DLHS -2

TRIPURA

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, Government of India,
New Delhi – 110 011

Development & Research
Services Pvt. Ltd.
New Delhi-110029

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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 As a first step, family planning target has been withdrawn and an effort is being made to provide a package of reproductive services at different levels of health care centres.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 Tripura and covered all the districts. The findings of selected indicators of reproductive and child health services from the state of Tripura 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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We also express our sincere gratitude towards our respondent who spent their valuable time and responded to the questions patiently.

Thanks are due to all professionals and field staff who worked in very difficult conditions.

We would be failing in our duty if we do not thank our respondents who spent their valuable time with tremendous patience.

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KEY INDICATORS, TRIPURA

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

Sample size	
Households surveyed	4,300
Currently married women age 15-44	3,884
Husbands of eligible women	2,939
Characteristics of households	
Percent rural	69.7
Percent Hindu	92.7
Percent Muslim	3.3
Percent other religion (Christian)	2.4
Percent scheduled caste	19.9
Percent scheduled tribe	17.4
Percent with electricity	76.8
Percent with flush toilet	26.3
Percent with no toilet facility	1.9
Percent living in *Kachcha* houses	63.6
Percent living in *Pucca* houses	11.6
Percent with low standard of living	38.2
Percent with high standard of living	20.4
Percent with iodized salt (15+ppm)	44.5
Characteristics of currently married women age 15-44 years	
Percent below age 30	41.7
Percent with age at first cohabitation below age 18.	37.7
Percent illiterate	21.4
Percent having 10 or more years of schooling	25.8
Percent with illiterate husband	17.4
Percent with husband 10+ years of schooling	35.6
Marriage	
Mean age at marriage for boys	27.3
Mean age marriage for girls	20.9
Percent of boys married below age 21	14.0
Percent of girls married below age 18	21.6
Fertility	
Mean children ever born women age 40-44 years	2.5
Percent of births of order 3 and above[1]	17.9
Current use of family planning method	
Any method	54.4
Any modern method	42.7
Pill	16.4
IUD	0.8
Condom	10.9
Female sterilization	13.6
Male sterilization	0.6
Any traditional method	11.7
Rhythm/safe period	9.0
Withdrawal	2.6
Unmet need for family planning	
Percent with unmet need for spacing	6.6
Percent with unmet need for limiting	18.5
Percent with total unmet need	25.1
Maternal care[2]	
Percent of women received antenatal check-ups	82.2
Antenatal check-up at home	0.6
Antenatal check-up in first trimester	61.1
Three or more visit for ANC	66.1
Two or more tetanus toxoid injections	68.3
Adequate Iron folic acid tablets/syrup[3]	15.9
Full antenatal check-up[4]	13.6
Delivery characteristics[2]	
Delivery at home	37.5
Delivery at government health institutions	57.4
Delivery at private health institutions	5.0
Delivery attendant by skilled persons[5]	65.1
Child health	
Percent of children whose mother squeezed out milk from her breast[6]	35.9
Percent of children[7] with diarrhoea[8] who received ORS	53.7
Percent of children[7] with pneumonia[8] who were taken to a health facility or provider	65.5
Percent of children who received vaccinations[9]	
BCG	75.8
DPT (3 injections)	51.2
Polio (3 drops)	42.5
Measles	49.7
All vaccinations[10]	31.3
No vaccination at all.	8.6
Percentage of women who had	
Pregnancy complication[2]	38.8
Delivery complication[2]	55.1
Post delivery complication[2]	30.2
Symptoms of RTI/STI	31.2
Problems of vaginal discharge	5.3
Menstruation related problem	9.3
Awareness of RTI/STI and HIV/AIDS	
Percent of women who have heard of RTI/STI	16.7
Percent of women who have heard of HIV/AIDS	57.1
Utilization of government health services	
Antenatal care	56.3
Treatment for pregnancy complication	70.1
Treatment for post-delivery complication	63.9
Treatment for vaginal discharge	46.1
Treatment for children with diarrhoea	74.7
Treatment for children with pneumonia	55.1
Quality of family planning services	
Percent non-users ever advised to adopt the family planning method	8.7
Percent users told about side effects of method	30.3
Percent users who received follow-up services	5.6
Characteristics of husband of eligible women	
Percent of husband knowing NSV	10.7
Percent of men who have heard of RTI/STI	25.8
Percent of men who have heard of HIV/AIDS	68.2
Percentage who had any symptoms of RTI/STI	9.5
Sought treatment for RTI/STI	33.0

