DLHS -2

Meghalaya

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

TALEEM Research Foundation, Ahmedabad – 380 058

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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 As a first step, family planning target has been withdrawn and an effort is being made to provide a package of reproductive services at different levels of health care centres.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 Nagaland covering all the districts. The findings of selected indicators of reproductive and child health services from the state of Nagaland 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 involved in the survey, several organizations and individuals deserve special mention.

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KEY INDICATORS, MEGHALAYA

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

Sample size	
Households surveyed	7,583
Currently married women age 15-44	4,952
Husband's of eligible women	4,455
Characteristics of households	
Percent rural	73.3
Percent Hindu	14.7
Percent Muslim	2.3
Percent other religion (Christian)	71.5
Percent scheduled caste	3.0
Percent scheduled tribe	89.5
Percent with electricity	57.1
Percent with flush toilet	36.5
Percent with no toilet facility	16.1
Percent living in *Kachcha* houses	49.9
Percent living in *Pucca* houses	10.7
Percent with low standard of living	64.8
Percent with high standard of living	11.0
Percent with iodized salt (15+ppm)	41.2
Characteristics of currently married women age 15-44 years	
Percent below age 30	39.7
Percent with age at first cohabitation below age 18.	24.8
Percent illiterate	45.6
Percent having 10 or more years of schooling	15.4
Percent with illiterate husband	37.0
Percent with husband 10+ years of schooling	23.0
Marriage	
Mean age at marriage for boys	22.8
Mean age marriage for girls	20.8
Percent of boys married below age 21	32.5
Percent of girls married below age 18	16.7
Fertility	
Mean children ever born women age 40-44 years	3.2
Percent of births of order 3 and above[1]	59.5
Current use of family planning method	
Any method	17.1
Any modern method	14.7
Pill	4.0
IUD	1.2
Condom	2.4
Female sterilization	7.1
Male sterilization	0.0
Any traditional method	2.3
Rhythm/safe period	1.3
Withdrawal	0.8
Unmet need for family planning	
Percent with unmet need for spacing	36.2
Percent with unmet need for limiting	19.5
Percent with total unmet need	55.8
Maternal care[2]	
Percent of women received antenatal check-ups	54.6
Antenatal check-up at home	0.8
Antenatal check-up in first trimester	28.3
Three or more visit for ANC	43.8
Two or more tetanus toxoid injections	30.2
Adequate Iron folic acid tablets/syrup[3]	14.1
Full antenatal check-up[4]	11.7
Delivery characteristics	
Delivery at home	68.9
Delivery at government health institutions	23.7
Delivery at private health institutions	7.2
Delivery attendant by skilled persons[5]	34.5
Child health	
Percent of children whose mother squeezed out milk from her breast[6]	49.9
Percent of children[7] with diarrhoea[8] who received ORS	45.5
Percentage of women whose child[7] with pneumonia[8] sought treatment	10.2
Percent of children who received vaccinations[9]	
BCG	66.2
DPT (3 injections)	30.5
Polio (3 drops)	26.0
Measles	29.9
All vaccinations[10]	13.7
No vaccination at all.	18.0
Percentage of women who had	
Pregnancy complication[2]	33.4
Delivery complication[2]	14.5
Post delivery complication[2]	24.2
Symptoms of RTI/STI	19.0
Problems of vaginal discharge	1.2
Menstruation related problem	4.2
Awareness of RTI/STI and HIV/AIDS	
Percent of women who have heard of RTI/STI	8.3
Percent of women who have heard of HIV/AIDS	55.6
Utilization of government health services	
Antenatal care	42.5
Treatment for pregnancy complication	27.8
Treatment for post-delivery complication	26.5
Treatment for vaginal discharge	34.1
Treatment for children with diarrhoea	53.2
Treatment for children with pneumonia	40.2
Quality of family planning services	
Percent non-users ever advised to adopt the family planning method	7.5
Percent users told about side effects of any method	40.4
Percent users who received follow-up services any modern method	5.8
Characteristics of husband of eligible women	
Percent of husband knowing NSV	1.5
Percent of men who have heard of RTI/STI	11.1
Percent of men who have heard of HIV/AIDS	59.2
Percentage who had any symptoms of RTI/STI	4.1
Sought treatment for RTI/STI	9.7

[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 Meghalaya, TALEEM Research Foundation, Ahmedabad, India, was entrusted the work of carrying out of the survey. The survey for Phase-1 of the DLHS covering 3 districts of the state was carried out during May 2002 to November 2002. The survey for Phase-2 covering the remaining 4 districts of the state was carried out during January 2004 to September 2004. The focus of the survey was on: i) Coverage on ante natal 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 7,583 households in Meghalaya. From these households, 4,952 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 4,455 husbands of eligible women were interviewed.

Of the total households interviewed in Meghalaya, 27 percent were from urban areas. Majority of the households were Christians (72 percent) in the sample. Ninety percent of the households belonged to Scheduled Tribes. Eleven percent of the households lived in *Kachcha* and 65 percent are in *pucca* houses. Eleven percent of the households belonged to low economic status.

About 66 percent of population aged seven and above are literate. Percent literate among females is 64 percent where as it is 67 percent for male. Proportion of non-literates is higher among the older cohort compared to the younger ones. Thirty six percent of eligible women in the state are non-literate and 21 percent have completed 10 or more years of schooling. As regards to the distribution of non-literate women, a lesser proportion of younger women below age 30 are illiterate compared to older women age 30 and above, but in case of non-literate husbands variation is not much across their age cohort.

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 22.8 and 20.8 years respectively. Thirty three percent of boys and 17 percent of girls in the state got married before attaining the minimum legal age at marriage of 21 and 18 years respectively. Boys marrying below the legal age at marriage ranges from zero percent in East Khasi Hills to 42 percent in West Khasi Hills. Similarly, girls marrying below the legal age at marriage ranges from zero percent at East Khasi Hills to 38 percent at Ri Bhoi district.

About 41 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 19 percent of households used salts that are not iodized at all. The lowest proportion of households in East Khasi Hills district (5 percent) are using non-iodized salt whereas in West Garo Hills the highest proportion

of households (32 percent) used non-iodized salt. In two districts out of seven, more than half of the households were seen to be consuming adequately iodised salt.

On an average, women on the verge of completion of reproductive period have given birth to 4.7 children. The completed fertility in the states varies from the lowest of 3.3 children ever born per women in West Garo Hills to the highest of 6.7 children in Ri Bhoi district.

The share of births of order 3 and above in the total births that occurred three years prior to survey is 60 percent. In most of the districts, proportion of higher order births rang from the lowest of around 51 percent in West Garo Hills to the highest of about 74 percent in West Khasi Hills.

The data collected on the utilization of ANC services for the women who had their last live/ still birth during three years prior to the survey shows that the ANC coverage in the state is 55 percent. Only one percent of the women during their pregnancy were visited by health worker at their residence for providing ANC. Forty three percent received ANC from government health facilities and 11 percent from ANM/Nurse/LHV. The percent of women who got some kind of ANC during pregnancy range between 22 percent in West Garo Hills to 82 percent in East Khasi Hills. In three districts out of seven, more than 60 percent of women got some antenatal care.

Out of those women who received ANC, 85, 81 and 83 percent women had check-up of weight, blood pressure and abdomen respectively. Only 14 percent women received 100 or more IFA tablets/syrup and 48 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 12 percent of the women.

A minimum three ANC and timing of first check up is crucial for maternal and child care. In Meghalaya, 28 percent of women got ANC in the first trimester and 44 percent had minimum three antenatal check-ups. An extent of ANC in first trimester varies from minimum of 11 percent in West Garo Hills to the maximum of 60 percent in East Khasi Hills. Women receiving three or more ANC were highest in East Khasi Hills (77 percent) and lowest in West Garo Hills (19 percent).

Nearly 31 percent of the total deliveries in Meghalaya were conducted in the health institutions; two percent point down from RCH Round-I. The institutional deliveries include both government (24 percent) and private health institutions (7 percent). Thirty five percent of the total deliveries were safe deliveries, which is one percent down from RCH Round-I. The extent of institutional deliveries varies from the lowest of 15 percent in Ri Bhoi to a highest of 73 percent in East Khasi Hills. The percent of the institutional deliveries increases substantially with women's education and economic status.

In Meghalaya, 33, 15 and 24 percent of the women experienced pregnancy, delivery and post delivery complications respectively. About 28 percent of the women sought treatment for the pregnancy and 27 percent for the post-delivery complications. The pregnancy complication varies from the lowest of 20 percent in East Garo Hills to the highest of 59 percent in South Garo Hills. Delivery complications were lowest in East Garo Hills (three percent) and highest in South

Garo Hills (48 percent). Similarly, post delivery complications were lowest in East Khasi Hills (10 percent) and highest in South Garo Hills (55 percent).

In most of the districts and the state as a whole, the practice of breast-feeding is fairly prevalent. In Meghalaya, 66 percent of women started breastfeeding the child within two hours of birth and 92 percent started after one day of birth. There is great deal of variation in the pattern of breastfeeding across the districts. Breastfeeding within two hours of birth was reported highest in East Garo Hills district (93 percent) and lowest in Jaintia Hills (20 percent).

In Meghalaya, 66, 31, 26 and 30 percent of the children received the BCG vaccine, three doses of DPT, Polio and measles vaccine respectively. There is drop of 36 percentage points from BCG to measles. It means that the children who got in touch with service providers for BCG 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 14 percent of the children, whereas 18 percent of the children did not receive a single vaccination under routine programme. Fourteen percent of the children received supplementation of at least one dose of vitamin A and only ten percent children received IFA tablets/liquid for iron supplementation.

The extent of complete immunization consisting of BCG, three injections of DPT and Polio each and measles is the lowest in East Garo Hills, East Khasi Hills and West Garo Hills (one percent each) and highest in Jaintia Hills district (45 percent). Overall, the extent of complete immunisation is poor in most of the districts of Meghalaya.

In Meghalaya, 57 percent of the women were aware of diarrhoea management and 30 percent were aware of Oral Rehydration Salt (ORS). During the two-week period prior to survey, 17 percent of children suffered from diarrhoea. Forty six percent women treated diarrhoea among children by giving ORS. In comparison to awareness about diarrhoea management, the awareness about danger signs of pneumonia is low. About 17 percent of the women reported awareness about danger signs of pneumonia. Ten percent of the women reported that their children suffered from cough, cold and difficulty in breathing in the two-week period prior to survey and 78 percent of them sought treatment.

Knowledge of family planning methods is universal in all districts of Meghalaya, with 65 percent women reporting knowledge of one method or the other. However, the knowledge of any spacing method is marginally low, the proportion *per se* is 54 percent. The knowledge of any modern methods is also universal in all the districts, though the knowledge of all modern methods is only two percent. The proportion of knowing all modern methods (males and females' sterilization, IUD, oral pills and condom) varies from less than one percent in Ri Bhoi to four percent each in East Khasi Hills, Jaintia Hills and West Garo Hills.

In DLHS, knowledge about No-scalpel vasectomy has been asked to husbands of eligible women. Only two percent of the husbands were aware of no-scalpel vasectomy in the state. The proportion of husbands knowing No-scalpel vasectomy varies from about less than one percent each in Jaintia Hills and West Khasi Hills to 14 percent in South Garo Hills.

The contraceptive prevalence rate (any method) in the state is 17 percent, which is same as RCH Round-I, comprising 15 percent of any modern methods and two percent of any traditional methods. Seven percent of the couples adopted sterilization. The percent user of condom is only two percent. There has been positive association between contraceptive use and female education, economic development and availability of health facility. The highest contraceptive prevalence is in Jaintia Hills (28 percent) and lowest is in East Garo Hills (12 percent).

In Meghalaya, a total of 56 percent of women are found to have unmet need for family planning, with 20 percent for limiting and 36 percent for spacing. The total unmet need varies from the lowest of 40 percent in West Khasi Hills to a highest of 62 percent in East Garo Hills.

Only two percentage of the women in the state reported that ANM/LHV visited them at their residence at least once in the past three months.

It has been observed that in the three months period prior to survey, 13 percent of the eligible women who were required to consult health facility visited any health facilities. Of them 60 percent visited government health facilities. A substantial proportion of women who visited the health facilities rated it as “good”.

The district level variation in the utilization of the government health facilities ranges from 54 percent each in West Khasi Hills to 98 percent in South Garo Hills. The percentage of women who visited to private health facilities ranges from a minimum of two percent in South Garo Hills to 45 percent in Jaintia Hills.

In Meghalaya, eight and 56 percent of women are aware of RTI/STI and HIV/AIDS respectively. The corresponding level of awareness among husbands of eligible women is 11 and 59 percent. The percent of women who are aware of RTI/STI is lowest in West Khasi Hills And Jaintia Hills (two percent each) and highest in South Garo Hills (25 percent). Awareness of HIV/AIDS among women was found to be lowest in East Garo Hills (37 percent) and highest in East Khasi Hills (70 percent). Similarly, among males, the awareness of HIV/AIDS was lowest in West Khasi Hills (46 percent) and highest in East Khasi Hills (72 percent).

About 19 percent of women and four percent of husbands of eligible women in the state reported having at least one symptom of RTI/STI. Among women, the prevalence of RTI/STI is lowest in East Garo Hills (3 percent) and highest in South Garo Hills and West Garo Hills (26 percent each), while for men it is lowest in Jaintia Hills (less than one percent) and highest in West Garo Hills (9 percent). Only one percent women reported vaginal discharge. Thirty four percent of women sought treatment for vaginal discharge problem and 10 percent of husbands sought treatment with at least one symptom of RTI/STI.

CHAPTER I

INTRODUCTION

1.1 Background and Objectives of the Survey

The Reproductive and Child Health (RCH) programme that has been launched by Government of India (GoI) in 1996-97 is expected 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 being made to reorient the 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 & 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.

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 was 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 the second stage, within each PSU, 28 residential households were selected with Circular Systematic Random Sampling (CSRS) procedure after house listing. In order to take care of non-response due to various reasons, sample was inflated by 10 percent (i.e. 1,100 households).

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 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 a 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: Household 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 had been canvassed during round II of the DLHS–RCH survey, taking into consideration the views of all the regional agencies involved. The house–listing teams and 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.

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 whether 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 the information collected on age, educational 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 gives 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 provides 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 government health facilities by eligible woman.

Section VI: Awareness about RTI/STI and HIV/AIDS: In this section, information was collected about women's awareness on RTI/STI, source of information, awareness of mode of transmission, curability, symptoms and treatment seeking behaviour, about HIV/AIDS; awareness, 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 eligible women's husbands about age, educational status, knowledge and source of knowledge of RTI/STI and HIV/AIDS reported symptoms of RTI/STI and male participation. Apart from this 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) has also been collected.

Health Questionnaire: In DLHS-RCH round II, a health questionnaire is included. Information is 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. Information is collected on the availability and accessibility of various facilities in the village especially on accessibility of educational and health facilities.

1.5 Fieldwork and Sample Coverage

The fieldwork for RCH Round II was done in two phases. During Phase I, three districts were covered from May 2002 to November 2002 and remaining four districts were covered during Phase II from January 2004 to September 2004.

During Round II, a total of 7,583 households were covered. A total of 4,952 currently married women (aged 15-44 years) and 4,455 husbands of eligible women were interviewed in the surveyed households.

1.6 Data processing

All the five types of completed questionnaires were brought to the headquarters of regional agencies 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 regional agency 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 has 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 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

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

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 work 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 households' response rates. A total of 7,583 households were interviewed. Of them, 73 percent were rural households. The overall household response rate (i.e. the number of households interviewed per 100 occupied households) was 99 percent. Except East Garo Hills district (97 percent), the household response rates of all the other districts were 99-100 percent.

Table 1.1 NUMBER OF HOUSEHOLDS INTERVIEWED

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

State/District	Month and year of field work		Number of households interviewed			Response rate
	From	To	Total	Rural	Urban	
State	-	-	7,583	5,553	2,030	99.4
State-phase I	05/2002	11/2002	-	-	-	-
State-phase II	01/2004	09/2004	-	-	-	-
East Garo Hills	08/2002	11/2002	979	722	257	96.7
Jaintia Hills	07/2002	09/2002	1116	781	335	100.0
West Khasi Hills	05/2002	09/2002	1113	780	333	99.9
East Khasi Hills	04/2004	07/2004	1078	615	463	99.6
Ri Bhoi	01/2004	05/2004	1099	1099	0	99.5
South Garo Hills	06/2004	09/2004	1099	781	318	99.8
West Garo Hills	06/2004	04/2004	1099	775	324	99.7

Note: Table based on unweighted cases.

In the interviewed households, interviews were completed with 4,952 currently married women who were usual members of the household or stayed night before the household interview and 4,455 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 98 and 88 percent respectively. The variation in the women's response rate by district was highest in Jaintia&West Garo Hills (99.7 percent) and lowest in East Khasi Hills (95.7 percent). Similarly, husbands response rate was found to be highest in Ri Bhoi (96 percent) and lowest in South Garo hills (74 percent).

Table 1.2 NUMBER OF WOMEN AND HUSBANDS INTERVIEWED

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

State/District	Number of women interviewed			Response rate	Number of husbands interviewed			Response rate
	Total	Rural	Urban		Total	Rural	Urban	
State	4,952	3,761	1,191	97.9	4,455	3,374	1,081	88.0
East Garo Hills	758	573	185	96.7	643	476	167	82.4
Jaintia Hills	790	571	219	99.7	730	515	215	91.6
West Khasi Hills	833	582	251	98.8	787	547	240	93.0
East Khasi Hills	400	220	180	95.7	392	218	174	93.8
Ri Bhoi	797	797	0	97.8	783	783	0	96.0
South Garo Hills	708	522	186	95.9	543	425	118	73.6
West Garo Hills	666	496	170	99.7	577	410	167	86.4

Note: * Based on unweighted cases.

1.9 Basic Demographic Profile of the State

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

The state of Meghalaya has seven districts. Meghalaya is situated in the northeastern region of India, between the Brahmaputra valley in the north and the Bangladesh in the south. The state is dominated by three main ethnic groups – the Garos in the East, South and West Garo Hills, the Jaintias in Jaintia Hills district and the Khasi-Pnar in the East and West Khasi Hills. They follow primarily a matrilineal system. Shillong is the state capital. English is the official language of the state.

According to 2001 census the total population of Meghalaya is 2.3, which constitutes merely 0.2 percent of India's population. The density of population of the state is 103 persons per Sq. Km. The percentage of state urban population (20 percent) is lower than India's urban population (28 percent). The growth rate of population during the period 1991-2001 of the state is 30.7 percent.

The sex ratio of Meghalaya (972) is higher than India's sex ratio of 933. This has significantly improved from the level of 947 in the previous census. Jaintia Hills district has recorded the highest sex ratio (996) and Ri Bhoi has the lowest (941) within the state. The state is dominated by Scheduled Tribe population (86 percent).

The level of literacy among males, females and total in the state are 65 percent, 60 percent and 63 percent respectively. The level of literacy except for female is higher than that of the national average. Among the districts, East Khasi Hills has the highest literacy rate of 77 percent and West Garo Hills has a lowest literacy rate of 51 percent.

Table 1.3 BASIC DEMOGRAPHIC INDICATOR

Basic demographic indicator of India, Nagaland 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	1,028,737	28.0	21.5	933	75.3	53.7	64.8
Meghalaya	2,319	19.6	30.7	972	65.4	59.6	62.6
East Garo Hills	251	14.3	32.7	966	67.4	55.7	61.7
Jaintia Hills	299	8.4	35.7	996	50.5	55.5	53.0
West Khasi Hills	296	11.7	34.5	968	67.0	64.2	65.6
East Khasi Hills	661	42.0	22.9	981	78.1	75.8	77.0
Ri Bhoi	193	6.8	51.4	941	69.2	62.7	66.1
South Garo Hills	101	8.6	31.0	942	62.6	48.6	55.8
West Garo Hills	518	11.4	28.6	968	57.5	44.5	51.0

Note: Source: Primary Census Abstract, Series 20, Census of India, 2001. [1] 1991-2001, [2] Females per 1,000 males.
District level SC/ST percent of population as per 1991 census. NA- Not Available.

CHAPTER II

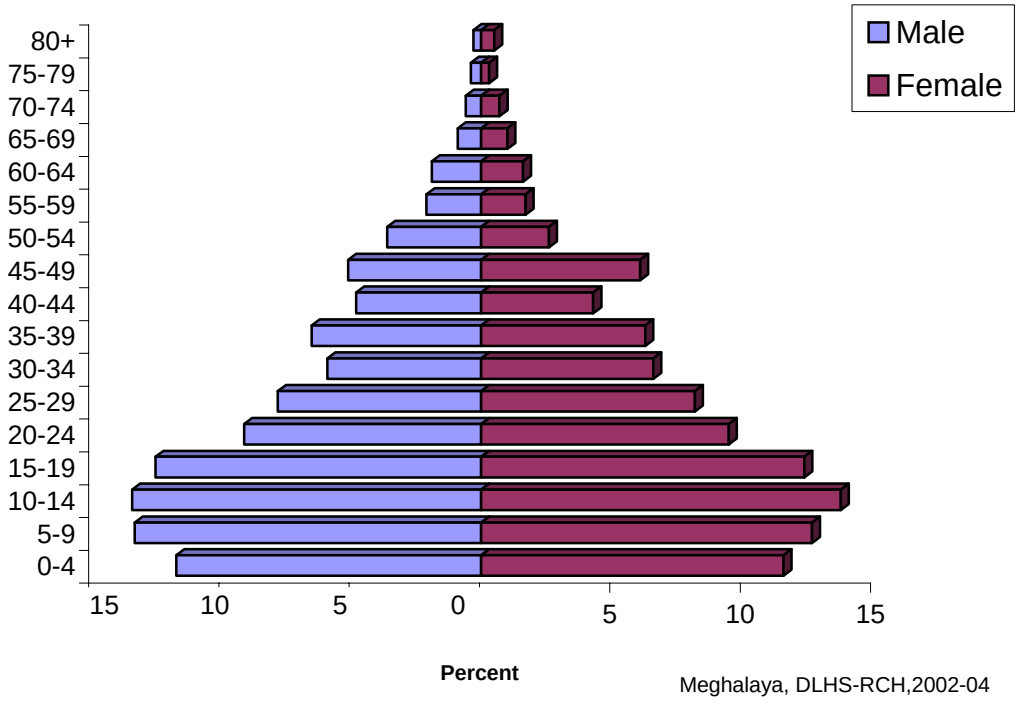
BACKGROUND CHARACTERISTICS OF HOUSEHOLD

This chapter provides a socio-economic and demographic profile of households interviewed during the District Level Household Survey-Reproductive and Child Health (DLHS-RCH). Facilities and services in terms of Health, Education and Communication available in the representative sampled villages are also presented here. The *de facto* producer 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 39,072 persons of whom 75 percent lived in the rural areas. The state of Meghalaya depicts a young and growing population with 38 percent below the age of 15 years (Figure 2.1). There are more children below 15 years recorded in rural areas (40 percent) compared to urban areas (32 percent).

Figure: 2.1
Age-sex Pyramid



Meghalaya, DLHS-RCH,2002-04

The overall sex ratio is balanced in Meghalaya with 101 males per 100 females being recorded as the *de facto* population. The sex ratio is more skewed in favour of males in rural areas (104) compared to 93 in urban areas.

Table 2.1 HOUSEHOLD POPULATION BY AGE AND SEX

Percent distribution of the household population by age and by residence and sex, Meghalaya, 2002-04

	Total			Rural			Urban		
Age	Total	Male	Female	Total	Male	Female	Total	Male	Female
< 1	2.3	2.2	2.3	2.5	2.4	2.6	1.7	1.7	1.8
1-4	9.4	9.5	9.3	10.7	10.6	10.8	5.7	6.1	5.3
5-9	13.0	13.3	12.7	13.6	13.9	13.4	11.0	11.5	10.6
10-14	13.6	13.4	13.8	13.6	13.4	13.7	13.7	13.7	13.8
15-19	12.4	12.5	12.4	12.1	12.4	11.9	13.4	12.8	14.0
20-24	9.3	9.1	9.5	8.9	8.8	9.1	10.4	10.3	10.6
25-29	8.0	7.8	8.2	7.9	7.6	8.2	8.3	8.3	8.3
30-34	6.3	5.9	6.6	6.1	5.7	6.5	6.7	6.6	6.9
35-39	6.4	6.5	6.3	6.3	6.5	6.1	6.6	6.5	6.8
40-44	4.6	4.8	4.3	4.4	4.5	4.3	5.1	5.7	4.5
45-49	5.6	5.1	6.1	5.2	4.8	5.6	6.9	6.3	7.4
50-54	3.1	3.6	2.6	2.9	3.4	2.5	3.6	4.4	2.8
55-59	1.9	2.1	1.7	1.8	2.1	1.6	2.2	2.2	2.2
60-64	1.8	1.9	1.6	1.8	1.9	1.8	1.6	1.9	1.2
65-69	1.0	0.9	1.0	0.9	1.0	0.9	1.1	0.8	1.3
70-74	0.7	0.6	0.7	0.6	0.5	0.6	1.0	0.8	1.1
75-79	0.3	0.4	0.3	0.3	0.4	0.2	0.4	0.3	0.5
80+	0.4	0.3	0.5	0.3	0.3	0.3	0.6	0.3	0.9
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of persons	39,072	19,651	19,421	29,187	14,876	14,311	9,885	4,775	5,110
Sex ratio[1]	101	NA	NA	104	NA	NA	93	NA	NA

Note: 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 7,583 households surveyed in Meghalaya by selected characteristics of the household head and the number of usual household members are shown in Table 2.2. This is based on *de jure,* the usual resident population. Seventy Four percent of household heads are male, invariant of place of residence and twenty six percent are reported to be female headed households. Nearly 72 percent of household heads are in the 30-59 years age group. The median age of the household head is 43 years for the state as a whole, while it is 42 years in rural areas and 43 years in urban areas. About fifteen percent of household heads are younger below 30 years and 13 percent are at least 60 years old. Majority of the household heads are Christians (72percent), 15 percent are Hindu and Eight percent belongs to other religions. Christians constitute a slightly higher proportion of population in urban areas (72 percent) than in rural areas (71 percent). Twenty percent of the urban households are Hindu as compared to 13 percent of rural households.

Table 2.2 HOUSEHOLD CHARACTERISTICS

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

Characteristic	Total	Residence	
		Rural	Urban
Sex of the household head			
Male	73.8	75.5	69.2
Female	26.2	24.5	30.8
Age of the household head			
< 30	14.7	14.7	14.6
30-44	39.3	40.1	37.1
45-59	32.8	31.8	35.4
60+	13.2	13.4	12.9
Median age of the household head	42.5	42.2	43.4
Religion of the household head			
Hindu	14.7	12.6	20.4
Muslim	2.3	2.4	1.9
Christian	71.5	71.1	72.4
Sikh	0.3	0.1	0.7
Buddhist	0.1	0.1	0.0
Jain	0.1	0.0	0.2
No Religion	3.6	4.0	2.4
Other	7.6	9.7	1.9
Caste/tribe of the household head			
Scheduled caste	3.0	2.7	3.6
Scheduled tribe	89.5	93.6	78.3
Other backward class	2.5	1.6	5.1
Other #	4.4	1.7	11.6
Don't know	0.6	0.4	1.4
Number of usual members			
1	5.4	4.9	6.8
2	7.3	7.3	7.3
3	13.8	13.2	15.4
4	17.2	15.8	21.1
5	15.9	15.9	16.1
6	13.8	14.6	11.7
7	10.3	11.2	7.9
8	6.4	6.5	6.2
9+	9.8	10.6	7.5
Mean household size	5.0	5.0	4.8
Total percent	100.0	100.0	100.0
Number of households	7,583	5,553	2,030

Note: Table is based on the *de jure* population
Total includes 10 household heads who are not a usual member of the households
Higher caste (Not belonging to a scheduled caste, a scheduled tribe and an other backward class)

Majority of the households in Meghalaya belong to Scheduled Tribes (90 percent). About 94 percent of the household head in rural areas belong to Scheduled Tribe and 78 percent in urban areas. The overall state average household size is five persons. The rural-urban differential in average household size is 5 in rural areas and 4.8 in urban areas.

2.3 Educational Level

The educational background of Meghalaya presented in this section is based on *defacto* household population. Level of literacy 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, Meghalaya, 2002-04

Age	Non-literate	Literate but no schooling	Year of schooling				Missing	Total Percent	Number of persons
			1-5	6-8	9-10	11 or more			
					TOTAL				
					Male				
7-9	37.3	21.2	41.2	0.2	0.0	0.0	0.1	100.0	1,512
10-14	23.5	4.9	56.5	13.6	1.4	0.0	0.2	100.0	2,642
15-19	24.4	1.5	24.3	26.7	18.3	4.9	0.0	100.0	2,449
20-29	29.6	1.5	17.0	13.3	18.5	20.1	0.0	100.0	3,321
30-39	37.4	2.5	17.4	13.0	15.1	14.7	0.0	100.0	2,435
40-49	38.4	2.2	16.2	11.1	14.5	17.6	0.0	100.0	1,953
50+	50.0	2.6	12.9	9.1	10.0	15.5	0.0	100.0	1,925
Total	33.2	4.2	26.3	13.3	12.0	11.0	0.0	100.0	16,237
					Female				
7-9	35.3	17.9	46.2	0.6	0.0	0.0	0.0	100.0	1,436
10-14	20.8	3.5	57.1	17.3	1.1	0.0	0.2	100.0	2,672
15-19	21.2	1.3	22.1	29.7	18.6	7.0	0.0	100.0	2,414
20-29	29.8	1.2	18.2	13.3	17.1	20.4	0.0	100.0	3,449
30-39	43.1	2.1	16.3	12.9	13.3	12.3	0.0	100.0	2,500
40-49	50.7	2.4	15.4	8.2	10.1	13.2	0.0	100.0	2,024
50+	66.8	2.6	9.2	6.1	6.0	9.3	0.0	100.0	1,636
Total	36.0	3.5	26.1	13.9	10.5	9.9	0.0	100.0	16,131
					Total				
7-9	36.3	19.6	43.6	0.4	0.0	0.0	0.0	100.0	2,948
10-14	22.1	4.2	56.8	15.5	1.2	0.0	0.2	100.0	5,314
15-19	22.8	1.4	23.2	28.2	18.5	5.9	0.0	100.0	4,863
20-29	29.7	1.4	17.6	13.3	17.8	20.3	0.0	100.0	6,769
30-39	40.3	2.3	16.8	12.9	14.2	13.5	0.0	100.0	4,935
40-49	44.7	2.3	15.8	9.6	12.2	15.4	0.0	100.0	3,977
50+	57.7	2.6	11.2	7.7	8.2	12.7	0.0	100.0	3,561
Total	34.6	3.9	26.2	13.6	11.3	10.5	0.0	100.0	32,368

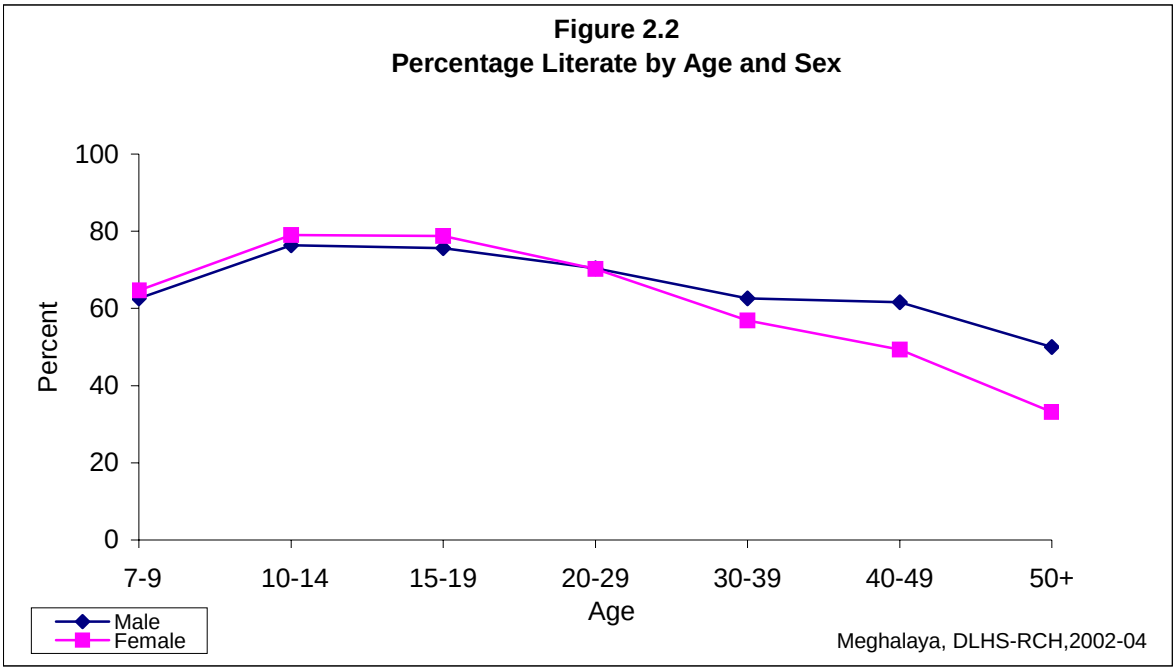
Note: The table is based on *defacto* population

Contd.

Table 2.3 indicates that, 36 percent of the population in the age group 7-9 years are non-literate. Interestingly, the proportion of non-literates is 35 percent among females and 37 percent among males showing a narrow gap of literacy level between boys and girls at primary level of schooling. However, the proportion of non-literate is much higher among the older cohorts of both male and female population. As obvious, the degree of illiteracy widens in the older cohort beyond nine years of age between male and female even within the same age cohort and the disparity further widens in the age cohort 50 years and above. Overall 33 percent male household

population aged 7 years and above is illiterate compared to 36 percent among female population (Figure 2.2).

Figure 2.2
Percentage Literate by Age and Sex



Overall lesser proportion of males as well as females are found in higher education of 9-10 years (11 percent) and 11 or more years (10 percent) and males having corresponding figures of 12 percent and 11 percent respectively. However, this gap disappears in the younger generation of 14 years of age or below. Four percent of the total population are found to be literate without any formal schooling.

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, Meghalaya, 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	44.5	23.3	31.9	0.2	0.0	0.0	0.1	100.0	1,181
10-14	29.0	5.8	56.8	7.9	0.4	0.0	0.1	100.0	1,990
15-19	31.1	1.9	27.9	26.0	11.9	1.2	0.0	100.0	1,840
20-29	37.2	1.8	20.7	15.1	16.7	8.5	0.0	100.0	2,434
30-39	46.7	3.1	20.0	13.1	12.8	4.3	0.0	100.0	1,812
40-49	50.4	2.7	20.3	11.2	10.3	5.2	0.0	100.0	1,379
50+	61.8	3.2	15.2	9.9	7.0	2.9	0.0	100.0	1,417
Total	41.5	5.1	28.1	12.7	9.2	3.5	0.0	100.0	12,053
					Female				
7-9	42.5	19.4	37.6	0.4	0.0	0.0	0.0	100.0	1,109
10-14	25.8	4.5	59.0	10.1	0.6	0.0	0.0	100.0	1,967
15-19	25.9	1.7	27.1	30.9	12.6	1.8	0.0	100.0	1,698
20-29	38.6	1.6	23.1	15.0	14.8	6.9	0.0	100.0	2,482
30-39	55.3	2.5	19.2	11.9	8.4	2.7	0.0	100.0	1,803
40-49	65.6	3.4	17.2	7.4	4.5	2.0	0.0	100.0	1,413
50+	80.1	2.6	10.0	4.4	1.4	1.4	0.0	100.0	1,123
Total	44.9	4.3	28.6	12.7	7.1	2.5	0.0	100.0	11,595
					Total				
7-9	43.6	21.4	34.7	0.3	0.0	0.0	0.0	100.0	2,290
10-14	27.4	5.2	57.9	9.0	0.5	0.0	0.0	100.0	3,956
15-19	28.6	1.8	27.5	28.3	12.2	1.5	0.0	100.0	3,538
20-29	37.9	1.7	21.9	15.1	15.8	7.7	0.0	100.0	4,916
30-39	51.0	2.8	19.6	12.5	10.6	3.5	0.0	100.0	3,614
40-49	58.1	3.0	18.7	9.3	7.3	3.6	0.0	100.0	2,792
50+	69.9	3.0	12.9	7.5	4.5	2.3	0.0	100.0	2,541
Total	43.1	4.7	28.3	12.7	8.1	3.0	0.0	100.0	23,648

Contd.

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, Meghalaya, 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			
					URBAN				
					Male				
7-9	11.3	14.0	74.3	0.2	0.0	0.0	0.2	100.0	331
10-14	6.7	2.2	55.3	30.9	4.5	0.0	0.4	100.0	652
15-19	3.9	0.2	13.7	28.8	37.6	15.8	0.0	100.0	609
20-29	8.7	0.6	7.0	8.2	23.4	52.1	0.0	100.0	887
30-39	10.2	0.5	9.8	12.6	21.9	45.0	0.0	100.0	623
40-49	9.7	1.0	6.3	10.8	24.7	47.5	0.0	100.0	574
50+	17.0	0.7	6.4	6.9	18.4	50.6	0.0	100.0	508
Total	9.3	1.9	21.1	15.0	20.0	32.7	0.1	100.0	4,184
					Female				
7-9	10.9	12.7	75.0	1.3	0.0	0.0	0.0	100.0	328
10-14	6.8	0.9	51.5	37.4	2.5	0.0	0.9	100.0	706
15-19	10.1	0.3	10.2	27.1	33.0	19.4	0.0	100.0	716
20-29	7.2	0.4	5.5	9.1	22.9	55.0	0.0	100.0	966
30-39	11.7	0.8	8.9	15.4	26.0	37.2	0.0	100.0	697
40-49	16.2	0.3	11.3	9.8	23.0	39.3	0.0	100.0	611
50+	37.6	2.5	7.3	9.9	16.0	26.7	0.0	100.0	512
Total	13.2	1.6	19.9	16.9	19.4	28.8	0.1	100.0	4,536
					Total				
7-9	11.1	13.3	74.7	0.8	0.0	0.0	0.1	100.0	658
10-14	6.8	1.5	53.3	34.3	3.5	0.0	0.6	100.0	1,358
15-19	7.3	0.2	11.8	27.9	35.1	17.8	0.0	100.0	1,325
20-29	7.9	0.5	6.2	8.6	23.2	53.6	0.0	100.0	1,853
30-39	11.0	0.7	9.3	14.1	24.1	40.9	0.0	100.0	1,320
40-49	13.1	0.6	8.9	10.3	23.8	43.3	0.0	100.0	1,185
50+	27.3	1.6	6.8	8.4	17.2	38.6	0.0	100.0	1,020
Total	11.3	1.8	20.5	16.0	19.7	30.7	0.1	100.0	8,720

An examination of the educational attainment by place of residence revealed that the urban-rural differential is quite pronounced. In urban areas, 11 percent of the total population is non-literate in comparison to 43 percent of the rural population. The numbers of non-literate females living in rural areas accruing a share as high as 45 percent as against 41 percent among rural males. Illiteracy is found to be less in urban areas with 13 percent among females and nine percent among males. A contrasting feature of rural-urban difference in educational level is noticed as 28 percent people in rural areas had 1-5 years of schooling as against 21 percent in urban areas. Similarly, those who had 11 or more years of schooling were just three percent in rural areas, whereas in urban areas, a significant proportion of people (31 percent) had this level of education.

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 the percent distribution of household population by marital status distribution of *de facto* household population by age and sex. Seven percent of females in the age

group 15-19 years, 64 percent in the age group 25-29 years and 82 percent in the age group 30-44 years are currently married. The proportion of never married is 49 percent in the state, and it is higher for males (53 percent) than for females (45 percent). The proportion of never married among males declines with increasing age and reaches the lowest by the time they are in the age group 45-59 years and 60 or more years. A similar pattern has been observed in case of females, with the lowest never married proportion for the age group 45-59 years. Seventy percent of women aged 60 years or above are widowed /divorced /separated. The total percentage of currently married for males and females is 43 percent each.

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 , Megahalaya, 2002-04

Age	Marital status				Total Percent	Number of persons
	Never married	Currently married	Married, g*aunna* not performed	Widowed/ divorced/ Separated		
			Male			
10-14	99.2	0.7	0.1	0.0	100.0	2,642
15-19	98.5	1.4	0.1	0.0	100.0	2,449
20-24	84.3	14.2	0.4	1.2	100.0	1,797
25-29	46.7	50.7	0.4	2.2	100.0	1,524
30-44	13.7	81.1	1.0	4.2	100.0	3,381
45-59	2.2	88.4	1.0	8.4	100.0	2,129
60+	1.4	75.8	2.9	20.0	100.0	803
Total	52.8	42.9	0.6	3.7	100.0	14,725
			Female			
10-14	98.8	1.0	0.2	0.0	100.0	2,672
15-19	92.3	7.1	0.1	0.5	100.0	2,414
20-24	56.2	39.9	0.1	3.8	100.0	1,848
25-29	30.3	64.2	0.3	5.2	100.0	1,601
30-44	6.7	81.7	0.5	11.0	100.0	3,344
45-59	2.3	67.7	0.9	29.1	100.0	2,016
60+	1.5	25.8	2.3	70.4	100.0	800
Total	45.4	42.7	0.5	11.5	100.0	14,694
			Total			
10-14	99.0	0.9	0.2	0.0	100.0	5,314
15-19	95.4	4.3	0.1	0.3	100.0	4,863
20-24	70.0	27.2	0.2	2.5	100.0	3,644
25-29	38.3	57.7	0.3	3.7	100.0	3,125
30-44	10.3	81.4	0.7	7.6	100.0	6,725
45-59	2.2	78.3	1.0	18.5	100.0	4,145
60+	1.4	50.8	2.6	45.1	100.0	1,603
Total	49.1	42.8	0.6	7.6	100.0	29,419

Note: Table is based on *de facto* population

2.5 Marriage

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

Table 2.5 MARRIAGE

Mean age at marriage and percentage of marriages below legal at marriage by sex and by districts, Meghalaya, 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	22.8	20.8	32.5	16.7
State – Rural	21.9	20.5	39.4	18.4
State – Urban	26.8	22.7	3.2	7.4
East Garo Hills	22.9	19.8	29.4	31.7
East Khasi Hills	27.1	24.2	(0.0)	(0.0)
Jaintia Hills	22.8	20.4	(37.3)	16.2
Ri Bhoi	21.9	19.0	40.4	37.6
South Garo Hills	24.2	21.7	(6.9)	11.9
West Garo Hills	22.3	22.0	35.2	6.2
West Khasi Hills	21.2	20.7	(42.3)	9.9

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. ( ) Based on less number of cases

Mean age at marriage for boys and girls in urban areas of Meghalaya are 27 years and 23 years respectively. The corresponding figures in rural areas are 22 years and 21 years. On the whole, as far as Meghalaya is concerned, marriages for both boys and girls seem to go with legal age at marriage, which can be seen from average age at marriage being 23 years for boys and 21 years for girls. However, 33 percent of boys and 17 percent of girls got married below the corresponding specified legal age for marriage. The proportion is little 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 East Khasi Hills for both boys (27 years) and girls (24 percent). The lowest mean age at marriage for boys is 21 years recorded for the district of West Khasi Hills and for the girls, the lowest is 19 years in Ri Bhoi.

