DLHS PROJECT 2001-2002

Total Team Member

	Name
	Supervisor
1.	Anand Garodia
2.	Arvind Mishra
3.	Babubhai
4.	Bhavesh Patel
5.	Digish Shah
6.	Ketal Patel
7.	Pankaj Basera
	Health Investigator
8.	Harshad Dabhi
9.	Hema Parmar
10.	Jigar Brahmbhatt
11.	Manisha Jangam
12.	Nihir Shah
13.	Pratik Dave
14.	Rana Deepa
15.	Sandhya Kadam
16.	Varsha Parmar
	Male Investigator
17.	Adhik Kharva
18.	Deepak Patil
19.	Chimanbhai Jadav
20.	Jigar Pandya
21.	Navneet Bhai
22.	Pritesh Patel
23.	Rakesh Yadav
24.	Vikram Khidkikar
	Female Investigator
25.	Anita Budhwani
26.	Anjana Trivedi
27.	Bharati khatri
28.	Bhavika Patel
29.	Chitra Dave
30.	Drashti Jadav
31.	Gayatri Mishra
32.	Gayatri Rawalji
33.	Jayshree Trivedi
34.	Neha Mistry
35.	Neha Patel
36.	Reena Mahida
37.	Rekha Khatri
38.	Renuka Patil
39.	Rukhsana Pathan
40.	Shilpa Jadeja
41.	Sunanda Pargi
42.	Sunit Budhwani
43.	Sushma Jungum
44.	Tejal Amin
45.	Trupti Pandya
46.	Vaishali Shah
	Total Manpower

REPRODUCTIVE AND CHILD HEALTH (RCH)
(Round-2, Phase-II, 2004)

Sr. No.	Name
	List of Male Investigator - Gujarat
1.	Ghorpade Prakash
2.	Jadhav Bhalchandra R.
3.	Makwana Ketan G
4.	Makwana Punam L.
5.	Mehta Nikhil D.
6.	Parekh Bhavnesh
7.	Parmar Kaushik
8.	Parmar Prashant
9.	Patel Chintan
10.	Patel Mehul S.
11.	Patel Shashikant A.
12.	Pathak Gaurang
13.	Shaikh Mohammad A.
14.	Sujit Brahmbhatt
	List of Female Investigator – Gujarat
15.	Budhavani Sunita
16.	Budhwani Anita
17.	Chaudhari Anju
18.	Chaudhari Hasuben
19.	Chaudhari Ila
20.	Chaudhari Sandita C
21.	Chaudhari Sangita
22.	Chauhan Minakshi
23.	Chavda Vasmitaben
24.	Dave Suvida
25.	Gamit Sunita S
26.	Khatri Bharati
27.	Khatri Rekha
28.	Panchal Nilam
29.	Raulji Gayatri
30.	Shah Krupali
31.	Shah Purnima
32.	Shaikh Anjum
33.	Vasaiya Daxaben S.
	List of Health Investigator – Gujarat
34.	Chauhan Pravina D.
35.	Godse Kavita
36.	Jethva Bhavesh M.
37.	Vankar Maheshbhai
38.	Vikram Kharchikar
39.	Patel Harish N.
40.	Amit Shah
41.	Chirag Patel
42.	Patel Anal R.
43.	Panchal Chandramauleshwar
44.	Jabir Saiyed
45.	Alka R. Patel
46.	Rekha Prajapati
47.	Dolly Darji
	Mapper Lister Team – Gujarat
48.	Gautam
49.	Kalagude Vishal
50.	Jigar Shah
51.	Bhatt Vinay Kumar
52.	Mochi Chirag

Sr. No.	Name
53.	Parmar Ajit
54.	Rana Thakorbhai
55.	Dharmesh Chaitanya
56.	Bhagat Brugunath
57.	Pandya Samir
58.	Jambu Vishubhai
59.	Pawar Alkesh
60.	Shah Manish
61.	Parmar Manoj
62.	Raj Majoj
63.	Parmar Hasmukh R.
64.	Patel Dharmesh
65.	More Santosh
66.	Purohit Amit M.
67.	Rohit Kanubhai
68.	Parmar Prashant