[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 Tripura, DRS was entrusted the work of carrying out of the survey**.** The survey for Phase-1 of the DLHS covering 2 districts of the state during Phase-1.Dhalai (rural), west Tripura districts of the state was conducted during November 2002. The Survey for Phase-2 covering the remaining North Tripura, South Tripura and Dhalai (Urban) districts of the state was carried out during August 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 4,300 households in Tripura. From these households, 3,884 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 2,939 husbands of eligible women were interviewed.

Of the total households interviewed in Tripura, nearly 30 percent were from urban areas. There were 93 percent Hindu households, 3 percent Muslim and two percent were Christians. Thirty-seven percent of the households belonged to either scheduled castes or scheduled tribes. Sixty-four percent of the households lived in *Kachcha* and about 25 percent are in Semi-*pacca* and 12 percent are in *pucca* houses. The majority of the households belonged to medium economic status (42 percent in low SLI)

About 82 percent of population aged seven and above are literate. Percent literate among females is 79 where as it is 85 percent for male. Proportion of non-literate is much higher among the older cohort compared to the younger ones. Nearly 22 percent of eligible women in the state are non-literate, and 11 percent have completed 10 or more years of schooling. In Tripura the level of literacy among the eligible women and their husbands are low. As regards distribution of non-literate women, lesser proportion of younger women's below age 30 are illiterate compared to older women age 30 and above, but in case of non-literate husbands across age is more or less uniform, though it is marginally more for husbands below 30 years.

The reporting of the marriages during three yeas prior to survey gives the mean age at marriage among the boys and girls in the state as 27.3 and 20.9 years respectively. Fourteen percent of boys and 22 percent of girls in the state got married before attaining the minimum legal age at marriage of 21 and 18 years respectively. In two districts, Dhalai and West Tripura about 25 percent and 28 percent of boys, respectively, got married below the legal minimum age at marriage. Except in Dhalai, in the other three districts nearly 16 to 29 percent of the girls got married below the legal minimum age at marriage.

A little less than half of the households (45 percent) use cooking salt that is iodized at the recommended level of 15 parts per million or higher level of iodine content whereas 2 percent of

households used salts that are not iodized at all. Lowest proportion of households (0.2 percent) in West Tripura is using non-iodized salt whereas in North Tripura the highest proportion of households (5 percent) used non-iodized salt. While more than 66 percent of households in North Tripura, consume adequately iodized salt, only 20 percent of households in Dhalai do so.

On an average, women on the verge of completion of reproductive period have given birth to 2.5 children. The completed fertility in the states varies from the lowest of 2 children ever born per women in a West Tripura to the highest of 3.2 children in North Tripura.

The share of births of order 3 and above in the total births that occurred three years prior to survey is 18 percent. In most of the district, proportion of higher order births is quite high, ranging from the lowest of around 7 percent in West Tripura, to the highest of about 29 percent in. North Tripura.

The data collected on the utilization of ANC services for the women who had their last live/ still birth during three years prior to survey shows that the ANC coverage in the state is high as 82 percent of the women received at least one ante-natal care during pregnancy. About less than one percent of the women during their pregnancy were visited by health worker at their residence for providing ANC. Twenty-three percent of the women visited private health facilities and 56 percent received ANC from government health facilities. The percent of women who got some kind of ANC during pregnancy range between 76 percent in Dhalai to 89 percent in West Tripura. In 3 districts out of 4, 80 percent or more women got some antenatal care.