It is also found that the percentage of girls who were married below the legal age at marriage was the highest in Ri Bhoi (38 percent) and the lowest in West Garo Hills (six percent). No girl in East Khasi Hills district were found marrying below legal age at marriage. In the case of boys, marriages below the legal age at marriage are the highest in West Khasi Hills (42 percent) and lowest in South Garo Hills (seven 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 for these three morbidities.

Table 2.6 MORBIDITY RATES

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

Morbidity	Total	Residence	
		Rural	Urban
Prevalence rate of blindness			
Male			
Partial	3186	2558	5151
Complete	268	291	196
Night blindness	377	430	212
Female			
Partial	4969	3713	8515
Complete	400	452	254
Night blindness	326	418	68
Persons			
Partial	4071	3124	6885
Complete	334	370	226
Night blindness	352	424	138
Prevalence rate of tuberculosis			
Male	513	632	214
Female	278	348	82
Person	405	493	146
Prevalence rate of malaria[1]			
Male	5102	6309	1310
Female	4072	5167	974
Person	4590	5750	1137

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 4,071 per 100,000 populations in the state and is lower in rural areas (3,124 per 100,000) than in urban areas (6,885 per 100,000). It is more among females (4,969) than males (3,186). The prevalence of complete blindness is 334 per 100,000 population with a rural-urban differential of 370 against 226 per 100,000. Sex differential in complete blindness does exist, as it is high among females (400) compared to males (268). The prevalence of night blindness due to vitamin A deficiency is 352 per 100,000 populations and is higher in rural areas (424) than in urban areas (138).

Tuberculosis

The prevalence of tuberculosis is 405 per 100,000 populations with rural areas having a higher prevalence of 493 compared to 146 per 100,000 in urban areas. The prevalence of TB is higher among males (513 per 100,000) than among females (278 per 100,000). Similarly, TB prevalence is much higher among males of rural areas (632) as compared to the males of urban areas (214).

Malaria

The 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 the survey. In the state of Meghalaya, 4590 persons per 100,000 populations were reported to have suffered from malaria. Rural residents are five times more likely to have suffered from malaria (5750 per 100,000) than urban residents (1137 per 100,000). Overall, the reported prevalence of malaria is higher for males (5102) than for females (4072).

2.7 Morbidity Rates by Districts

Table 2.7 shows the prevalence of blindness, tuberculosis and malaria in the districts of Meghalaya. The prevalence of partial blindness varies considerably among the districts the lowest being 528 per 100,000 in East Garo Hills and the highest, 8,451 per 100,000 in East Khasi Hills.

The prevalence rate of complete blindness ranges from 31 per 100,000 in West Khasi Hills to 804 per 100,000 in West Garo Hills. The prevalence of tuberculosis varies from lowest of 201 in East Garo Hills to highest of 602 in West Garo Hills. Similarly, in case of malaria, the prevalence rate is highest in South Garo Hills (10,608 per 100,000) and lowest in East Khasi Hills (2,212 per 100,000).

Table 2.7 MORBIDITY RATES BY DISTRICTS

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

District	Prevalence[1] of morbidity			
	Partial blindness	Complete blindness	Tuberculosis	Malaria[2]
East Garo Hills	528	398	201	2,146
East Khasi Hills	8,451	78	291	2,212
Jaintia Hills	3,816	311	234	3,692
Ri Bhoi	3,645	289	426	6,443
South Garo Hills	1,628	240	599	10,608
West Garo Hills	1,817	804	602	2,215
West Khasi Hills	2,779	31	520	10,458
Meghalaya	4,071	334	405	4,590

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

2.8 Housing Characteristics

This section describes the availability of basic amenities in the state. Table 2.8 presents the percent distribution of households by selected housing characteristics. Fifty seven percent of the households in Meghalaya have electricity connection and it is much more in urban areas (95 percent) than in rural areas (43 percent).

As regards to the sources of drinking water, 46 percent of the households get drinking water through individual or public taps, while 2 percent drink water from hand pumps/ bore-wells and 26 percent drink water from uncovered wells. About 86 percent of households in urban areas get tap water for drinking, whereas in rural areas only 31 percent of the households have such provision.

When it comes to sanitation facility, 16 percent of the households have flush toilets, while 38 percent have pit based toilets or latrines, 10 percent depend on shared toilets and nearly 37 percent of the households have no toilet facility at all. There is a large rural-urban difference; 48 percent of rural households have no toilet facility, compared to around five percent of urban households.

DLHS-RCH has also collected data on the type of fuel used in the households for cooking. Seventeen percent of the households used liquid petroleum/gas including electricity for cooking in Meghalaya. Another 73 percent of households rely on firewood and eight percent on kerosene. Evidently the use of liquid petroleum gas/electricity for cooking is reported more in urban areas (57 percent) and firewood in rural areas (91 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*. Half of the households are living in *kachcha* houses (50 percent), 39 percent in semi *pucca* houses and 11 percent in *pucca* houses. Thirty two percent of urban households live in *pucca* houses compared to only 3 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 bicycles are owned by (11 percent), an electric fan (10 percent), television (31 percent) and radio/transistor (36 percent). Other durable goods found in the surveyed households are sewing machine (8 percent), telephone (13 percent), motorcycle or scooter (5 percent), car/jeep and tractor (4 percent). Ownership of most of the consumer durable items is more among the urban households than among the rural households except that of bicycle, which is little higher in rural areas (13 percent) than in urban areas (8 percent).

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
   High – if total score is greater than 19.

Table 2.8 HOUSEING CHARACTERISTICS

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

Housing characteristic	Total	Residence	
		Rural	Urban
Electricity			
Yes	57.1	43.2	95.1
No	42.9	56.8	4.9
Source of drinking water			
Tap inside	15.7	5.4	43.8
Tap shared public	30.3	26.0	42.1
Hand pump/ bore well	2.0	2.6	0.3
Well covered	2.3	2.4	1.8
Well uncovered	25.5	33.5	3.4
River	1.4	1.7	0.7
Pond	3.1	3.7	1.5
Spring	19.5	24.4	6.0
Other	0.3	0.2	0.4
Sanitation facility			
Own flush toilet	16.1	5.9	43.9
Own pit toilet / latrine	37.5	42.7	23.2
Shared toilet of any type	9.5	2.6	28.2
Public / community toilet	0.5	0.6	0.2
No toilet facility	36.5	48.3	4.5
Main type of fuel used for cooking			
Liquid petroleum gas/ electricity	17.4	2.9	56.9
Kerosene	8.1	5.6	15.0
Wood	73.4	91.3	24.2
Other	1.1	0.1	3.9
Type of house			
Kachcha	49.9	60.0	22.3
Semi - *pucca*	39.3	37.0	45.7
Pucca	10.7	3.0	32.0
Household assets			
Fan	9.8	6.0	20.1
Radio/transistor	35.9	35.2	37.6
Sewing machine	7.5	4.4	15.9
Television	31.3	14.8	76.6
Telephone	13.4	2.6	42.7
Bicycle	11.3	12.5	7.8
Motor cycle/ scooter	5.0	1.5	14.6
Car / Jeep	3.8	0.9	11.7
Tractor	0.2	0.2	0.1
Standard of living index			
Low	64.8	81.3	19.6
Medium	24.2	16.6	44.9
High	11.0	2.1	35.5
Number of households	7,583	5,553	2,030

As per the standard of living index, 65 percent of the households come under the low, 24 percent to medium and 11 percent to high category of standard of living.

The proportion of households with medium and high standard of living is higher in urban areas than in rural areas, while the proportion with low standard of living is much higher in rural households (81 percent) than in urban households (20 percent) in the state.

2.9 Housing Characteristics by Districts

The seven districts in Meghalaya 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 highest in East Khasi Hills (90 Percent) and lowest is in East Garo Hills and South Garo Hills (37 percent each). East Khasi Hills district has highest (75 percent) households useing piped water or water from a hand pump for drinking while it is lowest in Ri Bhoi district (31 Percent).

In two districts, namely East Garo Hills (89 percent) and South Garo Hills (82 percent), more than 80 percent of the households have toilet facilities. Households with toilet facilities were lowest in West Khasi Hills (49 percent).

The usage of liquid petroleum gas/electricity in the households of all the districts varies as lowest in West Khasi Hills (3 percent) and highest in East Khasi Hills (31 percent). The percentage of households living in *pucca* houses is quite low which ranges from the lowest of one percent in Ri Bhoi and highest of 17 percent each in East Khasi Hills and Jaintia Hills.

Table 2.9 HOUSEING CHARACTERISTICS BY DISTRICT

Selected housing characteristics by district, Meghalaya, 2002-04

Districts	Percentage of households: With electricity	With drinking water[1]	With toilet facility	Using Liquid petroleum gas/ electricity	Living in *pucca* house
East Garo Hills	37.0	42.8	88.8	10.6	8.4
East Khasi Hills	89.7	75.0	62.3	31.1	16.6
Jaintia Hills	66.8	44.6	67.0	23.8	17.2
Ri Bhoi	46.3	31.3	62.7	4.7	1.4
South Garo Hills	36.6	34.3	81.6	5.1	5.8
West Garo Hills	41.5	44.4	62.9	17.7	12.1
West Khasi Hills	53.6	54.1	48.9	2.6	6.4
Meghalaya	57.1	50.2	63.5	17.4	10.7

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

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 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 ionization of salt and categorised by background characteristics. It is observed that nearly 41 percent of households used salt that contained a minimum recommended 15 ppm or higher level of iodine content whereas 19 percent of households used salt that is not iodized at all and another 40 percent used salt showing 7 ppm, which is inadequately iodized.

In rural areas, 25 percent of households against one percent in urban areas used non-iodized salts. Percentage of households using inadequately iodized salt in rural areas (46 percent) is more than that in urban areas (23 percent). Number of households using non-iodized or inadequately iodized salt is closely associated with the educational level of the household head. The use of adequately iodised salt (15 ppm) was recorded in 72 percent of the households where the household heads had more than 10 years of schooling as against 26 percent in the households where heads were found to be illiterate. Consumption of adequately iodised salt among households of 'other caste' is highest (69 percent), followed by 41 percent in Other Backward Class households, 40 percent in Scheduled Tribes households and 39 percent in the households of Scheduled Castes.

Table 2.10 IODIZATION OF SALT

Percent distribution of household heads by degree of Iodization of salt, according to selected background characteristics, Meghalaya, 2002-04

Background characteristic	Not Iodised	7ppm	15+ppm	Other[1]	Total percent	Number of households
Place of Residence						
Rural	24.9	45.7	28.7	0.7	100.0	5,553
Urban	1.4	23.0	75.6	0.1	100.0	2,030
Education of the household heads						
Non-literate	28.1	45.3	25.7	0.9	100.0	3,269
0-9@ years	16.2	41.5	41.7	0.5	100.0	2,695
10 and above	3.2	25.0	71.8	0.0	100.0	1,618
Religion of household head						
Hindu	29.6	37.7	32.3	0.4	100.0	1,114
Muslim	16.2	50.6	33.1	0.0	100.0	172
Christian	16.2	40.9	42.4	0.5	100.0	5,421
No Religion	21.3	32.6	46.0	0.0	100.0	273
Other	19.3	31.5	47.4	1.7	100.0	603
Caste/tribe of the household head#						
Scheduled caste	14.7	46.2	39.1	0.0	100.0	224
Scheduled tribe	19.8	40.0	39.6	0.6	100.0	6,788
Other backward class	4.0	53.8	40.5	1.7	100.0	190
Other	6.4	24.5	69.0	0.1	100.0	333
Standard of living index						
Low	26.9	45.0	27.2	0.8	100.0	4,913
Medium	4.3	34.4	61.2	0.1	100.0	1,834
High	0.7	19.3	79.8	0.2	100.0	835
Total	18.6	39.6	41.2	0.6	100.0	7,583

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.

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 33 percent among Muslim households, whereas the corresponding figures are for Hindu (32 percent) and Christian (42 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. This can be noticed from table 2.10 that 27 percent of households with low standard of living used non-iodized salt whereas less than one 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 thrice of 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. Ri Bhoi has the lowest proportion of households (5 percent) using adequately iodized salt, whereas Jaintia Hills has the highest proportion of households (68 percent) using same salt. Percentage of households using inadequately iodized salt is the highest in Ri Bhoi (62 percent) and the lowest in Jaintia Hills district (20 percent). The households which are using non-iodized salt ranges from less than six percent in East Khasi Hills to 32 percent in West Garo Hills district (see Map-2).

Table 2.11 IDOIZATION OF SALT BY DISTRICT

Percent distribution of household heads by degree of idoization of salt by district, Meghalaya, 2002-04

District	Not idoized	7ppm	15+ppm	Other[1]
East Garo Hills	13.7	38.1	47.2	0.9
East Khasi Hills	4.7	39.5	55.4	0.5
Jaintia Hills	12.0	19.6	68.4	0.1
Ri Bhoi	29.0	61.7	5.1	4.2
South Garo Hills	22.9	44.4	32.5	0.1
West Garo Hills	31.9	48.9	19.1	0.0
West Khasi Hills	19.7	31.6	48.6	0.1
Meghalaya	18.6	39.6	41.2	0.6

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

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 from the villages, if they are not available within the village. The enquiry includes various types of education facilities, including primary school, middle school, secondary school, higher secondary school, college, *Gurujee* scheme and '*Madarasa*'. Further information on the location in terms of distances for 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) were recorded.

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 (96 percent) (the *de jure* rural population) in the state live in villages that have a primary school, 46 percent live in villages with middle school and 19 percent of the rural population live in villages with secondary schools. Higher secondary schools are available within the villages for six percent of the rural population. Twenty eight percent of the rural population live in villages, which have *Madarasa*. two percent of the surveyed villages have a college. As regards to the distribution of educational institutions within 5 kilometres distance from the surveyed village, it can be seen that 16 percent of the villages have secondary school, 8 percent have higher secondary school, 21 percent have middle school and 1 percent have a '*Madarasa*'. For 77 percent of the villages, the college is more than 10 kilometres away.

Table 2.12 DISTANCE FROM THE NEAREST EDUCATION FACILITY

Percent distribution of rural household population by distance from the nearest education facility, Meghalaya, 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	95.9	2.0	0.4	1.7	0.0	100.0
Middle School	45.9	20.5	13.9	16.4	3.2	100.0
Secondary School	19.1	16.0	22.5	36.2	6.2	100.0
Higher Secondary School	6.1	7.7	14.1	62.3	9.8	100.0
College	1.5	2.5	7.3	77.0	11.7	100.0
Gurujee Scheme	18.8	2.0	1.1	36.9	41.2	100.0
Madarsa	27.6	1.3	0.8	28.9	41.3	100.0

Note: Table based on rural *de jure* population

Table 2.13 DISTANCE FROM THE NEAREST HEALTH FACILITY

Percent distribution of rural household population by distance from the nearest health facility, Meghalaya, 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	24.1	14.1	18.9	31.8	11.2	100.0
Primary health centre	12.9	10.0	25.4	45.2	6.4	100.0
Either sub-centre or PHC	29.0	15.4	23.8	29.8	2.1	100.0
Community health centre/ Referral hospital	2.1	5.6	10.6	65.6	16.1	100.0
Government dispensary	9.7	6.9	12.5	51.9	18.9	100.0
Government hospital	1.2	2.9	5.4	69.4	21.1	100.0
Private clinic	4.3	2.9	6.0	68.3	18.5	100.0
Private hospital	0.5	1.9	3.9	66.3	27.4	100.0
ISM health facility	6.1	4.3	2.7	48.7	38.2	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 facility. About 24 percent of the rural population live in villages with Sub-centres. Only 13 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 29 percent. The proportion of rural population having other health facilities are two percent for CHCs/RHs, ten percent for Government dispensary, one percent for Government hospitals, 4 percent for private clinics, 0.5 percent for private hospitals and six percent for Indian System of Medicine (ISM).

Table 2.14 AVAILABILITY OF SERVICES

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

Services	Percentage of rural residents
Anganwadi centre	37.7
Anganwadi worker	50.5
Private doctor	15.6
Visiting doctor	15.3
Homeopathic doctor	2.3
Village health guide	13.6
Trained birth attendant	32.4
Traditional healer	62.8
Dai	73.1

Note: Table based on rural *de jure* population

The proportion of rural population located within a distance of 5 kilometres from health facilities are 14 percent for sub-centres, 10 percent for primary health centres, 15 percent for CHCs/RHs, 7 percent for a Government dispensary, 3 percent for Government hospitals, 3 percent for private clinic, 2 percent for private hospitals and 4 percent for ISM health facilities. Distance of particular health facilities is beyond 10 kilometres from surveyed villages in the case of Government hospitals (69 percent) and for private hospitals, (66 percent).

Table 2.14 shows the proportion of rural residents in the state that live in the villages with various health services. Almost 38 percent of rural residents live in villages that have an *anganwadi,* (a nursery school for children age 3-6 years) and 51 percent of rural households live in villages with *anganwadi* workers (*Anganwadi* workers provide integrated child development services).

About 16 percent of the rural residents live in villages that have a private doctor, 15 percent live in villages with a visiting doctor, 15 percent with a homeopathy doctor, 14 percent with a village health guide, 32 percent with a trained birth attendant and 63 percent with a traditional healer. 73 percent 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 Meghalaya. Out of 7 districts, in 3 districts, all the rural population have access to primary or middle schools. In the state of Meghalaya, 96 percent of the rural population live in villages having primary schools. Around 24 percent of the rural population in the state have sub-centres within the village, with the highest coverage of 45 percent in Jaintia Hills and the lowest of 7 percent in Ri Bhoi

There is one district(West Khasi Hills) where no primary health centre was found within the sampled villages. Highest availability of PHCs within the village is found in East Khasi Hills (33 percent). The percentage of rural households population having access to any government health facility ranges between 11-59.

Table 2.15 AVAILABILITY OF FACILITY AND SERVICES BY DISTRICT

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

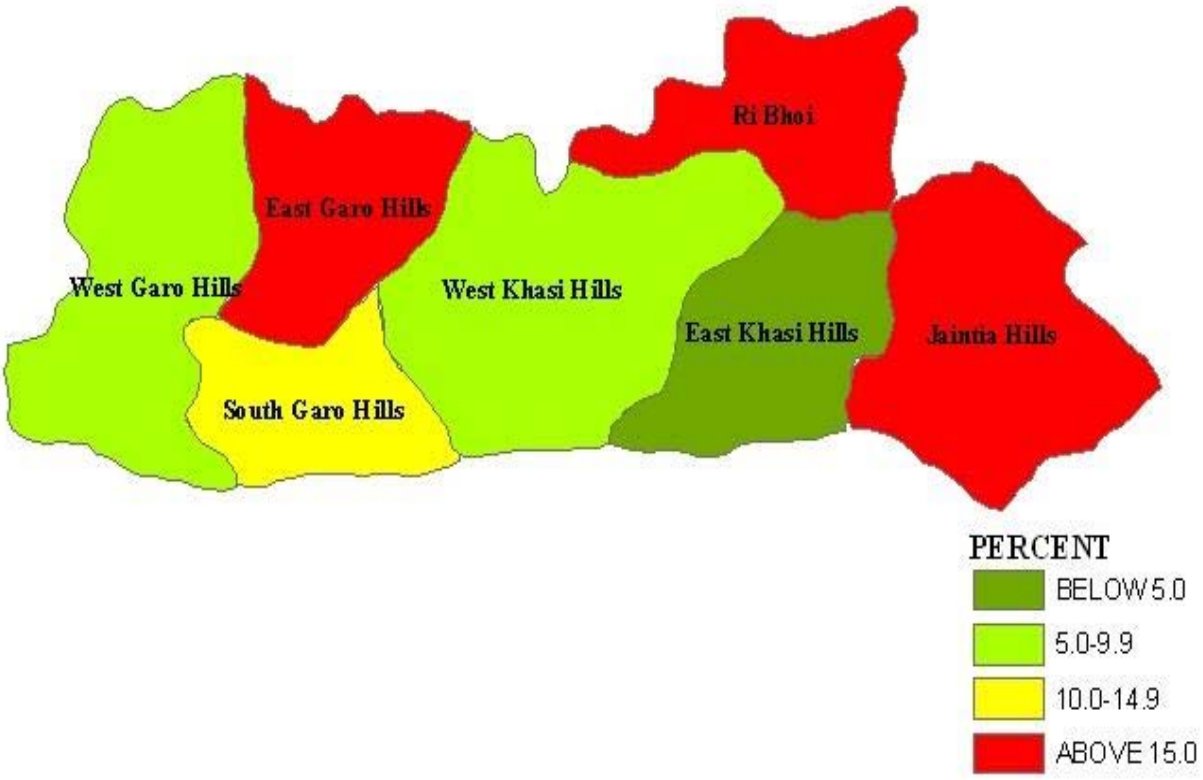
Districts	Percentage of rural household population with: Primary or middle school	Sub-centre	PHCs	Any govern-ment health facility[1]	Doctor[2]	TBA[3]	*Angan-wadi* worker
East Garo Hills	100.0	26.8	15.9	36.4	22.4	6.7	49.0
East Khasi Hills	93.3	32.8	33.0	36.6	65.0	29.7	42.3
Jaintia Hills	100.0	45.4	19.7	59.0	17.7	41.9	68.4
Ri Bhoi	95.3	7.4	7.1	18.8	55.6	46.2	61.5
South Garo Hills	94.5	21.1	2.3	22.5	6.2	15.8	51.9
West Garo Hills	89.7	8.6	5.6	10.6	18.3	45.2	13.9
West Khasi Hills	100.0	23.5	0.0	27.1	9.3	24.2	84.2
Meghalaya	95.9	24.1	12.9	30.5	28.4	32.4	50.5

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

More than half of the rural population were visited either by private or by visiting doctors in the surveyed villages are found in the districts of East Khasi Hills (65 percent), Ri Bhoi(56 percent) and West Garo Hills and Jaintia Hills (18 percent) and it is found to be less than 10 percent in the districts of South Garo Hills (6.2 percent), West Khasi Hills (Nine percent) Highest numbers of rural population (46 percent) are attended by trained birth assistants in Ri Bhoi as well as West Garo Hills(45.2 percentage), while only seven percent of rural population availed themselves of such a provision in East Garo Hills. A visit by *anganwadi* workers to rural households is highest in West Khasi Hills (84 percent) and the lowest in West Garo Hills (14 percent).

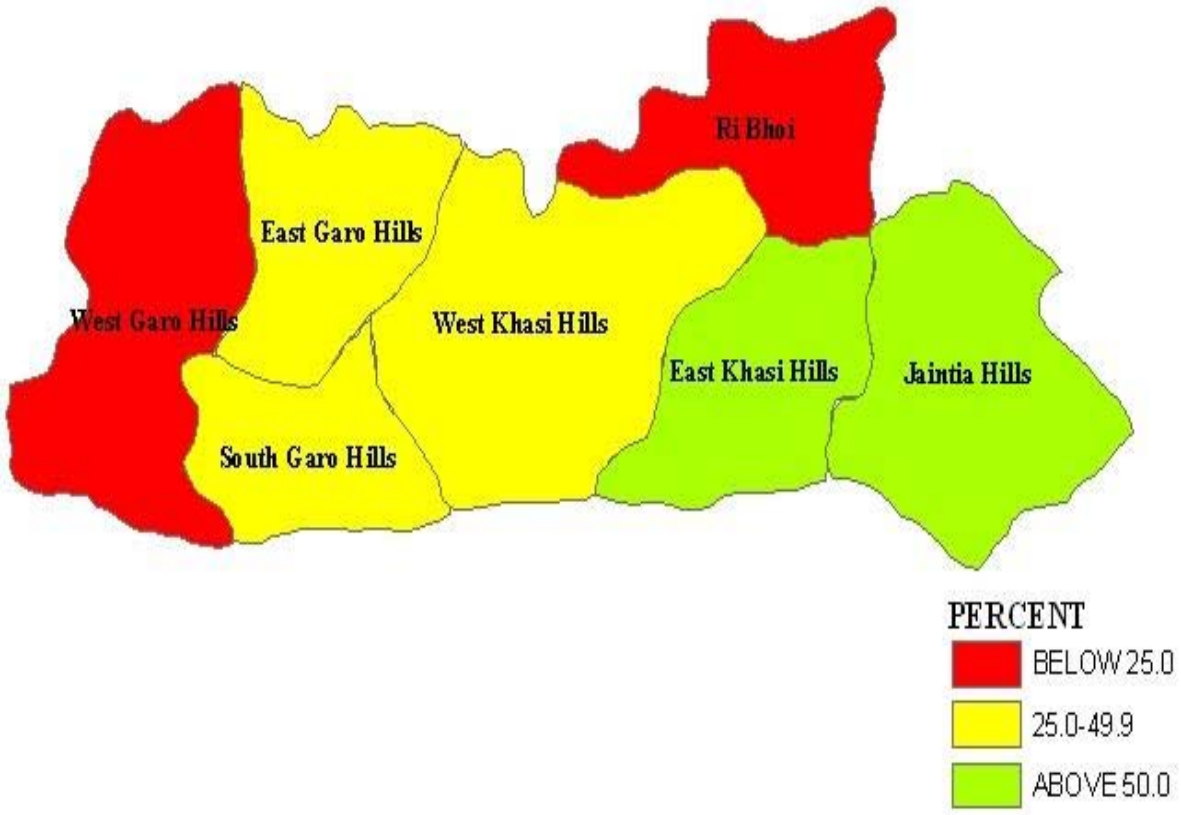
Map – 1

Percent Girl Marrying Below Legal Age at Marriage



Map-2

Percentage of Households using Salt that Contains 15ppm Level of Iodine



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 to 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 percent 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 4,952 eligible women represents the state of Meghalaya in DLHS-RCH and 3,761 of these women are from rural areas. About 58 percent of the currently married women are in the age range of 20-34 years and the distribution is higher in rural areas (61 percent) compared to urban areas (51 percent). Age at consummation of marriage before 18 years, is found to be 28 percent in rural areas and 14 percent in urban areas. Looking at the distribution of marital duration, it is noted that about 38 percent of the women across the state are married for more than 15 years.

Among the sample of 4,952 representative women in Meghalaya, Christian and Hindus constitute 72 percent and 14 percent respectively. More Christian women are found in rural areas (74 percent) than in urban areas (69 percent), while more Hindu women are found in urban area (24 percent) than in rural area (11 percent). The presence of women belonging to other religious groups is insignificant in proportional and absolute terms. Majority of women belong to Scheduled Tribes (89 percent) while very less (3 percent) women belong to Scheduled Castes and 2 percent to Other Backward Classes. Majority of the sample women belong to Scheduled Tribe. There is a clear rural-urban differential in the educational attainment of women. It is found that illiteracy among rural women is much higher (56 percent) than in urban areas (14 percent). For the state of Meghalaya, 46 percent of the women are non-literate.

Table 3.1 BACKGROUND CHARACTERISTICS OF ELIGIBLE WOMEN

Percent distribution of currently married women aged 15-44 by selected background characteristics, according to residence, Meghalaya, 2002-04

Background characteristic	Total	Residence	
		Rural	Urban
Age group			
15-19	3.0	3.7	0.9
20-24	14.7	16.3	9.7
25-29	22.0	22.4	20.6
30-34	21.6	22.0	20.5
35-39	23.4	21.2	30.3
40-44	15.3	14.4	18.1
Age at consummation of marriage			
Below 18 years	24.8	28.3	13.7
18 years & above	75.2	71.7	86.3
Marital duration			
0-4	19.9	20.1	19.5
5-9	18.9	19.1	18.2
10-14	23.3	24.1	20.9
15+	37.9	36.8	41.4
Religion			
Hindu	14.4	11.2	24.4
Muslim	2.7	2.7	2.6
Christian	72.4	73.7	68.5
Sikh	0.3	0.1	1.0
Buddhist	0.0	0.0	0.0
No religion	3.0	3.3	2.1
Other	7.0	8.9	1.0
Caste/tribe			
Scheduled caste	3.0	2.9	3.3
Scheduled tribe	89.2	94.2	73.3
Other backward class	2.3	0.9	6.9
Other #	4.8	1.6	15.2
Don't know			
Education (Years of schooling)			
Non-literate	45.6	55.6	13.7
0-9@ years	39.0	38.9	39.1
10 years & above	15.4	5.3	47.1
Missing	0.1	0.1	0.1
Husband's education (Years of schooling)			
Non-literate	37.0	45.8	9.4
0-9@ years	38.6	41.0	31.0
10 years & above	23.0	11.5	59.4
Don't know	1.1	1.5	0.1
Missing	0.2	0.2	0.1
Standard of living index			
Low	66.4	82.0	17.1
Medium	24.2	16.0	49.8
High	9.5	2.0	33.1
Number of women	4,952	3,761	1,191

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.

Further, thirty nine percent of women across the state have completed 0-9 years of schooling irrespective of rural-urban differentials. However, only 5 percent of rural women have completed 10 or more years of schooling compared to 47 percent for urban women. Men are more literate than their spouses. In Meghalaya, 37 percent of the husbands of eligible women are non-literate and the corresponding figures are 46 percent in rural areas and nine 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 categories of living standard. Sixty six percent of women in the state live in low standard of living households and this is 82 percent in rural areas and 17 percent in urban areas. Twenty-four percent of women across the state live in households categorised as medium standard of living. In urban areas, 33 percent of women belong to high standard of living households and the corresponding figure is just two 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 to the 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. An increasing pattern of educational attainment of women has been noticed particularly among younger generation. For the women in the age group 15-19 years, 26 percent and 17 percent of them had 1-5 years and 6-8 years of schooling respectively. Among the older women in the age group 40-44 years, uneven distribution by year of schooling is observed with 19 percent, 9 percent, 12 percent and 10 percent of them having attended school for 1-5, 6-8, 9-10 and 11 or more years of schooling.

There is a significant rural-urban differential in the level of education of women in Meghalaya. About 56 percent of rural eligible women are non-literate while 21 percent, 11 percent, 8 percent and 2 percent of the women have 1-5, 6-8, 9-10 and 11 or more years of schooling. The corresponding figures in urban areas are 14 percent non-literate and 9 percent between 1-5, 16 percent for 6-8 years, 29 percent for 9-10 years and 31 percent for 11 and more years. More Hindu women (60 Percent) as well as Muslim women (59 percent) are non-literate compared to Christian women (40 percent). For literate eligible women most of the Hindus (14 percent) and Muslims (16 percent) have 9-10 years of schooling and most of the Christians have 1-5 years of schooling (21 percent).

An uneven level of educational attainment by caste can be noted. The proportion of non-literate women was found to be highest among Scheduled caste (58 percent) and Schedule Tribe (46 percent). The variation is marginal in the proportion of non-literate women among all other caste and class ranging somewhere between 30-34 percent. The literate women belonging to different castes or tribes are concentrated more in the range of 9-10 years of schooling. The husband's education is an important characteristic, which has strong association with the education of eligible women. As many as 83 percent of women, who were non-literate, and their husbands are also non-literate, while only six percent of women's who were non-literate had

husband with 11 or more years of schooling. Fifty one percent of literate women with 11 or more years of schooling have husbands with the same level of education.

Table 3.2 LEVEL OF EDUCATION OF ELIGIBLE WOMEN

Percent distribution of currently married women aged 15-44 by years of schooling, according to selected background characteristics, Meghalaya, 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	45.2	2.7	26.4	17.4	8.2	0.1	0.0	100.0	148
20-24	42.7	1.7	22.1	15.1	12.5	5.9	0.0	100.0	729
25-29	42.8	1.4	18.5	12.1	14.1	11.0	0.1	100.0	1,088
30-34	47.5	1.6	17.1	14.0	13.1	6.5	0.2	100.0	1,071
35-39	46.5	1.2	14.1	11.6	13.7	12.8	0.1	100.0	1,160
40-44	48.2	2.1	18.7	9.1	11.6	10.4	0.1	100.0	755
Place of residence									
Rural	55.6	2.0	20.8	11.4	7.9	2.2	0.1	100.0	3,761
Urban	13.7	0.4	9.1	16.2	29.2	31.4	0.1	100.0	1,191
Religion									
Hindu	59.6	0.2	7.9	6.7	13.9	11.7	0.0	100.0	713
Muslim	58.8	1.0	2.6	10.5	11.5	15.6	0.0	100.0	134
Christian	40.0	1.5	21.2	14.4	13.9	8.9	0.2	100.0	3,588
No religion	65.6	0.0	10.0	7.8	8.4	8.2	0.0	100.0	150
Other	59.7	6.0	15.1	8.2	5.1	5.8	0.0	100.0	368
Caste/tribe #									
Scheduled caste	57.5	0.0	5.7	15.3	8.7	12.8	0.0	100.0	150
Scheduled tribe	46.3	1.7	19.2	13.0	12.0	7.7	0.1	100.0	4,418
Other backward class	42.3	0.0	6.3	5.0	27.0	19.3	0.0	100.0	116
Other	27.8	0.1	7.4	5.6	27.7	30.4	0.9	100.0	240
Husband's education									
Non-literate	83.3	1.2	9.0	3.6	2.7	0.4	0.0	100.0	1,835
Literate but no schooling	30.8	42.3	14.7	8.7	2.8	0.6	0.0	100.0	80
1-5 years	38.0	2.4	42.0	12.2	4.9	0.5	0.1	100.0	799
6-8 years	29.1	0.3	33.2	19.9	15.0	2.2	0.3	100.0	650
9-10 years	15.3	0.2	18.1	28.2	30.3	7.7	0.2	100.0	789
11 or more years	5.8	0.0	1.9	12.8	28.9	50.6	0.0	100.0	732
Total	45.6	1.6	18.0	12.5	13.0	9.2	0.1	100.0	4,952

Note: # Total number may not add upto N due to don't know and missing cases. Table includes 238 missing / do not know cases on husband's education were not shown separately.

3.3 Background Characteristics of Husbands of Eligible Women

In DLHS-RCH, husbands of eligible women were also interviewed. The response rate for husbands is relatively low compared to that of eligible women. Selected background characteristics of husbands are shown in Table 3.3. Across the state of Meghalaya, the largest proportion of husbands falls in the age group 35-44 years (40 percent). Fewer husbands are in the less than 25 years of age group. In Meghalaya, 72 percent of the husbands are Christian, 15 percent are Hindus and presence of other religious groups is insignificant. Majority of husbands

(89 percent) in the state belong to the Scheduled Tribe and it is higher (94 percent) in rural areas and 73 percent in urban areas. Few husbands belong to Scheduled Caste, and other backward classes. As regards to the educational characteristics of the husbands of surveyed eligible women, 39 percent of them have completed 0-9 years of schooling and the proportion of non-literate husband ranges from 9 percent in urban areas to 47 percent in rural areas.

Table 3.3 BACKGROUND CHARACTERISTICS OF MEN

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

Background characteristic	Total	Residence	
		Rural	Urban
Age group			
< 25	4.5	5.2	2.2
25-34	34.1	34.8	31.7
35-44	40.1	38.6	44.5
45 +	21.4	21.3	21.6
Religion			
Hindu	14.6	11.2	25.1
Muslim	2.7	2.8	2.7
Christian	72.3	73.7	67.8
Sikh	0.3	0.1	1.1
Buddhist	0.0	0.0	0.0
Jain	0.1	0.0	0.5
No religion	3.2	3.5	2.3
Other	6.8	8.8	0.6
Caste/tribe			
Scheduled caste	3.0	2.9	3.3
Scheduled tribe	89.0	94.2	72.6
Other backward class	2.4	0.9	6.9
Other #	5.0	1.6	15.7
Don't know	0.6	0.4	1.4
Education (Years of schooling)			
Non-literate			
0-9@ years	37.7	47.0	8.5
10 years & above	38.5	41.6	29.0
Missing	23.7	11.3	62.5
	0.0	0.0	0.0
Standard of living index			
Low	65.9	81.9	16.2
Medium	24.4	16.1	50.3
High	9.7	2.1	33.5
Number of living children			
0	7.4	7.4	7.6
1	17.7	16.2	22.4
2	19.9	18.1	25.8
3	19.6	19.5	19.9
4+	35.3	38.8	24.3
Number of Men	4,455	3,374	1,081

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 living in households classified as low, medium and high standard of living index are 66 percent, 24 percent and 10 percent respectively. In rural areas, 82 percent of

the husbands live in low standard of living households compared to 16 percent in urban areas. Around 20 percent of husbands across the state reported having two living children. More husbands in urban areas (26 percent) reported to have two living child as compared to the husbands living in rural areas (18 percent). Above 50 percent of husbands of rural eligible women and 44 percent for husbands of urban eligible women have more than three living children.

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 distribution of non-literate husbands across age is more or less uniform, though it is marginally higher for husbands below 25 years (39 percent) and more than 45 years (44 percent) compared to 38 percent and 34 percent for husbands in the age group 25-34 years and 35-44 years respectively. Among the literate husbands, irrespective of their age at the time of survey most of them have 9-10 years of schooling. Three percent of the younger husbands below 25 years have 11 or more years of schooling compared to 12 percent of those aged 25-34 years. As in the case of eligible women, 46 percent of Hindu husbands are non-literate while the corresponding non-literate husbands of Muslim (41 percent) and Christian are 33 percent respectively. The proportions of husbands of Hindu, Muslim and Christian who have 11 or more years of schooling constitute 20 percent, 23 percent and 14 percent respectively. Most of the literate Christian husbands (19 percent) have completed 1-5 years of schooling and the corresponding percentage are 10 percent and five percent respectively for Hindu and Muslim husbands. Educational attainment of husbands of eligible women varies according to the caste/tribe they belong. There are more non-literate husbands belonging to Scheduled Caste and Schedule Tribe (39 percent each) followed by other backward class husbands (23 percent). Among the Scheduled Caste and Scheduled Tribe husbands, 17 percent and 16 percent of them have nine or more years of schooling. The literacy level of other backward classes is comparable with that of husbands from castes other than Scheduled Tribe and other caste. Among the husbands belonging to other backward classes, 23 percent of them are non-literate and 19 percent of them have nine or more years of schooling.

Table 3.4 LEVEL OF EDUCATION OF MEN

Percent distribution of husbands of eligible women by years of schooling, according to selected background characteristics, Meghalaya, 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	39.3	1.7	25.3	10.4	20.1	3.1	0.0	100.0	200
25-34	37.9	1.9	15.7	14.6	17.8	12.1	0.0	100.0	1,518
35-44	34.0	2.1	18.0	13.1	15.2	17.6	0.0	100.0	1,785
45 +	43.9	1.0	12.3	11.6	13.5	17.6	0.1	100.0	953
Place of residence									
Rural	47.0	2.3	19.4	13.6	12.3	5.2	0.0	100.0	3,374
Urban	8.5	0.1	6.6	11.8	27.2	45.8	0.0	100.0	1,081
Religion									
Hindu	45.8	0.2	9.9	10.0	13.8	20.3	0.0	100.0	648
Muslim	40.9	0.5	4.6	18.3	13.0	22.7	0.0	100.0	122
Christian	33.4	1.7	18.9	14.2	17.5	14.2	0.1	100.0	3,220
No religion	45.0	0.4	4.3	12.0	18.3	20.0	0.0	100.0	144
Other	59.9	6.8	13.2	8.2	4.1	7.7	0.0	100.0	321
Caste/tribe #									
Scheduled caste	39.1	0.0	6.3	16.2	16.7	21.8	0.0	100.0	135
Scheduled tribe	39.0	2.0	17.5	13.0	15.6	12.9	0.0	100.0	3,964
Other backward class	23.3	0.0	7.6	9.5	19.0	40.6	0.0	100.0	106
Other	22.3	4.8	4.3	16.0	20.2	37.2	0.0	100.0	224
Total	37.7	1.8	16.3	13.2	15.9	15.1	0.0	100.0	4,455

Note: # Total number may not add upto N due to don't know and missing 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 had experienced more average live births than younger women. On an average, women in the reproductive age group have given birth to more male children than female children and a 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 4.7 for the state of Meghalaya and it comprises an average of 2.5 male children and 2.2 female children. Out of 4.7 mean children ever born to women in the 40-44 year age, an average of 4.5 children survived. By sex of children, 2.3 mean numbers of males and 2.1 mean number of females survived.

Women with longer marital duration have higher mean children ever born. On an average, women who are married for 15 or more years have 4.6 children ever born with 4.4 surviving children. There is a clear rural-urban differentiation in terms of mean children ever born with 3.3 children in rural areas and 2.7 children in urban areas. The mean children ever born to women who are Hindu, Muslim, Christian and other religions are 2.3, 2.8, 3.4 and 3.3 respectively. The corresponding mean surviving children are 2.2, 2.8, 3.2 and 3.2 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 2.8, for Scheduled Tribe 3.3, Other Backward Classes 2.6 and other castes are 1.8

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 aged 15-44 years, Meghalaya, 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	0.7	0.4	0.3	0.7	0.4	0.3	148
20-24	1.4	0.7	0.7	1.3	0.7	0.7	729
25-29	2.4	1.3	1.2	2.3	1.2	1.1	1,088
30-34	3.5	1.9	1.7	3.4	1.8	1.6	1,071
35-39	4.0	2.0	2.0	3.8	1.9	2.0	1,160
40-44	4.7	2.5	2.2	4.5	2.3	2.1	755
Marital duration							
0-4	1.0	0.5	0.5	1.0	0.5	0.5	987
5-9	2.4	1.2	1.1	2.3	1.2	1.1	934
10-14	3.4	1.8	1.7	3.3	1.7	1.6	1,154
15+	4.6	2.3	2.2	4.4	2.2	2.1	1,876
Residence							
Rural	3.3	1.7	1.6	3.2	1.6	1.5	3,761
Urban	2.7	1.4	1.3	2.6	1.3	1.3	1,191
Religion							
Hindu	2.3	1.1	1.1	2.2	1.1	1.1	713
Muslim	2.8	1.5	1.3	2.8	1.5	1.3	134
Christian	3.4	1.7	1.6	3.2	1.6	1.6	3,588
No religion	3.2	1.5	1.7	3.2	1.5	1.7	150
Other	3.3	1.7	1.6	3.2	1.6	1.5	368
Caste/tribe #							
Scheduled caste	2.8	1.5	1.3	2.8	1.4	1.3	150
Scheduled tribe	3.3	1.7	1.6	3.1	1.6	1.5	4,418
Other backward class	2.6	1.3	1.3	2.5	1.3	1.3	116
Other	1.8	1.0	0.9	1.8	0.9	0.9	240
Education							
Non-literate	3.4	1.8	1.6	3.2	1.7	1.6	2,256
0-9@ years	3.3	1.7	1.6	3.1	1.6	1.5	1,929
10 years & above	2.3	1.1	1.2	2.2	1.1	1.1	761
Standard of living index							
Low	3.4	1.7	1.6	3.2	1.6	1.5	3,287
Medium	3.0	1.5	1.5	2.9	1.4	1.4	1,196
High	2.5	1.2	1.2	2.4	1.2	1.2	469
All women	3.2	1.6	1.6	3.0	1.6	1.5	4,952

Note # Total number may not add upto N due to don't know and missing cases. Table includes 6 women with missing information on education were not shown separately. @ Literate women with no year of schooling are included.