Though 82 percent of the women in Tripura received ANC, only 71, 65 and 57 percent women had check-up of weight, blood pressure and abdomen respectively. Sixteen percent women received Iron and Folic Acid (IFA) tablets and 68 percent got at least two 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 14 percent of women.

Minimum three ANC and timing of first check up is crucial for maternal and child care. In Tripura nearly 61 percent of women got ANC in the first trimester and nearly 14 percent had minimum three antenatal check-ups. An extent of ANC in first trimester varies from minimum of 59 percent in Dhalai to the maximum of 66 percent in West Tripura. In North Tripura, only 64 percent of women had minimum three ANC whereas in West Tripura more than 70 percent women had got minimum three ANC.

Nearly 62 percent of the total deliveries in Tripura were conducted in the health institutions; 16 percentages point up from RCH Round I. The majority of the institutional deliveries were conducted in government institutions (57 percent of total deliveries) as against in private institution 5 percent of total deliveries. Seven percent of the total deliveries, that took place at home, were assisted by midwifery trained persons i.e. doctor/ nurse and ANM. So in all, 65 percent of the deliveries, slightly up from RCH Round I (48 percent), in the state were assisted by skilled personnel**.** The extent of institutional deliveries varies from the highest of 80 percent in Dhalai to the lowest of 52 percent in North Tripura. In all the districts, comparatively higher proportion of the deliveries took place in government health institutions. Safe deliveries were on the similar pattern in all the districts. The percent of the institutional deliveries increases

substantially with women's education and economic status, though the variation in the institutional deliveries by women's education is much conspicuous than that by women's economic status.

In Tripura, 39, 55 and 30 percent of the women experienced pregnancy, delivery and post delivery complications respectively. About 54 percent of the women sought treatment for the pregnancy and 48 percent for the post-delivery complications. The pregnancy complication varies from the lowest of 22 percent in Dhalai to the highest of 54 percent in West Tripura. The incidence of all the three types of complications seems to be linked with each other. In the districts where the incidence of pregnancy complications is high, the incidence of delivery and post-delivery complications is also high.

In most of the districts and the state as a whole, the practice of breast-feeding is almost universal. The practice of initiation of breastfeeding within two hours of birth of the child is also common. In Tripura, 53 percent women started breastfeeding the child within two hours of birth and nearly 22 percent started after one day of birth. There is great deal of variation in the pattern of breastfeeding across the districts. In West Tripura district only 36 percent of the women breastfed the child within two hours of birth. In North Tripura district, the percentage is highest (68 percent).

In Tripura 76, 51, 43 and 50 percent of the children received the BCG vaccine, three doses of DPT, Polio and measles vaccine respectively. There is 26 percentage points drop from BCG to measles. It means that large number of children that have contact with services providers are missed out of subsequent services. The complete schedule of immunization including BCG, three doses of DPT and Polio each and measles was received by 31 percent of the children, whereas 9 percent of the children did not receive a single vaccination under routine programme. About 24 percent of the children received supplementation of at least one dose of vitamin A and only 6 percent children received IFA tablets/liquid for iron supplementation.

The extent of complete immunization consisting of BCG, three injections of DPT, three doses of Polio and measles is the lowest in Dhalai and West Tripura (5 percent each) and highest in North Tripura (54 percent).

In Tripura, 80 percent of the women were aware of diarrhoea management and 62 percent were aware of Oral Rehydration Salt (ORS). During the two-week period prior to survey, children of 8 percent of the women suffered from diarrhoea. And 54 percent women treated diarrhoea among children by giving ORS. In comparison to awareness about diarrhoea management, the awareness about danger sings of pneumonia is quite low. Only 21 percent of the women reported awareness about danger sings of pneumonia. Twenty-six percent of the women reported that their children suffered from cough, cold and difficulty in breathing in two-week period prior to survey and 66 percent sought treatment.

The knowledge of family planning methods is universal in all districts of Tripura, with over 93 percent women reporting knowledge of one method or the other. However, the knowledge of any spacing method is marginally low, but the proportion *per se* is quite high (78 percent). The knowledge of any modern methods is also universal in all the districts, though the

knowledge of all modern methods is only 18 percent. The proportion knowing all modern methods (males and females' sterilization, IUD, oral pills and condom) varies from about 5 percent in Dhalai to 41 percent in South Tripura.

In DLHS, knowledge about No-scalpel vasectomy has been asked to husbands of eligible women. About eleven percent of the husbands were aware of no-scalpel vasectomy in the state. The proportion of husbands knowing No-scalpel vasectomy varies from about 2 percent in West Tripura to 35 percent in North Tripura.

The contraceptive prevalence rate (any methods) in the state is 54 percent, 17 percentage point up from RCH Round I, comprising of prevalence of about 43 percent of modern methods and 12 percent of traditional methods. Fourteen percent of the couples adopted sterilization. The percent user of the two male methods sterilization and condom is only 12 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 South Tripura (83 percent) followed by West Tripura (53 percent) and lowest is in Dhalai (16 percent).

In Tripura, a total of 25 percent of women are found to have unmet need for family planning, with 19 percent for limiting and 7 percent for spacing. There is inter-district differences in the pattern of unmet need. The total unmet need varies from 7 percent in South Tripura to 67 percent in Dhalai.

Only 3 percent of the women in the state reported that either ANM/LHV or health worker visited them at their residence at least once in the past three months. Less than one third of women who were visited by ANM felt that ANM had given them sufficient time to discuss health-related matters.In all the districts, 2 percent to 4 percent of the women reported the visit of ANM/LHV to their residence.

It has been observed that in three months period prior to survey, 15 percent of the eligible women who were required to consult health facility visited any of the government health facilities. Very small proportion of the women who visited the health facility rated facility as excellent. On the other hand, nearly 53 percent of the women who did not visit the government health facility reported government health facility "non-conveniently located" or "time is not suited" as reason.

The district level variation in the utilization of the government health facilities ranges from 36 percent in North Tripura to 91 percent in Dhalai. A large percentage of women visited to private health facilities (43 percent), ranges from 9 percent in Dhalai, to 63 percent in North Tripura.

In Tripura 18 and 57 percent of women are aware of RTI/STI and HIV/AIDS respectively. The corresponding level of awareness among husbands of eligible women is 26 and 68 percent. The percent of women who are aware of RTI/STI and HIV/AIDS is lowest in Dhalai 14 and 32 percent respectively to highest in North Tripura and South Tripua 24 and 80 percent. Similarly awareness level of husbands of eligible women of RTI/STI and HIV/AIDS are lowest in South Tripura (16 percent) and in Dhalai (36 percent) to highest in North Tripura (33 percent)

and in South Tripura (88 percent) respectively. Out of 4, in 2 districts the awareness of HIV/AIDS is below state figure for women and in 2 districts for husbands of eligible women.

About 31 percent of women and 10 percent of husbands of eligible women in the state reported having at least one symptoms of RTI/STI. In most of the districts the reported prevalence of RTI/STI among husbands was low. The prevalence of RTI/STI is lowest in South Tripura (26 percent) for women and in Dhalai (4 percent) for husbands to highest in North Tripura (38 percent) for women and in South Tripura (11 percent) for husbands. About 5 percent of women reported vaginal discharge with low in West Tripura (less than one percent) to highest in North and South Tripura (11 percent each). Thirty-seven percent of women sought treatment for vaginal discharge problem and 33 percent of husbands sought treatment with at least one symptoms of RTI/STI. It may be noted that in 50 percent of districts higher proportion of women compared to husbands sought treatment for their reproductive health problems.