The mean children ever born is higher for non-literate women (3.4) and women who have completed 0-9 years of schooling (3.3) than 10 or more years of schooling (2.3). The mean number of surviving children for women corresponding to these educational levels is 3.2, 1.6 and 2.2 respectively. Further the mean children ever born for women classified into low, medium and high standard of living index are 3.4, 3.0 and 2.5 respectively. On the whole, 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 Meghalaya together with mean number of surviving children are shown in Table 3.6. Women on the verge of completing reproductive period have given on an average, birth to 4.7 children in their reproductive life of which 4.5 children are surviving. Completed fertility in Meghalaya varies from the lowest of 3.3 mean children ever born for West garo Hills to the highest of 6.7 children in Ri Bhoi district. Mean children ever born in all other districts of Meghalaya fall between 3.9 to 6.4. The ratio of mean numbers of male and female children ever born to women in the age group 40-44 years have negligible difference in all the districts. It is good sign for acceptation of girl child. Ri Bhoi recorded highest (5.9) mean number of surviving children. Except West Garo Hills district, the mean number of surviving children in all the other districts of Meghalaya is four or more than four.

Table 3.6 COMPLETED FERTILITY BY DISTRICT

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

	Mean children ever born			Mean children surviving		
District	Total	Male	Female	Total	Male	Female
East Garo Hills	4.8	2.4	2.4	4.7	2.4	2.4
East Khasi Hills	3.9	2.1	1.8	3.8	2.1	1.7
Jaintia Hills	5.8	3.1	2.7	5.4	2.9	2.6
Ri Bhoi	6.7	3.5	3.2	5.6	2.9	2.7
South Garo Hills	4.7	2.4	2.3	4.6	2.4	2.3
West Garo Hills	3.3	1.7	1.6	3.3	1.7	1.6
West Khasi Hills	6.4	3.4	3.1	5.9	3.0	2.8
Megahlaya	4.7	2.5	2.2	4.5	2.3	2.1

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 use 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, Meghalaya, 2002-04

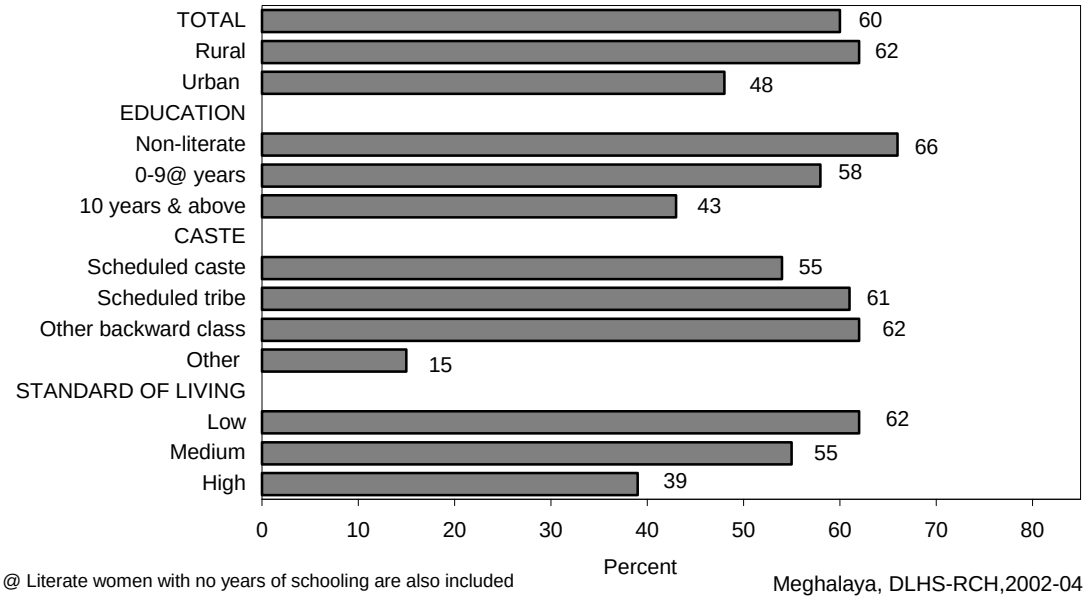
Background characteristic	Birth order				Total percent	Number of births
	1	2	3	4+		
Age of women						
15-19	86.5	12.8	0.6	0.0	100.0	96
20-24	48.2	31.3	14.3	6.3	100.0	624
25-29	21.8	22.1	26.8	29.3	100.0	784
30-34	6.7	12.7	15.3	65.3	100.0	591
35-39	3.9	2.0	10.3	83.8	100.0	409
40-44	0.1	0.6	2.2	97.1	100.0	153
Place of residence						
Rural	21.2	16.8	16.9	45.1	100.0	2,186
Urban	31.3	20.7	14.1	33.8	100.0	471
Education (Years of schooling)						
Non-literate	19.4	14.7	17.1	48.7	100.0	1,161
0-9@ years	22.3	20.0	16.7	41.1	100.0	1,167
10 years & above	38.3	18.6	13.3	29.8	100.0	326
Religion						
Hindu	39.7	24.3	15.2	20.7	100.0	182
Muslim	(23.3)	(15.3)	(20.9)	(40.5)	100.0	40
Christian	22.1	17.7	16.2	43.9	100.0	2,105
No religion	10.7	15.2	24.1	50.0	100.0	100
Other	23.1	11.3	14.7	50.8	100.0	230
Caste/tribe #						
Scheduled caste	(18.9)	(26.3)	(21.8)	(33.1)	100.0	48
Scheduled tribe	22.0	17.3	16.8	44.0	100.0	2,501
Other backward class	24.1	14.2	6.0	55.7	100.0	26
Other	64.9	20.3	4.0	10.8	100.0	64
Standard of living index						
Low	21.4	16.8	17.2	44.6	100.0	2,006
Medium	24.9	19.9	12.8	42.4	100.0	544
High	43.2	17.5	19.8	19.4	100.0	107
Total	23.0	17.5	16.4	43.1	100.0	2,657

Note: Total includes 4 births with missing information on mother's education. # Total number of births may not add up to N due to don't know and missing cases. ( ) Based on less than 50 unweighted cases.

For the state of Meghalaya, 23 percent of the births born in three-year period preceding the survey were of first order, 18 percent of second order, 16 percent of third order and 43 percent were of order four and higher. By current age of eligible women, 84 percent of births to women in the age group 35-39 years and 97 percent of women in the age group 40-44 years are having four and more births. For women of 15-19 years, 87 percent births are of first order and 13 percent births are of second order. In case of eligible women in urban areas 48 percent of the births are of three and higher and that in rural areas constitute 62 percent. Of the total births to non-literate women, 66 percent are 3 and higher order births, followed by 58 percent for women with 0-9 years of schooling and 43 percent for women who had 10 or more years of schooling. Looking at the religion differential in birth order distribution, it is observed that 60 percent of births born to Christian women are three and higher order births, which is 36 percent in case of Hindus and 61 percent in case of Muslims. The occurrence of births of order 3 and above is more

among Scheduled Tribe (61 percent) than among Scheduled Caste (55 percent) and other backward classes (62 percent). Incidence of births of order 3 and above for women classified by household standard of living index are 39 percent for high, 55 percent for medium and 62 percent for women living in the household categorized under low standard of living index.

Figure: 3.1
Birth Order 3 & above by Selected Background Characteristic



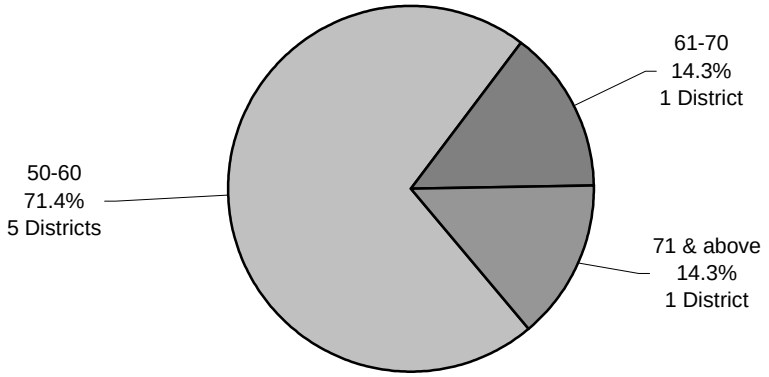
@ Literate women with no years of schooling are also included

Meghalaya, 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 Meghalaya. The proportions of births of order three percent and above ranges from the lowest of 51 percent in West Garo Hill to the highest of 74 percent in West Khasi Hills. In all the district of Meghalaya, the percentage in case of third birth order is less than that of birth orders one, two and four or more.

Figure 3.2
Birth Order 3 & above by District



Meghalaya, DLHS-RCH,2002-04

Table 3.8 BIRTH ORDER BY DISTRICT

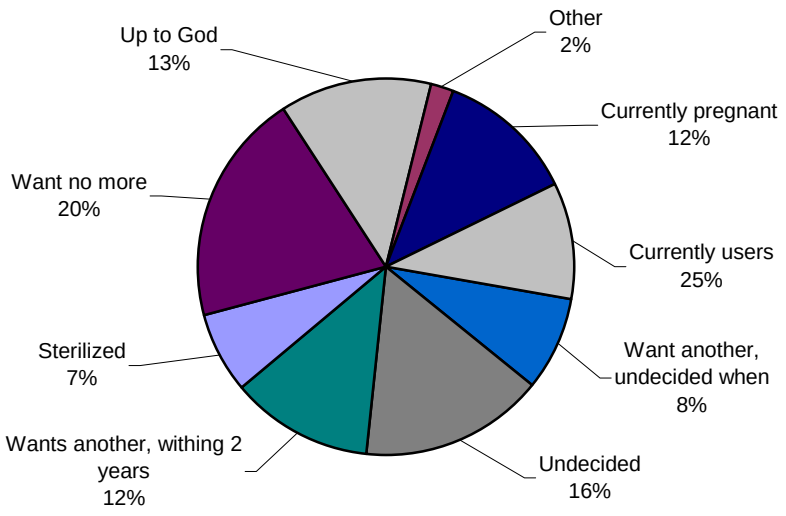
Percent distribution of births during three years preceding the survey by birth order, according to district, Meghalaya, 2002-04

District	Birth order			
	1	2	3	4+
East Garo Hills	20.8	19.1	18.0	42.1
East Khasi Hills	31.0	15.6	14.4	39.0
Jaintia Hills	19.9	18.9	15.9	45.3
Ri Bhoi	20.2	19.6	16.2	43.9
South Garo Hills	30.3	17.9	20.3	31.6
West Garo Hills	28.6	20.5	20.7	30.2
West Khasi Hills	12.1	14.1	13.6	60.2
Meghalaya	23.0	17.5	16.4	43.1

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 342 women with no living child, 32 percent are currently pregnant and 5 percent are using spacing methods, while 45 percent want to have children within two years. Ten percent responded that it is up to God. Among the currently married women, the desire for additional children decreases with increasing number of living children. As many as 10 percent of the women having one living child are using spacing methods, 19 percent of them want additional children within two years, 2 percent after two years, 19 percent are undecided about the timing of the next child, 7 percent of them want no more additional children and one percent are sterilized. Out of the 4,952 surveyed representative women, 12 percent desired to have additional children within two years, one percent after two years, 20 percent want no more children, 12 percent are currently pregnant and 17 percent are using either terminal or temporary contraceptive methods. A total of 2,443 women want additional children irrespective of the number of living children. Out of 203 women who have no living children and desire for additional children, four percent want a boy as the first child, six percent desired for girl, for 59 percent, the sex of the child is immaterial and 31 percent leave it to God. A close observation of the analysis reveals that in Meghalaya, son preference, though existing the degree of variation is not large enough with respect to the number of living children and preference for additional male children. This apart, a sizeable proportion of women desiring additional children expressed that sex of the child is immaterial.

Figure 3.3 Fertility Preference



Meghalaya, 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, Meghalaya, 2002-04

Desire for children	Number of living children					Total
	0	1	2	3	4+	
Desire for additional child						
Wants another soon[1]	45.2	18.5	8.2	7.3	6.3	11.6
Wants another later[2]	0.1	2.0	0.8	0.6	1.5	1.2
Want another, undecided when	2.9	18.8	8.3	4.9	4.5	7.6
Undecided	0.9	14.9	18.2	18.9	16.3	15.9
Up to God	10.0	11.2	13.9	9.7	15.9	13.1
Want no more	3.3	6.6	15.2	24.8	27.8	19.6
Sterilized	0.0	1.1	5.4	12.8	9.1	7.2
Currently users[3]	5.1	10.0	15.9	10.1	7.8	10.0
Currently pregnant	31.9	15.7	13.1	8.1	7.4	11.7
Declared infecund	0.7	0.9	1.0	2.8	3.1	2.1
Missing	0.0	0.2	0.0	0.0	0.3	0.2
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	342	828	950	963	1869	4,952
Preferred sex of additional children						
Boy	4.1	6.5	7.6	4.7	2.6	4.9
Girl	6.2	15.7	9.0	9.7	7.5	9.9
Doesn't matter	58.9	57.5	44.9	44.3	44.7	48.7
Upto God	30.8	19.9	37.9	40.8	44.9	36.2
Missing	0.0	0.3	0.7	0.5	0.3	0.4
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	203	542	469	398	832	2,443

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

3.10 Pregnancy Outcomes

Table 3.10 shows distribution of pregnancy outcomes including live birth, stillbirth, induced abortion and spontaneous abortion by districts in Meghalaya. For the state as a whole, 98 percent of pregnancy ends in live births, 0.1 percent in induced abortions, one percent in spontaneous abortion and one percent in stillbirth. Live birth is same in urban and rural areas (98 percent), the incidence of induced abortion has not much difference in urban and rural areas. The proportion of live births ranges from 96 percent in West Khasi Hills, Jaintia Hills and South Garo Hills to 100 percent in Ri Bhoi and East Khasi Hills. There is no incidence of stillbirth in West Garo Hills and East Khasi Hills while it is higher in South Garo Hills (3 percent). The induced abortion in Meghalaya is almost negligible. Spontaneous abortion is highest in West Khasi Hills (3 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, Meghalaya, 2002-04

Districts	Live birth	Stillbirth	Induced abortion	Spontaneous abortion	Missing	Total percent
State -Rural	97.7	0.9	0.1	1.3	0.1	100.0
State – Urban	98.4	0.8	0.2	0.6	0.0	100.0
State-Total	97.8	0.9	0.1	1.1	0.1	100.0
East Garo Hills	97.9	2.1	0.0	0.0	0.0	100.0
East Khasi Hills	99.7	0.0	0.0	0.3	0.0	100.0
Jaintia Hills	96.0	1.8	0.5	1.5	0.2	100.0
Ri Bhoi	99.8	0.2	0.0	0.0	0.0	100.0
South Garo Hills	96.3	2.7	0.0	0.5	0.5	100.0
West Garo Hills	97.1	0.0	0.6	2.3	0.0	100.0
West Khasi Hills	95.8	1.2	0.0	3.0	0.0	100.0

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 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, management and referral of high-risk pregnancies, natal care, that is encouragement for 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 cases 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.

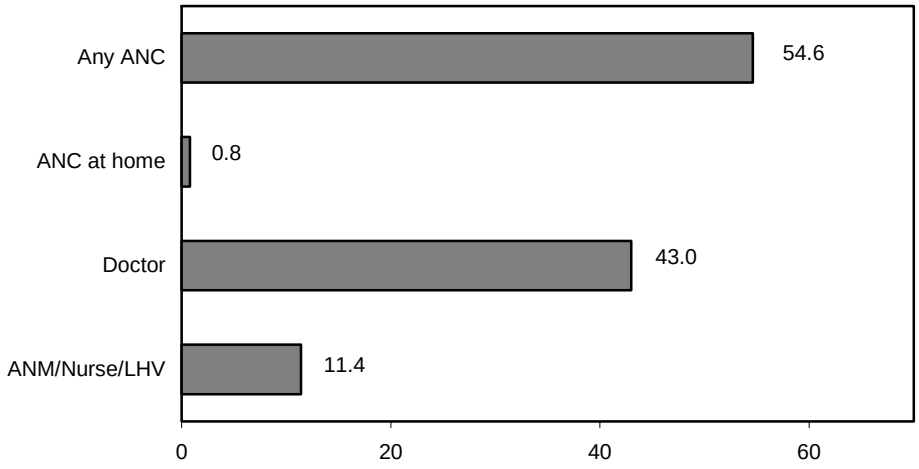
The National Population Policy (NPP), 2000 adopted by the Government of India (Ministry of Health and Family Welfare, 2000) reiterates the Government's commitments to the safe motherhood programme within the wider context of reproductive health. Among the national socio-demographic goals for 2010 specified by the policy, several goals pertaining to safe motherhood were set, which includes 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, to 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 still birth.

4.1 Antenatal Check-Ups

Women who had given 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 was provided to them. 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 three years preceding the survey, and information regarding antenatal check-ups they had by source of antenatal check-ups according to some selected background characteristics. Results show that 55 percent of women received antenatal check-ups during the three years preceding the survey, 43 percent of women received antenatal check-ups from doctors and 11 percent from ANM/Nurse/LHV. Only one percent women received antenatal check-ups at the doorstep from the ANMs.

Figure: 4.1
Sources of Antenatal Care



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

Meghalaya, DLHS-RCH,2002-04

Antenatal check-ups are more common among younger women ages below 35 years than among older women. It is more common among those women who had given their first birth. The percentage of women who received antenatal check-up was much higher in urban areas (82 percent) than in rural areas (49 percent) and the percentage of women who received antenatal check-ups from doctors is higher in urban areas (74 percent) than in rural areas (37 percent). On the other hand, 12 percent of rural women received antenatal check-ups from auxiliary nurse midwife, nurse or LHVs; the same for women living in urban areas is eight percent. Forty percent of non-literate women received antenatal check-ups against 89 percent who had educational level of 10 years and above.

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, Meghalaya, 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	41.9	1.7	27.1	12.6	0.0	0.9	90
20-34 years	56.7	0.7	44.4	12.4	0.1	0.0	1,797
35 years & above	49.9	1.0	41.2	7.9	0.0	0.3	552
Children ever born							
1	59.7	0.8	48.1	12.3	0.0	0.1	532
2	64.8	1.0	51.4	12.8	0.0	0.2	441
3	41.5	0.5	32.3	8.6	0.3	0.0	376
4+	52.6	0.9	40.9	11.4	0.0	0.2	1,087
Residence							
Rural	48.9	1.0	36.6	12.1	0.1	0.2	2,018
Urban	82.1	0.0	73.8	8.0	0.0	0.1	421
Education							
Non-literate	40.1	1.0	32.1	7.6	0.0	0.1	1,084
0-9 @ years	60.1	0.9	43.9	15.9	0.2	0.1	1,059
10 years & above	89.4	0.0	80.9	9.4	0.1	0.2	292
Religion							
Hindu	63.3	0.8	55.1	13.5	0.0	0.0	187
Christian	52.8	0.8	40.2	12.1	0.1	0.2	1,921
No religion	69.4	0.0	63.3	6.2	0.0	0.0	82
Other	57.0	1.1	49.1	6.6	0.2	0.0	249
Caste/tribe#							
Scheduled caste	(25.3)	(3.1)	(22.2)	(0.0)	(0.0)	0.0	42
Scheduled tribe	54.1	0.8	42.2	11.9	0.1	0.2	2,282
Other backward class	(58.3)	(3.8)	(36.7)	(17.8)	(0.0)	(0.0)	26
Other	82.6	0.6	80.7	1.3	0.0	0.0	73
Standard of living index							
Low	46.4	1.1	34.1	12.0	0.0	0.2	1,843
Medium	78.3	0.1	68.1	10.7	0.3	0.0	478
High	87.1	0.0	80.8	5.8	0.0	0.3	119
Availability of health facility[4] in the village							
No	45.9	1.3	34.7	11.2	0.1	0.2	1,418
Yes	55.8	0.3	41.2	14.3	0.1	0.2	600
Total	54.6	0.8	43.0	11.4	0.1	0.1	2,439

Note: * Women who had their last live/still birth since 1-1-1999/1-1-2001.
Total includes 31 women with zero parity 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.

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 two percent non-literate women as compared to 81 percent having education of more than 10 years received ANC from doctors. Similarly, 34 percent of women belonging to households with a low standard of

living against 81 percent of that from a high standard of living received ANC from doctors. The proportion of Christian women who received antenatal check-ups from doctors (40 percent) was lower than that of women from any other religion. Thirty seven percent of women from the Other Backward Class category received antenatal check-ups from doctors, while it was 22 percent for Scheduled Caste women, 42 percent for Scheduled Tribe women and 81 percent for other castes. Women belonging to Scheduled Tribes (54 percent) received any antenatal check-ups less compared to other caste (83 percent) and Other Backward Class (58 percent). Women receiving antenatal check-ups by ANM/Nurse/LHV at home are 12 percent among Scheduled Tribes.

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 of such services.

Table 4.2 shows the percentage of women who had received antenatal check-ups during pregnancy by place of ANC services. 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 through 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 43 percent of women received antenatal check-ups at Government health facility, including 23 percent through primary health centre, five percent through sub-centre and 7 percent at a private health facility. Other than this, nine percent of women reported that they had received antenatal check-ups at Private ISM and one percent received ANC at home. As mentioned above, women availed antenatal check-ups from multiple sources and hence those who were visited by an ANM might have also visited government and/or private health facilities including Indian system of medicine.

Women aged 20-34 years were more likely to receive antenatal check-ups at government health facilities (44 percent) compared to women aged less than 20 years (33 percent) and women aged 35 years and above (39 percent). Forty one percent women from rural areas availed government health facilities for antenatal check-ups; which is lower than women in urban areas (49 percent). A high proportion of women (13 percent) from urban areas availed private health facilities for antenatal check-ups compared to women from rural areas (5 percent). Quite a good proportion of women from rural areas received antenatal services from PHCs (31 percent) but much lower proportion of women received at sub-centres (6 percent). A relatively higher proportion of women who had received antenatal check-ups from Government health facilities are those belonging to medium standard of living index or had schooling of 10 years and above.

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, Meghalaya, 2002-04

Background characteristic	Antenatal check-up only at home	Place of antenatal check-ups[1]							Number of women
		Govern-ment [2] health facility	Private[3] health facility	PHC	SC	ISM[4] facility		Other	
						Govt.	Private		
Age group									
Less than 20 years	1.7	32.8	7.4	34.9	3.5	0.0	0.0	0.0	90
20-34 years	0.7	44.2	6.3	22.2	4.6	0.2	9.8	0.2	1,797
35 years & above	1.0	38.6	7.7	22.9	4.2	0.0	5.0	1.7	552
Children ever born									
1	0.8	44.3	7.4	16.9	2.1	0.3	13.3	0.7	532
2	1.0	51.4	4.9	21.9	5.8	0.0	11.6	0.0	441
3	0.5	31.9	5.7	23.2	2.1	0.0	8.3	0.1	376
4+	0.9	41.8	7.3	26.2	5.9	0.1	4.4	0.8	1,087
Residence									
Rural	1.0	41.1	5.4	30.8	6.1	0.2	2.0	0.7	2,018
Urban	0.0	49.2	12.6	0.2	0.0	0.0	26.9	0.0	421
Education									
Non-literate	1.0	34.9	2.2	23.4	3.6	0.0	5.6	0.4	1,084
0-9 @ years	0.9	48.3	7.7	27.0	6.4	0.3	5.1	0.8	1,059
10 years & above	0.0	50.5	19.5	11.3	1.3	0.0	21.6	0.0	292
Religion									
Hindu	0.8	48.0	6.6	30.6	0.3	0.0	12.7	0.0	187
Christian	0.8	41.2	6.4	22.3	5.2	0.1	8.5	0.7	1,921
No religion	0.0	57.0	8.6	1.7	0.0	0.0	5.4	0.2	82
Other	1.1	44.0	8.0	27.7	5.2	0.4	6.5	0.0	249
Caste/tribe#									
Scheduled caste	(4.4)	(6.7)	(2.2)	(0.0)	(20.0)	(0.0)	(20.0)	(0.0)	42
Scheduled tribe	0.8	42.6	6.5	23.9	4.8	0.1	7.9	0.5	2,282
Other backward class	3.8	50.0	4.5	28.6	0.0	0.0	0.0	0.0	26
Other	0.6	57.2	12.7	3.0	0.0	0.0	14.8	0.0	73
Standard of living index									
Low	1.1	39.5	4.5	26.7	5.9	0.1	2.4	0.7	1,843
Medium	0.1	52.4	13.0	17.7	2.4	0.3	17.0	0.3	478
High	0.0	48.9	14.5	8.5	0.5	0.0	27.8	0.0	119
Availability of health facility[5] in the village									
No	1.3	39.0	4.6	35.5	5.2	0.2	2.0	0.4	1,418
Yes	0.3	46.1	7.3	21.8	7.9	0.2	2.0	1.2	600
Total	0.8	42.5	6.6	22.7	4.5	0.1	8.5	0.5	2,439

Note: * Women who had their last live/still birth since 1-1-1999/1-1-2001.
Total includes 31 women with zero parity 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.

4.3 Antenatal Check-Ups by District

Table 4.3 indicates the antenatal coverage in Meghalaya that ranges from a highest of 82 percent in East Khasi Hills to the lowest of 22 percent in West garo Hills. Except three districts, namely South Garo Hills, West Garo Hills and East Garo Hills, in all the other districts of Meghalaya, more than 60 percent of women received antenatal check-ups. Antenatal check-ups received from doctors ranges from the lowest of 21 percent each in East Garo Hills and West Garo Hills to the highest of 71 percent in East Khasi Hills.

The extent of utilisation of government health facilities for antenatal check-ups was higher than that of private health facilities in all the districts. The antenatal check-up coverage through government facilities was highest in East Khasi Hills (59 percent) and lowest in West Garo Hills (20 percent). In Meghalaya, only five percent of women availed ISM facility for an antenatal check-up.

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, Meghalaya, 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
East Garo Hills	36.7	0.0	20.8	15.0	36.2	0.3	0.0
East Khasi Hills	81.6	0.0	70.7	10.9	59.0	8.8	14.7
Jaintia Hills	68.6	0.4	59.5	7.8	51.0	16.9	0.4
Ri Bhoi	61.3	2.9	34.3	26.1	52.9	4.8	0.2
South Garo Hills	30.2	0.4	28.2	8.1	27.4	1.5	1.9
West Garo Hills	21.6	0.7	20.9	3.1	20.2	0.7	0.3
West Khasi Hills	59.9	1.6	44.9	12.9	45.2	10.9	1.2
Meghalaya	54.6	0.8	43.0	11.4	42.5	22.7	4.7

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 Reasons for Not Seeking Antenatal Check-Ups

Table 4.4 shows the percentage of women who had given live/still births during the three years preceding the survey and who did not receive any antenatal check-ups by the main reason for not seeking check-ups according to residence and availability of health facility in the village. Thirty eight percent of women stated that it was not necessary to have an antenatal check-up. It was surprising to see that a higher proportion of urban women (67 percent) than rural women (36 percent) felt that it was not necessary to have an antenatal check-up. Fifty percent of the rural women belonging to the villages which have a health facility stated that an antenatal check-up was not necessary while 31 percent women belonging to village had positive response for the use of health facilities. This notion however, may be viewed in the context of existing traditional belief that pregnancy is a normal phenomenon, which does not require specific medical attention.

Other factors for keeping women away from availing antenatal care services are lack of knowledge (28 percent), costly affair (13 percent) and non-accessibility of health facility (27 percent), and poor quality service (nine percent). Six percent of women reported that it is not customary.

Table 4.4 REASONS FOR NOT SEEKING ANTENATAL CHECK-UPS

Percentage of women* who did not receive any antenatal check-up by the main reason for not receiving an antenatal check-up, according to residence and availability of health facility in the village, Meghalaya, 2002-04

Reason	Total	Residence		Availability of health facility[1] in the village	
		Rural	Urban	No	Yes
Not Necessary	38.3	36.2	66.8	31.3	50.3
Not customary	5.8	6.1	1.3	7.1	3.3
Cost too much	12.9	13.4	6.2	15.6	7.1
Health facility too far/ No transport	26.6	28.6	0.2	33.5	14.4
Poor quality service	8.6	9.0	3.1	9.3	7.9
No time to go	2.2	2.3	0.6	2.8	.9
Family did not allow	2.4	2.6	0.6	3.1	1.0
Lack of knowledge	27.9	28.7	16.9	32.4	18.3
Other	6.4	6.3	7.2	6.5	5.9
Number of women	1,107	1,032	75	766	265

Note: * Women who had their last live/still birth since 1-1-1999/1-1-2001.
[1] Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village.
Note: percentage may add more than 100.0 due to multiple response

4.5 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 4.5 presents the percentage of women who received specific check-ups by residence. It is to be mentioned that except for X-rays (which are not recommended as a standard component of antenatal care), all other antenatal measurements and tests are part of essential obstetric care or are required for monitoring high-risk pregnancies.

The survey revealed that 85 percent of women were weighted, 81 percent had their blood pressure checked and 83 percent had an abdominal examination as the part of the antenatal check-ups. Other common antenatal check-ups carried out include blood test (41 percent), urine test (38 percent), internal examination (22 percent) and breast examination (33 percent). Every one in ten women had a sonogram or ultrasound, 9 percent had an X-ray and less than one percent of women reported that they had amniocentesis test. All of these examinations were performed more often during antenatal check-ups in urban areas than in rural areas.

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 4.5. Advice on diet was given to 49 percent of urban women and 42 percent to rural women. Seventeen percent of the women received advice on danger signs of pregnancy. Overall, women were less likely to receive advice on delivery care (42 percent), breastfeeding (37 percent) and newborn care (34

percent). Advice on family planning was given to 14 percent of rural women and 37 percent of urban women.

Table 4.5 COMPONENTS OF ANTENATAL CHECK-UPS

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

Components of antenatal check-ups	Total	Rural	Urban
Antenatal measurements/tests			
Weight measured	85.3	84.0	89.1
Height measured	8.8	6.8	14.7
Blood pressure checked	81.4	78.3	90.1
Blood tested	40.8	31.7	66.5
Urine tested	37.8	27.7	66.7
Abdomen examined	83.0	81.1	88.6
Internal examined	21.9	16.0	38.8
Breast examined	33.4	30.7	41.2
X-ray	8.6	7.2	12.7
Sonography /ultrasound	3.5	1.6	9.0
Amniocentesis	0.3	0.1	0.8
Antenatal advice			
Diet	43.9	42.2	48.7
Danger signs of pregnancy	16.5	11.1	32.2
Delivery care	42.4	38.2	54.2
Breast feeding	36.9	32.2	50.2
New born care	34.3	30.9	44.2
Family planning	19.7	13.7	37.1
Number of women who received any antenatal check-up	1,332	986	346

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

4.6 Antenatal Care Services

In India, the Reproductive and Child Health Programme requires 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-up should take place latest during the first trimester of the pregnancy. It also includes the provision of at least three antenatal care visits, 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, tetanus toxoid injection and supplement iron folic acid tablets. The results are presented in Table 4.6. In Meghalaya, 44 percent of the women received at least three antenatal check-ups. At least three antenatal check-ups were received by 74 percent of women in urban areas as compared to 38 percent of women in rural areas. The number of visits for antenatal care varies by education, children ever born, religion, caste and standard of living index. Thirty-one percent of non-literate, 46 percent literate women (educated below high school) and 84 percent of women who had 10 or more years of schooling visited health facilities for minimum three antenatal care services. With the increase in parity, frequency of antenatal check-ups decreases. Fifty-two percent of women with parity one received at least three antenatal check-ups compared to 40 percent of women with parity 4 and above.

Table 4.6 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, Meghalaya, 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	45.4	51.2	17.9	60.0	39.9	10.6	40.3	35.2	58.5	47.5
1	2.9	3.3	1.1	3.0	3.4	0.8	3.4	2.3	2.9	2.9
2	7.9	8.0	7.4	6.4	10.2	4.8	4.4	10.1	5.0	9.7
3	11.2	11.6	9.4	8.0	15.0	9.4	8.3	15.6	10.6	11.0
4+	32.6	26.0	64.3	22.6	31.4	74.4	43.6	36.9	22.9	28.8
Stage of pregnancy at the time of the first antenatal check-up										
No antenatal check-up	45.5	51.2	17.9	60.1	39.9	10.8	40.3	35.2	58.7	47.6
First trimester	28.3	22.6	55.4	19.9	26.4	66.4	38.1	33.6	22.7	23.3
Second trimester	23.6	23.4	24.2	18.0	29.7	22.3	19.8	28.1	16.0	26.2
Third trimester	2.6	2.7	2.5	2.0	3.9	0.5	1.8	3.1	2.6	2.9
Women who received TT										
No TT	49.1	54.9	21.2	64.0	42.7	16.2	43.8	36.9	58.1	53.5
1	17.8	17.6	19.1	12.0	23.7	18.5	7.8	22.4	17.0	21.2
2+	30.3	26.1	50.5	22.9	29.9	59.5	43.0	36.3	23.5	24.0
Do not remember/missing	2.8	1.5	9.1	1.1	3.7	5.8	5.5	4.4	1.4	1.3
Women who received IFA tablets/syrup										
No IFA/syrup	47.0	52.4	21.1	60.8	41.7	14.4	39.7	39.3	55.8	50.6
Received but not consumed	1.9	1.7	3.0	0.7	3.0	2.6	1.7	2.0	1.8	2.0
Consumed one IFA per day	25.8	25.5	27.1	18.3	32.5	29.6	25.5	30.0	22.9	25.2
Received 100+ IFA tablets/syrup	14.1	10.9	29.1	5.4	17.5	34.1	15.4	15.8	9.2	14.5
Percentage of women who received full [1] antenatal check-ups	11.7	9.1	24.5	4.0	14.2	31.5	14.2	11.9	7.8	11.8
Number of women	2,439	2,018	421	1,084	1,059	292	532	441	376	1,087

Note: Total includes 3 women with zero parity 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.

Continued…….

Table 4.6 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, Meghalaya, 2002-04

	Religion				Caste#			
Antenatal care indicators	Hindu	Christian	No Religion	Other	Scheduled caste	Scheduled tribe	Other backward class	Other
Number of ANC visits								
No visit	36.7	47.2	30.6	43.2	(84.4)	45.9	(26.7)	18.0
1	1.9	2.6	4.2	5.5	(2.2)	2.7	(13.3)	9.8
2	3.6	8.7	0.0	7.4	(4.4)	8.2	(6.7)	1.1
3	13.7	10.8	5.4	14.3	(0.0)	11.6	(6.7)	1.0
4+	44.2	30.7	59.8	29.7	(8.9)	31.6	(46.7)	70.2
Stage of pregnancy at the time of the first antenatal check-up								
No antenatal check-up	36.7	47.3	30.6	43.2	(84.4)	45.9	(26.7)	18.0
First trimester	37.1	26.9	53.9	23.9	(8.9)	27.0	(46.7)	72.1
Second trimester	25.7	23.0	15.1	29.3	(6.7)	24.3	(20.0)	9.9
Third trimester	0.5	2.8	0.4	3.6	(0.0)	2.8	(6.7)	0.0
Women who received TT								
No TT	38.8	50.6	40.7	47.9	(86.7)	49.8	(33.7)	17.9
1	17.3	18.0	9.2	19.8	(6.7)	18.6	(6.7)	2.6
2+	36.9	28.5	50.1	32.3	(4.4)	29.2	(60.0)	72.0
Do not remember/missing	7.0	2.9	0.0	0.0	(2.2)	2.5	(0.0)	7.5
Women who received IFA tablets/syrup								
No IFA/syrup	31.2	49.9	22.1	44.9	(88.9)	47.4	(33.3)	18.3
Received but not consumed	0.4	2.4	0.0	0.0	(0.0	2.0	(0.0)	0.0
Consumed one IFA per day	38.6	24.5	10.7	30.8	(4.4)	25.8	(46.7)	18.9
Received 100+ IFA tablets/syrup	20.6	14.0	8.6	11.2	(6.7)	13.2	(13.3)	39.3
Percentage of women who received full [1] antenatal check-ups	16.2	11.5	8.6	11.2	(2.2)	11.1	(6.7)	39.3
Number of women	187	1,921	82	249	42	2,282	26	73

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.

Hindu women (58 percent) were more likely to have at least three visits for antenatal check-ups than women from 'Christian' religions (42 percent). Coverage of at least three antenatal care among Scheduled Tribe (43 percent) is lower than that of Other Backward Class (53 percent) and other caste (71 percent). Proportion of women with three or more antenatal visits sharply increases with the standard of living-35 percent for women with a low standard of living, 70 percent for women with a medium standard of living and 82 percent for women with a high standard of living. Prevalence of three or more antenatal visit is higher in case of availability of health facilities in the village (43 percent) compared to non-availability of health facilities (35 percent) in the villages.

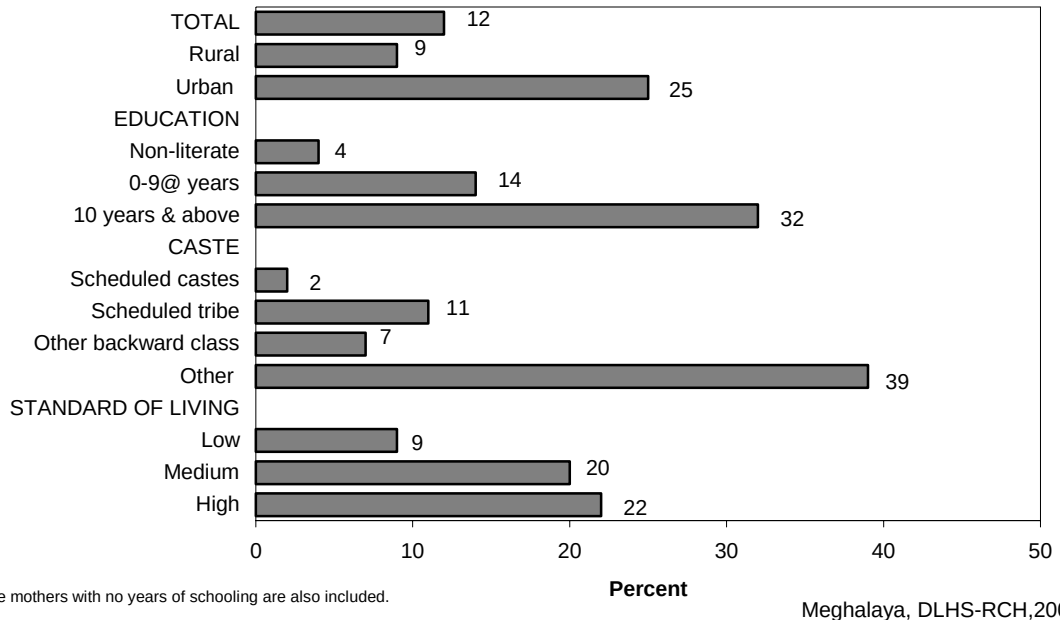
Data on timing of first antenatal check-up shows that 28 percent of the women received their first antenatal check-up in the first trimester of pregnancy, 24 percent received their first check-up in the second trimester and three percent of women received their first check-up in the third trimester. A relatively higher proportion of women in the urban areas (55 percent) as compared to those in rural areas (23 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 percent of non-literate women had undergone their first antenatal check-up in the first trimester and 66 percent of women who had completed at least 10 years of schooling received their first antenatal check-up in the first trimester. 38 percent women with parity-one were visited in first trimester and only 23 percent women with parity-four and above had undergone antenatal check-up in first trimester. Hindu (37 percent) and Christian women (26 percent) were less likely to go for first antenatal check-up in first trimester of their pregnancy as compared to "No religion" (54 percent). Higher proportion (27 percent) of Scheduled Tribe women were visited in first trimester for first antenatal check-up compared with 9 percent of scheduled caste women, 47 percent of Other Backward Class of women and 72 percent women from 'other' caste category. Twenty-one percent women with low standard of living, 48 percent with medium, and 68 percent with high standard of living had undergone their first antenatal check-up in the first trimester of their pregnancy.

Nutritional deficiencies in 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 iron folic acid tablets/syrup supplements during pregnancy is also collected. Table 4.6 shows that only 14 percent of women in Meghalaya, received 100 or more IFA tablets/syrup with 11 percent in rural areas and 29 percent in urban areas. Intake of 100 or more IFA is directly related to education and standard of living index. However, it is inversely proportional to parity. Hindu women received 100 or more IFA than Christian women. Similarly, Other Backward Class and Scheduled Tribe received more than that of Scheduled Caste. Higher percentage of women reported receiving 100 and more IFA in the villages where health facilities are available. Twenty-six percent of women reported consuming one IFA per day.

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 4.6 shows that thirty percent of the women received two or more tetanus toxoid injections. Coverage of two or more TT injections is higher in urban areas (51 percent) than that in rural areas (26 percent). The coverage of at least one tetanus toxoid injection for

Hindu women (54 percent) is more than that for Christian women (47 percent). Coverage of at least one tetanus toxoid injection is 75 percent for other class, 67 percent for Other Backward Class, 48 percent for Scheduled Tribes and 11 percent for Scheduled Caste. Non-literate women received at least one tetanus toxoid injection for 35 percent of their last birth, whereas literate women with 9 years of schooling received at least one tetanus toxoid injection for 54 percent and women who had completed 10 years or more of schooling received at least one tetanus toxoid injection for 78 percent of their last birth. Seventy-eight percent of women with a high standard of living received at least one tetanus toxoid injection and 42-66 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 51 percent women of Parity-one compared with 45 percent of Parity four and above.

Figure: 4.2
Full Antenatal Care by Background Characteristics



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

Meghalaya, DLHS-RCH,2002-04

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. Only 12 percent of women in Meghalaya received full antenatal care. Coverage of full antenatal care is relatively low for non-literate women, women with higher parity, Christian women, Scheduled Caste and Other Backward Class women, low standard of living, and women from those villages where health facilities are not available. Full antenatal coverage is also lower in rural areas (nine percent) than in urban areas (25 percent).

4.7 Antenatal Care Indicator by District

Table 4.7 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 such as women receiving antenatal check-up in the first trimester, who had minimum three antenatal check-ups, at least one tetanus toxoid injection, 100 or more iron folic acid tablets/syrup and those who received full antenatal care services by district.

Table 4.7 ANTENATAL CARE INDICATORS BY DISTRICT

Percentage of women* who received different type of antenatal care by district, Meghalaya, 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
East Garo Hills	16.3	27.8	31.7	0.5	0.2
East Khasi Hills	59.9	77.2	69.9	12.1	9.7
Jaintia Hills	30.1	51.0	63.8	25.9	24.6
Ri Bhoi	21.5	43.1	53.1	29.8	21.2
South Garo Hills	26.8	22.0	23.1	1.5	1.5
West Garo Hills	11.0	18.5	22.0	2.5	2.5
West Khasi Hills	15.6	39.3	53.8	22.9	20.0
Meghalaya	28.3	43.8	41.1	14.1	11.7

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 utilisation of antenatal care services differs from district to district. East Khasi Hills district women received highest (60 percent) antenatal check-ups in the first trimester of their first pregnancy, while lowest is West Garo Hills (11percent). Similarly, the percentage of women who received at least three visits for antenatal check-ups ranges from minimum of 19 percent in West Garo Hills to a maximum of 77 percent in East Khasi Hills. The coverage of tetanus toxoid injection ranges from 22 percent in South Garo Hills to 70 percent in East Khasi Hills. The performance regarding receipt of 100 or more IFA is poor. The value ranges from one in East Garo Hills to 30 percent in Ri Bhoi. Similarly, the percentage of women who received full antenatal care ranges from 0.2 percent in East Garo Hills to highest of 25 percent in Jaintia Hills.