CHAPTER I

INTRODUCTION

1.1 Background and Objectives of the Survey

The Reproductive and Child Health (RCH) programme 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 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 then 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 were selected in each district in case the percent urban was low. The target sample size in each district was set at 1,000 complete residential households from 40 selected PSUs. In 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: Households Questionnaire and Women's Questionnaire and added three more Questionnaires i.e., Husband's Questionnaire, Village Questionnaire and Health Questionnaire, in consultation with MoHFW and World Bank. These Questionnaires were discussed and finalized in training cum workshop organized at IIPS during the first week of November 2001.

These modified questionnaires had been canvassed of 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.

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

The Details of questionnaires are as follows:

Household Questionnaire: The household questionnaire lists all usual residents in each sample household including visitors who stayed in the household the night before the interview. For each listed household member, the survey collected basic information on age, sex, and marital status, relationship to the head of the household, education and the prevalence /incidence of tuberculosis, blindness and malaria. Information was also collected on the main source of drinking water, type of toilet facility, source of lighting, type of cooking fuel, religion and caste of household head and ownership of other durable goods in the household. In addition, a test was conducted to assess 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 collect 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 to government health facilities by eligible woman.

Section VI: Awareness about RTI/STI and HIV/AIDS: In this section the information were collected about women's knowledge of RTI/STI about awareness, Source of knowledge, aware of mode of transmission, curability, symptoms and treatment seeking behaviour. About HIV/AIDS; Awareness, Source of knowledge, aware 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 these information desires 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. The information collected were on weight of children age 0–71 months old and the blood sample to assess the haemoglobin levels of children age 0–71 months old, adolescents 10–19 years old and pregnant eligible women. This information is useful for assessing the levels of nutrition prevailing in the population and prevalence of anaemia among women, adolescent girls and children.

Village Questionnaire: A village questionnaire is also added in this round of DLHS. The information collected on the availability and accessibility of various facilities in the village especially on accessibility 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, 2 districts Dhalai (rural), West Tripra were covered from November 2002 to December 2002 and remaining 2 districts North Tripura , South Tripura Dhalai (urban), districts were covered during Phase II from August 2004 to September 2004.

During Round II, a total of 4300 thousand households were covered. From these surveyed households, 3883 currently married women (aged 15-44 years) and 2939 husbands of eligible women were interviewed.

1.6 Data processing

All the five types of completed questionnaires were brought to the headquarter 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 have been used and these for a particular district are based on three selection probabilities f_1^i, f_2^i and f_3^i pertaining to i^{th} PSU of the district. These probabilities are defined as

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

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

Where, n_r is the number of rural PSU to be selected in a district, H_i refers to the number of household in the i^{th} PSU and $H = \sum H_i$, 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 household's response rates. A total of 4,300 households are interviewed, about 2,995 were rural. The overall household response rate – the number of households interviewed per 100 occupied households – was 100 percent. The household response rate was almost 100 percent in every district.

Table 1.1 NUMBER OF HOUSEHOLDS INTERVIEWED

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

State/District	Month and year of field work		Number of households interviewed			Response rate
	From	To	Total	Rural	Urban	
State	-	-	4,300	2,995	1,305	99.8
State-phase I	11/2002	12/2002	-	-	-	-
State-phase II	08/2004	09/2004	-	-	-	-
Dhalai (Rural)	11/2002	12/2002	1097	763	334	100.0
Dhalai (Urban)	09/2004	09/2004	-	-	-	-
West Tripura	11/2002	12/2002	1081	752	329	100.0
North Tripura	08/2004	09/2004	1078	749	329	99.5
South Tripura	08/2004	09/2004	1044	731	313	99.5

Note: Table based on unweighted cases.

In the interviewed households, interviews were completed with 3,883 currently married women who are the usual member of the household or stayed night before the household interview and 2,939 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 95 and 76 percent respectively. The variation in the women's response rate by district was highest in West Tripura (99 percent) and lowest in North Tripura (91 percent), similarly husband's response rate was found to be highest in Dhalai (87 percent) and lowest in South Tripura (66 percent).