4.8 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 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 4.8 and Figure 4.3.

Figure: 4.3
Percentage of Women with Pregnancy Complications by Symptoms

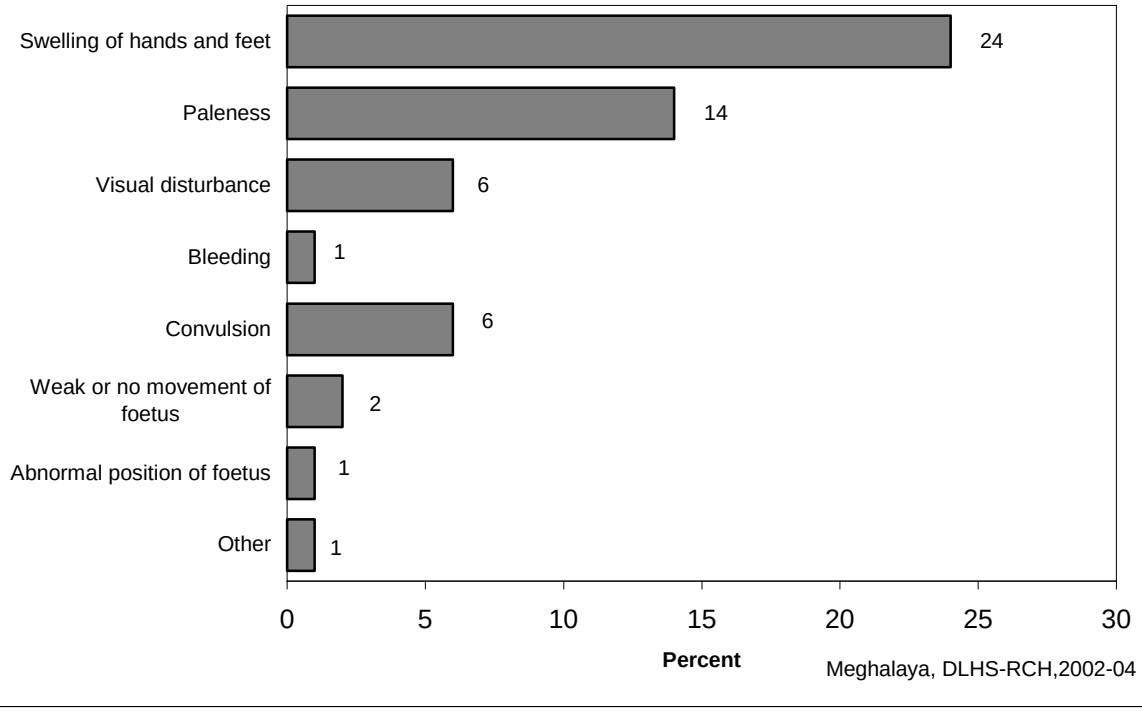


Table 4.8 PREGNANCY COMPLICATIONS

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, Meghalaya, 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	39.2	28.3	30.5	5.6	0.4	6.2	2.0	0.0	0.4	90
20-24	27.9	17.7	13.6	9.7	1.8	4.5	1.1	0.2	0.3	541
25-29	35.2	26.4	16.4	4.4	1.3	6.2	1.9	0.7	0.8	697
30-34	33.5	25.4	12.8	5.2	0.3	4.6	1.0	0.8	0.5	559
35-39	36.7	25.8	11.2	3.5	1.4	6.6	2.5	1.3	1.9	380
40-44	31.9	24.9	11.5	6.2	2.0	5.1	2.1	2.9	0.3	171
Children ever born										
1	31.0	22.4	16.2	7.7	2.0	3.5	1.5	0.6	0.2	532
2	27.5	21.1	13.8	4.9	1.4	5.8	1.2	0.2	0.4	441
3	34.2	24.3	15.0	4.8	0.7	6.4	3.1	0.4	0.9	376
4+	36.6	26.1	13.4	5.5	0.9	6.0	1.4	1.4	1.0	1,087
Residence										
Rural	33.5	24.5	14.3	5.1	1.4	6.1	1.7	0.8	0.5	2,018
Urban	32.5	22.3	14.4	8.9	0.2	2.5	1.2	1.2	1.9	421
Standard of living index										
Low	33.3	24.0	14.5	5.2	1.3	5.8	1.8	0.8	0.8	1,843
Medium	36.2	26.6	15.5	8.0	1.0	5.1	0.8	0.2	0.6	478
High	22.2	15.5	7.5	6.2	0.8	0.6	2.3	3.5	0.0	119
Received any ANC										
Yes	35.6	26.1	15.6	7.9	1.1	4.7	1.3	1.1	0.5	1,332
No	30.7	21.7	12.8	3.2	1.3	6.4	2.1	0.5	1.0	1,107
Total	33.4	24.1	14.3	5.8	1.2	5.5	1.6	0.8	0.7	2,439

Note: Total include 3 women with zero parity were not shown separately
@ Literate women with no years of schooling are also included

Overall, 33 percent of the women experienced at least one pregnancy related problem. There is marginal difference between rural women (34 percent) and urban women (33 percent). Women aged 30 years and above and those with higher parity are more likely to face at least one pregnancy related problem than younger women and women with low parity. This proportion is relatively high among women who had received some kind of antenatal care during their pregnancy. Thirty-six percent of women who had an antenatal check-up reported that they had experienced at least one problem during their pregnancy against 31 percent of women who did not receive any antenatal check-up during their pregnancy. Overall, the major problems reported are 'swelling of hand and feet' (24 percent) and 'paleness' (14 percent). Swelling of hands and feet is on the higher side (25 percent) among rural women and women with medium standard of living (27 percent). Paleness, visual disturbance, and convulsion increased steadily with increase of parity.

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 4.9 shows the percentage of women who had pregnancy complications and obtained advice or sought treatment by source of treatment according to residence and availability of health facility in the village. Twenty-eight percent of women reported that they had obtained advice or consulted someone for their problem. The proportion was higher among urban women (41 percent) than among rural women (25 percent) and 25 percent of women sought treatment irrespective of the availability of health facilities in the villages.

Among women who sought treatment for pregnancy complications, 69 percent visited a government health facility including a primary health centre (18 percent) and sub-centre (five percent). Twenty three percent of them visited a private health facility. Seven percent had gone to a facility with the Indian system of medicine and another 3 percent obtained advice from other health facility. The proportion of women who visited a private health facility is higher in urban areas (34 percent) than in rural areas (20 percent). Among women who sought treatment, 79 percent went to a doctor and 16 percent to an auxiliary nurse midwife or nurse or LHV and another three percent to dais, ISM practitioner and other health professionals. Ninety-four percent of these women in urban areas and 74 percent in rural areas were examined by a doctor, whereas ANM/Nurse/LHV examined twenty one percent of the women in rural areas and three percent in urban areas.

Table 4.9 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, Meghalaya, 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	27.8	25.1	41.4	25.3	24.5
Number of women	814	677	137	505	172
Percentage sought treatment at health facility					
Government health facility[1]	68.5	76.5	44.7	75.3	(78.7)
Primary health centre	17.9	23.9	-	28.5	(9.8)
Sub centre	5.3	7.1	-	3.3	(18.0)
Private health facility[2]	23.1	19.5	34.0	20.5	(16.4)
ISM[3] facility	7.0	1.8	22.5	2.1	(1.6)
Other	2.6	3.5	-	3.5	(4.9)
Percent distribution of women who obtained treatment from					
Doctor	78.8	73.6	94.3	75.8	(67.2)
ANM/nurse/midwife/LHV	16.3	20.8	2.6	19.1	(24.6)
Other[4]	3.3	4.4	0.0	4.1	(6.6)
Missing	1.7	1.3	3.0	1.0	(1.6)
Total percent	100.0	100.0	100.0	100.0	100.0
Number of women	227	170	57	128	42

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

4.9 Delivery Care

4.9.1 Place of Delivery

One of the important thrusts of the Reproductive and Child Health Programme is to encourage deliveries under proper hygienic conditions and 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 deliveries at home, characteristics of delivery, and any problems that occurred at the time of delivery. Table 4.10 and Figure 4.4 present the place of delivery. Twenty four percent of the births took place in government health institutions and another 7 percent in private health institutions while a large

proportion of births (70 percent) took place at home. Seventy seven percent of the deliveries in urban areas and 21 percent of the deliveries in rural areas took place in health institutions.

Table 4.10 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, Meghalaya, 2002-04

Background characteristics	Health institutions		Home	Other	Missing	Total percent	Number of women
	Public	Private					
Age group (in years)							
Below 20	10.6	3.3	86.1	0.0	0.0	100.0	90
20-34	24.9	8.2	66.8	0.1	0.0	100.0	1,797
35 and above	21.9	4.4	73.2	0.2	0.4	100.0	552
Children ever born							
1	33.1	13.2	53.5	0.1	0.0	100.0	532
2	24.9	8.1	67.1	0.0	0.0	100.0	441
3	18.9	5.0	75.9	0.2	0.0	100.0	376
4+	20.4	4.5	74.8	0.1	0.2	100.0	1,087
Residence							
Rural	18.6	2.7	78.5	0.1	0.1	100.0	2,018
Urban	48.5	28.6	22.9	0.0	0.0	100.0	421
Education							
Non-literate	21.5	2.0	76.4	0.0	0.2	100.0	1,084
0-9@ years	20.3	6.3	73.2	0.2	0.0	100.0	1,059
10 years & above	44.8	29.7	25.3	0.3	0.0	100.0	292
Religion							
Hindu	27.2	17.5	55.4	0.0	0.0	100.0	187
Christian	21.9	6.1	71.9	0.1	0.1	100.0	1,921
No religion	54.4	7.6	38.0	0.0	0.0	100.0	82
Other	25.4	7.4	66.5	0.6	0.0	100.0	249
Caste#							
Scheduled caste	(13.3)	(4.4)	(82.2)	(0.0)	(0.0)	100.0	42
Scheduled tribe	22.8	6.1	70.8	0.1	0.1	100.0	2,282
Other backward class	(46.7)	(20.0)	(33.3)	(0.0)	(0.0)	100.0	26
Other	53.5	28.0	18.5	0.0	0.0	100.0	73
Standard of living index							
Low	19.6	1.6	78.7	0.1	0.1	100.0	1,843
Medium	35.5	20.2	44.0	0.3	0.0	100.0	478
High	40.8	41.2	17.7	0.3	0.0	100.0	119
Number of antenatal check-ups							
No check-up	7.2	0.7	91.8	0.1	0.2	100.0	1,108
1	17.0	2.5	80.5	0.0	0.0	100.0	71
2	13.3	2.3	84.4	0.0	0.0	100.0	192
3	18.6	6.2	74.6	0.6	0.0	100.0	273
4+	51.6	18.1	30.2	0.0	0.0	100.0	795
Delivery characteristics							
Normal	22.5	5.4	71.9	0.1	0.0	100.0	2,310
Caesarean	49.6	47.3	3.2	0.0	0.0	100.0	85
Assisted	(41.2)	(11.8)	(37.1)	(0.0)	(0.0)	100.0	40
Availability of health facility[1] in the village							
No	17.7	2.0	80.0	0.1	0.1	100.0	1,418
Yes	20.5	4.2	75.1	0.1	0.0	100.0	600
Total	23.7	7.2	68.9	0.1	0.1	100.0	2,439

Note: Total includes 31 women with zero parity and 17 on delivery characteristics 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.

The proportion of births occurring in health institutions is higher for women aged 20-34 years (33 percent) than for women aged 35 years and above (26 percent) and below 20 years (14 percent). Institutional deliveries increases with the increase of educational level and standard of living. Twenty four percent of the births to non-literate women and 75 percent births to literate women who had completed at least 10 or more years of schooling took place at health institutions. Institutional delivery is also higher among those women belonging to high standard of living than women with a low standard of living (Figure 4.4). The proportion of institutional deliveries decreases as parity increases from parity one (46 percent) to parity four and above (25 percent). Institutional delivery is lower among Christian women (28 percent) than among Hindus (35 percent) and no religion women (62 percent). Institutional deliveries (government and private) were 29 percent among Scheduled Tribe women, 18 percent among Scheduled Caste, 67 percent among Other Backward Class and 82 percent among Other Caste. Institutional deliveries are more common among women who had four or more antenatal check-ups (70 percent) than among those who had three antenatal check-ups (25 percent), two antenatal check-ups (16 percent) and one antenatal check-up (20 percent). Institutional deliveries are least prevalent among women who did not receive any antenatal check-ups (eight percent). Importantly, most of the deliveries in health institutions are either caesarean or assisted by forceps. The incidence of caesarean delivery in government health institutions (50 percent) is higher than in private health institution (47 percent). Similarly, forceps delivery is more frequent in government hospital (41 percent) as compared to private hospitals (12 percent). At the same time, three percent of caesarean deliveries and 37 percent of assisted deliveries took place at home. The presence of health facilities in the village has no impact on the choice of places for delivery as most of the deliveries still take place at home.

4.9.2 Assistance During Home Delivery

Table 4.11 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 attendant assisted during the delivery, then the most qualified person is considered. In the last three years only one percent of home deliveries were attended by the doctors, six percent by ANM or nurse or LHV, 11 percent by trained birth attendants, 46 percent by untrained *dais*, 33 percent were attended by relatives and friends and 4 percent of home deliveries were not attended by anyone (Figure 4.4). Overall, health professionals attended only seven percent of deliveries that took place at home. About 3-7 percent of births were attended by health professional for women age below 20 and 20-34 years, which decreases to five percent for women age 35 and above. In rural areas, seven percent of births were attended by health professionals, which is slightly higher than in urban areas (6 percent). The percentage of births attended by health professionals was decreased steadily with increasing parity of women.

Births to literate women who had completed 10 or more years of schooling which were attended by health professionals is six times higher than those of non-literate women. About five percent of home deliveries to women with a low standard of living and 13 percent of deliveries to women with medium standard of living were attended by health professionals. Six percent of women each belonging to Christian religion and Scheduled Tribe community were attended to by health professionals. Six percent of home deliveries to women who did not have any antenatal check-ups were attended to by health professionals compared to 10 percent of home deliveries to women who had four or more antenatal check-ups. Health professionals attended to about six percent of home deliveries that were normal. Ten percent home deliveries were attended to by health professionals in the villages where health facility is available and the percentage for the same decreases to five percent in case the villages have no health facility.

Table 4.11 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, Meghalaya, 2002-04

Background characteristics	Attendant assisting during home delivery[1]						Number of women	Percentage of safe[2] delivery
	Doctor	ANM/ Nurse/ LHV	TBA	Un-trained *dai*	Relative/ friends	None		
Age group (in years)								
Below 20	0.0	3.4	8.0	42.5	41.4	4.6	87	15.7
20-34	1.1	6.0	11.0	45.3	33.8	2.8	1404	36.9
35 and above	0.6	4.9	9.7	46.6	30.4	7.0	487	29.6
Children ever born								
1	0.3	5.8	8.8	50.2	32.9	2.0	295	48.6
2	1.1	5.4	11.0	43.5	36.2	2.8	354	36.7
3	2.0	5.5	13.1	43.9	33.1	2.3	344	28.4
4+	0.7	5.7	10.0	45.3	32.5	5.4	983	28.8
Residence								
Rural	0.9	5.8	10.7	45.5	32.8	4.1	1764	25.3
Urban	1.9	3.7	8.9	45.8	37.4	1.9	214	78.3
Education								
Non-literate	0.5	5.1	8.8	49.0	32.7	3.5	860	26.5
0-9@ years	1.2	5.6	11.6	43.8	33.7	4.2	1010	31.1
10 years & above	2.9	9.6	14.4	32.7	34.6	4.8	104	76.8
Religion								
Hindu	0.0	5.6	1.9	53.7	33.3	5.6	54	46.4
Christian	1.0	5.5	10.6	45.4	33.0	4.2	1720	31.9
No Religion	5.0	15.0	20.0	25.0	35.0	0.0	20	63.9
Other	0.5	6.0	10.9	46.2	35.3	1.1	184	35.8
Caste#								
Scheduled caste	0.0	0.0	37.8	51.4	10.8	0.0	37	24.7
Scheduled tribe	1.0	5.8	10.1	45.3	33.7	3.9	1906	32.8
Other backward class	0.0	0.0	20.0	40.0	20.0	20.0	5	60.8
Other	0.0	0.0	0.0	37.5	50.0	12.5	16	81.5
Standard of living index								
Low	0.7	4.4	10.6	46.4	33.4	4.3	1647	24.4
Medium	2.7	10.4	10.8	41.8	32.3	2.0	297	60.3
High	0.0	23.5	5.9	32.4	35.3	0.0	34	86.6
Number of antenatal check-ups								
No check-up	0.5	4.6	8.4	49.0	33.4	3.8	1119	11.8
1	1.3	2.5	10.0	40.0	42.5	3.8	80	21.8
2	0.5	7.7	12.7	45.7	29.0	4.5	221	21.4
3	1.2	7.4	9.5	43.2	34.6	4.1	243	29.4
4+	2.5	7.3	17.5	36.3	32.2	3.8	314	72.2
Delivery characteristics								
Normal	0.6	5.4	10.5	45.8	33.5	3.9	1955	31.3
Caesarean	*	*	*	*	*	*	4	96.8
Assisted	*	*	*	*	*	*	16	84.0
Availability of health facility[3] in the village								
No	0.8	4.2	9.7	47.5	31.7	5.7	1201	23.1
Yes	0.9	9.2	13.0	41.0	35.0	0.7	563	30.7
Total	1.0	5.6	10.5	45.5	33.3	3.9	1978	34.5

Note: Total includes 10 women with zero parity and 22 caesarean delivery 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

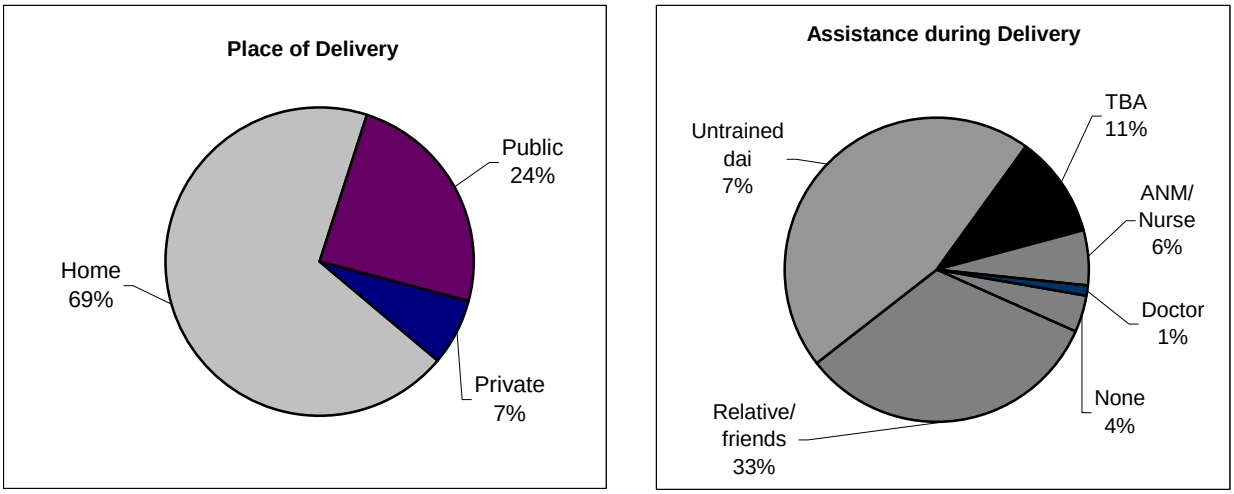
[1] If the respondent mentioned more than one attensdant, only the most qualified attendant is shown

[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. * Percentage not shown: Based on few cases.

Total include 4 Caesarean and 16 cases assisted were not shown separately.

Figure 4.4
Place of Delivery and Assistance During Delivery



Note: Percentage may add more than 100.0 due to rounding

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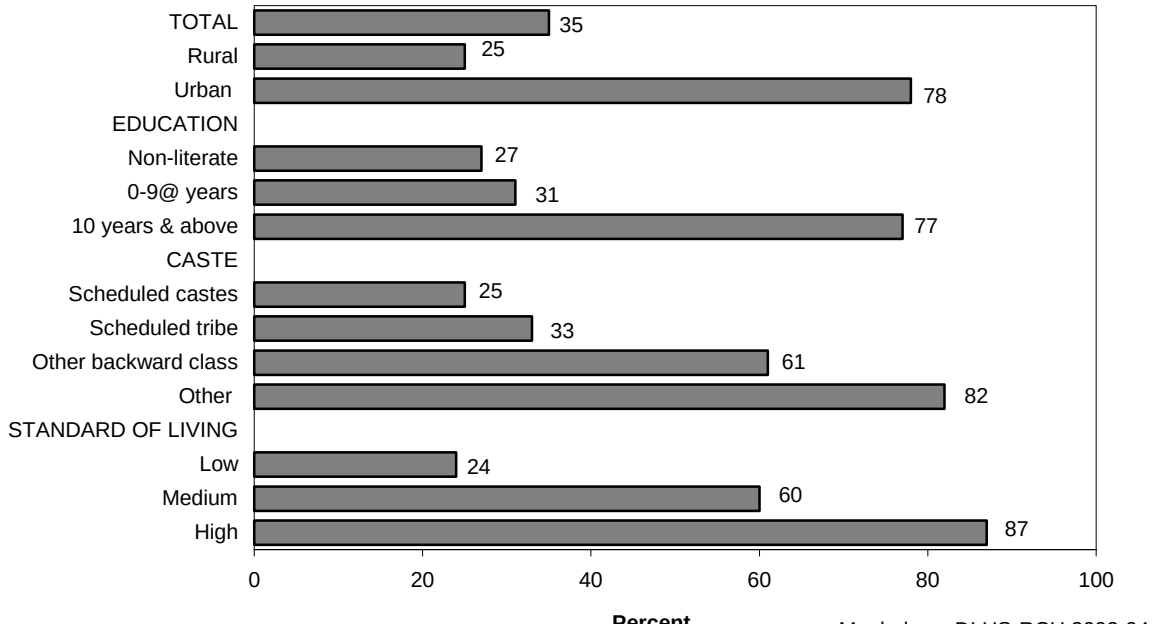
4.9.3 Delivery Assisted by Skilled Persons

The extent of safe deliveries varied substantially by background characteristics of women (Table 4.11 and Figure 4.5). Thirty-five percent of the births were safe in Meghalaya. In urban areas, 78 percent of the deliveries were safe as against 25 percent in rural areas. About 16-37 percent of the deliveries were safe for women aged below 35 than to elderly women (30 percent). The proportion of safe deliveries was lower among Christian women (32 percent) than Hindu women (46 percent) and women with no religion (64 percent). Sixty-one percent of births to women from Other Backward Class were safe, compared to 33 percent to women from Scheduled-tribe and and 82 percent to women from other caste. Proportion of safe deliveries decreases as parity increases from one (49 percent) to four and above (29 percent). Safe deliveries were least prevalent among women who did not receive any antenatal check-up (12 percent) and it is most prevalent among women who had four or more antenatal check-ups (72 percent). The proportion of safe deliveries increases considerably with women's education and standard of living. About 27 percent of non-literate women had safe deliveries whereas its' prevalence is 77 percent among women who had completed at least high school. Women with a high standard of living had 87 percent safe deliveries compared to 60 percent of women with a medium standard of living and 24 percent with a low standard of living. Safe deliveries were higher in the villages where health facilities were available (31 percent) compared to those villages with no availability of health facilities (23 percent).

Figure: 4.5
Delivert Assisted by Skilled Person by Background Characteristics



4.10 Reasons for Not Going to Health Institutions for Delivery

Table 4.12 shows the percentage distribution of women who did not go for delivery in any health institutions in the three years preceding the survey. The main reason for not going to health institutions has been presented according to residence and availability of health facility in the village. Thirty percent of the women stated that it was not necessary to deliver in health institutions. It is surprising to see that a higher proportion of urban women (41 percent) than rural women (30 percent) felt this way. Also, 38 percent of women stated that it was not necessary to deliver in health institutions when their villages are equipped with health facilities, as compared to 26 percent of women from villages where a health facility is not available. Three percent of the women felt that it was not customary to deliver in health institutions. Other factors contributing towards not going to health institutions for delivery were, 'it cost too much' (ten percent), 'no transportation' or 'health facility is too far' (seventeen percent), 'no time to go' (seven percent), 'family did not allow' (three percent), 'better care at home' (thirteen percent), lack of knowledge (eleven percent) and 'other' (two percent). Four percent women did not opt for institutional delivery due to poor quality of services.

Table 4.12 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, Meghalaya, 2002-04

Reason	Total	Residence		Availability of health facility[1] in the village	
		Rural	Urban	No	Yes
Not Necessary	30.2	29.5	40.9	26.2	37.8
Not customary	2.7	2.8	0.8	2.7	3.3
Cost too much	10.4	10.9	2.8	11.2	10.0
Health facility too far/ No transport	16.6	17.4	3.4	21.0	8.6
Poor quality service	3.5	3.2	8.2	3.0	3.6
No time to go	7.3	7.3	6.8	6.3	9.8
Family did not allow	2.6	2.4	6.2	1.4	4.7
Better care at home	12.8	12.3	22.3	11.9	13.2
Lack of knowledge	11.4	11.8	5.8	14.2	5.5
Other	2.0	2.0	1.9	1.6	2.9
Total percent	100.0	100.0	100.0	100.0	100.0
Number of women	1,681	1,585	96	1,134	451

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

4.11 Delivery Characteristics by District

Table 4.13 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 West Garo Hills and Ri Bhoi (15 percent each) and it is highest in East Khasi Hills (73 percent).

Table 4.13 DELIVERY CHARACTERISTICS BY DISTRICT

Place of delivery, assistance during home deliveries, and percentage of safe deliveries by district, Meghalaya, 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
East Garo Hills	18.0	82.0	15.7	30.8
East Khasi Hills	73.3	26.7	5.3	74.7
Jaintia Hills	29.5	70.2	4.6	32.7
Ri Bhoi	14.5	84.4	3.4	17.3
South Garo Hills	34.8	65.0	10.7	41.8
West Garo Hills	15.4	84.6	1.6	16.7
West Khasi Hills	17.3	82.7	1.2	18.3
Meghalaya	46.3	68.9	34.5	34.5

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.

Compared to delivery in health institutions, deliveries at home are more common in all the districts except East Khasi Hills of Meghalaya. In all the districts Except East Khasi Hills (27 percent), more than sixty percent of the births took place at home, the highest being in West Garo Hills (85 percent). The percentage of home deliveries assisted by skilled persons ranges from the lowest of one percent in West Khasi Hills to the highest of 16 percent in East Garo Hills district. The extent of safe deliveries also ranges from 17 percent each in Ri Bhoi and West Garo Hills to 75 percent in East Khasi Hills (see Map-4).

4.12 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. Fifteen percent of the women experienced at least one problem during delivery (Table 4.14 and Figure 4.6). The proportion of delivery complications is slightly higher among rural women (15 percent) than among urban women (13 percent). Women aged 20-34 years and women with low parity of one reported more delivery related problems. Delivery complications were reported higher among women who had no antenatal check-ups compared to those who had antenatal check-ups. Among women who had assisted or caesarean delivery, 24-48 percent reported experiencing such problems and 13 percent women with normal deliveries also cited complications during delivery. A relatively higher proportion of women who delivered in health institutions (11-20 percent) faced at least one delivery complication compared to those who delivered at home (15 percent).

The problems reported were 'prolonged labour' (9 percent), 'premature labour' (4 percent), 'obstructed labour' (2 percent), and 'breech presentation' (one percent). Prolonged labour is more among younger women (21 percent). Delivery complications such as excessive bleeding and prolonged labour were reported more by rural women while premature labour is reported more by urban women. The percentages of various delivery complications except excessive bleeding are inversely related with parity. Excessive bleeding is higher among women with high parity. In case of all types of delivery complications, deliveries were mostly done through caesarean. Women whose recent delivery was performed in medical institutions reported more premature labour and obstructed labour compared with place of delivery other than medical institutions.

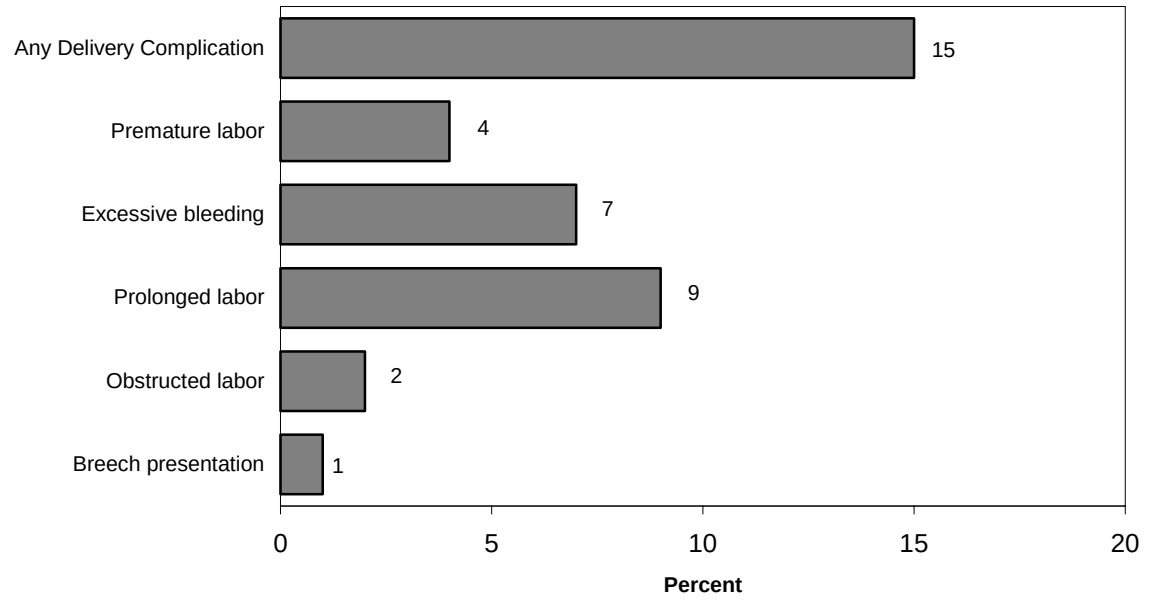
Table 4.14 DELIVERY COMPLICATIONS

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

Background characteristics	Any delivery complic-ation	Type of delivery complication; Prematu-re labour	Excessi-ve bleeding	Prolonged labour	Obstructed labour	Breech presnta-tion	Other	Number of women
Age group (in years)								
Below 20	24.0	2.5	19.9	20.7	0.4	0.4	0.0	90
20-34	14.9	3.7	8.0	8.4	1.9	1.4	0.1	1,797
35 and above	11.5	3.4	3.3	7.6	0.4	1.0	0.0	552
Children ever born								
1	18.9	4.9	8.6	12.3	3.3	3.3	0.0	532
2	13.4	3.7	7.9	7.5	0.6	0.2	0.0	441
3	17.3	4.0	10.2	10.4	0.7	1.1	0.4	376
4+	11.8	2.8	5.7	6.8	1.4	0.8	0.1	1,087
Residence								
Rural	14.8	3.0	8.2	9.1	1.1	0.7	0.1	2,018
Urban	13.1	6.2	3.6	6.6	3.8	4.0	0.0	421
Number of antenatal check-ups								
No check-up	18.0	4.6	10.1	10.0	0.6	1.0	0.1	1,108
1	12.5	2.4	3.2	7.6	1.8	0.0	0.0	71
2	8.9	1.6	4.1	6.5	0.2	1.0	0.1	192
3	13.3	1.5	8.8	10.0	0.9	0.2	0.4	273
4+	11.6	3.6	4.3	7.1	3.3	2.2	0.0	795
Delivery characteristics								
Normal	13.1	3.4	7.2	7.5	0.5	0.8	0.1	2,310
Caesarean	48.2	8.0	15.4	37.8	27.9	15.2	0.0	85
Assisted	(23.5)	(2.9)	(0.0)	(14.7)	(5.9)	(0.0)	(2.9)	40
Place of delivery								
Government sector	10.8	4.0	3.2	5.5	1.6	1.0	0.0	579
Private sector	19.5	3.4	7.9	14.6	10.6	7.4	0.0	174
Home	15.3	3.5	8.8	9.2	0.6	0.7	0.2	1,681
Total	14.5	3.6	7.4	8.7	1.5	1.3	0.1	2,439

Note: Table include 3 women with zero parity, 4 with missing information on delivery characteristics, 2 missing information on place of delivery and 3 other delivery place cases who were not shown separately.

Figure: 4.6
Percentage of women with Delivery Complication and by Symptoms



Meghalaya, DLHS-RCH,2002-04

4.13 Post Delivery Complications and Treatment

Table 4.15 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, which can be judged by complications during the first six-weeks of delivery includes 'high fever', 'lower abdominal pain', 'foul smelling vaginal discharge', 'excessive bleeding', 'convulsion', 'severe headache', and 'other' problems. Twenty four percent of women reported that they faced any of the problems during the first six weeks after their delivery. The proportion of women who cited at least one post delivery complication is higher (26 percent) in rural areas and lower in urban areas (17 percent). Post delivery complications were reported more among younger women aged below 20 (33 percent) and women with higher parity three (27 percent) and four and above (25 percent) reported higher post delivery complications. Those women who delivered at home and assisted by untrained dai (22 percent) and trained birth attendant (14 percent) had more post delivery complications compared to those whose deliveries were assisted by doctors (28 percent) or ANM/Nurse/LHV (25 percent). On the whole, various complications were reported, which include lower abdominal pain (14 percent), foul smelling vaginal discharge (2 percent), high fever (9 percent), severe headache (12 percent), excessive vaginal bleeding (4 percent) and convulsion (three percent). The symptoms of postpartum complications were increasing steadily with increasing parity. 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 severe headache during the first six weeks of delivery.

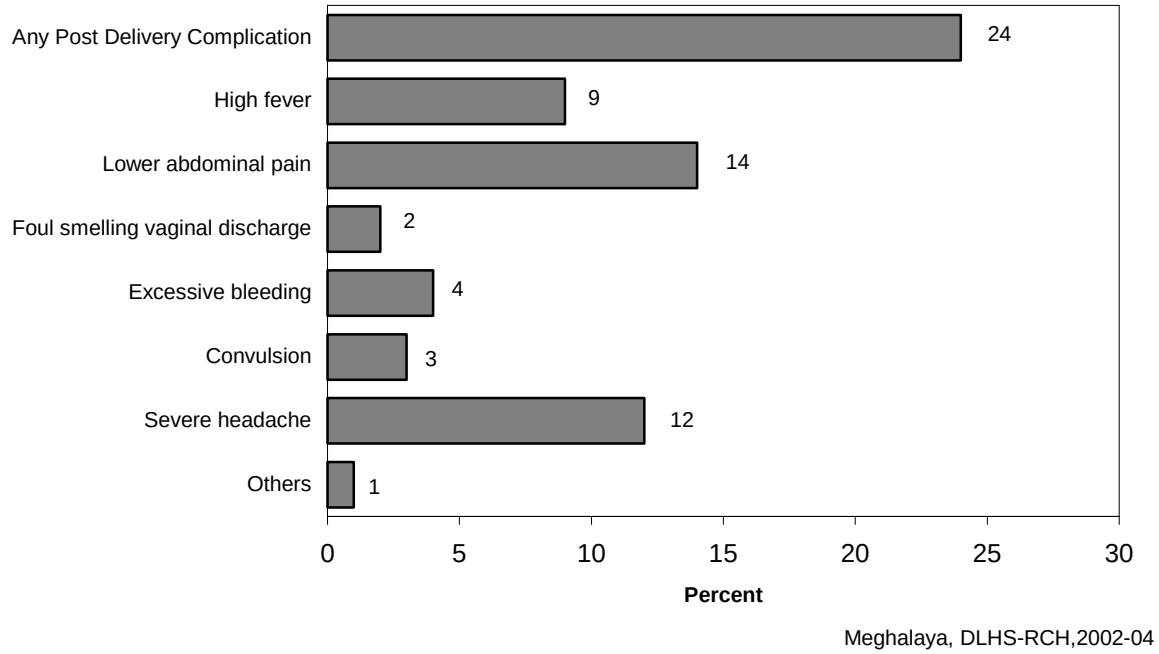
Table 4.15 POST DELIVERY COMPLICATIONS

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, Meghalaya, 2002-04

Background characteristics	Any post delivery complic-ation	Type of post delivery complication; High fever	Lower abdominal pain	Foul smelling vaginal discharge	Excessive bleeding	Convul-sion	Severe head-ache	Other	Number of women
Age									
Below 20	32.5	21.3	26.1	0.4	1.0	2.9	6.2	0.8	90
20-34	24.5	9.5	13.9	2.0	3.9	2.7	13.6	0.8	1,797
35 and above	21.9	6.8	11.6	2.7	2.7	3.3	8.0	0.4	552
Children ever born									
1	23.0	12.2	16.2	1.9	4.2	1.9	11.0	0.1	532
2	21.0	11.2	12.8	0.9	5.3	1.6	11.0	0.8	441
3	26.6	6.4	13.4	3.1	3.4	4.9	14.4	2.0	376
4+	25.3	8.2	13.2	2.4	2.6	3.1	12.2	0.5	1,087
Residence									
Rural	25.8	9.9	15.5	1.7	3.2	3.0	12.9	0.6	2,018
Urban	16.6	6.4	5.8	4.1	5.1	1.9	7.7	1.2	421
Delivery characteristics									
Normal	23.7	8.6	13.8	2.0	3.3	2.9	11.7	0.7	2,310
Caesarean	39.3	27.7	16.5	5.6	10.8	1.6	21.6	0.8	85
Assisted	(29.4)	(8.8)	(14.7)	(0.0)	(0.0)	(2.9)	(11.8)	(5.9)	40
Place of delivery									
Government sector	14.4	6.8	7.2	0.9	3.0	0.5	5.9	0.6	579
Private sector	21.7	11.2	7.5	8.1	8.8	3.7	11.2	0.4	174
Home	27.9	10.0	16.8	1.9	3.2	3.5	14.3	0.8	1,681
Assistance during home delivery									
ANM/Nurse/LHV	25.1	18.1	5.8	9.0	2.0	0.2	0.0	10.7	71
TBA	14.4	16.4	3.6	10.6	1.0	1.3	0.8	11.0	149
Untrained *dai*	21.7	33.3	11.0	19.1	2.3	4.3	3.6	19.6	868
Relative/friends	27.9	24.7	10.7	16.6	1.6	2.1	4.5	7.8	515
None	24.2	22.4	10.9	15.0	2.0	4.1	6.3	10.4	55
Total	24.2	9.3	13.8	2.1	3.5	2.8	12.0	0.7	2,439

Note: Total includes 3 women with zero parity, 4 with missing information on delivery characteristics, 3 other and 2 with missing information on place of delivery who were not shown separately. 17 cases of assistance during home delivery by doctor are not shown separately.

Figure: 4.7
Percentage of women with Post Delivery Complication and by Symptoms



Meghalaya, 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 4.16 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. Twenty-seven percent of women reported that they had obtained advice or had consulted someone for their problems. The proportion was higher among urban women (41 percent) than among rural women (25 percent). Twenty three percent of women sought treatment from those villages where health facility was available as compared to 25 percent of women who did not have a health facility within the village.

Table 4.16 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, Meghalaya, 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	26.5	24.7	40.5	25.2	23.2
Number of women	591	521	70	385	136
Percentage sought treatment at health facility					
Government health facility[1]	67.5	72.8	(68.6)	69.3	(80.0)
Primary health centre	32.4	39.5	(2.0)	43.6	(21.7)
Sub centre	5.3	6.5	(0.0)	2.9	(17.4)
Private health facility[2]	22.2	18.2	(25.5)	20.5	(13.0)
ISM[3] facility	5.8	4.1	(2.0)	5.5	(0.0)
Other	4.5	4.9	(3.9)	4.9	(6.5)
Percent distribution of women who obtained treatment from					
Doctor	79.6	76.1	(90.2)	81.6	(60.9)
ANM/nurse/midwife/LHV	16.4	19.6	(5.9)	14.7	(30.4)
Other health professionals[4]	2.0	2.4	(2.0)	2.6	(4.3)
Other	1.4	1.2	(2.0)	1.2	(2.2)
Total percent	100.0	100.0	100.0	100.0	100.0
Number of women	157	128	28	97	32

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

Among women who sought treatment for complications in the postpartum period, 68 percent visited a government health facility including primary health centre (32 percent) and sub-centre (five percent). Twenty two percent of women visited a private health facility and six percent went to a facility with the Indian system of medicine (either government or private) and another 5 percent obtained advice from other health facilities. The proportion of women who visited a government health facility is relatively higher in rural areas (73 percent) than in urban areas (69 percent). Among women who sought treatment, 80 percent preferred to go to a doctor, sixteen percent visited an auxiliary nurse midwife or nurse or LHV, two percent went to other health professionals and one percent went to some one else. Ninety percent of these women in urban areas and 76 percent in rural areas went to a doctor, whereas a visit to an ANM/nurse/LHV was 20 percent in rural areas and 6 percent in urban areas. There are also differences by

availability of health facilities and non-availability of health facilities in the village. Sixty one percent of women who belonged to villages health facilities were seen by doctor compared to 82 percent of women belonging to villages which has no health facilities.

4.14 Obstetric Morbidity by District

Table 4.17 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, 33 percent, 15 percent and 24 percent of the women experienced pregnancy, delivery and post delivery complications respectively. About 28 percent of the women sought treatment for pregnancy complications and 27 percent for post delivery complications. A woman experiencing at least one of the symptoms of pregnancy complications was lowest in East Garo Hills (20 percent) and highest in South Garo Hills (59 percent).

Table 4.17 PREGNANCY, DELIVERY AND POST DELIVERY COMPLICATIONS

Extent of pregnancy, delivery and post delivery complications and treatment seeking behaviour by districts, Meghalaya, 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
West Garo Hills	47.6	10.7	45.4	42.8	23.5
East Garo Hills	20.1	14.5	3.4	16.8	18.4
South Garo Hills	59.1	26.0	47.8	55.4	21.8
West Khasi Hills	32.6	53.2	10.1	26.2	41.9
Ri Bhoi	41.2	42.0	10.0	25.3	44.0
East Khasi Hills	26.5	36.3	8.3	9.7	44.1
Jaintia Hills	28.3	16.1	3.8	24.0	3.8
Meghalaya	33.4	27.8	14.5	24.2	26.5

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 two districts, namely West Garo Hills (48 percent) and Ri Bhoi (41 percent), the incidence of pregnancy complications was found to be on the higher side. The percentage of women who experienced at least one type of delivery complication ranges from 3 percent in East Garo Hills to 48 percent in South Garo Hills and the incidence of post delivery complication varies from ten percent in East Khasi Hills to 55 percent in South Garo Hills. The incidence of all three types of complications seems to be linked with each other in varying proportions.

The proportion of women who sought treatment for pregnancy complication ranges from a lowest of 11 percent in West Garo Hills to a highest of 53 percent in West Khasi Hills. Similarly, the proportion of women who sought treatment for post delivery complication varies from a lowest of four percent in Jaintia Hills to a highest of 44 percent each in Ri Bhoi and East Khasi Hills.