Table 1.2 NUMBER OF WOMEN AND HUSBANDS INTERVIEWED

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

State/District	Number of women interviewed			Response rate	Number of husbands interviewed			Response rate
	Total	Rural	Urban		Total	Rural	Urban	
State	3,883	2,740	1,143	94.5	2,939	2,055	884	76.4
Dhalai	990	714	276	95.3	876	636	240	87.2
West Tripura	1,008	701	307	98.7	795	559	236	81.4
North Tripura	919	654	265	91.1	625	423	202	69.8
South Tripura	966	671	295	93.0	643	437	206	66.4

Note: Table based on unweighted cases.

1.9 Basic Demographic Profile of the State

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

The state of Tripura, located in the North Eastern part of the country with 3.20 million populations in 2001 Tripura is one of the seven states in the north eastern part of India Tripura ranks second highest in terms population among the North-eastern states of India after Assam The state ranks 17th position in terms of density of population, although, it is the 2nd most smallest State in the entire country after Goa. The geographical location of the state is quite unique It is bounded on the north, west, south and south-east by Bangladesh whereas in the east it has a common boundary with Assam and Mizoram It is fact that in days of yore the boundaries of Tripura was extended up to the Bay of Bengal. The state is consisted of 4 districts, 15 sub-districts, 38 Blocks and 862 villages (Revenue). The urban areas of the state comprise 23 towns during 2001. Agaratala is the capital of the state.

According to 2001 census the population of Tripura is 3.20 million out of which 1.64 millions are males and 1.54 millions are females. The rural and urban breakup of the population shows that 82.9 percent of the population was enumerated in rural areas and 17.1 percent in urban areas. Keeping pace with the national average, Tripura has recorded a sharp decline in the decadal growth rate from 34.3 per cent in 1981-91 to 15.74 percent during 1991-2001. Among the districts, North Tripura with 26.5 percent has the highest decadal growth rate whereas South Tripura with 6.8 percent has the lowest decadal growth rate of total population during 1991-2001.

Percentage of both Scheduled Caste and Schedule Tribe population have experienced a marginal decline during 1991-2001 and the proportion of schedule caste and scheduled tribe population in total population of 2001 are 17.4 percent and 31.1 percent respectively. Highest proportion of Schedule Caste population has been recorded in West Tripura district (19.3 per cent) and that of Schedule Tribe in Dhalai (54.0 per cent) and North Tripura has the lowest proportion of Schedule Caste (14.0 per cent) and that of Schedule Tribe in West Tripura (25.3 per cent). With a population density of 304 per sq. km., Tripura ranks 18 among the states and union territories in India and this figure is almost three times higher than the all India density of 325 persons per square km. Among the districts, West Tripura has the highest density (511 person/sq. km.) and Dhalai has the lowest (131 person/sq. km).

The sex ratio of the total population in the state has improved since 1991 Census from 944 to 948 per 1000 males. North Tripura and West Tripura has recorded the highest sex ratio (951) and surprisingly Dhalai has the lowest (935) within the state.

The literacy rate in the state has improved from 60.44 percent in 1991 to 59.9 percent in 2001 .The literacy rate in urban (83.09 percent) is considerably higher in the state than that in rural areas (56.08 percent). Among the districts, West Tripura are has the highest literacy rate of 67.5 percent. Dhalai has the lowest literacy rate of 51.4 percent. The male literacy for the state is 70.1 percent and the female literacy rate is 56.0 percent. Both the rates have increased from 1991 census to 2001 census.