Map-3

Percentage of Women Received Three or more Antenatal Check-ups

Map-4

Percentage of Delivery Attended by Skilled Person

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 were collected on breastfeeding practices and its duration. 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. Breastfeeding practices affect fertility and the length of birth intervals in general and postpartum fertility in particular. 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 proper time intervals.

Table 5.1 shows the breastfeeding practices among children born during the three years preceding the survey in Meghalaya. Although the practice of breastfeeding is common in Meghalaya, the initiation of breastfeeding within two hours of the birth of the child is not always followed. Around 66 percent of the children were breastfed within two hours of birth and 92 percent were breastfed within one day of birth (including those who were breastfed within two hours of birth), while 8 percent of children were breastfed after one day of birth. As shown in Figure 5.1, about 66 percent of the children were breastfed within two hours of birth, 25 percent after two hours of birth but on same day, seven percent were breastfed after the first day of birth but before 3 days and one percent children were put to the breast after three days. Fifty percent of the women who gave birth to children during the three years preceding the survey squeezed the first milk from the breast before they began breastfeeding. Sixty six percent of children from

Scheduled Tribe were breastfed within two hours of birth, which is lower than "other" caste (95 percentage). Women who reside in urban areas, have had high school education and above and women who live in households with a medium and high standard of living were reported breastfeeding their children early. Higher proportion of children from urban areas (10 percent), Muslim community (8 percent), Scheduled Caste (10 percent), literate mothers, 10 and above (16 percent) and households with a high standard of living started breast-feeding after one day of birth.

Table 5.1 INITIATION OF BREASTFEEDING

Percentage of children born during the three years preceding the survey who 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, Meghalaya, 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	65.7	92.0	7.6	46.5	1,782
Urban	69.9	90.4	9.5	66.1	376
Mother's education					
Non-literate	73.1	93.8	5.9	50.0	963
0-9@ years	61.2	91.6	7.8	46.7	934
10 and above	59.8	84.1	15.8	61.1	258
Religion					
Hindu	75.2	94.6	5.4	44.4	172
Muslim	65.6	91.3	8.1	49.4	1,687
Christian	86.4	95.7	4.3	76.6	78
Other	58.4	90.7	9.3	48.9	221
Caste/tribe#					
Scheduled caste	(76.2)	(90.5)	(9.5)	(52.4)	40
Scheduled tribe	66.2	91.8	7.8	48.9	2,019
Other	94.9	98.4	1.6	88.1	62
Standard of living index					
Low	67.7	92.0	7.5	47.7	1,627
Medium	59.7	91.3	8.6	57.2	435
High	74.3	88.8	11.2	55.3	97
Total	66.4	91.7	7.9	49.9	2,159

Note: Table based on youngest living child born during the three years preceding the survey
Table includes 3 children with missing information on mother's education, 40 children in schedule caste and 23 in other backward classes who were not shown separately.
[1] Includes children who 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

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 mothers of Scheduled Caste children. Children who live in households with low and medium standard of living are less likely than that of high standard of living to have mothers who squeezed the first milk from the breast before breastfeeding. In urban areas (66 percent) the custom of squeezing the first milk from the breast before breastfeeding is more prevalent than that it is in rural areas (47 percent). Mothers of

children born in the three years preceding the survey were also asked whether the child had been fed breast milk exclusively and if so, what was 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

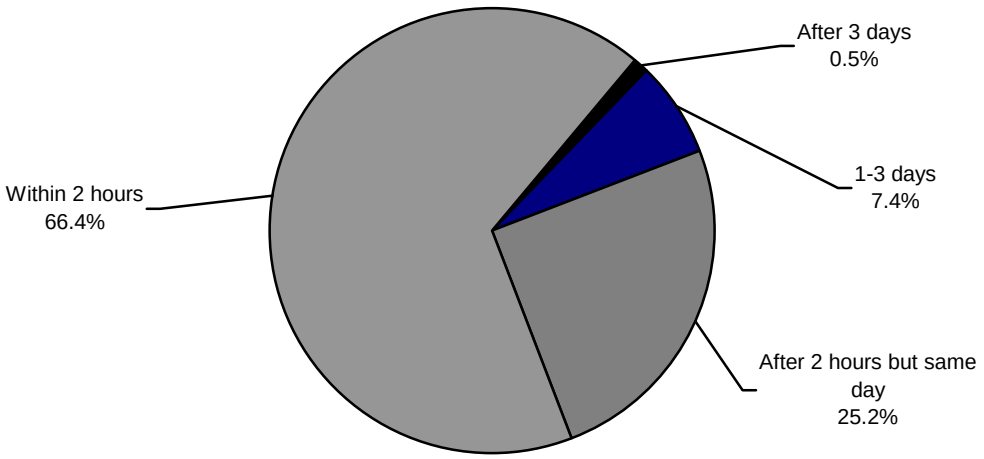


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Table 5.2 EXCLUSIVE BREASTFEEDING BY CHILD'S AGE

Percentage of children under age3 years by exclusive breastfeeding, according to child's age in month, Meghalaya, 2002-04

Age in months	Status of exclusive breastfeeding			Number of children
	Exclusive breastfeeding	At least 4 months	At least 6 months	
<2	66.5	*	*	140
2-3	42.6	*	*	156
4-5	47.4	52.5	*	167
6 -7	35.5	48.7	41.5	140
8-9	30.6	33.6	31.5	121
10-11	33.7	43.4	36.1	123
12-13	14.9	54.4	38.2	150
14-15	24.8	41.3	27.7	176
16-17	24.9	45.5	36.7	117
18-19	25.0	55.2	50.3	153
20-21	39.6	52.8	45.8	88
22-23	23.1	48.8	42.2	81
24-25	10.0	54.2	40.3	131
26-27	10.0	43.8	33.6	118
28-29	23.8	51.8	46.5	114
30-31	31.0	60.3	57.4	79
32-33	17.0	55.6	50.2	60
34-35	(9.3)	(38.9)	(27.8)	45
< 4 months	53.9	*	*	296
4-6 months	45.2	46.9	*	236
7-9 Months	30.9	38.2	34.3	192

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

() Based on less than 50 unweighted cases

In Meghalaya 54 percent of children under four months of age are exclusively breastfed. The percentage of infants exclusively breastfed drops steadily from 67 percent for children under 2 months of age to 36 percent for children who are 6-7 months old. About 53 percent of children in the age group 4-5 months were exclusively breastfed up to 4 months and 42 percent of children in the age group 6-7 months are exclusively breastfed upto 6 months.

5.1.1 Breastfeeding by Districts

Table 5.3 shows that in all the districts of Meghalaya, three districts namely Jaintia Hills, South Garo Hills, and West Khasi Hills, less than half of the children started breastfeeding within two hours of birth. Children breastfed within two hours of birth is highest in East Garo Hills (93 percent) and lowest in Jaintia Hills (20 percent). Out of seven districts in four districts, more than half of the mothers squeezed out the first milk before breastfeeding.

Table 5.3 BREASTFEEDING BY DISTRICT

Percentage of children under age 3 who 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 exclusively breastfeed by District, Meghalaya, 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		
East Garo Hills	92.9	99.6	0.4	35.5	97.8
East Khasi Hills	73.1	92.0	7.5	79.6	31.3
Jaintia Hills	20.1	80.3	19.5	18.7	0.4
Ri Bhoi	89.0	91.7	7.5	54.9	36.0
South Garo Hills	31.4	93.5	5.9	60.5	36.0
West Garo Hills	88.8	96.6	3.4	56.1	68.0
West Khasi Hills	38.5	87.4	11.7	39.5	3.4
Meghalaya	66.4	91.7	7.9	49.9	39.6

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

There is a great deal of variation in the extent of exclusive breastfeeding for six months. It is highest in East Garo Hills (98 percent) and lowest in Jaintia Hills (0.4 percent). Besides Jaintia Hills, exclusive breastfeeding for six months is low in West Khasi Hills (3 Percent).

5.2 Immunization of Children

The immunization of children against six serious but preventable diseases-namely tuberculosis, diphtheria, pertusis, 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 14 percent of the children are fully vaccinated and 18 percent have not received any routine vaccination. Coverage of each vaccination is much higher than the percentage fully vaccinated. BCG, the first dose of DPT and first dose of Polio vaccine has been given each to more than half the children (Figure 5.2). About 31 percent of the children have received three doses of DPT, 26 percent of the children received 3 drops of Polio and 30 percent of the children 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 24 percent point for DPT and 27 percent points for polio.

Table 5.4 VACCINATION OF CHILDREN

Percentage of children age 12-23 months who received vaccination according to some selected background characteristics, Meghalaya, 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	28.6	62.9	52.7	46.2	31.9	53.3	39.2	27.3	24.3	14.5	19.7	695
Urban	75.3	82.5	60.4	44.6	23.5	48.8	41.1	19.9	57.5	9.7	9.4	141
Sex of the child												
Male	32.1	63.6	50.6	43.0	28.3	54.2	39.7	23.0	28.9	14.2	18.5	433
Female	41.2	68.9	57.7	49.0	32.9	50.8	39.2	29.3	30.9	13.2	17.4	403
Birth order												
1	42.4	66.8	52.0	41.6	22.4	49.7	39.3	21.7	28.5	10.8	20.1	207
2	41.4	71.9	63.7	58.7	41.6	57.2	44.5	30.9	33.5	16.0	12.6	146
3	37.1	61.1	51.1	43.7	29.9	59.5	29.8	22.9	30.4	12.4	9.6	136
4+	30.9	66.0	52.8	44.4	31.2	50.0	41.6	28.0	29.3	15.1	22.5	343
Mother's education												
Non-literate	25.9	51.6	36.2	29.9	19.8	42.0	26.4	15.9	13.1	6.9	27.9	379
0-9@ years	36.7	74.5	66.1	58.4	42.3	63.5	51.4	38.1	38.2	20.9	11.6	360
10 years and above	79.2	94.8	81.0	63.9	29.2	52.2	47.6	21.3	66.3	14.1	2.5	94
Religion												
Hindu	33.3	61.0	38.6	37.6	19.9	76.8	48.0	14.9	33.1	2.5	8.4	75
Christian	35.1	65.9	56.0	47.2	31.3	51.6	38.7	27.0	27.9	14.1	19.3	651
No Religion	47.1	71.7	52.6	43.9	33.4	41.7	38.0	27.9	39.7	18.9	16.6	109
Caste/tribe #												
Scheduled caste	35.6	67.1	54.1	45.9	30.7	52.5	39.3	26.6	28.7	14.5	17.9	786
Standard of living index												
Low	26.6	59.7	46.8	40.4	28.1	50.8	36.1	24.8	22.2	12.3	22.4	632
Medium	64.2	86.6	76.1	66.2	42.5	58.6	51.6	32.7	52.7	19.0	4.3	171
High	(67.6)	(78.4)	(70.3)	(45.9)	(29.7)	(78.4)	(62.2)	(29.7)	(51.4)	(24.3)	(2.7)	32
Total	36.5	66.2	54.0	45.9	30.5	52.6	39.5	26.0	29.9	13.7	18.0	835

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

Total includes 1 child with missing information on mother's education and 6 children with Scheduled tribe and 19 other caste were not shown separately.

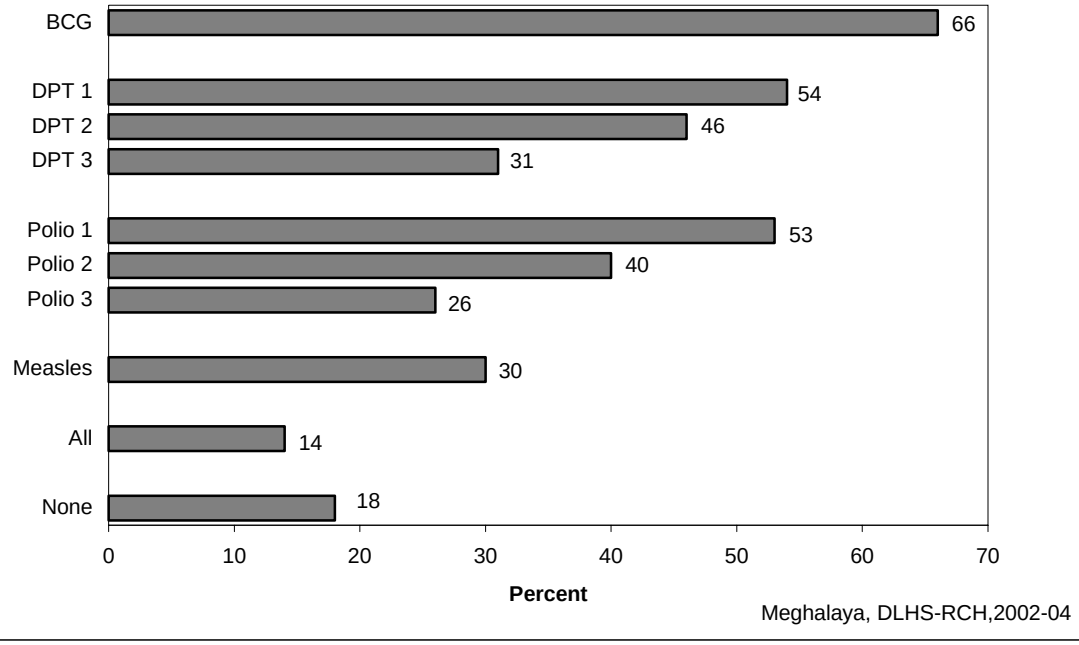
@ Literate mothers with no years of schooling are included. # Total figure may not add to N due to do not know cases.

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

* Total include other religion 22 were not shown separately.

The data indicates that the coverage of Polio 0, BCG, DPT 1, Polio 2 and Measles vaccines is higher in urban areas than in rural areas. Surprisingly, the coverage of full vaccination is higher in rural areas compared to urban areas (10 percent). Seventy five percent of the children have received polio (0) vaccine at the time of birth in urban areas whereas 29 percent received it at the same as in the rural areas.

Figure: 5.2
Percentage of Children Age 12-23 months who have Received Specific Vaccination



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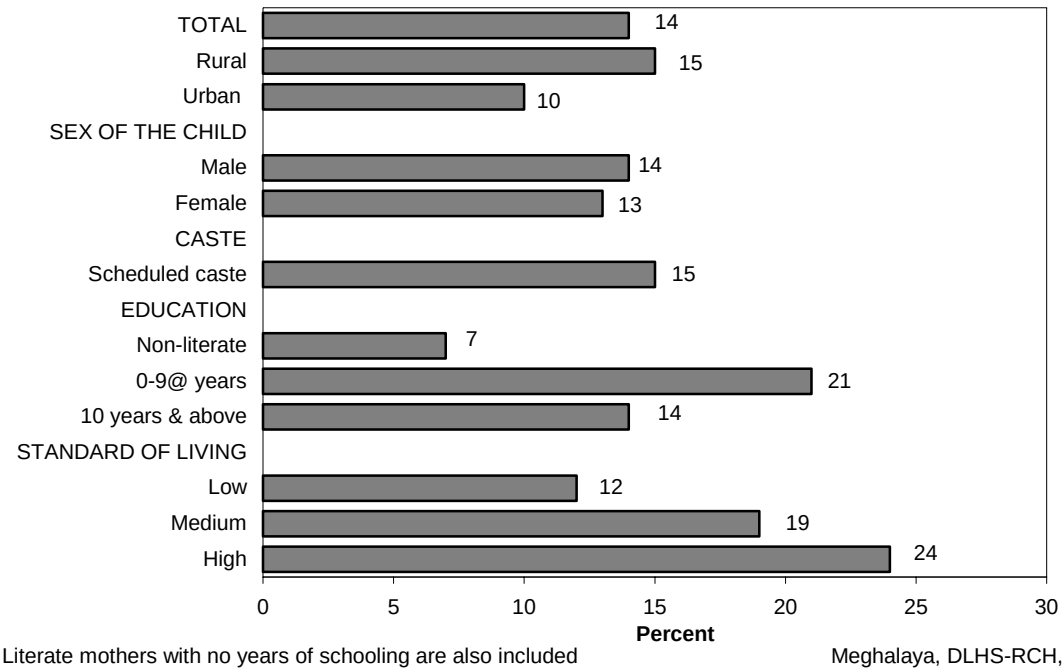
Full vaccination of male children (14 percent) has been done little higher than female children (13 percent). However, male-female differentiation shows that except Polio1 and Polio 2, all the other individual vaccinations received by females were higher than males. This may be due to the importance of female child among matriarchal tribes of Meghalaya. The vaccination coverage of almost all vaccines is more among second birth orders. As with the use of child health care services, there is a positive relationship between mother's education and children's vaccination coverage. Only seven percent children of non-literate mothers are fully vaccinated compared to 21 percent of children with mothers' education below high school and 14 percent of mothers who have at least completed high school. Children with no religion are much more likely than Christian and Hindu children to have received each of the recommended vaccines. The standard of living index of the household has a positive relationship with vaccination coverage. Twenty four percent of children from households with a high standard of living are fully vaccinated, as compared to 12 percent children of low standard of living.

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

Meghalaya, 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 interviewers were shown this vaccination card by the interviewing mothers.

The proportion of children fully vaccinated by age 12 months remain same as 14 percent for children in the age group 12-23 months and for children in the age group 24-35 months. Not much rural-urban differential for the coverage of full vaccination is found. In rural areas, the proportion of children in the age group 12-23 months and percentage of children in the age group 24-35 months fully vaccinated have remained same (15 percent), while the gap is wider in urban areas (Figure 5.4). Ten percent of children in the age group 12-23 months have received all vaccinations in urban areas compared to 14 percent with children in the age group 24-35 months. Younger children aged 12-23 months are more likely to receive each type of vaccine except Polio-3, DPT-3 and measles.

Table 5.5 CHILDHOOD VACCINATION RECEIVED BY 12 MONTHS OF AGE

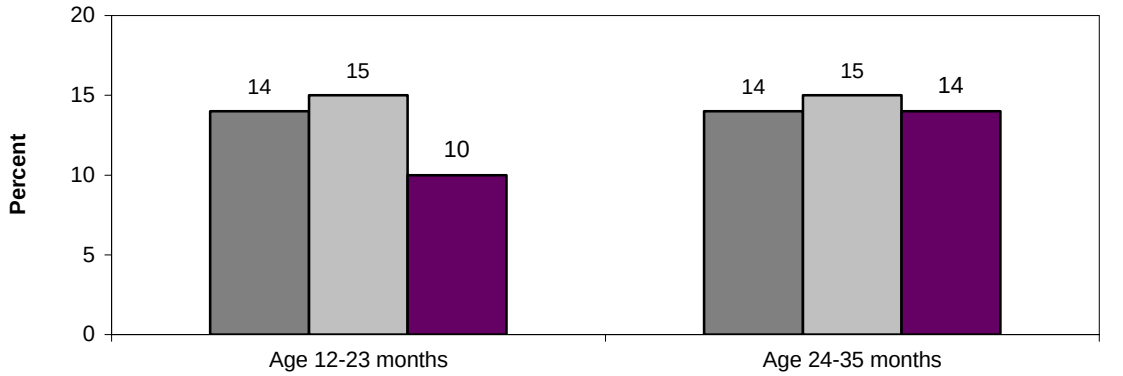
Percentage of children age 12-23 months and 24-35 months with a vaccination card that shown to the interviewer and percentage who received specific vaccinations by 12 months of age according to residence, Meghalaya, 2002-04

	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	21.7	15.2	16.2	11.2	48.5	37.8
Percentage vaccinated by 12 months of age						
Polio 0	36.5	33.8	28.6	26.0	75.3	77.5
BCG	66.2	63.6	62.9	59.8	82.5	84.5
Polio doses						
No Polio	35.9	40.5	36.4	40.5	32.8	40.9
1	13.4	5.8	14.4	6.5	8.4	1.5
2	13.8	14.3	12.1	14.8	22.9	11.2
3	26.7	27.6	27.6	28.7	21.5	21.1
Don't remember/missing	10.3	11.9	9.5	9.0	14.5	25.2
DPT injection						
No DPT	40.5	42.4	44.5	44.9	20.8	28.4
1	8.1	4.2	6.5	3.5	15.8	8.5
2	15.4	13.5	14.3	14.5	21.1	7.9
3	30.5	32.0	31.9	32.5	23.5	29.0
Don't remember/missing	5.4	7.7	2.8	4.5	18.8	26.2
Measles	29.9	30.8	24.3	26.0	57.5	57.8
Full [1] vaccination	13.7	14.4	14.5	14.5	9.7	13.8
No vaccination at all	18.0	19.5	19.7	21.6	9.4	8.0
Number of children	835	815	695	692	141	123

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

Figure: 5.4
Child Vaccination by Age



Meghalaya, DLHS-RCH,2002-04

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 sub-centre is the primary provider of childhood vaccinations in Meghalaya. Most of the children (84 percent) were immunized at the government health facilities and only six percent at private health facilities. Further, among the children immunized in government health facilities, 15 percent of them had received vaccination from the sub-centre, 21 percent from municipal hospital and 35 percent from community health centre or from primary health centre. The percentage of children receiving vaccination from the private sector is considerably lower in rural areas (two percent) than in urban areas (21 percent). Even in urban areas, 62 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.

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, Meghalaya, 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	21.3	14.2	49.1	15.2	12.1
Community/primary health centre	34.7	41.5	8.2	41.8	41.0
Sub-centre	15.2	18.2	3.5	12.8	29.6
RCH/MCP camp	12.7	15.5	1.8	19.1	8.0
Private health sector					
Private hospital	3.9	1.6	13.0	1.5	1.6
Private doctor	2.0	0.5	7.8	0.7	0.0
ISM[2] health facility	3.0	0.5	12.7	0.2	1.1
Other	5.6	6.5	2.3	7.4	4.4
Do not remember	1.2	1.1	1.4	1.0	1.4
Missing	0.4	0.5	0.2	0.4	0.8
Total percent	100.0	100.0	100.0	100.0	100.0
Number of children	1,938	1,540	398	1,040	500

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

5.4 Reason for Not Immunizing the Children

Table 5.7 presents the percent distribution of children under the age of three years who did not receive any vaccination by reason as reported by the mother according to place of residence and availability of health facilities in the village. About 24 percent of the children did not receive any vaccination because the mothers of children were unaware of the need for immunization and 15 percent of children were not vaccinated, as the mothers feel that they were too young. The other reasons for not immunizing the children as reported by the mothers were inconvenient place and time (18 percent), fear of side effect (12 percent), no faith (8 percent), family problems (7 percent), place/time of vaccination unknown (six percent) long waiting time (3 percent) and ANM absent/vaccine not available (two percent). Children from villages where health facilities are available are less likely to report that they were unaware of the need for immunization as compared to those villages where health facilities are not available.

Table 5.7 REASON FOR NOT GIVING VACCINATION

Percent distribution of children under age 3 who did not receive any vaccination by reason reported by mother for not giving vaccination, according to place of residence and availability of health facilities in the village, Meghalaya, 2002-04

Reason	Total	Residence		Availability of health facility[1] in the village	
		Rural	Urban	No	Yes
Unaware of need for immunization	24.3	24.2	(20.2)	22.7	29.0
Place/time unknown	5.8	6.4	(0.0)	6.6	5.5
Place/time inconvenient	17.7	19.2	(2.2)	21.3	12.8
Fear of side effect	12.0	10.3	(20.2)	10.7	9.3
No faith	8.1	8.5	(11.2)	7.5	11.4
ANM absent/vaccine not	1.7	1.9	(0.0)	1.5	3.0
Long waiting time	2.7	3.0	(0.0)	4.0	0.0
Child too young	14.8	15.2	(14.6)	15.8	13.6
Family problems	6.5	6.3	(11.2)	7.1	4.0
Other	6.2	4.9	(20.2)	2.8	11.2
Missing	0.1	0.1	0.0	0.0	0.3
Total percent	100.0	100.0	100.0	100.0	100.0
Number of children	545	497	49	374	123

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] Includes mother too busy, family problems, including illness of mother, and illness of child

5.5 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 5.8 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 Meghalaya as a whole, 14 percent of the children received at least one dose of Vitamin A and only ten percent received IFA tablets/syrup. This indicates that a large number of children in Meghalaya did not receive Vitamin A supplements and very few children received IFA tablets/syrup supplementation.

Table 5.8 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, Meghalaya, 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	14.6	12.3	835
24-35 months	13.6	7.6	815
Sex of the child			
Male	14.2	9.0	789
Female	14.0	10.9	862
Birth order			
1	15.8	13.3	402
2	14.6	10.5	285
3	13.6	8.2	297
4+	13.2	8.7	659
Residence			
Rural	12.5	7.5	1,387
Urban	22.6	23.4	264
Mother's education			
Non-literate	8.5	5.0	739
0-9 years@	17.8	9.6	713
10 years and above	22.0	30.3	195
Religion	12.8	15.7	141
Hindu	15.6	9.4	1267
Christian	7.0	9.8	243
Other			
Caste/tribe #			
Scheduled caste	(2.3)	(2.3)	42
Scheduled tribe	13.9	9.2	1,551
Other	(42.3)	(34.6)	34
Standard of living index			
Low	12.1	6.3	1260
Medium	19.1	19.3	327
High	28.6	34.5	64
Availability of health facility in the village[1]			
Yes	17.1	4.6	421
No	10.4	8.7	966
Total	14.1	10.0	1,651

Note: Table includes last and last but one living children born in the three years preceding the survey.
Total include other caste 14 cases were not shown separately.
@ 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.

Children in the age group 12-23 months are more likely to receive at least one dose of Vitamin A and IFA tablets/syrup each than children in the age group 24-35 months. Male and female children received same (14 percentage) of at least one dose of vitamin A, while female children received higher (11 percent) than male children (nine percent) of iron folic acid tablets/syrup. Children living in urban areas, children whose mothers completed high school and

above and children living in households with a high standard of living 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, 2 or 3 to receive any dose of vitamin A and IFA tablets/syrup.

Table 5.9 CHILDHOOD VACCINATION BY DISTRICT

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

District	Percentage vaccinated[1]							Percentage received at least one dose of Vitamin A[3]
	Polio 0	BCG	DPT3	Polio3	Measles	Full[2]	None	
East Garo Hills	25.6	52.5	8.5	2.6	7.3	1.1	22.6	4.8
East Khasi Hills	73.5	84.3	15.4	5.8	36.7	1.4	13.7	11.3
Jaintia Hills	22.8	83.2	75.3	72.3	49.0	45.3	14.0	32.2
Ri Bhoi	65.4	81.3	37.0	26.5	38.9	12.1	11.2	21.6
South Garo Hills	24.6	26.4	14.4	13.4	21.9	5.9	16.6	8.7
West Garo Hills	21.3	27.7	5.4	4.1	10.0	0.6	28.1	0.3
West Khasi Hills	13.6	77.2	54.6	54.6	35.5	33.1	17.4	25.5
Meghalaya	36.5	66.2	30.5	26.0	29.9	13.7	18.0	14.1

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.

5.6 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 5.9. There are inter-district differentials in the coverage for different vaccinations, and for children receiving all vaccinations and those that did not receive any vaccination at all. The percentage of children who are fully vaccinated ranges from the lowest of less than one percent each in West Garo Hills, East Garo Hills and East Khasi Hills to 45 percent in Jaintia Hills. The coverage of full immunization is poor in all the districts of Meghalaya (see Map-5). The percentage of children who were not vaccinated at all is highest in West Garo Hills (28 percent) and lowest in Ri Bhoi (11 percent). In almost all the districts, comparatively less children have received the polio 3 vaccine than any of the other vaccinations. The coverage of polio drops at the time of birth varies from a lowest in West Khasi Hills (14 percent) to a highest in East Khasi Hills (74 percent).

District wise variations in the percentage of children who received at least one dose of Vitamin A are also shown in Table 5.9. The percentage of children in the age group 12-35 months who received at least one dose of Vitamin 'A' supplements ranges from less than one percent in West Garo Hills to 32 percent in Jaintia Hills.

5.7 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.

5.7.1 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 practice followed during the episode of diarrhoea. This has been presented in Table 5.10.

In Meghalaya, 57 percent of the mothers with births during the three years preceding the survey were aware of what to do when a child had diarrhoea and 30 percent were aware of oral rehydration solution (ORS). Thirty four percent of the women were aware of salt and sugar solution. Some of the women also reported that they would continue giving normal food (five percent), breastfeeding (five percent) and plenty of fluids (three percent) to manage diarrhoea. About 43 percent of women did not know what to give a child who had diarrhoea. As expected, knowledge of ORS is higher among urban women (58 percent) than rural women (24 percent) and among high school and above educated women (73 percent) as compared to non-literate women (20 percent). Women belonging to Scheduled Tribes (29 percent) are less likely to know about ORS than women belonging to any other caste group. Sixty six percent of women with children having a high standard of living know about ORS, which declines to 52 percent for women with a medium standard of living and 22 percent with a low standard of living. Knowledge of ORS is more among middle age groups than among older women and among younger women. Women from villages with health facilities are more aware of diarrhoea management (61 percent) than women from other villages where no health facility is available (50 percent).

Table 5. 10 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, Meghalaya, 2002-04

Background characteristic	Knowledge of diarrhoea manage-ment	Type of practices to be followed do if child gets diarrhoea*						
		Give ORS	Salt and sugar solution	Continue normal food	Continue breastfe-ding	Give plenty of fluids	Do not know	Number of women
Age								
15-24	54.0	28.4	30.6	5.7	4.7	3.0	46.0	612
25-34	58.6	32.1	35.0	3.8	5.7	2.3	41.6	1,241
35-44	57.6	27.1	35.1	4.9	4.5	4.0	42.6	522
Residence								
Rural	53.0	24.1	31.2	5.0	5.3	2.9	47.1	1,961
Urban	77.1	58.3	46.7	2.1	4.9	2.7	22.9	412
Mother's education								
Non-literate	45.7	19.9	27.7	3.9	4.0	2.2	54.3	1,054
0-9@ years	61.0	28.5	34.8	5.1	7.0	2.8	39.1	1,030
10 and above	85.4	73.2	52.8	4.7	3.4	5.6	14.6	286
Religion								
Hindu	50.2	35.6	28.2	3.2	4.2	1.6	49.8	186
Christian	57.2	29.0	34.0	4.2	5.3	3.3	42.9	1,861
No religion	77.5	65.6	50.5	4.1	.0	.0	22.5	82
Other	55.3	21.8	32.0	7.9	7.2	1.5	44.7	245
Caste/tribe#								
Scheduled tribe	57.0	29.1	33.6	4.7	5.4	2.9	43.1	2,220
Other	87.4	64.0	69.9	0.0	0.0	0.0	12.6	71
Standard of living index								
Low	50.6	21.9	29.4	4.3	5.2	2.4	49.5	1786
Medium	76.3	52.2	46.7	5.8	5.1	3.3	23.7	471
High	80.3	65.7	50.7	3.3	6.2	7.9	19.7	116
Availability of health facility [2] in the village								
Yes	60.8	27.0	37.5	5.2	6.3	2.8	39.4	585
No	49.7	22.8	28.5	5.0	4.8	2.9	50.4	1,376
Total	57.2	30.0	33.9	4.5	5.2	2.9	42.9	2,374

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 canter, Community health centre or referral hospital, government hospital, and government dispensary within the village. Total includes 3 women missing information on education and 42 woman on scheduled caste and 23 woman on other backward class which are not shown separately

5.7.2 Treatment of Diarrhoea

During the two weeks before the survey, seventeen percent of the women reported that their children suffered from diarrhoea (Table 5.11). Women whose children had diarrhoea, were further asked about treatment with ORS, any other medical treatment and source of treatment. About 46 percent of these women mentioned that they gave ORS therapy, 81 percent of them reported that their child had been treated for diarrhoea. Use of ORS for the treatment of childhood diarrhoea in Meghalaya is much higher among urban women (72 percent) than among rural women (38 percent).

It was observed that a relatively less proportion of women from those villages where health facilities are not available within the village used ORS for the treatment of childhood diarrhoea (38 percentage) compared to those villages where health facilities are available (40 percentage).

Among those mothers whose children suffered from diarrhoea during last two weeks before the survey and those women who consulted or obtained advice, about 33 percent of women visited private hospitals/clinics and 22 percent of women treated their children through the Indian System of Medicine. Again these percentage needs to be interpreted cautiously due to small sample in the case.

Table 5.11 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, Meghalaya, 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	16.5	15.3	22.3	13.4	16.1
Number of women	2,374	1,961	412	585	1,376
Percentage of women whose child suffered[1] from diarrhoea treated with ORS	45.5	37.5	71.7	39.6	36.7
Percentage of women whose child suffered[1] from diarrhoea sought treatment	81.2	82.0	78.9	72.6	85.3
Number of women	393	301	92	78	222
Source of treatment					
Government health facility					
Hospital/dispensary	36.0	37.5	31.0	20.1	42.7
UHC/UHP/UFWC	2.2	2.9	0.0	0.0	3.8
CHC/ Rural hospital	4.2	5.4	0.2	2.8	6.2
Primary health centre	7.0	9.1	0.0	7.0	9.7
Sub centre	4.1	5.3	0.0	16.6	1.9
Private health facility					
Private hospital clinic	32.7	26.7	52.9	42.1	22.1
ISM[3] facility	21.9	17.4	37.3	13.0	18.7
Home remedy	7.2	9.3	0.0	7.4	9.8
Other	5.5	7.0	0.3	5.6	7.4
Percent distribution of women who seek treatment by					
Doctor	77.4	73.0	92.6	63.4	75.8
ANM/Nurse/LHV	10.0	13.0	0.0	16.5	12.0
Relative/friends	1.4	1.8	0.0	0.0	2.3
Dai	2.4	3.2	0.0	1.8	3.6
Chemist/medical shop	6.7	8.6	0.3	16.4	6.3
ISM	1.6	0.0	7.1	0.0	0.0
Missing	0.4	0.5	0.0	2.0	0.0
Total percent	100.0	100.0	100.0	100.0	100.0
Number of women	319	246	73	57	189

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

5.7.3 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 5.12. It was found that a low proportion (17 percent) of women with births three years preceding the survey in Meghalaya were aware of danger signs of pneumonia. A high proportion of women in urban areas (37 percent) were aware of the danger signs of pneumonia as compared to women living in rural areas (13 percent). Knowledge of danger signs of pneumonia is higher among women aged 25-34 years (18 percent), women having no religion (26 percent), educated women with 10 and above (45 percent) and women living in high standard of living household (55 percent).

Women who were aware of the danger signs of pneumonia were further asked about different signs of pneumonia. Majority of the women mentioned 'difficulty in breathing' (76 percent). The other signs mentioned are productive cough (32 percent), wheezing/whistling (31 percent), chest in-drawing (29 percent), conditions in which child is not able to drink or feed (16 percent) and rapid breathing (12 percent).

5.6.4 Treatment of Pneumonia

About 10 percent of women reported that their child had suffered from pneumonia during two weeks before the survey, the corresponding figure is 10 percent in rural areas and 13 percent in urban areas (Table 5.13). The incidence of pneumonia varies a little with availability of health facilities in the villages.

Table 5.13 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. Seventy - eight percent of women received some advice or treatment whose children were ill with ARI. This percentage is relatively low in rural areas (73 percent) than in urban areas (96 percent) and in villages without health facilities (72 percent) than in villages with health facilities (75 percent).

Among them who got advice for children ill with ARI, 34 percent of women visited private hospital/clinic and 30 percent went to government hospital/dispensary, whereas eight percent of them obtained treatment through Indian System of Medicine. Most of these women consulted doctors for treatment or advise in this case. Many of them also consulted other health personnel but in no case does the percentage exceed 10 for that matter, except home remedy (18 percent).

Table 5.12 AWARENESS OF PNUEMONIA

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, Meghalaya, 2002-04

Background characteristic	Percentage of women aware of danger signs of pneumonia	Number of women	Danger signs								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	15.3	612	71.0	28.1	20.4	11.3	31.4	11.8	19.2	16.7	93
25-34	18.0	1,241	76.8	29.1	15.3	8.3	35.3	3.4	29.1	9.4	223
35-44	17.1	522	79.3	28.6	13.5	13.9	23.8	11.1	49.2	15.2	89
Residence											
Rural	12.9	1,961	77.7	31.0	13.2	6.7	29.1	6.6	30.1	12.2	252
Urban	37.2	412	73.2	25.1	20.7	15.9	36.5	7.7	33.1	12.7	153
Mother's education											
Non-literate	11.2	1,054	68.4	27.6	16.3	7.2	30.9	9.1	33.6	15.4	118
0-9@ years	15.4	1,030	79.5	21.9	17.4	11.7	21.8	5.1	22.5	7.4	158
10 and above	45.2	286	78.6	38.3	14.3	11.2	45.2	7.4	39.7	15.7	129
Religion											
Hindu	19.7	186	(83.3)	(29.2)	(20.8)	(25.0)	(54.2)	(12.5)	(33.3)	(33.3)	37
Christian	18.4	1,861	79.5	31.6	12.9	9.3	30.4	5.9	27.9	11.6	342
No Religion	25.5	82	*	*	*	*	*	*	*	*	21
Other	2.6	245	*	*	*	*	*	*	*	*	6
Caste/tribe#											
Scheduled caste	(10.9)	42	*	*	*	*	*	*	*	*	9
Scheduled tribe	16.4	2,220	75.7	30.7	13.4	8.8	30.7	5.5	29.6	11.1	365
Other	23.5	71	*	*	*	*	*	*	*	*	17
Standard of living index											
Low	12.5	1,786	76.1	30.0	14.1	6.5	25.0	7.7	30.7	12.7	223
Medium	25.4	471	74.5	31.3	19.6	10.9	37.2	3.8	32.5	6.2	120
High	54.5	116	78.4	19.4	16.1	22.2	46.2	10.6	30.6	22.8	63
Availability of health facility [2] in the village											
Yes	12.7	585	83.5	21.7	6.2	4.8	20.9	2.7	19.6	6.5	75
No	12.9	1,376	75.3	34.9	16.1	7.6	32.6	8.2	34.5	14.6	178
Total	17.1	2,374	76.0	28.8	16.1	10.2	31.9	7.0	31.2	12.4	406

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 3 women with missing information on education who are not shown separately.

Total includes 23 women in other backward classes who are not shown separately.
() Based on less than 50 unweighted cases. * Percentage not shown : Based on few cases

Table 5.13 TREATMENT OF PNUEMONIA

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, Meghalaya, 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	10.2	9.7	12.7	6.6	11.1
Number of women	2,374	1,961	412	585	1,376
Percentage of women sought treatment whose child suffered from cough and cold	77.6	72.6	95.9	(75.0)	71.5
Number of women	243	190	52	38	152
Source of treatment					
Government health facility					
Hospital/dispensary	30.2	30.4	29.6	(12.8)	35.6
UHC/UHP/UFWC	0.0	0.1	0.0	(0.0)	0.1
CHC/ Rural hospital	3.0	4.1	0.2	(7.7)	1.5
Primary health centre	5.2	7.0	0.0	(15.4)	5.9
Sub centre	2.1	2.8	0.0	(12.8)	0.0
Private health facility					
Private hospital clinic	33.9	34.8	31.5	(38.5)	33.1
ISM[3] facility	7.9	1.9	24.6	(0.0)	2.4
Home remedy	18.1	19.3	14.9	(7.7)	23.2
Other	3.6	4.8	0.0	(7.7)	4.4
Percent distribution of women who seek treatment by					
Doctor	73.6	64.8	97.6	(74.4)	64.9
ANM/Nurse/LHV	8.7	11.6	0.6	(12.8)	7.9
Dai (trained or untrained)	1.5	2.0	0.0	(2.6)	1.6
Relative/friends	2.1	2.9	0.0	(5.1)	2.4
Chemist/medical shop	12.8	16.8	1.8	(2.6)	20.9
Total percent	100.0	100.0	100.0	100.0	100.0
Number of women	189	138	50	29	109

Note: Table based on women with living children born since 01.01.1999 for phase - I /01.01.2(001 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

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

Table 5.14 presents knowledge of diarrhoea management, knowledge of ORS, and incidence of diarrhoea by district. The knowledge of diarrhoea management is higher than the knowledge of use of ORS in all districts. Knowledge of diarrhoea management is highest in East Khasi Hills (85 percent) and lowest in West Garo Hills (23 percent). Awareness of ORS is also highest in East Khasi Hills (62 percent) and lowest in West Garo Hills (11 percent). Table 5.14 also shows differentials in the awareness of danger signs of pneumonia and incidence of pneumonia. In comparison to awareness about diarrhoea management (57 percent), the awareness of danger signs of pneumonia is low (17 percent). It is the lowest in West Khasi Hills (five percent) and highest in East Garo Hills district (39 percent). Incidence of pneumonia is 10 percent in Meghalaya as a whole while; Ri Bhoi has shown the highest incidence (25 percent) and the lowest in East Garo Hills (one percent).

Table 5.14 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, Meghalaya, 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			
East Garo Hills	46.6	29.1	2.5	39.4	1.3
East Khasi Hills	85.4	61.5	28.7	26.0	11.9
Jaintia Hills	63.7	24.9	8.4	6.5	4.7
Ri Bhoi	47.4	29.1	31.8	19.2	25.1
South Garo Hills	51.1	31.6	9.7	11.2	23.2
West Garo Hills	23.4	11.2	1.7	6.6	6.0
West Khasi Hills	62.0	12.3	22.6	5.2	12.2
Meghalaya	57.2	30.0	16.5	17.1	10.2

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.

Map-5

Percentage of Children (Age 12-23 Months) who Have Received Full Vaccinaion

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 source of 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. Question regarding 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 Meghalaya. 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 54 percent, and higher among women with urban residence. There are large differentials in knowledge of all modern methods with respect to the aforesaid background characteristics. For instance, one percent of women from rural areas are aware about all modern methods compared to 7 percent of their urban counterparts.

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, Mehalaya, 2002-04

Contraceptive methods	Total	Residence		Availability of health facility in the village[3]	
		Rural	Urban	No	Yes
Any method	64.7	58.5	84.5	53.8	70.5
Any modern method	59.9	52.4	83.4	48.6	62.1
Any modern spacing method[1]	53.6	45.7	78.6	43.3	51.7
All modern methods[2]	2.3	0.8	7.3	0.6	1.3
Female sterilization	33.1	28.1	48.9	22.4	42.6
Tubectomy	10.4	8.8	15.5	6.8	13.8
Laparoscopy	3.8	1.7	10.2	1.6	2.1
Male sterilization	6.0	2.9	15.9	2.4	4.2
Vasectomy	2.2	0.7	7.0	0.7	0.9
No-scalpel vasectomy	3.9	1.6	11.4	1.5	1.8
IUD/Loop	25.0	19.7	41.9	21.1	15.9
Pills	48.8	41.1	73.1	38.4	48.1
Daily	22.4	14.5	47.4	12.9	18.7
Weekly	18.3	9.6	45.9	8.7	11.7
Condom/Nirodh	28.8	22.5	48.5	22.9	21.5
Sponge (today)	2.9	1.5	7.4	1.5	1.6
Injectables	1.4	0.3	4.7	0.3	0.3
Norplant	1.1	0.4	3.4	0.5	0.1
Contraceptive herbs	2.1	1.4	4.3	1.5	1.0
Any traditional method	16.0	16.0	16.1	12.8	24.4
Any other Indian system of medicinal contraceptives	2.7	1.9	5.2	2.2	1.1
Number of women	4,952	3,761	1,191	2,711	1,050

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.

Pills are the most widely known of all contraceptive methods in Meghalaya followed by female sterilisation. Overall, 33 percent of currently married women are aware of female sterilization and 6 percent knew about male sterilization. The knowledge of both male and female sterilisation is higher in urban areas compared to rural areas. There are differentials in spacing methods such as IUD/Loop, Pill and condom users with respect to the background characteristics. The best-known spacing methods are Pills (49 percent), followed by condom/Nirodh (29 percent). Twenty -five percent of women know about IUD/Loop. Awareness of women about all the spacing methods is higher in urban areas as compared to rural areas. Forty one and 20 percent of rural women know the modern spacing methods like Pill and IUD respectively while the corresponding figures in urban areas are 73 and 42 percent. The knowledge of these spacing methods remains low as compared to knowledge of sterilization.

In Meghalaya, 16 percent of the women are aware of a traditional method and three percent are aware of other contraceptives of the Indian System of Medicine. It is also observed that women from villages with a health facility are more aware about modern spacing methods (52 percent) as compared to those villages which has no health facilities (43 percent).

Figure: 6.1
Knowledge of Family Planning Methods

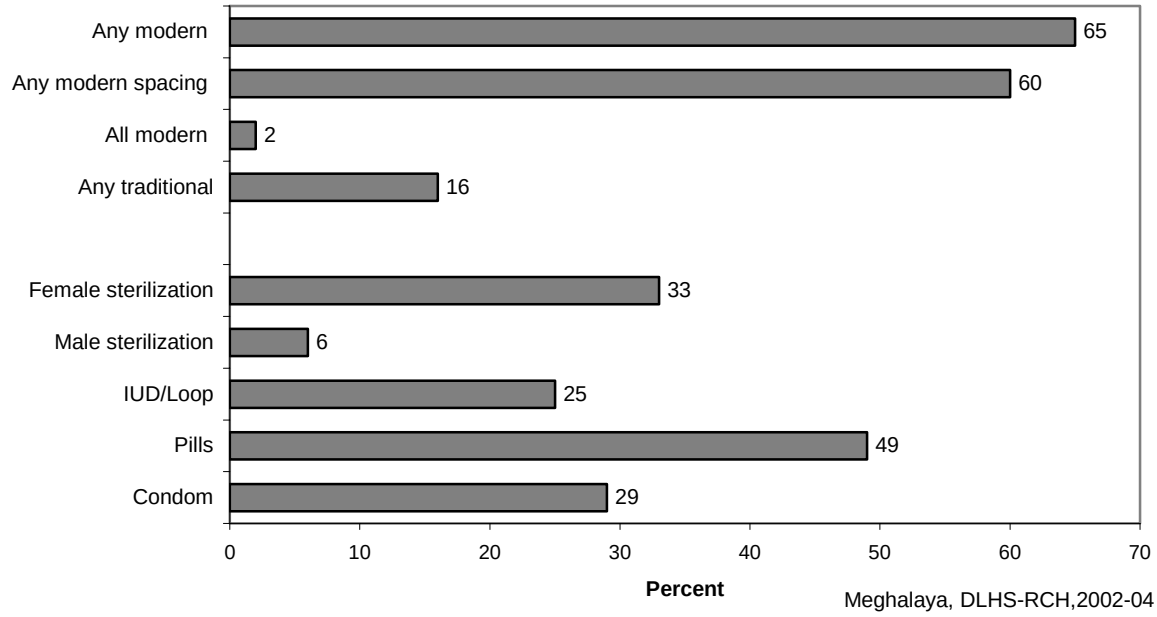


Table 6.2 KNOWLEDGE OF CONTRACEPTIVE METHODS BY DISTRICT

Percentage of currently married women age 15-44 years who know any contraceptive method by specific method and district, Meghalaya, 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
East Garo Hills	44.0	43.1	39.3	1.3	3.7	21.1	20.2	34.1	18.6	2.8
East Khasi Hills	65.4	65.4	57.1	3.9	11.1	41.9	22.1	53.1	29.6	5.1
Jaintia Hills	95.9	85.0	75.4	3.6	5.2	62.5	26.2	73.3	43.0	56.3
Ri Bhoi	39.3	38.5	32.7	0.3	1.6	16.2	8.8	30.1	5.0	0.5
South Garo Hills	73.5	65.1	48.6	2.9	10.4	44.1	32.9	35.6	31.7	2.3
West Garo Hills	63.5	62.9	62.4	3.9	5.9	26.2	45.6	54.9	46.8	6.1
West Khasi Hills	80.3	59.1	50.0	0.9	1.8	42.6	17.8	48.8	12.6	59.6
Meghalaya	64.7	59.9	53.6	2.3	6.0	33.1	25.0	48.8	28.8	16.0

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.

6.1.1 Knowledge of Family Planning Methods by Districts

Table 6.2 shows the knowledge of contraceptive methods by districts in Meghalaya. In almost all districts except East Garo Hills and Ri Bhoi, more than 60 percent of women know about any method of contraception. The awareness of all modern methods ranges from less than one percent in Ri Bhoi to four percent each in East Khasi Hills, Jaintia Hills and West Garo Hills. The knowledge of female sterilization is found the lowest in Ri Bhoi (16 percent) and the highest in Jaintia Hills district (63 percent). Knowledge about IUD/Loop ranges from 9 percent in Jaintia Hills to 46 percent in West Garo Hills and awareness level of condom/Nirodh ranges from 5 percent in Ri Bhoi to 47 percent in West Garo Hills. Awareness of any traditional method ranges from the lowest of one percent in Ri Bhoi to the highest of 60 percent in West Khasi Hills. Ri Bhoi district places itself at the lowest rung of the ladder in Meghalaya as far as knowledge of family planning is concerned.

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 Meghalaya is shown in Table 6.3. Two percent of the husbands know about the no-scalpel vasectomy. In rural areas, one percent of husbands know about NSV compared to 3 percent in urban areas. For women residing in villages having health facility, one percent of their husbands are aware of No-scalpel vasectomy and it is the same for those living in villages having no health facilities. Among the husbands who know about NSV, 49 percent reported that NSV is simpler than conventional family planning methods, 11 percent feel that NSV does not lead to any complication and 14 percent reported that NSV does not affect a man's sexual performance. Two percent of the husbands in villages with a health facility reported that NSV does not affect sexual performance compared to 5 percent of husbands in villages without a health facility.

Table 6.3 NO-SCALPEL VASECTOMY (NSV)

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

		Residence		Availability of health facility in the village[1]	
Knowledge of NSV	Total	Rural	Urban	No	Yes
Percentage of husband who had knowledge about NSV	1.5	1.0	3.1	1.1	0.7
Number of husbands	4,455	3,374	1,081	2,409	965
Who know that NSV is simpler than conventional vasectomy	48.7	(39.6)	(69.8)	(40.0)	*
Who feel that NSV does not lead to any complication	11.3	(2.1)	(25.6)	(0.0)	*
Who feel that NSV does not affect man's sexual performance	14.4	(10.4)	(37.2)	(11.4)	*
Number of husbands	67	33	34	26	6

Note: [1] Includes sub-centre, primary health centre, community health centre 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.

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

Awareness of no-scalpel vasectomy by districts in Meghalaya is provided in Table 6.4. The districts in which more husbands know about NSV is South Garo Hills (14 percent), while other districts, one percent husbands know about NSV, except East Garo Hills (3 percent). That NSV does not lead to any complication was reported highest in West Garo hills (57 percent), while in East Khasi Hills, South Garo Hills, and West Khasi Hills no one reported so. The husbands who reported that the NSV does not affect a man's sexual performance were highest in West Garo Hills (49 percent) and the lowest in South Garo Hills (eight percent). In East Khasi Hills and West Khasi Hills, no one reported that NSV does not affect man's sexual performance.

Table 6.4 NO-SCALPEL VASECTOMY BY DISTRICT

Percentage of husband of eligible women by knowledge of NSV by district, Meghalaya, 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
East Garo Hills	3.3	85.9	37.1	41.1
East Khasi Hills	0.9	63.9	0.0	0.0
Jaintia Hills	0.2	0.0	44.1	44.1
Ri Bhoi	1.0	0.0	3.7	17.0
South Garo Hills	14.0	33.7	0.0	8.0
West Garo Hills	1.1	70.3	57.0	48.9
West Khasi Hills	0.4	34.1	0.0	0.0
Meghalaya	1.5	48.7	11.3	14.4

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 Meghalaya. At the time of DLHS-RCH, 17 percent of currently married women were using any method of contraception. Current contraceptive use is higher in urban areas (34 percent) than in rural areas (12 percent). Use of any modern method is reported by 15 percent of the women, the breakdown of which is 7 percent for permanent methods and 8 percent for modern spacing methods. Acceptance of male sterilisation methods is nil while the acceptance of female sterilisation is 7 percent.

Table 6.5 CONTRACEPTIVE PREVALENCE RATE

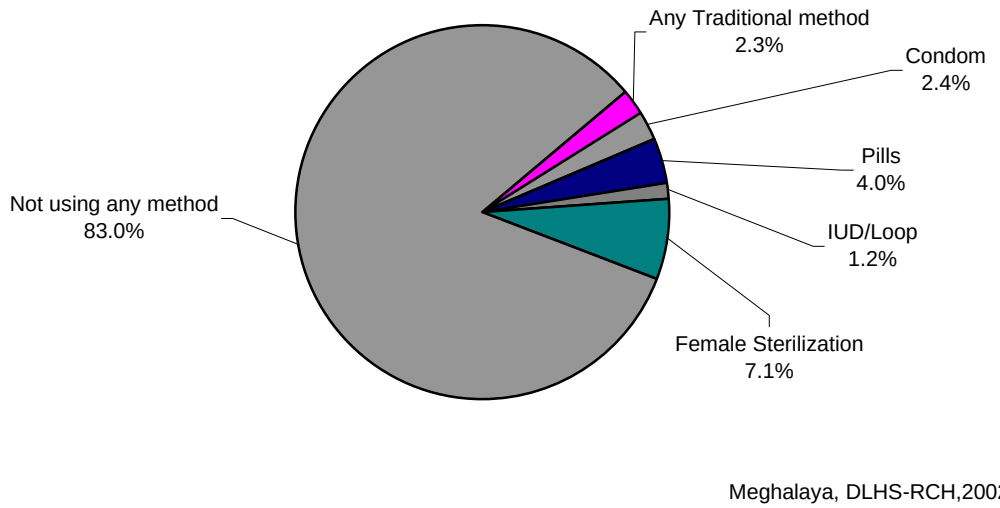
Percentage of currently married women age 15-44 years currently using any contraceptive method by selected background characteristics, Meghalaya, 2002-04

Method	Any method	Any modern[1] method	Any modern spacing method[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	12.0	9.3	4.6	4.6	0.1	4.6	0.6	2.9	1.1	2.6	1.4	0.8	3,761
Urban	33.5	31.9	16.8	15.2	0.0	15.2	3.1	7.5	6.2	1.4	0.8	0.6	1,191
Education													
Non-literate	8.8	6.7	3.4	3.3	0.0	3.3	0.5	1.5	1.4	2.0	0.8	1.0	2,256
0-9@ years	20.5	17.2	8.1	9.1	0.1	9.0	1.1	5.5	1.4	3.1	2.1	0.6	1,929
10 years & above	33.3	32.1	18.4	13.7	0.0	13.7	3.2	7.7	7.5	1.2	0.5	0.6	761
Religion													
Hindu	20.8	20.4	16.7	3.7	0.0	3.7	2.6	6.9	7.2	0.3	0.0	0.3	713
Muslim	13.8	12.1	8.0	4.1	0.0	4.1	3.0	4.7	0.3	1.7	0.0	0.1	134
Christian	17.5	14.8	6.5	8.3	0.1	8.2	0.9	3.9	1.7	2.6	1.4	0.8	3,588
No religion	7.1	7.1	0.8	6.3	0.0	6.3	0.0	0.8	0.0	0.0	0.0	0.0	150
Other	12.1	7.2	2.7	4.5	0.0	4.5	1.3	0.5	0.9	4.9	3.2	1.7	368
Caste/tribe#													
Scheduled caste	20.2	18.9	14.6	4.3	0.0	4.3	1.6	11.4	1.6	1.2	0.0	0.0	150
Scheduled tribe	16.1	13.5	6.1	7.3	0.0	7.3	0.9	3.4	1.8	2.5	1.4	0.8	4,418
Other backward class	16.8	16.8	8.4	8.4	0.0	8.4	4.8	1.2	2.4	0.0	0.0	0.0	116
Other	33.6	32.5	27.5	5.0	0.0	5.0	4.3	10.6	12.6	1.1	0.0	1.0	240
Standard of living index													
Low	9.7	7.3	4.2	3.2	0.0	3.1	0.6	2.7	0.9	2.3	1.3	0.7	3,287
Medium	26.8	24.3	11.6	12.6	0.1	12.5	1.5	6.6	3.5	2.5	1.5	0.8	1,196
High	44.3	42.2	20.7	21.5	0.0	21.5	4.3	6.9	9.6	1.8	0.6	0.8	469
Availability of health facility in the village[4]													
No	10.1	8.0	4.5	3.4	0.1	3.3	0.5	2.8	1.3	2.0	0.9	0.7	2,711
Yes	16.8	12.7	4.9	7.8	0.0	7.8	0.9	3.3	0.7	4.0	2.7	1.0	1,050
Total	17.1	14.7	7.5	7.2	0.0	7.1	1.2	4.0	2.4	2.3	1.3	0.8	4,952

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. Note:

The use of traditional methods is reported by 2 percent of the women. The rural-urban differential in the case of female sterilisation shows that 15 percent of the urban women are the adopters compared to 5 percent of the rural women.

Figure: 6.2
Practice of Family Planning Method



Meghalaya, DLHS-RCH,2002-04

The use of any method of contraception is lowest among women of Scheduled Tribes (16 percent). The use of any method is high among the women who have 10 or more years of schooling (33 percent) than the women who have less than 10 years of schooling (21 percent) or among non-literate women (9 percent). Similarly, any method of contraceptive use increases with respect to the standard of living from low (10 percent) to high (44 percent). The availability of the health facility in the village is an important factor in motivating eligible women to use contraceptives. About 17 percent of the women living in villages with a health facility are currently using contraceptives, which is higher than the women from villages deprived of a health facility (10 percent). The current use of the traditional method is lower among women with a higher education level and with a high standard of living than their counterparts.

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 Meghalaya. The contraceptive use is a couple concept as family planning methods can be used either by women or by their husbands. In most of the districts, the current use of contraception is between 15-25 percent (see Map-6). The state figure for any modern spacing method ranges from four percent in Jaintia Hills district to the highest of 14 percent in West Garo Hills. The variation in contraceptive prevalence at district level is basically due to the variation in the use of spacing

methods while both modern and traditional contraceptive uses do not show much variation across districts.

Table 6.6 CONTRACEPTIVE PREVALENCE BY DISTRICT

Percentage of currently married women age 15-44 years currently using any contraceptive method by district, Meghalaya, 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
East Garo Hills	11.7	10.4	7.9	0.0	2.5	2.2	5.0	0.6	1.1
East Khasi Hills	14.9	14.5	7.2	0.0	7.2	1.2	2.1	3.8	0.4
Jaintia Hills	28.4	20.0	4.2	0.0	15.9	1.0	3.0	0.1	8.2
Ri Bhoi	16.0	14.7	8.4	0.0	6.4	0.4	7.2	0.7	0.6
South Garo Hills	18.2	16.0	8.9	0.0	6.6	1.1	3.3	4.5	2.3
West Garo Hills	26.2	25.9	14.0	0.1	11.8	1.9	9.1	3.1	0.2
West Khasi Hills	20.8	12.6	4.8	0.1	7.7	0.8	3.6	0.4	8.2
Meghalaya	17.1	14.7	7.5	0.0	7.1	1.2	4.0	2.4	2.3

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

In Meghalaya, the use of any traditional method is two percent and it is highest in Jaintia Hills and West Khasi Hills districts (8 percent each) and lowest in West Garo Hills (less than one percent). The use of oral pills ranges from two percent in East Khasi Hills to nine percent in West Garo Hills. The use of condom is also very poor in all the districts.

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 used of contraception by age of women and number of surviving children of either sex. The current use of any method of contraception among currently married women in 15-19 years age group is one percent and this attains a peak of 28 percent in the age group 40-44 years. A similar pattern of contraceptive use is also observed in case of modern and traditional methods. The use of traditional method is 3 percent for the women aged 35-39 and 40-44 years and less than one percent for the women in younger age groups 15-19 years. The use of modern methods ranges from only one percent for women in the age group 15-19 years to the highest among the age group of 40-44 years (25 percent)

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, Meghalaya, 2002-04

Demographic Characteristic	Percentage of women/husbands using				Percentage of women/husbands by contraceptive status		Number of women
	Any modern method[1]	Any traditional method[2]	Any method	Not using any method	Ever used	Never used	
Age-group							
15-19	1.0	0.4	1.3	98.7	1.3	98.7	148
20-24	5.8	2.0	7.9	92.1	10.2	89.8	729
25-29	11.1	2.2	13.4	86.6	16.3	83.7	1,088
30-34	14.6	2.3	17.1	82.9	18.7	81.3	1,071
35-39	19.1	2.6	21.8	78.2	23.7	76.3	1,160
40-44	24.6	2.9	27.5	72.5	29.0	71.0	755
Surviving children							
0	4.2	0.5	4.7	95.3	6.4	93.6	366
1	11.5	1.2	12.7	87.3	16.9	83.1	869
2	18.0	2.0	20.0	80.0	22.7	77.3	980
3 or more	16.0	3.0	19.2	80.8	20.3	79.7	2,737
Surviving sons							
0	10.7	1.4	12.1	87.9	15.2	84.8	1,196
1	18.4	2.3	20.7	79.3	23.0	77.0	1,545
2 or more	14.3	2.9	17.4	82.6	18.6	81.4	2,211
Surviving daughters							
0	7.9	1.3	9.2	90.8	11.2	88.8	1,147
1	18.5	1.9	20.4	79.6	23.2	76.8	1,703
2 or more	15.4	3.3	18.8	81.2	20.2	79.8	2,102
All women	14.7	2.3	17.1	82.9	19.2	80.8	4,952

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 women who have two or more surviving children invariably of methods in Meghalaya. The use of any method of contraception is 21 percent for the women who have one son, which is marginally higher than the women who have one daughter (20 percent). In case of use of any modern method, 18 percent of the women have one surviving son compared to 14 percent having two or more sons. More or less similar case is observed in case of surviving daughters. Overall, 19 percent of the women ever used any family planning method while 81 percent of them have never used any family planning method.

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 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 5 percent and it gradually picks up with the age and reaches 21 percent in the age group 45 and above. A similar pattern of contraceptive use is observed in the case of traditional methods. Among the husbands in the age group 45 years and above the use of traditional methods is 2 percent and it is same among the husbands in the younger age group of below 25 years. The use of modern methods ranges from 3 percent for husbands below 25 years of age to 19 percent for the husbands in the age group 45 years and above.

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, Meghalaya, 2002-04.

Demographic Characteristics	Percentage of husbands/women using				Number of men
	Any modern method[1]	Any traditional method[2]	Any method	Not using any method	
Age-group					
<25	3.1	1.8	4.9	94.4	200
25-34	9.8	1.7	11.5	88.1	1,518
35-44	18.1	2.9	20.9	78.4	1,784
45+	19.2	2.2	21.4	78.3	953
Surviving children					
0	4.1	0.0	4.1	94.1	331
1	9.8	0.9	10.8	88.7	788
2	18.6	2.5	21.0	78.3	888
3 or more	16.5	3.0	19.5	80.3	2,448
Surviving sons					
0	9.4	0.9	10.4	88.9	1,064
1	18.9	2.5	21.4	78.0	1,428
2 or more	14.7	2.9	17.6	82.1	1,963
Surviving daughters					
0	8.0	1.1	9.1	90.2	1,054
1	17.7	2.0	19.6	79.7	1,530
2 or more	16.3	3.2	19.5	80.3	1,870
All men	14.8	2.3	17.1	82.4	4,455

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 Meghalaya. Among all the husbands interviewed, 69 percent reported about female methods. Reporting of female methods is less in rural areas (65 percent) and higher in urban areas (73 percent). The major reason cited for not preferring the male methods is popularity of female methods (85 percent). The other reasons cited are due to fear of method failure (3 percent), fear of weakness (2 percent), lack of sexual pleasure (one percent), fear of operation (5 percent), fear of method failure (3 percent), fear of impotency and fear of weakness (two percent each). However, there is not much rural-urban differential in the reasons for not using male methods. Popularity of female methods as a reason for not using male methods of contraception has marginal difference between urban areas (85 percent) and in rural areas (84 percent). Fear of weakness as a reason for not accepting male methods has marginal difference between rural areas (3 percent) compared to urban areas (2 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, Meghalaya, 2002-04

Female method users and reason for not accepting male methods	Total	Residence	
		Rural	Urban
Percentage of husband who have reported female methods	68.5	64.9	72.5
Number of men	762	398	364
Reasons for not accepting male methods*			
Fear of impotency	1.6	1.3	2.0
Lack of sexual pleasure	0.9	1.4	0.5
Fear of method failure	3.2	5.8	0.7
Fear of operation	5.0	6.4	3.6
Fear of weakness	2.4	2.6	2.2
Female methods are more popular	84.7	84.4	85.0
Other	2.8	1.2	4.3
Number of men	522	258	264

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

6.4 Source of Contraceptive Methods

In order 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 Meghalaya are provided primarily through a network of government hospitals and health centres. The services are also provided by private hospitals and clinics. The analysis reveals that Government medical centres are the main source for female sterilization (74 percent) followed by private medical centres (25 percent). For IUD users also

the main source is government medical centres (67 percent). However, chemist is the main source for Pills (53 percent) and condom (78 percent) supply. This clearly indicates that by and large, users of oral pills and condom do not rely on free supply from Government health centres.

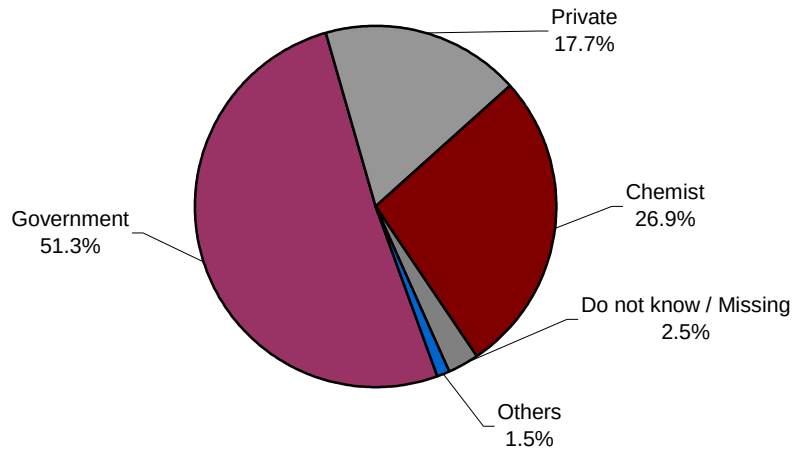
Table 6.10 SOURCE OF MODERN CONTRACEPTIVE METHODS

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

Source	Contraceptive method					
	Female sterilization	Male sterilization	IUD/ Loop	Pills	Condom/ Nirodh	All modern methods[1]
Government medical centre	73.9	*	66.9	28.8	12.6	51.3
Government/Municipal hospital	65.5	*	42.5	13.6	3.4	39.5
CHC/PHC	2.1	*	18.2	9.4	2.2	5.6
Sub-centre	0.0	*	0.8	2.1	2.9	1.1
Government doctor	5.0	*	1.3	1.0	4.0	3.4
Government nurse/ ANM	0.7	*	0.0	2.5	0.0	1.0
Family planning/RCH camp	0.5	*	4.1	0.0	0.0	0.6
Out reach/MCP clinic in village	0.0	*	0.0	0.4	0.2	0.1
Private medical centre	24.7	*	31.3	8.2	6.2	17.7
Private hospital	23.8	*	12.1	4.8	2.6	14.2
Private doctor	0.8	*	17.8	3.5	3.6	3.4
Private nurse	0.1	*	1.4	0.0	0.0	0.2
Chemist	NA	NA	NA	53.1	77.8	26.9
Other	1.0	*	0.0	2.9	1.4	1.5
Do not know	0.0	*	0.0	0.7	1.5	0.4
Missing	0.4	*	1.8	6.3	0.4	2.1
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of users	353	2	59	199	117	729

Note: [1] Includes female sterilization, male sterilization, IUD, Pills or condom. CHC: Community health centre, PHC: Primary health centre.* percentage not shown based on few cases.

Figure: 6.3
Source of Family Planning Among Current Users of Modern Contraceptive Method



Meghalaya, 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 with the current methods they are using. Table 6.11 shows the percentage of current contraceptive users who were informed about the available methods and their possible side effects before adoption of the method. The table also indicates the reported side effects due to the contraceptive use. Sixty percent of the acceptors of sterilization method reported that they were informed about the all available methods and 45 percent knew about their possible side effects before adoption. Fifty six percent of the IUD users were explained about its possible side effects while 31 percent of the pill users were told about its possible side effects. The analysis of the method specific problems reveals that 4 percent of the sterilized women have problem due to the use of contraceptive method.

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, Meghalaya, 2002-04

Health problems/side effect	Type of method		
	Female sterilizations	IUD/loop	Pill
Women who were informed about all the available methods	60.3	0.0	0.0
Women who were informed about the side effects before adoption of the method	45.0	56.0	30.6
Women who had side effect/health problem due to use of contraceptive method	4.1	9.9	4.6
Number of current users	353	59	199
Type of health problems/side effects			
Weakness/inability to work	*	*	*
Body ache/ backache	*	*	*
Cramps	*	*	*
Weight gain	*	*	*
Dizziness	*	*	*
Nausea/vomiting	*	*	*
Irregular periods	*	*	*
Excessive bleeding	*	*	*
White discharge	*	*	*
Number of users with side effects	15	6	9

Note: * Percentage not shown based on few cases.

6.6 Treatment for Health Problems with Current Use of Contraception

Table 6.12 shows that seven percent of the respondents had follow up visit by health worker after adoption of method compared to IUD (9 percent) and pills (4 percent). Regarding the satisfaction about the method, 97 percent of the sterilized women reported satisfaction with sterilization. In case of spacing methods, 87 percent of women using Pills and 99 percent of women using IUD were satisfied with the respective methods.

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, Meghalaya, 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	7.2	9.3	4.3
Women who are satisfied with method of current use	96.9	98.5	86.8
Number of current users	353	59	199
Women who sought treatment for the health problem	*	*	*
Number of women with side effects	15	6	9
Source of treatments			
Government health facility			
Government hospital/dispensary	*	*	*
CHC/Rural hospital	*	*	*
PHC	*	*	*
Sub-centre	*	*	*
Out reach/MCP clinic in village	*	*	*
Private health facility			
Private hospital/clinic	*	*	*
ISM health facility[1]	*	*	*
Chemist/Medical shop	*	*	*
Home remedy	*	*	*
Other	*	*	*
Number of women with side effects	9	6	3

Note:[1] Either government or Private. * percentage not shown ( ) Based on few 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 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 seven percent of the women were advised by ANM/health worker to adopt any family planning method in Meghalaya. This is higher in rural areas (8 percent) compared to urban areas (4 percent).

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, Meghalaya, 2002-04

		Residence		Availability of health facility in the village[1]	
Advice/future intension to use	Total	Rural	Urban	No	Yes
Percentage of current non-users advised by ANM/health worker to use of contraceptive method	7.4	8.3	3.7	7.8	9.7
Number of non-users	3,999	3,241	757	2,385	856
Percent distribution of women who were advised by method					
Female sterilization	31.7	33.7	(16.7)	30.7	40.5
Male sterilization	5.3	5.3	(2.4)	7.4	0.5
IUD/loop	14.6	12.7	(28.6)	11.4	15.5
Pill	42.8	42.4	(50.0)	42.9	41.2
Condom/Nirodh	4.5	4.9	(0.0)	6.9	0.6
Rhythmic /periodic abstinence	0.2	0.2	(0.0)	0.3	0.0
Other	0.3	0.3	(0.0)	0.5	0.0
Missing	0.6	0.5	(2.4)	0.0	1.6
Total percent	100.0	100.0	100.0	100.0	100.0
Number of non-users	298	270	28	187	83

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. * percentage not shown based on few cases.

The recommended contraceptive methods by ANM/health worker are largely Pills (43 percent) and female sterilisation (32 percent). Fifteen percent women were advised to adopt IUD/loop. Condom/Nirodh and male sterilisation was advised to merely five percent each of women respectively.

6.7.1 Future Intentions

Table 6.14 reveals the future intention of using contraception by current non-users. Among the non-users, 6 percent of women have expressed their intention to use any method of contraception in future. The intention to use any method of contraception is slightly higher in urban areas (13 percent) than in rural areas (5 percent).

Among the women who intended to use methods of contraception, 29 percent preferred female sterilization whereas less than one percent of the women preferred to have their husband sterilised instead. In case of temporary methods, the preferred methods by women are oral Pills (34 percent) and IUD/copper-T/loop (21 percent).

Six percent of the husbands intended to use contraception in future, among them 4 percent belong to rural areas and 14 to urban areas. Method wise choice by husbands were female sterilization and condom/Nirodh (25 percent each), which was followed by pills (24 percent), IUD/copper-T/loop (11 percent), other methods (6 percent) and rhythm/periodic

abstinence (4 percent). Less than one percent of husbands have the intention of adopting male sterilisation method in future.

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, Meghalaya, 2002-04

	Women			Husband		
Future intention to use/method	Total	Rural	Urban	Total	Rural	Urban
Percentage of respondents who intend to use contraceptive in future	6.3	4.9	12.5	5.8	3.8	14.1
Number of non-users	3,999	3,241	757	3,657	2,946	711
Percent distribution of non-user who were preferred to use family methods by preferred method						
Female sterilization	29.2	37.8	15.0	25.2	32.4	17.1
Male sterilization	0.3	0.4	0.3	0.9	1.8	0.0
IUD/copper-T/loop	21.1	17.0	27.8	11.2	6.4	16.6
Oral pills	33.5	35.7	29.9	24.2	23.8	24.5
Condom/Nirodh	11.0	4.4	21.8	24.9	17.3	33.4
Rhythm/periodic abstinence	0.5	0.7	0.2	3.2	5.6	0.5
Withdrawal	0.2	0.0	0.6	4.2	1.5	7.1
Other	1.4	1.8	0.8	5.9	10.4	0.8
Missing	2.8	2.2	3.6	0.3	0.7	0.0
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of non-users	251	156	95	212	112	100

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

6.7.2 Future Intention to Use Among Women 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 contraceptives that are likely to be in demand. Table 6.15 provides information on intention to use contraception in future according to number of living children and residence. Among the current non-users, three percent of the women intended to use contraception within the next twelve months. Two percent of women wanted to use within one to two years whereas three percent reported their intention to use contraceptives after two years. About 34 percent are not sure of their intention to use contraceptive, where as 60 percent reported to have no intention to use it. The intention of using contraception is high among the women who have two or more living children compared to the women who have either one or no living children. Forty two 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, Meghalaya, 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	0.2	3.3	0.7	2.8	3.5	2.5
One to two years	0.4	1.0	2.1	1.6	1.8	1.5
More than two years	2.9	2.6	2.3	1.5	1.9	2.2
Does not intend to use	54.3	56.3	60.3	60.3	62.7	59.9
Not yet decided	41.7	36.3	34.6	33.6	30.1	33.7
Missing	0.4	0.4	0.0	0.1	0.0	0.1
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	346	750	773	709	1,421	3,999
			Rural			
Intends to use in next 12 months	0.3	1.2	0.6	1.3	2.5	1.5
One to two years	0.4	1.3	1.9	1.5	1.5	1.4
More than two years	1.5	2.5	1.9	1.5	1.8	1.8
Does not intend to use	54.8	55.9	56.7	57.0	62.1	58.5
Not yet decided	42.5	39.1	38.9	38.6	32.1	36.6
Missing	0.5	0.0	0.0	0.1	0.0	0.1
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	271	547	593	594	1,237	3,241
			Urban			
Intends to use in next 12 months	0.0	8.8	1.1	10.5	10.2	6.7
One to two years	0.4	0.3	2.7	2.0	3.7	1.9
More than two years	8.1	3.1	3.5	1.8	3.1	3.5
Does not intend to use	52.6	57.4	72.1	77.5	66.7	65.7
Not yet decided	39.0	29.0	20.5	8.3	16.3	21.8
Missing	0.0	1.5	0.0	0.0	0.0	0.4
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	75	203	180	114	184	757

Note: * Exclude women who are in menopause or those who have undergone hysterectomy. ( ) Based on less than 50 unweighted cases.

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 or 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 never users and current non-users but were past users. Among the past users, around 65 percent of the women mentioned that they discontinued the use because they wanted a child. The other reasons mentioned for discontinuation were difficult to get

method (3 percent), weakness/inability to work (9 percent), method failed/became pregnant (2 percent) and weight gain (3 percent) and other reasons (3 percent).

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, Meghalaya, 2002-04

Reasons	Total	Place of residence	
		Rural	Urban
Reason for discontinuation			
Wanted child	64.9	71.1	(55.9)
Method failed/became pregnant	2.1	3.4	(0.0)
Supply not available	2.1	3.3	(0.0)
Difficult to get method	3.1	5.0	(0.0)
Weakness/inability to work	9.0	6.2	(8.8)
Body ache/ Backache	1.2	1.5	(2.9)
Dizziness	0.2	0.0	(2.9)
Excessive bleeding	1.6	2.2	(2.9)
Lack of pleasure	1.5	1.3	(2.9)
Method was inconvenient	8.4	0.0	(11.8)
Other	3.4	2.9	(5.9)
Missing	2.5	3.1	(5.9)
Total percent	100.0	100.0	100.0
Number of past users	100	63	37

Note: ( ) Based on less than 50 unweighted cases.

6.8.1 Reasons for Not Using Contraceptive Methods

DLHS asked women and husbands about the reasons for currently not using any contraception. Table 6.17 shows that the main reasons for not using contraceptives as reported by women are lack of knowledge about family planning methods (37 percent) and opposed to family planning (17 percent). About 7 percent of the women reported other reasons for not using contraception, which is grouped separately in 'other' category of responses. In rural areas also, the main reason for not using contraceptive methods is 'lack of knowledge' (43 percent) and 'opposed to family planning' (16 percent). In urban areas, the main reasons for not using contraceptive methods are opposed to family planning (21 percent), inconvenient to use method (16 percent), health does not permit and lack of knowledge about FP method (13 percent each). The reasons stated by husbands were almost similar to the responses of women.

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, Meghalaya, 2002-04

Reason	Women			Husband*		
	Total	Rural	Urban	Total	Rural	Urban
Lack of Knowledge about FP method	37.2	43.3	12.6	39.6	50.1	16.6
Against the Religion	6.5	6.4	7.1	4.8	6.4	1.3
Opposed to family planning	16.6	15.6	20.6	11.1	6.8	20.6
Not like existing method	8.1	8.2	7.6	5.9	6.0	5.6
Afraid of sterilization	1.2	1.4	0.8	2.8	2.3	3.9
Can not work after sterilization	0.2	0.1	0.6	0.5	0.3	0.9
Worry about side effects	6.1	6.5	4.4	6.6	5.7	8.4
Costs too much	0.9	0.9	0.8	1.7	2.1	0.8
Health does not permit	4.8	2.8	12.9	5.8	4.0	9.6
Hard/inconvenient to get method	1.2	1.2	1.0	1.4	1.3	1.4
Inconvenient to use method	5.5	3.0	15.7	8.6	3.0	20.8
Difficult to become pregnant	3.7	3.1	6.1	4.1	5.2	1.7
Wife is pregnant[1]	-	-	-	0.1	0.0	0.3
Other	7.3	7.0	8.5	6.1	5.6	7.0
Missing	0.7	0.5	1.4	1.1	1.1	1.0
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of current non-users	2,786	2,235	550	904	621	283

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 need for limiting and spacing. Table 6.18 provides the information about unmet need for limiting and spacing in Meghalaya by background characteristics.

The unmet need is high for women below 30 years, mainly for spacing rather than for limiting. Unmet need is also relatively higher for women aged 15-19 years (42 percent) for spacing. Among women aged 20-24, it is 42 percent for spacing, among the older women of age 25-29 years, 44 percent have unmet need for spacing and 10 percent for limiting. Among the women age 35-39 years, unmet need is 30 percent for spacing and 32 percentage for limiting. The rural women have high unmet need (59 percent) compared to the urban women (46 percent). The total unmet need for family planning is higher among non-literate women (66 percent) than

among women with 0-9 years of schooling (49 percent) and 10 or more years of schooling (43 percent). Christian women have lesser-unmet need for family planning (53 percent) compared to the Muslim women (72 percent) or Hindu women (64 percent). Unmet need for family planning for spacing among Scheduled Tribe is 38 percent and that for limiting is 19 percent

Table 6.18 UNMET NEED FOR FAMILY PLANNING SERVICES

Percentage of currently married women with unmet need for family planning services by selected background characteristics, Meghalaya, 2002-04

Background Characteristic	Unmet need for FP			Number of women
	Spacing[1]	Limiting[2]	Total	
Age				
15-19	41.9	1.6	43.6	148
20-24	42.1	6.0	48.1	729
25-29	43.8	10.0	53.8	1,088
30-34	39.3	21.7	61.0	1,071
35-39	30.2	32.4	62.6	1,160
40-44	23.6	26.9	50.5	755
Residence				
Rural	40.6	18.2	58.8	3,761
Urban	22.6	23.6	46.2	1,191
Education				
Illiterate	42.9	23.2	66.1	2,256
0-9 @ years	33.6	15.2	48.8	1,929
10 years and above	23.4	19.7	43.1	761
Religion				
Hindu	33.0	31.0	64.0	713
Muslim	40.9	31.3	72.1	134
Christian	36.0	17.1	53.1	3,588
No religion	63.0	19.8	82.8	150
Others	32.6	16.3	48.9	368
Caste/tribe#				
Scheduled caste	40.3	17.0	57.3	150
Scheduled tribe	37.5	18.8	56.3	4,418
Other backward class	17.6	40.9	58.5	116
Others	22.4	23.7	46.1	240
Number of living children				
0	12.6	3.0	15.6	366
1	43.7	6.4	50.0	869
2	39.6	17.5	57.0	980
3	34.1	23.7	57.8	956
4+	36.8	28.2	65.0	1,780
Standard of living Index				
Low	41.8	18.6	60.4	3,287
Medium	29.5	20.1	49.6	1,196
High	14.5	24.2	38.7	469
All women	36.2	19.5	55.8	4,952

Note: [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.

Women in low standard of living have high (60 percent) unmet need compared to women of medium (50 percent) and high standard of living (39 percent). Unmet need for spacing is much higher for the women with one living child (44 percent) than women with either no children (thirteen percent) or two or more children. Among the women with two or more children, unmet need for limiting is higher compared to those having children less than two.

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 total unmet need for family planning services for state is 56 percent and it ranges from as low as 36 percent in West Khasi Hills to a maximum of 62 percent in East Garo Hills. In four out of seven districts, unmet need for family planning is more than the state average. Unmet need for limiting was found to be lowest in Jaintia Hills and West Khasi Hills (four percent each) and highest in East Garo Hills (31 percent). District wise variation of unmet need due to spacing is not much. It is to be noted that in all the districts of Meghalaya, unmet need for limiting was less than spacing.

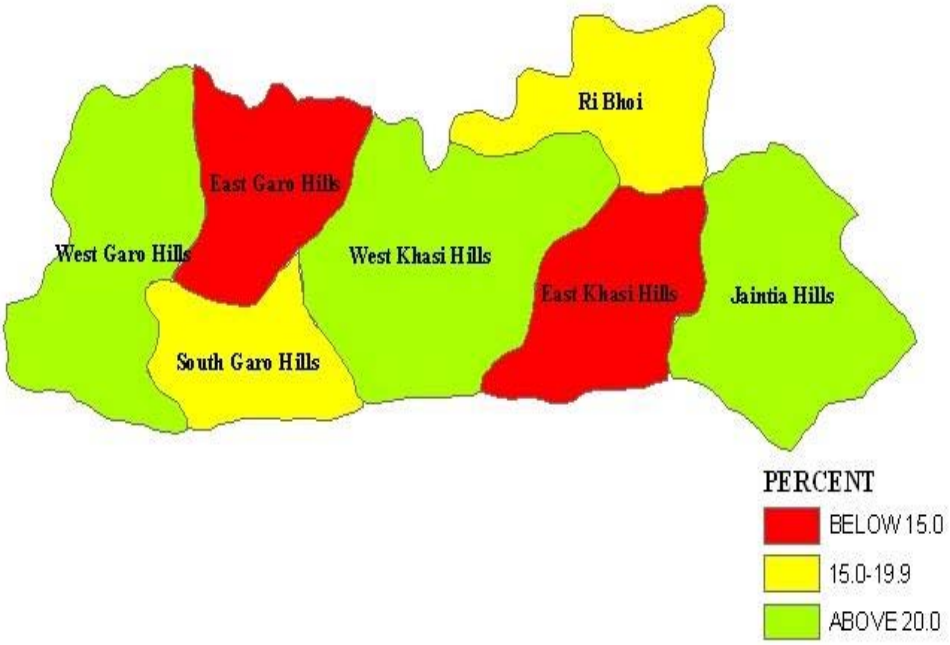
Table 6.19 UNMET NEED BY DISTRICT

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

Districts	Unmet need for		
	Spacing	Limiting	Total
East Garo Hills	31.5	30.9	62.3
East Khasi Hills	33.2	24.5	57.7
Jaintia Hills	37.5	3.7	41.1
Ri Bhoi	39.1	17.7	56.8
South Garo Hills	31.5	11.7	43.2
West Garo Hills	37.6	22.3	59.9
West Khasi Hills	32.4	3.5	35.9
Meghalaya	36.2	19.5	55.8

Map-6

Current Use of Any Family Planning Method



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 credibility 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. Only two percent of the women in Meghalaya reported that the health worker visited them at their residence at least once in last the three months preceding the survey. Younger women seemed more likely to report a home visit than older women. Three percent of women in the age group 15-24 years reported visiting by health workers at home compared to two percent each of women in the age group 25-34 and 35-44 years. The percentage of women receiving home visits is higher in rural areas (three percent) than in urban areas (less than one percent). More Scheduled Tribe women (three percent) reported home visits than other caste women. There was not much variation by education and standard of living index.

Table 7.1 HOME VISIT BY HEALTH WORKER

Percentage of women who had home visit by health worker in the 3 months preceding the survey by selected background characteristics, Meghalaya, 2002-04

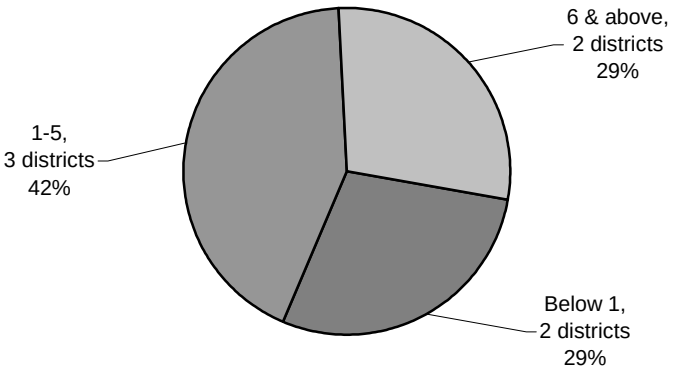
Background characteristic	Percentage with home visit	Number of women
Age		
15-24	3.4	878
25-34	2.2	2,159
35-44	2.1	1,915
Residence		
Rural	3.1	3,761
Urban	0.2	1,191
Education		
Non-literate	2.1	2,256
0-9 years@	3.3	1,929
10 and above	0.9	761
Religion		
Hindu	0.5	713
Muslim	1.9	134
Christian	2.8	3,588
No religion	0.0	150
Other	2.9	368
Caste/tribe#		
Scheduled caste	1.7	150
Scheduled tribe	2.5	4,418
Other backward class	0.0	116
Other	1.2	240
Standard of living index		
Low	2.8	3,287
Medium	1.8	1,196
High	1.0	469
Availability of health facility[2] in the village		
No	2.7	1,050
Yes	3.2	2,711
Total	2.4	4,952

Note: Total includes 6 cases with missing information on education were not shown separately. @ Literate women with no years of schooling are also 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.

7.2 Home Visit by Health Workers by Districts

Table 7.2 shows that home visit by health worker is highest is Ri Bhoi (nine percent), followed by Jaintia Hills (eight percent), West Khasi Hills and South Garo Hills (two percent each) and less than one percent in the rest of the districts.

Figure: 7.1
Distribution of Districts by Home Visit by Health Worker



Meghalaya, DLHS-RCH,2002-04

Table 7.2 HOME VISIT BY HEALTH WORKER BY DISTRICT

Percentage of women who had home visit by health worker in the 3 months preceding the survey by district, Meghalaya, 2002-04

District	Percentage with home visit
East Garo Hills	0.0
East Khasi Hills	0.4
Jaintia Hills	7.6
Ri Bhoi	9.1
South Garo Hills	1.4
West Garo Hills	0.8
West Khasi Hills	1.8
Meghalaya	2.4

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. Eighty-nine pregnant women or women with children born during the reference period, 8 current users and 20 current non-users were visited by health workers at home. Similarly, 340 pregnant woman or women with children born during the reference period, 22 current family planning users and 39 current non-users had visited health facilities.

The major focus of discussion during home visits was immunization (49 percent). In addition, discussions were also made on treatment of health problems (27 percent), disease prevention and child care (21 percent each), family planning (15 percent), sanitation/cleanliness (13 percent) and antenatal care (11 percentage).

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, Meghalaya, 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	12.3	*	*	14.7
Breastfeeding	4.0	*	*	4.1
Supplementary feeding	0.0	*	*	0.0
Immunization	50.9	*	*	48.8
Nutrition	0.4	*	*	2.9
Diseases prevention	11.2	*	*	20.7
Treatment of health problem	20.2	*	*	27.1
Antenatal care	14.1	*	*	10.7
Delivery care	1.9	*	*	2.7
Postpartum care	0.4	*	*	0.3
Childcare	21.6	*	*	21.2
Sanitation / cleanliness	6.2	*	*	13.3
Oral rehyderation	0.0	*	*	3.8
Other	1.6	*	*	1.2
Number of women	89	8	20	118
During visit to health facility				
Family planning	2.7	*	(0.0)	4.5
Breastfeeding	0.9	*	(0.0)	0.8
Supplementary feeding	0.5	*	(0.0)	0.5
Immunization	21.5	*	(4.8)	18.5
Nutrition	1.8	*	(2.4)	1.7
Diseases prevention	3.6	*	(7.1)	4.0
Treatment of health problem	23.0	*	(61.9)	30.0
Antenatal care	29.7	*	(4.8)	25.4
Delivery care	8.9	*	(2.4)	7.5
Postpartum care	0.0	*	(0.0)	0.0
Childcare	24.9	*	(7.1)	21.8
Sanitation / cleanliness	2.6	*	(2.4)	2.7
Oral rehyderation	1.2	*	(0.0)	1.1
Other	2.7	*	(19.0)	3.4
Number of women	340	22	39	400

Note: Percentage add to more than 100.0 due to multiple responses. [1] Women who visited private health facility are not included. ( ) : Based on less than 50 unweighted cases. * Percentage not shown- based on few cases.
[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 (30 percent), antenatal care (25 percent), immunization (19 percent) and child care (22 percent). Only five percent women reported that they discussed family planning during the visit. During the visit to health facility, pregnant women or women with children born during

reference period the topic discussed include antenatal care (30 percent), child care (25 percent), treatment of health problem (23 percent) and immunisation (22 percent).

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. Around 54 percent of women needed to visit health facility but could not visit. Similarly, 13 percent of women who needed to visit health facility visited it in past three months of the survey. The proportion of women who needed to visit health facility and visited it was higher in urban areas (15 percent) than in rural areas (12 percent). Among those who visited any health facility, 26 percent of women reported that they had visited a private hospital (19 percent in rural areas and 45 percent in urban areas).

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, Meghalaya, 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	54.2	52.4	59.6	52.8	51.5
Percentage of women who needed to visit health facility and visited	12.8	12.2	14.7	10.9	15.5
Number of women	4,952	3,761	1,191	2,711	1,050
Government health facility					
Hospital / CHC / FRU /RH	22.8	20.5	28.9	20.8	20.0
Dispensary	16.4	18.7	10.4	18.1	19.8
Primary health center	12.0	16.5	0.2	18.0	13.7
Sub-center	8.4	11.4	0.4	7.5	18.5
Private health facility					
Hospital	26.1	18.8	45.2	19.6	17.4
Dispensary	7.7	8.9	4.7	9.1	8.5
ISM[2] hospital/dispensary	4.0	1.9	9.6	2.4	0.8
Other	2.5	3.3	0.6	4.4	1.3
Total percent	100.0	100.0	100.0	100.0	100.0
Number of women	633	458	175	296	163

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.

About 60 percent visited a government health facility, of which 23 percent visited government health facility such as hospital/CHC/FRU/RH, 16 percent visited government dispensary, 12 percent visited primary health centres, 8 percent visited sub-centres and four percent of the women reported that they visited Indian system of medicine hospital/ dispensary,

which were either government-run or private. There is 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. In three out of seven districts, more than half of the women did not visit health facility when needed, with a highest percentage in East Khasi Hills (72 percent) and lowest in East Garo Hills (27 percent). The percentage of women who need to visit health facility and visited is highest in West Khasi Hills (31 percent) and lowest in West Garo Hills (one percent). In all the districts, women visited government health facilities more than a private health facility. In South Garo Hills, only two percent of women reported visited private health centres, while 98 percentage visited government health centres, which is highest among other districts.

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 and by district, Meghalaya, 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
East Garo Hills	26.7	2.1	81.9	18.1
East Khasi Hills	72.2	15.8	63.7	36.3
Jaintia Hills	41.9	24.7	54.7	44.7
Ri Bhoi	42.0	19.3	65.5	18.5
South Garo Hills	55.6	7.7	98.2	1.8
West Garo Hills	58.3	0.6	75.3	24.7
West Khasi Hills	37.8	31.1	53.7	44.1
Meghalaya	52.4	12.8	59.6	33.8

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 is 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 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), which is presented in Table 7.6. Majority of the women reported that the services at government health facilities were good. The reason for reporting poor services were mainly due to long waiting time (52 percent),

poor medical, surgical and diagnostic equipment (42 percent), general comfort (39 percent) and inconvenient location of health facilities (36 percent).

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, Meghalaya , 2002-04

Quality indicator	Poor	Good	Excellent	Missing
The convenience of the health facility location	36.2	63.1	0.0	0.8
Length[1] of time spend towards waiting	52.0	45.4	0.0	2.6
Personal manner[2] of the physician[5]	9.7	89.1	0.4	0.8
The technical skills and quality[3] of the physician[5]	17.9	80.9	0.4	0.8
Personal manner[2] of nurse	17.7	81.5	0.0	0.8
The technical skills and quality[3] of nurse	20.7	78.4	0.2	0.8
Personal manner of other staff[5]	28.5	70.7	0.0	0.8
The technical skills and quality of other[4] staff	28.8	70.5	0.0	0.8
The explanation of what was done to her	13.7	84.6	1.0	0.8
Medical, surgical and diagnostic equipment	42.1	57.1	0.0	0.8
General comfort	38.6	60.6	0.0	0.8

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 Reason 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. Thirty three percent of the currently married women reported heavy rush and 17 percent of the women reported medicine not given rarely given or of bad quality as the main reasons for not visiting the government health centre for their health problems. In rural areas, the main reasons for not visiting government health facilities are heavy rush (27 percentage), medicine not given rarely given or of bad quality (24 percentage) and poor quality services (13 percent). In urban areas, the main reasons for not visiting health facilities are heavy rush (41 percentage), referred by government doctor (21 percent) and poor quality of services (11 percent). Heavy rush as a reason for not visiting government health facilities was reported more in the villages where health facilities are available (30 percent) compared to the villages where health facilities are not available (24 percent).

Table 7.7 REASON FOR NOT PREFERRING GOVERNMENT HEALTH FACILITY

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

Reason	Total	Residence		Availability of health facility[1] in the village	
		Rural	Urban	No	Yes
Not conveniently located	2.8	4.7	0.3	6.9	(0.0)
Time is not suited	9.6	10.2	8.6	12.4	(5.4)
Poor quality of services	12.2	12.8	11.3	11.2	(16.1)
Heavy rush	32.9	27.4	40.5	23.7	(30.4)
Non/rare-availability of doctors/health workers	3.5	3.5	3.5	3.1	(7.1)
Doctors/health workers do not examine properly	4.7	3.5	6.3	4.2	(1.8)
Medicine not/rarely given or of bad quality	16.9	23.7	7.7	19.6	(28.6)
Doctors/paramedical staff does not behave properly	0.5	0.9	0.0	1.3	(0.0)
Services are charged	0.1	0.2	0.0	0.3	(0.0)
Referred by government doctor	13.1	7.4	21.1	10.6	(1.8)
Other	3.6	5.7	0.7	6.6	(8.9)
Total percent	100.0	100.0	100.0	100.0	(100.0)
Number of women	233	135	98	91	43

Note: [1] 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.

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. Seven percent of currently non-users of family planning methods reported that they were advised to adopt family planning method by ANM or family planning health worker (Table 7.8). The most frequently discussed method was Pills (43 percent) and female sterilization (32 percent). Only five percent each of women received advice to adopt condom and male sterilization as a contraceptive method. Discussions about traditional method such as rhythm or withdrawal were rare. There is not much variation by types of residence in terms of family planning information and advice give to them.

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 any problem in getting supply whenever needed. The results are presented in Table 7.9. Thirty four percent each of condom and pills users reported that they had a problem in getting these contraceptives.

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, Meghalaya, 2002-04

Advice/method	Total	Rural	Urban
Percentage of non-users who were advised to adopt family planning method	7.4	8.3	3.7
Number of women	3,999	3,241	757
Method			
Female sterilization	31.7	33.7	(16.7)
Male sterilization	5.3	5.3	(2.4)
IUD	14.6	12.7	(28.6)
Pills	42.8	42.4	(50.0)
Condom	4.5	4.9	(0.0)
Rhythm/periodic abstinence	0.2	0.2	(0.0)
Other	0.3	0.3	(0.0)
Missing	0.6	0.5	(2.4)
Total percent	100.0	100.0	100.0
Number of women	298	270	28

Note: * ( ) Based on less than 50 unweighted cases.

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, Meghalaya, 2002-04

Method/residence	Percentage who had a problem getting supply	Number of users
Condom		
Rural	34.0	109
Urban	34.0	89
Total	34.0	199
Pills		
Rural	(21.1)	43
Urban	6.8	74
Total	23.8	117

Note: ( ) Based on less than 50 unweighted cases.

7.10 Quality of Care of Family Planning Services

Several aspects of quality of care of family planning services were also investigated. Current users of a sterilization were asked whether the person or centre where sterilization had been performed had informed her about other alternative methods of family planning. It was asked whether she was told by an ANM or health worker about possible side effects of the modern method at the time when 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.

Sixty four percent of sterilized women reported that they were informed about alternative methods that they could use before adopting sterilization in government health facilities and 49 percent from private health facilities.

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, Meghalaya, 2002-04

Source of sterilization	Total	Rural	Urban	Number of users
Government health facility	63.8	67.3	61.1	261
Private health facility	48.9	34.2	74.9	87
Total	60.1	56.6	63.6	355

Note: Total includes 2,4 and 1 women who said that they sterilized at Family planning or RCH camp/ village session and by other and who do not know including missing information of place/source of sterilization, are not shown separately.

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 according to place of residence, Meghalaya, 2002-04

Information/follow-up	Total	Rural	Urban
Told about side effects			
Sterilization	44.7	42.0	47.8
Other modern method	36.3	30.5	41.2
Any modern method	40.4	36.2	44.2
Received follow-up			
Sterilization	7.2	7.5	7.2
Other modern method	4.5	7.5	1.5
Any modern method	5.8	7.5	4.2

Another important facet of informed contraceptive choice is to provide full information about any side effects and any other problems associated with the method. In Meghalaya, 40 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 areas and 48 percent in urban areas reported that they were informed about its possible side effects. Among users of modern method other than sterilization, 31 percent of rural users and 41 percent of urban users were informed about the method of side effects. It is clear from the result that ANM or health workers in Meghalaya are providing appropriate information to couples who need to make an informed choice about contraceptive methods. However, the situation with respect to follow-up services is not encouraging. Follow-up services among sterilization users are seen only in seven percent, six percent among users of any modern methods and five percent among users of other modern methods.

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, Meghalaya, 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
		Sterilizat-ion	Other modern method	Sterilizat-ion	Other modern method	
East Garo Hills	(68.2)	(71.4)	16.8	(0.0)	0.0	1.2
East Khasi Hills	92.6	76.9	64.5	11.1	2.3	8.5
Jaintia Hills	51.1	41.1	33.2	3.4	2.1	10.5
Ri Bhoi	80.4	34.8	46.4	7.8	20.8	25.5
South Garo Hills	51.5	48.1	32.0	13.9	5.1	5.3
West Garo Hills	31.8	17.4	10.5	6.5	2.2	2.9
West Khasi Hills	58.3	43.3	65.6	2.6	7.3	10.4
Meghalaya	60.1	44.7	36.3	7.2	4.5	7.5

Note: [1] At the time of accepting the current method.
[2] By a health worker or ANM/Nurse after accepting the current method. ( ): Based on less than 25 cases.

The percentage of sterilization-users who were informed about alternate method is lowest in West Garo Hills (32 percent) and is highest in East Khasi Hills (93 percent). There are also large inter-district variations in the percentage of sterilization- users and users of other modern contraceptive methods who were told about the possible side effects. In case of sterilization, the proportion varied from as low as seventeen percent in West Garo Hills to a maximum of 77 percent in East Khasi Hills. For other modern contraceptive methods, a highest of 66 percent users in West Khasi Hills and the lowest of 11 percent in West Garo Hills were told about the side effects of the method. Follow-up services are better for acceptors of sterilization than for other modern methods in most of the districts of Meghalaya except Ri Bhoi District. Table 7.12 also shows district wise variation in the percentage of currently non-users who were ever advised to adopt contraceptive methods, which varies from a low of one percent in East Garo Hills to a high of 26 percent in Ri Bhoi.

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 at least once 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, Meghalaya, 2002-04

Advise/follow-up service	Total	Rural	Urban
Percentage of women who were advised to have delivery at health facility	33.0	27.0	62.0
Percentage of women who were visited within 2 weeks of delivery	2.0	2.2	1.2
Percentage of women who were visited at least once within 6 weeks of delivery	2.2	2.3	2.2
Number of women	2,439	2,018	421

Note: * Women who had their last live/still birth during three years preceding the survey

Thirty three percent 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 (62 percent) were more likely than rural areas (27 percent) to get advised to deliver their child at health facility.

Among districts, the percentage varies from as low as 11 percent in East Garo Hills to as high as 68 percent in East Khasi Hills (Table 7.14). In four of the 7 districts, less than 30 percent 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 last live/still birth three years preceding the survey, quality of care indicators related to delivery care by district, Meghalaya, 2002-04

	Percentage of women		
District	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
East Garo Hills	10.7	0.3	0.5
East Khasi Hills	68.4	0.9	1.5
Jaintia Hills	31.9	2.0	2.0
Ri Bhoi	34.5	6.5	6.7
South Garo Hills	21.3	1.8	3.1
West Garo Hills	12.8	1.3	1.3
West Khasi Hills	28.0	1.8	1.8
Meghalaya	33.0	2.0	2.2

Only two percent of the women reported that they were visited by an ANM within two weeks of delivery; such visit was one percent in urban areas and two percent in rural areas. Only two percent of the women in rural areas as well as in urban areas received at least one follow-up service within six weeks of delivery (Table 7.13) The proportion of women who had at least one postpartum check-up within six weeks of delivery is lowest in East Garo Hills (less than one percent) and highest in Ri Bhoi (7 percent) (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 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 ways 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.

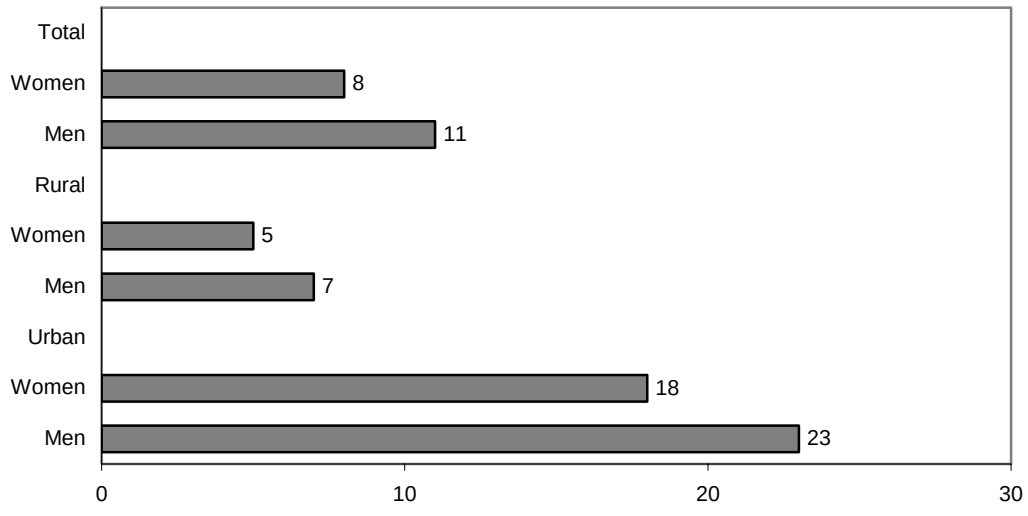
Table 8.1 shows the percentage of women aware of RTI/STI by background characteristics. Eight percent of the women in Meghalaya were aware of RTI/STI. The proportion of women who were aware of RTI/STI is higher in urban areas (18 percent) than in rural areas (5 percent) as shown in Figure 8.1. Awareness of RTI/STI is lower among younger women, non-literate women, women from Christian religions, Scheduled Tribe women and women from households with a low standard of living. Awareness of RTI/STI increases from 2 percent among non-literate women to 22 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 5 percent among women with a low standard of living to 31 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. The sources of information of RTI/STI as reported by women were television (63 percent), newspaper or books or magazines (48 percent), radio (47 percent), relatives/friends (41 percent) and slogans or posters or pamphlets or wall hoardings (36 percent). Only 20 percent of women received this information from doctors and 11 percent from health workers.

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 Meghalaya, the percentage of men who heard of RTI/STI is higher than that of women (Figure 8.1). Eleven percent of the men heard of RTI/STI. Men from urban areas and older men were relatively more aware of RTI/STI. Men who belong to Christian religion and

mainly from Scheduled Tribes are less aware of RTI/STI. The level of awareness of RTI/STI increases with an increase in education level and standard of living. Two percent of non-literate men were aware of RTI/STI against 29 percent of men who had completed 10 or more years of schooling. Seven percent of men from households with a low standard of living were aware of RTI/STI against 37 percent of men with a high standard of living.

Figure: 8.1
Awareness of RTI/STI by Sex and Residence



Meghalaya, DLHS-RCH,2002-04

The main sources of awareness about RTI/STI in Meghalaya are newspaper or books or magazines (64 percent), television (59 percent), radio (49 percent), relatives or friends (46 percent) and slogans or posters or pamphlets or wall hoardings (37 percent). Sixteen percent of the men received this information from doctors; ten percent from health workers, six percent from community meetings and six percent mentioned that they had received information about RTI/STI from school-teachers. More than half of the men in rural areas had heard about RTI/STI from relatives/friends and radio. Similarly, in urban areas, more than half of the men heard about RTI/STI from television (80 percent). The major source of awareness about RTI/STI among non-literates and low standard of living are relatives/friends (66 percent and 41 percent respectively). Doctors, health workers and community meetings seems to be marginal sources of spreading awareness of RTI/STI.

Table 8.1 SOURCE OF KNOWLEDGE ABOUT RTI/STI AMONG WOMEN

Percentage of currently married women aged 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, Meghalaya, 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	5.0	148	*	*	*	*	*	*	*	*	*	*	7
20-24	7.1	729	58.0	47.7	51.8	44.1	33.2	13.7	0.0	6.8	39.7	4.0	51
25-29	8.0	1,088	43.4	61.5	43.0	31.3	23.4	6.5	1.6	5.5	43.6	3.7	87
30-34	7.4	1,071	57.8	66.9	47.7	35.5	15.7	9.5	5.3	10.7	48.5	2.1	80
35-39	9.4	1,160	34.8	63.1	43.9	34.8	18.3	12.0	6.3	10.3	39.0	5.5	109
40-44	10.2	755	48.8	70.2	60.7	37.6	15.1	11.4	9.5	11.7	35.8	7.1	77
Residence													
Rural	5.2	3,761	60.6	36.9	32.6	40.1	15.2	9.4	2.7	11.5	39.6	2.3	196
Urban	18.1	1,191	34.7	85.7	62.7	32.2	24.6	11.7	7.2	7.2	42.4	6.4	215
Education													
Non-literate	2.3	2,256	37.8	17.4	14.5	38.1	6.8	6.6	0.0	14.5	43.9	10.6	51
0-9@ years	9.9	1,929	48.0	60.0	30.6	26.9	8.1	9.6	3.5	8.4	35.7	1.3	191
10 and above	22.2	761	48.7	78.8	78.6	45.4	37.4	12.9	8.4	8.7	46.2	6.2	169
Religion													
Hindu	10.8	713	23.5	80.5	37.0	21.6	20.8	9.5	1.8	7.3	49.1	15.0	77
Muslim	12.2	134	*	*	*	*	*	*	*	*	*	*	16
Christian	8.2	3,588	53.9	55.9	47.3	38.3	19.9	11.0	5.0	10.3	36.0	1.7	295
No Religion	4.5	150	*	*	*	*	*	*	*	*	*	*	7
Other	4.5	368	*	*	*	*	*	*	*	*	*	*	17
Caste/tribe[#]													
Scheduled caste	16.8	150	(40.7)	(55.6)	(51.9)	(48.1)	(18.5)	(22.2)	(14.8)	(18.5)	(85.2)	(3.7)	25
Scheduled tribe	7.1	4,418	55.1	56.4	47.1	38.3	18.9	10.2	4.7	10.0	36.2	1.9	312
Other backward class	13.8	116	*	*	*	*	*	*	*	*	*	*	16
Other	22.9	240	15.5	93.6	45.7	16.3	20.3	9.8	5.1	8.2	50.3	13.3	55
Standard of living index													
Low	4.5	3,287	49.1	40.6	22.1	34.6	10.3	3.6	0.9	12.5	46.5	2.5	146
Medium	10.1	1,196	53.3	65.2	43.7	29.8	15.2	12.8	3.8	4.7	34.8	5.8	121
High	30.7	469	39.8	82.5	79.0	42.5	34.2	15.9	10.3	9.8	40.9	5.3	144
Total	8.3	4,952	47.1	62.5	48.4	36.0	20.1	10.6	5.1	9.3	41.1	4.5	411

Note: Total includes 6 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. * 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, Meghalaya, 2002-04.

Background characteristic	Percentage who have heard about RTI/STI	Number of men	Among those who have heard about RTI/STI, percentage who received information from.										Number of men who have heard about RTI/STI
			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	4.8	200	*	*	*	*	*	*	*	*	*	*	10
25-34	9.9	1,518	62.7	53.8	58.4	30.1	10.6	4.9	8.2	7.5	46.3	1.3	151
35-44	11.3	1,784	43.2	61.7	64.3	38.0	20.8	16.0	3.7	6.1	44.4	0.3	201
45+	13.8	953	42.2	62.4	70.5	42.6	12.2	6.4	9.0	4.6	47.8	0.6	131
Residence													
Rural	7.2	3,374	55.3	34.8	60.7	35.6	13.9	11.2	6.5	8.3	47.5	1.2	243
Urban	23.1	1,081	43.3	82.3	66.9	37.9	16.9	8.7	6.3	3.8	44.2	0.3	249
Education													
Non-literate	1.8	1,678	(46.3)	(7.3)	(14.6)	(0.0)	(2.4)	(4.9)	(0.0)	(9.8)	(65.9)	(4.9)	31
0-9@ years	9.3	1,717	59.7	46.4	55.7	30.6	7.4	7.5	4.6	8.5	35.7	0.1	160
10 and above	28.5	1,058	44.5	71.1	73.9	43.8	21.3	11.3	8.0	3.5	48.4	0.9	302
Religion													
Hindu	15.8	648	50.8	84.2	53.4	31.2	12.4	8.6	2.5	2.8	26.8	0.0	103
Muslim	32.5	122	(32.1)	(39.3)	(60.7)	(42.9)	(14.3)	(3.6)	(10.7)	(17.9)	(67.9)	(0.0)	40
Christian	10.0	3,220	53.0	51.1	67.9	38.7	15.5	9.5	8.5	7.2	48.9	1.2	321
No Religion	9.2	144	*	*	*	*	*	*	*	*	*	*	13
Other	5.0	321	*	*	*	*	*	*	*	*	*	*	16
Caste/tribe[#]													
Scheduled caste	25.7	135	(40.6)	(46.9)	(68.8)	(43.8)	(18.8)	(6.3)	(12.5)	(18.8)	(71.9)	(0.0)	35
Scheduled tribe	9.0	3,964	51.2	51.2	64.2	38.6	15.6	11.1	7.6	7.0	50.0	1.0	358
Other backward class	9.3	105	*	*	*	*	*	*	*	*	*	*	10
Other	39.4	224	46.5	91.6	55.5	23.9	8.7	4.5	0.0	0.0	20.7	0.0	88
Standard of living index													
Low	6.9	2,938	61.2	38.4	53.2	26.9	7.3	9.1	7.4	7.8	40.6	0.8	202
Medium	12.0	1,086	41.5	65.4	69.5	43.7	18.4	14.3	6.1	5.6	50.8	1.1	130
High	37.4	431	40.3	79.1	72.6	43.6	23.3	7.5	5.4	4.1	48.5	0.5	161
Total	11.1	4,455	49.2	58.8	63.9	36.8	15.5	9.9	6.4	6.0	45.9	0.8	493

Note: @ 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. * Percentage not shown based on few cases.

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, 19 percent of them did not know anything about the mode of transmission of this disease. This proportion is relatively higher among rural women, non-literate women, women from Hindu religions, women from other caste and women coming from households with low standard of living. Heterosexual intercourse, homosexual intercourse and lack of personal hygiene were mentioned by 62 percent, 52 percent and 36 percent of women respectively as mode 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 aged 15-44 who have heard of RTI/STI, knowledge of mode of transmission by selected background characteristics, Meghalaya, 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						
20-24	55.7	70.5	22.7	0.0	19.5	51
25-29	40.4	51.0	33.1	5.1	30.9	87
30-34	52.1	59.8	28.4	2.2	16.5	80
35-39	53.1	61.8	42.6	3.9	19.7	109
40-44	61.6	68.5	48.0	7.1	7.0	77
Residence						
Rural	39.2	60.6	20.9	3.9	27.2	196
Urban	63.6	62.5	49.1	3.9	11.6	215
Education						
Non-literate	15.7	55.3	4.8	4.1	36.1	51
0-9@ years	51.5	56.8	20.4	0.8	26.0	191
10 years and above	63.3	68.8	62.3	7.3	6.1	169
Religion						
Hindu	51.0	48.3	36.3	4.2	30.7	77
Christian	54.0	68.3	32.9	1.6	16.7	295
Caste/tribe[#]						
Scheduled caste	60.6	64.0	55.5	9.9	14.1	25
Scheduled tribe	52.8	68.7	31.9	1.5	17.1	312
Other	48.4	28.5	39.2	5.1	37.1	55
Standard of living index						
Low	35.8	51.4	17.5	4.1	39.0	146
Medium	53.6	71.9	31.1	1.3	10.8	121
High	67.0	63.3	58.0	5.8	5.6	144
Total	52.0	61.6	35.7	3.9	19.0	411

Note: Total include 7 women aged 15-19, 16 Muslim, 7 no religion, 17 other religion, and 16 other backward class were not shown separately. Total includes 4 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. * Percentage not shown based on few cases.

Table 8.4 presents the knowledge of mode of transmission of RTI/STI among men. Among men who had heard of RTI/STI, 8 percent 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, Muslim, men from Scheduled Tribes and men coming from households with a low standard of living. Among the men who knew the modes of transmission of RTI/STI, 68 percent mentioned heterosexual intercourse, 40 percent reported lack of personal hygiene and 56 percent mentioned homosexual intercourse.

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, Meghalaya, 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						
25-34	55.7	60.3	37.0	5.6	10.7	151
35-44	60.2	73.1	39.3	3.4	5.1	201
45+	50.1	68.0	42.7	1.3	10.6	131
Residence						
Rural	41.3	59.8	39.6	7.0	15.9	243
Urban	70.1	76.0	39.6	0.2	0.8	249
Education						
Non-literate	(19.5)	(31.7)	(14.6)	(7.3)	(46.3)	31
0-9@ years	51.5	57.2	29.5	0.3	11.3	160
10 years and above	61.5	78.2	47.2	4.0	3.7	302
Religion						
Hindu	82.0	62.2	27.3	0.0	6.5	103
Muslim	(25.0)	(46.4)	(53.6)	(3.6)	(14.3)	40
Christian	51.1	71.8	47.3	5.1	8.0	321
Caste/tribe#						
Scheduled caste	(45.1)	(68.4)	(45.1)	(3.7)	(10.0)	35
Scheduled tribe	50.8	69.2	43.0	4.6	9.0	358
Other	86.7	63.1	19.3	0.0	0.8	88
Standard of living index						
Low	48.9	54.4	32.2	6.3	13.2	202
Medium	55.9	68.2	38.4	3.4	6.9	130
High	64.6	84.9	49.7	0.4	3.0	161
Total	55.9	68.0	39.6	3.6	8.2	493

Note: @ Literate men with no years of schooling are also included. # Total figure may not add to N due to do not know and missing cases. Total includes 10 cases of age <25 were not shown separately. Total include No Religion 13 and Other religion 16 and Other backward class 10 were not shown separately.

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 including 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 reported 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 the presence of others. In spite of intensive training of the investigators, the respondents might have hesitated in reporting the symptoms of RTI/STI. What gets reported in the survey may not have given the exact prevalence, but may give at least the lower limit.

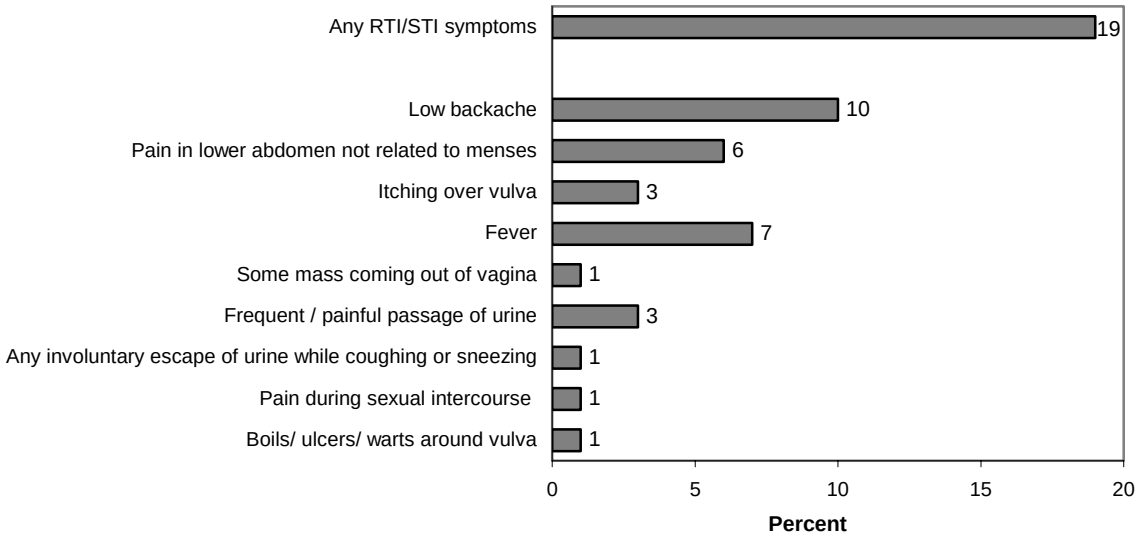
Table 8.5 and Figure 8.2 show that more than one-third of currently married women (19 percent) reported at least one RTI/STI problem. The problems reported by women were 'low backache' (10 percent), 'pain in lower abdomen' (6 percent), 'itching over vulva' (three percent), fever (seven percent) and 'frequent / painful passage of urine' (three percent). Other symptoms of reproductive health reported by women were less than two percent. Women reporting various symptoms of RTI/STI are little higher in urban areas compared to rural areas.

Table 8.5 SYMPTOMS OF RTI/STI AMONG WOMEN

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

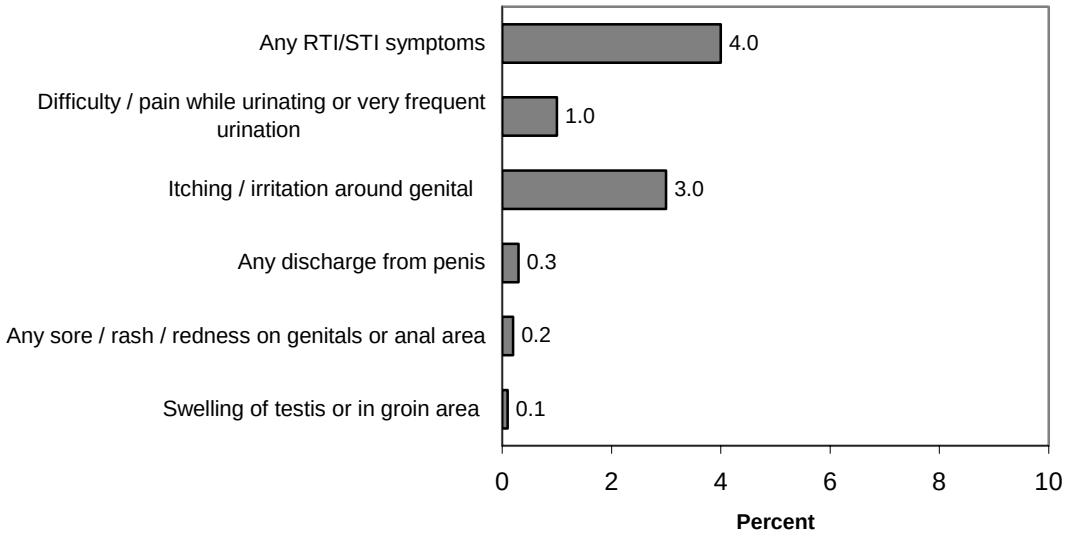
Symptoms	Total	Residence	
		Rural	Urban
Percentage of women reported any RTI/STI symptoms	19.0	17.7	22.9
Symptoms			
Itching over vulva	2.5	2.0	4.0
Boils/ ulcers/ warts around vulva	0.7	0.2	2.1
Pain in lower abdomen not related to menses	5.7	4.9	8.3
Low backache	10.4	9.0	14.6
Pain during sexual intercourse	0.7	0.6	1.2
Bleeding after sexual intercourse	0.3	0.2	0.6
Swelling in the groin	0.4	0.4	0.5
Frequent / painful passage of urine	2.6	2.9	1.6
Fever	6.9	7.2	5.9
Some mass coming out of vagina	1.1	0.4	3.0
Any involuntary escape of urine while coughing or sneezing	0.9	0.3	3.0
Swelling / lump in breast	0.2	0.2	0.2
Number of women	4,952	3,761	1,191

Figure: 8.2
Symptoms of RTI/STI among Women



Meghalaya, DLHS-RCH,2002-04

Figure: 8.3
Symptoms of RTI/STI among Husbands



Meghalaya, DLHS-RCH,2002-04

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. Four percent of men reported experiencing at least one symptom of RTI/STI problem in the last three months preceding the survey. The prevalence of reproductive health problems is higher among rural men (5 percent) than among urban men (2 percent). The 'itching / irritation around genital' (three percent), while other problems are less than one percent.

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, Meghalaya, 2002-04

Symptoms and treatment	Total	Residence	
		Rural	Urban
Percentage of men reported any RTI/STI symptoms	4.1	4.7	2.1
Symptoms			
Any discharge from penis	0.3	0.3	0.2
Any sore / rash / redness on genitals or anal area	0.2	0.2	0.0
Difficulty / pain while urinating or very frequent urination	0.6	0.7	0.3
Swelling of testis or in groin area	0.1	0.1	0.0
Itching / irritation around genital	3.2	3.7	1.6
Number of men	4,455	3,374	1,081
Percentage of men sought treatment for any RTI/STI	9.7	7.2	27.9
Number of men[1]	182	160	22
Percentage sought treatment at health facility[2]			
Government health facility[3]	*	*	*
Primary health centre	*	*	*
Sub centre	*	*	*
Private health facility[4]	*	*	*
ISM[5] facility	*	*	*
Chemist/ medical shop	*	*	*
Other	*	*	*
Percentage obtained treatment from[2]			
Doctor	*	*	*
Male health worker	*	*	*
Traditional healer	*	*	*
Relative/friends	*	*	*
ISM practitioner	*	*	*
Home remedy	*	*	*
Chemist medical shop	*	*	*
Other	*	*	*
Number of men[6]	18	12	6

Note: [1] Based on men with any symptoms of RTI/STI. [2] Percentage may add more than 100.0 due to multiple responses and based on who sought treatment. [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. [6] Based on who sought treatment for RTI/STI. * Percentage not shown based on few cases.

Among men who reported reproductive health problems, 10 percent of them sought treatment. Higher percentage of men sought treatment for RTI/STI in urban areas (28 percent) compared to rural areas (7 percent).

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 reported sufferings. Table 8.7 shows the asymptotic prevalence of vaginal discharge among currently married women in Meghalaya during the three months preceding the survey according to residence. One percent of the women reported problems related to vaginal discharge. The prevalence of vaginal discharge problem is relatively higher among urban women (2 percent) than among rural women (one percent).

Table 8.7 ABNORMAL VAGINAL DISCHARGE

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

		Residence	
Symptoms and treatment	Total	Rural	Urban
Percentage of women reported abnormal vaginal discharge	1.2	0.9	2.1
Number of women	4,952	3,761	1,191
Percentage of women sought treatment for vaginal discharge	34.1	(32.2)	(34.0)
Number of women[1]	61	35	25
Percentage sought treatment at health facility [2]			
Government health facility[3]	*	*	*
Primary health centre	*	*	*
Sub centre	*	*	*
Private health facility[4]	*	*	*
ISM[5] facility	*	*	*
Home remedy	*	*	*
Other	*	*	*
Percent distribution of women who obtained treatment from [2]			
Doctor	*	*	*
ANM/nurse/midwife/LHV	*	*	*
Other health professionals[6]	*	*	*
Other	*	*	*
Total percent	100.0	100.0	100.0
Number of women	21	12	8

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, 34 percent went for treatment and marginal difference is found between women in urban areas (33 percent) and their rural counterparts (32 percent).

8.3 Menstruation Related Problems

Table 8.8 shows the percentage of women who had menstrual problems and who sought treatment during the three months preceding the survey. The Table shows that around 4 percent women in Meghalaya had menstrual problems and the figures are 4 percent and 5 percent in the rural and urban areas respectively.

Table 8.8 MENSTRUATION RELATED PROBLEMS

Percentage of currently married women aged 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, Meghalaya, 2002-04

Symptoms and treatment	Total	Residence	
		Rural	Urban
Percentage of women with any menstruation related problem	4.2	4.1	4.7
Symptoms			
No period	6.6	3.8	(2.1)
Painful period	50.5	53.5	(63.8)
Frequent or short period	10.9	11.4	(10.6)
Delayed period	32.2	29.9	(23.4)
Prolonged bleeding	1.4	1.1	(10.6)
Excessive bleeding	15.1	9.6	(10.6)
Continuous bleeding	5.4	2.1	(2.1)
Scanty bleeding	23.5	14.1	(19.1)
Inter-menstrual bleeding	0.9	1.2	(0.0)
Number of women[1]	159	114	45
Percentage of women sought treatment who had any menstruation related problems	26.4	27.7	23.3
Percentage sought treatment at health facility[6]			
Government health facility[2]	(55.4)	(62.5)	*
Primary health centre	(21.4)	(30.0)	*
Sub centre	(3.6)	(5.0)	*
Private health facility[3]	(46.7)	(35.0)	*
Other	(3.6)	(2.5)	*
Percentage of women obtained treatment from[6]			
Doctor	(92.9)	(92.5)	*
ANM/nurse/midwife/LHV	(5.4)	(3.5)	*
Other health professionals[5]	(1.8)	(2.5)	*
Other	(1.8)	(0.0)	*
Number of women	42	32	11

Note: [1] Based on women who reported any menstruation 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.
( ) Based on less than 50 cases. * Percentage not shown based on few cases.

The symptoms of menstruation related problems reported by women were painful period (51 percent), delayed period (32 percent), scanty bleeding (24 percent), excessive bleeding (fifteen percent) and frequent or short period (11 percent). Among the women who had menstrual problems, 26 percent sought treatment in the state, and the figures for urban and rural areas are 23 percent and 28 percent respectively. More than half of the women sought treatment at a government health facility and 47 percent sought treatment at a private facility. Majority of the women, both in rural and urban areas went to a doctor for treatment (93 percent).

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 symptoms of RTIs/STIs among women are lowest in East Garo Hills districts (three percent) and highest in South Garo Hills and West Garo Hills (26 percent each). The problems related to abnormal vaginal discharge are less than four percent in all the districts of Meghalaya.

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, Meghalaya, 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
East Garo Hills	2.5	0.2	34.6	1.2	0.0
East Khasi Hills	17.7	1.1	35.4	0.9	42.6
Jaintia Hills	18.0	1.0	33.8	0.2	0.0
Ri Bhoi	17.2	3.7	34.9	4.7	53.2
South Garo Hills	25.6	1.5	20.3	7.9	1.5
West Garo Hills	25.7	0.3	0.0	9.4	0.0
West Khasi Hills	17.8	2.7	41.0	4.2	10.7
Meghalaya	19.0	1.2	34.1	4.1	9.7

In comparison to women, fewer men from all districts of Meghalaya reported symptoms of RTIs/STIs. Men from Jaintia Hills (less than one percent) reported the lowest prevalence of symptoms of RTIs/STIs while South Garo Hills (9 percent) reported the highest prevalence.

The percentage of women who have sought treatment for RTIs (abnormal vaginal discharge) ranges from 20 percent in South Garo Hills to 41 percent in West Khasi Hills and men who have sought treatment ranges from two percent in South Garo Hills to 53 percent in Ri Bhoi.

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 transmission.

8.5.1 Knowledge of HIV/AIDS

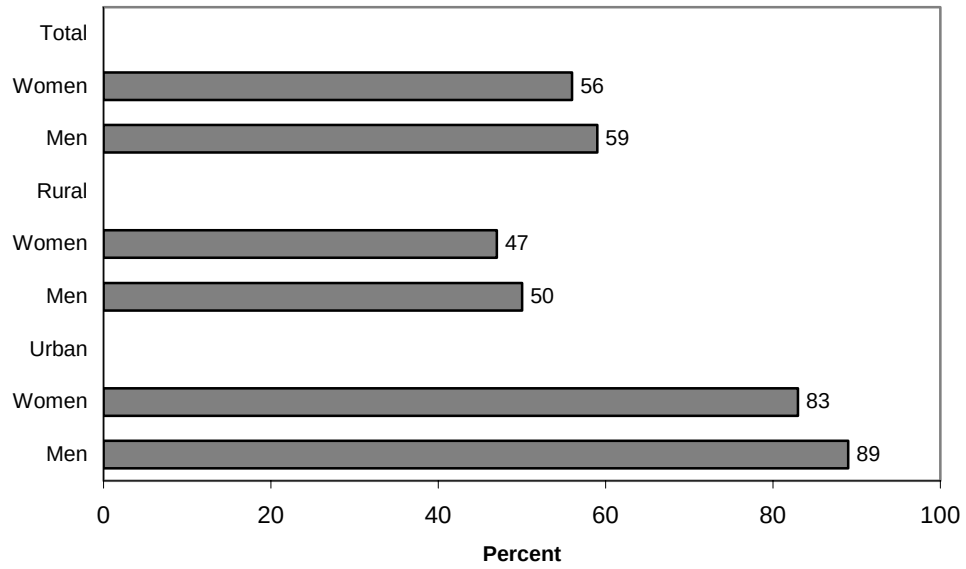
Table 8.10 shows the percentage of women who had heard about HIV/AIDS by some selected background characteristics. Fifty-six percent of currently married women in Meghalaya have heard of HIV/AIDS.

Knowledge of HIV/AIDS is lower among rural women, non-literate women, Christian women, women belonging to Scheduled Tribes, women from households with a low standard of living and younger women. Eighty-three percent of urban women had heard about HIV/AIDS compared to 47 percent of rural women. Knowledge of HIV/AIDS steadily increased with increase in educational level and household standard of living. Around 35 percent of non-literate women had heard of HIV/AIDS against 97 percent of women who had completed 10 or more years of schooling. Similarly, 43 percent of women with a low standard of living had heard of HIV/AIDS against 93 percent of women with a high standard of living. Except younger women (below the age of 20), more than 50 percent of the women from other age groups have knowledge of HIV/AIDS. Christian women (55 percent) were less aware of HIV/AIDS compared to Hindu women (67 percent). Women from Other Backward Class (67 percent) and other caste (74 percent) category were more knowledgeable about of HIV/AIDS than women belonging to Scheduled Caste (58 percent) and Scheduled Tribe (54 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 various sources of information about HIV/AIDS are relatives/friends (54 percent), television (50 percent), radio (48 percent), newspapers, books or magazines (33 percent) and slogans or pamphlets, posters or wall hoardings (26 percent). Only eight percent of the women reported that a health worker had informed them about HIV/AIDS and another 11 percent of the women received information of HIV/AIDS from a doctor.

Table 8.11 shows the percentage of husbands of currently married women who had heard about HIV/AIDS. In Meghalaya, the proportion of men who had heard about HIV/AIDS is higher than that of women. Fifty- nine percent of men had heard of HIV/AIDS as compared to 56 percent of women (Figure 8.4).

Figure: 8.4
Awareness of HIV/AIDS by Sex and Residence



Meghalaya, DLHS-RCH,2002-04

About 89 percent of urban men had heard about HIV/AIDS as compared to 50 percent of rural men. Knowledge of HIV/AIDS is lower among men below 25 years of age. Awareness of HIV/AIDS is lower among non-literate men, Christian men, men from Scheduled Tribes and men who belong to households with a low standard of living. Thirty-three percent of non-literate men had heard of HIV/AIDS, which goes upto 98 percent of men who had completed 10 or more years of schooling.

Table 8.11 also shows the percentage of husbands of currently married women who were aware of HIV/AIDS by different sources. As reported, the most prominent source of information of HIV/AIDS was radio and television (58 and 50 percent respectively) followed by relatives/friends (49 percent). Other important sources of HIV/AIDS are the newspapers, books or magazines (42 percent) and slogans or pamphlets, posters or wall hoardings (35 percent). Eight percent of men reported that a doctor had informed them about HIV/AIDS and six percent men had received information of HIV/AIDS from a health worker.

Table 8.10 SOURCE OF KNOWLEDGE ABOUT HIV/AIDS AMONG WOMEN

Percentage of currently married women aged 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, Meghalaya, 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	29.9	148	(43.9)	(31.8)	(27.3)	(9.1)	(7.6)	(16.7)	(7.6)	(1.5)	(51.5)	(1.5)	44
20-24	51.2	729	52.6	42.1	32.2	26.6	12.9	9.7	4.6	3.4	44.7	2.5	374
25-29	57.7	1,088	46.0	47.9	33.1	26.4	9.7	7.8	2.5	4.0	55.1	1.0	627
30-34	54.7	1,071	43.3	43.3	33.2	27.6	10.8	5.9	1.6	2.4	58.2	0.9	586
35-39	60.7	1,160	47.9	58.8	33.6	30.5	10.6	8.8	2.5	3.3	56.5	0.6	704
40-44	55.6	755	52.2	56.7	34.7	19.6	11.6	7.1	2.4	4.9	52.1	0.7	420
Residence													
Rural	47.0	3,761	51.2	28.6	24.1	28.7	9.7	10.0	2.4	4.4	55.9	0.6	1767
Urban	83.0	1,191	41.6	87.7	49.3	22.2	12.9	4.2	3.2	1.8	51.2	1.8	988
Education													
Non-literate	35.3	2,256	49.8	23.4	9.8	29.0	6.7	6.9	0.4	3.9	58.9	0.2	796
0-9@ years	63.3	1,929	43.9	46.0	30.9	22.1	10.1	9.2	2.4	3.5	54.0	0.8	1221
10 and above	96.5	761	51.7	85.0	62.2	30.5	16.3	6.9	5.8	2.8	49.5	2.4	734
Religion													
Hindu	67.2	713	37.7	59.9	24.1	38.4	11.5	2.0	0.8	2.0	63.8	1.0	479
Muslim	57.2	134	51.5	59.3	29.7	34.9	16.2	6.8	2.5	3.6	74.9	0.0	76
Christian	54.6	3,588	49.3	48.5	36.1	24.7	11.3	9.2	3.2	4.0	53.1	1.1	1958
No Religion	62.5	150	67.3	52.8	21.2	11.6	0.0	0.1	0.4	0.0	21.1	0.9	94
Other	40.4	368	45.5	28.3	33.2	14.7	6.5	16.4	4.0	2.8	48.7	0.7	149
Caste/tribe[#]													
Scheduled caste	57.5	150	54.2	58.6	34.3	46.3	21.0	4.5	2.2	3.2	72.7	2.2	86
Scheduled tribe	54.3	4,418	49.5	45.3	32.7	27.8	10.3	8.5	2.8	3.4	54.8	1.0	2398
Other backward class	67.4	116	46.6	88.7	29.5	0.5	0.5	0.0	0.5	0.0	23.8	0.0	78
Other	74.4	240	24.6	88.0	40.9	9.8	18.6	5.3	3.2	6.1	53.0	1.6	179
Standard of living index													
Low	42.6	3,287	44.8	23.2	21.0	27.8	8.0	9.0	1.8	4.3	61.0	0.7	1401
Medium	76.8	1,196	55.1	69.3	37.8	19.1	11.5	6.5	3.0	2.5	46.0	1.8	918
High	93.1	469	41.8	94.5	62.3	37.1	18.4	7.7	5.2	2.9	49.8	0.7	436
Total	55.6	4,952	47.8	49.8	33.2	26.4	10.8	7.9	2.7	3.5	54.2	1.1	2756

Note: Total includes 6 cases missing information on education are 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.

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, Meghalaya, 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	49.1	200	46.8	31.0	42.2	28.7	5.2	6.0	0.9	5.5	64.7	0.0	98
25-34	59.3	1,518	60.5	45.1	40.4	33.4	6.1	6.6	3.0	3.5	45.8	0.3	901
35-44	60.5	1,784	54.8	54.7	44.4	33.5	8.7	6.5	1.9	5.9	47.8	0.4	1,079
45+	58.9	953	62.4	53.3	40.3	41.4	8.3	4.1	2.4	4.9	52.6	1.1	561
Residence													
Rural	49.7	3,374	63.5	29.0	34.3	37.5	5.8	7.8	1.6	5.7	56.3	0.4	1,676
Urban	89.1	1,081	48.6	87.2	55.5	30.6	10.8	2.8	3.6	3.3	35.7	0.7	963
Education													
Non-literate	33.1	1,678	67.0	15.9	12.6	34.1	2.0	5.4	0.6	3.4	58.2	0.5	556
0-9@ years	61.1	1,717	56.1	35.9	37.1	31.4	3.9	6.3	1.6	6.2	52.4	0.3	1,049
10 and above	97.7	1,058	55.3	83.3	62.9	39.0	14.3	5.9	4.1	4.2	40.0	0.7	1,033
Religion													
Hindu	76.2	648	62.2	55.0	37.4	53.8	6.0	0.1	0.7	2.7	54.0	0.3	494
Muslim	65.7	122	57.9	68.4	50.4	56.0	22.5	4.1	3.1	7.7	65.5	3.3	80
Christian	57.6	3,220	56.4	49.2	44.3	32.1	8.0	7.4	3.0	5.7	48.0	0.5	1,856
No Religion	72.7	144	76.0	42.8	8.2	2.8	3.6	0.4	0.0	0.0	26.4	0.8	105
Other	32.6	321	49.8	39.8	52.4	13.0	0.8	15.2	0.6	1.3	47.5	0.0	105
Caste/tribe#													
Scheduled caste	68.0	135	65.5	66.4	49.7	59.7	25.0	2.7	2.2	9.2	60.1	1.8	92
Scheduled tribe	57.3	3,964	59.0	45.6	40.4	35.7	6.9	6.8	2.5	4.9	51.2	0.5	2,270
Other backward class	82.3	105	60.7	75.6	33.1	26.2	7.7	0.0	0.4	0.0	10.2	0.0	87
Other	78.6	224	43.2	89.0	62.4	16.7	7.5	0.5	1.3	3.7	28.5	0.0	176
Standard of living index													
Low	46.1	2,938	61.2	23.0	31.5	36.0	3.9	6.0	2.2	5.5	58.5	0.5	1,353
Medium	80.8	1,086	59.3	71.9	45.2	29.8	8.9	6.8	1.7	3.5	36.5	0.4	877
High	94.9	431	44.9	93.8	70.2	42.7	17.2	4.0	4.2	5.3	42.7	0.9	409
Total	59.2	4,455	58.1	50.2	42.1	34.9	7.6	6.0	2.3	4.8	48.8	0.5	2,639

Note: Table includes 2 men with 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 don't and missing cases.

About five percent of them reported that they were informed through community meetings and two percent received such information from a school teacher. On the whole the dominant sources of information in rural areas are radio (64 percent) and interpersonal communication between relatives and friends (56 percent).

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, 29 percent of them did not know about the mode of transmission.

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

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

Background characteristic	Percentage by knowledge of mode of transmission							Number of women who have heard of HIV/AIDS
	Homo sexual intercourse	Hetero sexual intercourse	Needles/ blade/ skin puncture	Mother to child	Transfusion of infected blood	Other	Do not know	
Age								
15-19	(18.2)	(51.5)	(15.2)	(13.6)	(10.6)	(0.0)	(43.9)	44
20-24	35.7	63.9	15.8	11.8	15.6	0.9	24.5	374
25-29	35.5	53.9	15.1	13.2	13.5	4.8	30.6	627
30-34	35.9	48.3	17.7	12.4	18.0	4.1	35.2	586
35-39	49.4	53.9	22.6	18.4	23.0	3.5	27.5	704
40-44	45.9	61.8	15.4	12.9	17.4	2.1	24.3	420
Residence								
Rural	24.3	49.9	11.0	8.6	12.0	4.1	40.0	1,767
Urban	69.2	64.5	29.5	23.7	27.8	1.8	10.1	988
Education								
Non-literate	17.2	35.5	4.6	3.1	3.0	5.1	51.9	796
0-9@ years	40.3	56.0	15.8	12.3	16.6	2.1	28.1	1,221
10 years and above	65.8	75.4	34.7	28.8	35.3	3.0	6.8	734
Religion								
Hindu	35.5	30.4	21.1	18.6	21.5	5.3	48.8	479
Muslim	26.1	36.3	12.0	12.5	8.4	15.6	44.5	76
Christian	42.6	62.5	17.6	13.5	17.7	2.0	24.5	1,958
No Religion	63.3	58.0	9.4	6.6	3.5	5.0	10.4	94
Other	20.1	46.3	14.2	11.8	18.1	5.8	33.8	149
Caste/tribe#								
Scheduled caste	33.2	45.2	28.1	35.7	36.0	11.7	35.9	86
Scheduled tribe	38.6	57.0	15.3	11.9	15.2	2.9	29.8	2,398
Other backward class	69.8	55.1	42.2	29.6	43.5	0.0	11.6	78
Other	58.5	34.6	32.0	25.7	29.5	6.8	27.7	179
Standard of living index								
Low	19.8	42.4	7.3	6.0	8.5	4.1	45.8	1,401
Medium	57.9	65.5	25.2	20.7	23.9	2.2	15.0	918
High	69.7	74.3	34.6	25.8	33.7	3.0	6.4	436
Total	40.4	55.2	17.6	14.0	17.7	3.3	29.3	2,756

Note: Total includes 4 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.

This proportion is relatively higher among rural women, younger women, non-literate women, Hindu women, women from Scheduled Caste and women with a low standard of living. For instance forty percent of the rural women do not know about the mode of transmission of HIV/AIDS compared to 10 percent of urban women.

Among women who reported different ways of transmission of HIV/AIDS, a large proportion (55 percent) mentioned heterosexual intercourse and 40 percent about homosexual intercourse as a mode of its transmission. Other modes reported by women were transmission through needle or blade or skin puncture and transfusion of infected blood (18 percent each) and mother to child (14 percent).

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, Meghalaya, 2002-04

Background characteristic	Percentage by knowledge of mode of transmission							Number of men who have heard of HIV/AIDS
	Homosexual intercourse	Heterosexual intercourse	Needles/ blade/ skin puncture	Mother to child	Transfusion of infected blood	Other	Do not know	
Age								
<25	24.7	59.5	20.0	9.8	16.8	0.0	24.6	98
25-34	42.8	67.8	19.0	11.7	16.7	2.5	17.5	901
35-44	49.9	64.3	26.8	14.7	22.7	3.8	16.2	1,079
45+	40.9	62.4	20.8	11.0	19.4	3.7	24.5	561
Residence								
Rural	33.0	60.7	12.9	11.6	17.8	3.8	27.4	1,676
Urban	64.8	72.3	39.4	14.7	23.1	2.1	3.7	963
Education								
Non-literate	21.7	41.5	3.2	3.0	4.9	3.4	47.3	556
0-9@ years	37.4	62.7	17.0	9.5	15.7	2.3	19.7	1,049
10 years and above	64.3	79.8	38.8	21.2	31.7	3.9	2.4	1,033
Religion								
Hindu	34.5	44.2	25.4	11.2	15.4	2.3	42.8	494
Muslim	28.5	51.2	25.9	14.7	14.4	9.8	29.9	80
Christian	48.8	69.9	22.7	13.5	21.7	3.1	12.9	1,856
No Religion	63.4	72.0	13.6	1.4	9.7	1.9	6.8	105
Other	12.4	77.7	15.1	15.5	18.9	4.9	11.2	105
Caste/tribe#								
Scheduled caste	37.2	54.7	28.8	27.6	28.7	11.7	35.2	92
Scheduled tribe	44.2	64.8	20.0	12.3	19.5	3.1	19.5	2,270
Other backward class	23.3	59.3	45.0	8.1	12.9	0.0	11.6	87
Other	66.2	72.9	42.4	12.6	21.3	1.1	3.8	176
Standard of living index								
Low	30.5	55.0	11.9	8.5	14.4	2.8	31.4	1,353
Medium	56.2	71.2	30.2	14.4	20.9	2.6	6.8	877
High	66.5	84.3	41.7	22.9	34.8	5.6	2.4	409
Total	44.6	64.9	22.6	12.7	19.7	3.2	18.7	2,639

Note: Total includes 2 with 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.

Table 8.13 presents the knowledge about mode of transmission of HIV/AIDS among men. Nineteen 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, Hindu men, men from Scheduled Castes and men from households with a low standard of living. Among those who reported ways of transmission of HIV/AIDS, 65 percent of them mentioned heterosexual intercourse as a mode of transmission. Other modes reported by men are homosexual intercourse (45 percent), transmission through needle or blade or skin puncture (23 percent), transfusion of infected blood (20 percent) and mother to child (13 percent).

8.5.3 How to avoid HIV/AIDS

All the male and female respondents were asked as to how HIV/AIDS could be prevented. 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 were aware of HIV/AIDS, thirty-three percent of them did not know how to avoid becoming infected by HIV/AIDS. This percentage is much higher among rural women (46 percent) than among urban women (9 percent). The percentage of women who did not know of any way to avoid getting infection decreases with increasing levels of education and household standard of living. Fifty- eight percent of non-literate women reported that they did not know of any way to avoid infection as compared to 6 percent of women who had completed ten or more years of schooling. Similarly, 52 percent of women with low a standard of living stated that they did not know of any way to avoid infection as compared to 7 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 Hindu and Muslim women, Scheduled CasteTribe women and surprisingly among younger women.

Several possible modes of its prevention however, were mentioned. As high as 66 percent of women said that “sex with only one partner” is the best possible way to avoid it. Other ways to prevent HIV/AIDS mentioned by women were ‘checking blood prior to transfusion’ (14 percent), ‘sterilizing needles and syringe before injecting’ (13 percent), using condoms correctly during each sexual intercourse (16 percent) and 9 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 are proportionally higher in urban women, among literates 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, 22 percent of them did not know of any method to avoid infection compared to 33 percent women in the state.

Again, a higher proportion of men reported that ‘sex with only one partner’ is the way to avoid HIV/AIDS (75 percent) and this was the most commonly reported way in all the groups.

Table 8.14 KNOWLEDGE ABOUT AVOIDANCE OF HIV/AIDS AMONG WOMEN

Among currently married women aged 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, Meghalaya, 2002-04

Background characteristic	Percentage reported HIV/AIDS can be avoided by:							Number of women
	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	
Age								
15-19	(48.5)	(18.2)	(4.5)	(10.6)	(0.0)	(1.5)	(48.5)	44
20-24	69.5	13.0	12.1	11.9	8.6	0.1	29.8	374
25-29	62.0	13.0	12.2	10.8	6.4	1.6	35.8	627
30-34	61.2	14.2	12.2	12.0	7.5	1.4	38.2	586
35-39	70.0	23.3	18.8	17.9	12.3	2.1	29.6	704
40-44	73.8	16.5	14.9	12.7	9.4	2.1	25.4	420
Residence								
Rural	53.2	10.7	9.1	8.7	6.3	1.3	45.7	1,767
Urban	89.9	26.5	23.1	21.3	13.4	1.9	9.2	988
Education								
Non-literate	42.4	3.0	2.4	2.2	1.4	0.0	57.5	796
0-9@ years	66.2	17.0	13.5	12.6	8.1	2.1	32.3	1,221
10 years and above	92.6	29.9	27.9	26.3	18.1	2.3	6.2	734
Religion								
Hindu	48.6	16.2	17.1	11.7	10.3	1.4	50.6	479
Muslim	48.4	21.3	6.7	8.5	5.9	0.6	51.1	76
Christian	70.9	17.7	14.4	14.8	9.0	1.8	27.9	1,958
No Religion	84.6	0.2	6.3	6.7	0.1	0.1	15.4	94
Other	62.1	6.5	9.8	4.5	8.0	0.0	37.9	149
Caste/tribe[#]								
Scheduled caste	56.2	37.9	27.9	27.1	29.6	2.2	43.8	86
Scheduled tribe	65.4	15.6	12.6	12.8	8.0	1.5	33.6	2,398
Other backward class	85.1	29.9	23.3	5.8	11.3	0.0	10.7	78
Other	76.9	9.3	22.2	15.5	9.3	2.8	23.1	179
Standard of living index								
Low	46.9	7.6	5.7	5.1	3.5	0.8	52.2	1,401
Medium	83.9	23.6	19.3	19.4	12.0	1.7	14.8	918
High	92.3	29.0	30.1	26.2	19.0	3.6	6.8	436
Total	66.4	16.4	14.1	13.2	8.8	1.5	32.6	2,756

Note: Total includes 5 cases missing information on education 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.

Other ways to prevent HIV/AIDS mentioned by men include 'checking blood prior to transfusion (15 percent), 'sterilizing needles and syringes before injecting' (13 percent), 'using a condom correctly during each sexual intercourse' (27 percent) and avoiding pregnancy when having HIV/AIDS (ten percent). All the specific ways to avoid becoming infected by HIV/AIDS reported are proportionally higher in urban areas than in rural areas, and among men who belong to 'other caste' category, men with a high level of education and men with a high standard of living.

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, Meghalaya, 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 men
Age								
<25	66.9	19.5	8.2	5.8	4.1	0.0	27.2	98
25-34	75.0	23.4	13.8	11.6	9.5	0.4	22.3	901
35-44	79.3	32.9	17.5	15.1	10.5	2.6	18.6	1,079
45+	69.6	23.4	13.7	13.0	9.5	1.3	27.7	561
Residence								
Rural	65.1	18.9	12.9	10.3	8.5	1.4	32.7	1,676
Urban	93.1	41.4	18.8	18.1	11.8	1.6	3.6	963
Education								
Non-literate	43.4	4.5	1.3	1.0	2.0	0.1	56.1	556
0-9@ years	73.5	23.3	12.3	10.1	6.5	1.3	23.1	1,049
10 years and above	94.3	43.1	25.3	22.7	17.1	2.4	2.9	1,033
Religion								
Hindu	55.2	26.1	11.2	10.7	10.9	1.8	42.7	494
Muslim	70.3	30.3	8.1	10.7	20.4	3.6	30.0	80
Christian	80.5	29.4	17.3	14.7	9.3	1.5	16.4	1,856
No Religion	74.5	1.8	0.7	3.6	3.6	0.0	25.5	105
Other	83.1	14.6	13.2	7.9	9.5	0.0	16.9	105
Caste/tribe[#]								
Scheduled caste	64.4	42.1	25.1	24.8	31.1	4.4	35.9	92
Scheduled tribe	73.6	25.5	15.2	12.9	8.8	1.3	23.6	2,270
Other backward class	86.6	33.9	7.5	7.9	12.3	3.4	9.7	87
Other	96.0	37.3	11.3	12.1	9.6	1.1	2.6	176
Standard of living index								
Low	60.2	16.5	10.1	7.9	5.9	0.7	38.0	1,353
Medium	89.2	35.5	17.4	15.3	10.7	2.4	7.1	877
High	95.4	44.2	26.7	25.4	20.0	1.9	1.9	409
Total	75.3	27.1	15.1	13.1	9.7	1.5	22.1	2,639

Note: Total includes 2 men with 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.

8.5.4 Misconception about HIV/AIDS

People generally have misconceptions about the transmission of HIV/AIDS, such as 'shaking hands with a person having AIDS', hugging and kissing with them, sharing their clothes or sharing 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 shows the percentage of women with misconceptions about spreading HIV/AIDS through specific ways by selected background characteristics. Overall, not more than 10 percent of the women had misconceptions on the possible ways of HIV/AIDS transmission.

However, within this limit some variations across socio-economic and cultural background may be seen. For example mosquitoes, fleas or bedbug bites is commonly reported as the way of getting HIV/AIDS infection by women but this response is higher among urban areas (12 percent) than in rural areas (ten percent). Other misconceptions about the spreading of HIV/AIDS were kissing (12 percent), 'stepping on urine/stool' (eight percent), hugging (seven percent) and 'sharing utensils' (six percent each), 'sharing clothes' (seven percent) and 'shaking hands' (five percent).

Table 8.16 MISCONCEPTION ABOUT TRANSMISSION OF HIV/AIDS AMONG WOMEN

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

Background characteristic	Percentage having misconception about the transmission of HIV/AIDS							Number of women
	Shaking hands	Hugging	Kissing	Sharing clothes	Sharing eating utensils	Stepping on Urine / stool	Mosquito, flea, or bedbugs biting	
Residence								
Rural	5.5	7.9	11.9	6.9	6.3	8.0	10.2	1,767
Urban	3.6	4.5	10.8	7.2	6.5	9.0	11.9	988
Education								
Non-literate	3.2	4.9	6.0	4.4	4.1	4.2	5.8	796
0-9@ years	7.5	10.3	18.2	10.4	9.5	12.9	16.0	1,221
10 years and above	2.0	2.6	6.4	4.2	3.7	5.5	7.3	734
Religion								
Hindu	1.6	2.0	3.2	2.6	1.8	1.9	2.2	479
Muslim	-	1.1	3.3	1.2	1.2	2.3	6.5	76
Christian	6.0	8.4	14.4	8.7	8.2	11.0	13.6	1,958
No Religion	3.7	3.7	3.8	3.7	3.7	3.7	3.7	94
Other	2.6	4.0	9.7	4.2	1.4	0.8	7.5	149
Caste/tribe#								
Scheduled caste	-	-	4.2	1.1	1.1	1.1	4.8	86
Scheduled tribe	5.4	7.6	12.8	7.9	7.2	9.4	11.8	2,398
Other backward class	-	0.1	-	-	-	0.4	3.6	78
Other	0.2	0.2	1.4	0.8	0.7	1.8	4.1	179
Standard of living index								
Low	6.1	8.7	13.0	8.1	7.6	9.0	10.5	1,401
Medium	4.1	5.2	9.7	5.8	4.9	8.3	11.8	918
High	2.1	3.4	10.8	6.1	5.5	6.4	9.5	436
Total	4.8	6.7	11.5	7.0	6.4	8.4	10.8	2,756

Note: Total includes 4 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.

Table 8.17 presents the percentage of men with misconceptions about the spreading of HIV/AIDS through specific ways by selected background characteristics. Again, just like the women, men in all the groups reported that HIV/AIDS is transmitted through kissing and insect bites, mosquitoes, through fleas or bedbugs (12 percent and 11 percent respectively) of men in Meghalaya felt so. The percentage who reported that HIV/AIDS could be transmitted through biting by mosquitoes or flees or bedbugs was higher among urban men (11 percent) than among rural men (10 percent). Other misconceptions about the spread of HIV/AIDS are 'stepping on urine/stool' (8 percent), 'sharing clothes' (6 percent), sharing eating utensils (7 percent), 'hugging' (5 percent) and 'shaking hands' (three percent).

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, Meghalaya, 2002-04

Background characteristic	Percentage having misconception about the transmission of HIV/AIDS							Number of men
	Shaking hands	Hugging	Kissing	Sharing clothes	Sharing eating utensils	Stepping on Urine / stool	Mosquito, flea, or bedbugs biting	
Residence								
Rural	4.3	6.8	11.9	6.6	7.5	7.9	10.4	1,676
Urban	1.8	2.7	11.2	4.3	6.0	6.8	11.2	963
Education								
Non-literate	2.1	3.7	4.8	3.6	3.3	3.9	4.5	556
0-9@ years	6.1	8.4	16.1	8.7	10.3	11.1	13.8	1,049
10 years and above	1.4	3.0	10.9	3.8	5.5	5.8	10.9	1,033
Religion								
Hindu	1.0	1.5	3.6	1.9	0.9	1.5	4.1	494
Muslim	0.4	4.5	6.1	3.9	6.6	3.1	5.2	80
Christian	4.2	6.2	14.5	7.0	8.9	9.8	13.0	1,856
No Religion	0.4	0.4	0.4	0.0	0.0	0.0	3.6	105
Other	5.8	13.1	15.3	8.3	8.4	6.1	12.0	105
Caste/tribe#								
Scheduled caste	0.2	0.2	3.0	0.2	2.6	2.6	4.0	92
Scheduled tribe	3.8	5.9	12.9	6.4	7.7	8.4	11.3	2,270
Other backward class	0.8	0.8	1.7	1.1	1.7	0.8	6.0	87
Other	0.4	0.4	3.3	0.5	0.6	1.5	6.3	176
Standard of living index								
Low	4.6	6.7	12.4	6.8	8.6	8.9	10.1	1,353
Medium	2.8	4.6	11.4	5.5	5.0	6.0	11.8	877
High	1.0	2.4	9.9	2.6	5.7	6.1	10.3	409
Total	3.4	5.3	11.7	5.7	7.0	7.5	10.7	2,639

Note: Total includes 2 men with missing information on education were not shown separately. # Total figure may not add to N due to don't and missing cases. @ Literate men with no year of schooling are also included.

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. Five percent women and three percent men have the notion that HIV/AIDS is curable, whereas 54 percent women and 64 percent men responded that the disease is not curable. Forty-one percent women and 34 percent men do not have any idea regarding the curability of the disease. This clearly indicates that the awareness level about the curability of HIV/AIDS does not vary much between men and women. However, some variations do exist among both men and women in terms of their socio-economic and cultural background. It can be safely asserted from the figures that both men and women of urban area, having high level of education and from households of high standard of living show better knowledge of 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, Meghalaya, 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	3.6	45.5	50.9	1,767	2.3	54.3	43.2	1,676
Urban	8.7	68.1	23.2	988	3.6	79.8	16.5	963
Education								
Non-literate	2.3	31.5	66.1	796	1.8	26.4	71.5	556
0-9@ years	6.6	53.6	39.8	1,221	3.3	59.1	37.6	1,049
10 years and above	6.7	78.0	15.4	734	2.8	88.2	8.9	1,033
Religion								
Hindu	4.6	38.0	57.4	479	2.2	44.5	53.2	494
Muslim	0.0	50.5	49.5	76	3.9	59.0	37.1	80
Christian	5.6	58.4	36.0	1,958	2.8	70.0	27.0	1,856
No Religion	11.4	31.7	56.9	94	5.9	37.1	57.0	105
Other	4.2	56.2	39.6	149	0.9	69.9	29.2	105
Caste/tribe#								
Scheduled caste	0.6	65.0	34.4	86	0.0	65.0	35.0	92
Scheduled tribe	4.9	52.9	42.2	2,398	2.8	62.2	34.9	2,270
Other backward class	17.3	58.0	24.7	78	1.1	84.7	14.2	87
Other	9.5	56.1	34.5	179	4.6	70.7	23.6	176
Standard of living index								
Low	4.6	40.1	55.3	1,401	2.9	47.7	49.1	1,353
Medium	6.1	63.1	30.7	918	1.4	75.7	22.9	877
High	6.5	77.0	16.5	436	5.3	90.0	4.6	409
Total	5.4	53.6	41.0	2,756	2.8	63.6	33.5	2,639

Note: Total includes 4 women and 34 men with missing information on education were not shown separately of women and men respectively. @ Literate persons with no year of schooling are also included. # Total number may not add up to N due to do not know and missing cases.

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

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.

Eight percent and 56 percent of women were aware of RTI/STI and HIV/AIDS respectively and the corresponding figures for husbands of eligible women are 11 and 59 percent respectively.

In all the districts of Meghalaya, men are much more aware of RTI/STI and HIV/AIDS than women. The highest level of awareness about RTI/STI among women was reported in South Garo Hills (25 percent) and lowest in Jaintia Hills and West Khasi Hills (two percent each). Among men also the highest level of awareness of RTI/STI was also reported in South Garo Hills (36 percent) and lowest in Jaintia Hills and West Khasi Hills districts (2 percent each).

Among women, the awareness about HIV/AIDS ranges from a highest of 70 percent in East Khasi Hills to a lowest of 37 percent in East Garo Hills district. Similarly, among men, the awareness of HIV/AIDS is highest in East Khasi Hills (72 percent) and lowest in West Khasi Hills (46 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, Meghalaya, 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
East Garo Hills	16.9	37.2	20.0	48.8
East Khasi Hills	8.5	69.7	10.2	72.1
Jaintia Hills	2.4	63.7	2.2	48.7
Ri Bhoi	10.5	48.2	8.7	57.5
South Garo Hills	25.1	58.4	36.0	66.8
West Garo Hills	10.0	59.8	17.0	68.4
West Khasi Hills	1.6	44.7	2.4	45.7
Meghalaya	8.3	55.6	11.1	59.2

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 a 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

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

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

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

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

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
BO3+	Proportion	Currently married women age 15-44 years with births in past three years

Sampling errors, Meghalaya, 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	0.171	0.008	4,952	4,952	2.372	4.8	0.155	0.188
Rural	0.120	0.007	3,761	3,761	1.928	6.1	0.105	0.134
Urban	0.335	0.024	1,191	1,191	2.990	7.1	0.288	0.381
Unmet Need (Currently Married Women age 15-44)								
Total	0.558	0.012	4,952	4,952	2.744	2.1	0.535	0.580
Rural	0.588	0.013	3,761	3,761	2.512	2.2	0.563	0.613
Urban	0.462	0.026	1,191	1,191	3.283	5.7	0.411	0.513
Received Any Antenatal Check up (last live/still birth of past 3 years)								
Total	0.546	0.015	2,625	2,439	2.334	2.8	0.516	0.576
Rural	0.489	0.017	2,102	2,018	2.188	3.4	0.456	0.521
Urban	0.821	0.032	523	421	3.004	3.9	0.758	0.885
Received 3+ Antenatal Check up (last live/still birth of past 3 years)								
Total	0.438	0.016	2,625	2,439	2.452	3.6	0.407	0.469
Rural	0.376	0.016	2,102	2,018	2.319	4.4	0.343	0.408
Urban	0.736	0.035	523	421	2.680	4.8	0.667	0.805
Institutional Delivery (last live/still birth of past 3 years)								
Total	0.309	0.016	2,625	2,439	2.855	5.1	0.278	0.340
Rural	0.212	0.015	2,102	2,019	2.763	7.1	0.183	0.242
Urban	0.771	0.029	523	420	2.048	3.8	0.714	0.829
Safe Delivery (last live/still birth of past 3 years)								
Total	0.345	0.016	2,625	2,440	2.680	4.6	0.314	0.376
Rural	0.253	0.015	2,102	2,019	2.518	6.1	0.223	0.284
Urban	0.783	0.029	523	421	2.056	3.7	0.727	0.840
Received BCG Vaccination (last and last but one living children, age 12-23 months)								
Total	0.662	0.028	857	835	3.061	4.3	0.607	0.718
Rural	0.629	0.031	688	694	2.911	5.0	0.567	0.691
Urban	0.825	0.052	169	141	3.100	6.3	0.723	0.927
Received Measles (last and last but one living children, age 12-23 months)								
Total	0.299	0.024	857	835	2.436	8.2	0.251	0.347
Rural	0.243	0.021	688	694	1.683	8.7	0.202	0.285
Urban	0.575	0.072	169	141	3.574	12.5	0.433	0.717
Birth order 3+ (birth in last three years)								
Total	0.595	0.015	2,883	2,657	2.437	2.5	0.566	0.624
Rural	0.620	0.016	2,315	2,186	2.229	2.5	0.590	0.650
Urban	0.480	0.042	568	471	3.272	8.7	0.398	0.561

Sampling errors, Meghalaya, 2002-04							
	Estimate	Sampling	Number of cases		Relative	95% Conf. Interval	
District	(R)	error (SE)	Unweighted	Weighted	Error (%)	R-1.96 SE	R+1.96 SE
Contraceptive Prevalence Rate (Currently Married Women age 15-44)							
East Garo Hill	0.117	0.013	758	758	11.1	0.091	0.143
East Khasi Hill	0.149	0.019	400	400	12.8	0.112	0.185
Jaintia Hill	0.284	0.017	790	790	6.0	0.251	0.318
Ri Bhoi	0.160	0.015	797	797	9.4	0.130	0.189
South Garo Hil	0.182	0.020	708	708	11.0	0.144	0.221
West Garo Hill	0.262	0.023	666	666	8.8	0.216	0.307
West Khasi Hill	0.208	0.016	833	833	7.7	0.177	0.240

Sampling errors, Meghalaya, 2002-04							
	Estimate	Sampling	Number of cases		Relative	95% Conf. Interval	
District	(R)	error (SE)	Unweighted	Weighted	Error (%)	R-1.96 SE	R+1.96 SE
Unmet Need (Currently Married Women age 15-44)							
East Garo Hill	0.623	0.019	758	758	3.0	0.586	0.661
East Khasi Hill	0.577	0.027	400	400	4.7	0.525	0.630
Jaintia Hill	0.411	0.018	790	790	4.4	0.375	0.448
Ri Bhoi	0.568	0.021	797	797	3.7	0.527	0.609
South Garo Hil	0.432	0.024	708	708	5.6	0.385	0.479
West Garo Hill	0.599	0.028	666	666	4.7	0.544	0.654
West Khasi Hill	0.359	0.018	833	833	5.0	0.324	0.394

Sampling errors, Meghalaya, 2002-04							
	Estimate	Sampling	Number of cases		Relative	95% Conf. Interval	
District	(R)	error (SE)	Unweighted	Weighted	Error (%)	R-1.96 SE	R+1.96 SE
Received Any Antenatal Check up (last live/still birth of past 3 years)							
East Garo Hill	0.367	0.025	444	449	6.8	0.318	0.417
East Khasi Hill	0.816	0.034	160	176	4.2	0.749	0.883
Jaintia Hill	0.686	0.022	487	493	3.2	0.643	0.729
Ri Bhoi	0.613	0.026	524	547	4.2	0.563	0.663
South Garo Hil	0.302	0.038	241	252	12.6	0.227	0.376
West Garo Hill	0.216	0.044	204	194	20.4	0.128	0.303
West Khasi Hill	0.599	0.022	565	569	3.7	0.555	0.642

Sampling errors, Meghalaya, 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)							
East Garo Hill	0.278	0.024	444	449	8.6	0.232	0.325
East Khasi Hill	0.772	0.037	160	176	4.8	0.699	0.844
Jaintia Hill	0.510	0.024	487	491	4.7	0.464	0.557
Ri Bhoi	0.433	0.026	524	547	6.0	0.382	0.484
South Garo Hil	0.220	0.036	241	251	16.4	0.149	0.291
West Garo Hill	0.185	0.044	204	194	23.8	0.099	0.271
West Khasi Hill	0.393	0.022	565	569	5.6	0.350	0.437

Sampling errors, Meghalaya, 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)							
East Garo Hill	0.180	0.021	444	449	11.7	0.138	0.221
East Khasi Hill	0.733	0.039	160	176	5.3	0.658	0.809
Jaintia Hill	0.295	0.022	487	492	7.5	0.253	0.337
Ri Bhoi	0.145	0.017	524	547	11.7	0.112	0.177
South Garo Hil	0.348	0.041	241	253	11.8	0.268	0.428
West Garo Hill	0.154	0.031	204	193	20.1	0.093	0.214
West Khasi Hill	0.173	0.018	565	569	10.4	0.139	0.208

Sampling errors, Meghalaya, 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)							
East Garo Hill	0.308	0.025	444	449	8.1	0.260	0.357
East Khasi Hill	0.747	0.038	160	176	5.1	0.673	0.821
Jaintia Hill	0.327	0.022	487	492	6.7	0.284	0.371
Ri Bhoi	0.173	0.018	524	547	10.4	0.138	0.208
South Garo Hil	0.418	0.041	241	252	9.8	0.337	0.499
West Garo Hill	0.167	0.032	204	194	19.2	0.105	0.229
West Khasi Hill	0.183	0.018	565	569	9.8	0.148	0.219

Sampling errors, Meghalaya, 2002-04

District	Estimate (R)	Sampling error (SE)	Number of cases Unweighted	Number of cases Weighted	Relative Error (%)	95% Conf. Interval R-1.96 SE	95% Conf. Interval R+1.96 SE
Received BCG Vaccination (last and last but one living children, age 12-23 months)							
East Garo Hills	0.525	0.049	116	115	9.4	0.428	0.621
East Khasi Hills	0.843	0.060	50	55	7.1	0.725	0.962
Jaintia Hills	0.832	0.028	167	165	3.3	0.777	0.886
Ri Bhoi	0.813	0.029	178	181	3.6	0.756	0.870
	0.264	0.068	56	62	25.9	0.130	0.398
South Garo Hills	0.277	0.089	77	82	32.2	0.102	0.452
West Garo Hills	0.772	0.035	161	167	4.5	0.704	0.840
West Khasi Hills							

Sampling errors, Meghalaya, 2002-04

District	Estimate (R)	Sampling error (SE)	Number of cases Unweighted	Number of cases Weighted	Relative Error (%)	95% Conf. Interval R-1.96 SE	95% Conf. Interval R+1.96 SE
Received Measles (last and last but one living children, age 12-23 months)							
East Garo Hills	0.073	0.028	116	115	38.0	0.018	0.127
East Khasi Hills	0.367	0.071	50	55	19.4	0.227	0.507
Jaintia Hills	0.490	0.039	167	165	7.9	0.414	0.566
Ri Bhoi	0.389	0.041	178	181	10.6	0.307	0.470
South Garo Hills	0.219	0.064	56	62	29.1	0.094	0.343
West Garo Hills	0.100	0.031	77	82	31.0	0.039	0.161
West Khasi Hills	0.355	0.039	161	167	11.1	0.278	0.432

Sampling errors, Meghalaya, 2002-04

District	Estimate (R)	Sampling error (SE)	Number of cases Unweighted	Number of cases Weighted	Relative Error (%)	95% Conf. Interval R-1.96 SE	95% Conf. Interval R+1.96 SE
Birth order 3+ (birth in last three years)							
East Garo Hill	0.601	0.026	449	450	4.3	0.551	0.652
East Khasi Hill	0.534	0.041	169	185	7.7	0.453	0.615
Jaintia Hill	0.612	0.022	564	559	3.6	0.570	0.654
Ri Bhoi	0.602	0.023	632	651	3.8	0.557	0.646
South Garo Hil	0.518	0.046	207	224	8.9	0.428	0.609
West Garo Hill	0.510	0.052	212	203	10.2	0.408	0.611
West Khasi Hill	0.738	0.018	650	665	2.4	0.702	0.774

APPENDIX B

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