Table 1.3 BASIC DEMOGRAPHIC INDICATOR

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

India/state/district	Population (in thousand)	Percentage urban	Percentage decadal growth rate[1]	Sex ratio[2]	Percentage literate 7+		
					Male	Female	Persons
India	1,028,737	28.0	21.5	933	75.3	53.7	64.8
State	3,199	17.1	15.74	948	81.0	64.9	73.2
Dhalai	307	6.1	10.9	935	70.2	51.0	60.9
West Tripura	1,532	26.7	18.5	951	84.6	69.6	77.3
North Tripura	590	10.6	26.5	951	80.0	65.6	73.0
South Tripura	767	7.1	6.8	945	78.9	60.3	69.9

Source: Primary Census Abstract, Series 20, Census of India, 2001. [1] 1991-2001, [2] Females per 184.6,000 males.

CHAPTER II

BACKGROUND CHARACTERISTICS OF HOUSEHOLD

This chapter provides a socio-economic and demographic profile of households interviewed in the District Level Household Survey-Reproductive and Child Health. Facilities and services such as Health, Education and Communication available in the representative sampled village are also presented here. The *de facto* 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 19,025 persons of whom 69 percent lived in the rural areas of Tripura. The state of Tripura depicts a young and growing population with 28 percent below the age of 15 years (Figure 2.1). There are more children below 15 years recorded in rural areas (30 percent) compared to those in urban areas (26 percent).

Figure 2.1
Age-sex pyramid

Tripura, DLHS-RCH, 2002-04

The overall sex ratio of 108 males per 100 females is recorded for the *de facto* population. The sex ratio is the same, 108 in favour of males in urban areas as well as in rural areas.

Table 2.1 HOUSEHOLD POPULATION BY AGE AND SEX

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

	Total			Rural			Urban		
Age	Total	Male	Female	Total	Male	Female	Total	Male	Female
<1	1.2	1.1	1.2	1.4	1.3	1.4	0.8	0.7	0.8
1-4	6.8	6.6	6.9	7.1	6.9	7.3	6.0	6.0	6.0
5-9	10.1	9.7	10.4	10.6	10.7	10.6	8.8	7.7	10.0
10-14	10.3	11.1	9.5	10.4	11.0	9.8	10.0	11.3	8.7
15-19	9.8	9.2	10.5	10.0	9.3	10.9	9.4	9.1	9.7
20-24	9.5	7.9	11.1	9.2	8.0	10.6	10.0	7.9	12.3
25-29	10.4	8.6	12.4	10.3	8.3	12.4	10.8	9.4	12.4
30-34	9.0	8.7	9.4	9.0	8.9	9.2	9.0	8.1	10.0
35-39	9.9	10.2	9.6	9.4	9.9	8.9	11.2	10.9	11.4
40-44	8.5	8.7	8.4	8.3	8.4	8.1	9.2	9.2	9.1
45-49	4.6	6.5	2.5	4.5	6.2	2.6	4.8	7.1	2.2
50-54	3.1	4.0	2.1	3.2	4.1	2.2	3.0	3.8	2.1
55-59	2.0	2.3	1.6	1.8	2.2	1.5	2.3	2.5	2.1
60-64	1.8	2.1	1.5	1.8	1.9	1.8	1.8	2.5	0.9
65-69	1.3	1.4	1.1	1.3	1.3	1.2	1.3	1.7	0.9
70-74	0.7	0.8	0.7	0.8	0.9	0.7	0.5	0.5	0.6
75-79	0.4	0.5	0.3	0.4	0.4	0.3	0.5	0.6	0.4
80+	0.5	0.6	0.5	0.5	0.4	0.6	0.6	0.9	0.3
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of Persons	19,025	9,888	9,136	13,213	6,865	6,347	5,812	3,023	2,789
Sex ratio[1]	108	NA	NA	108	NA	NA	108	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 19,025 households surveyed in the state of Tripura 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. More than 96 percent of household heads are male invariant of place of resident while only 4 percent are female-headed households. Nearly 82 percent of household heads are in the 30-59 years age group. The median age of household heads is 41 years for the state as a whole, and it is the same in rural areas as well as urban areas (41 years). About 11 percent of household heads are younger than 30 years and 8 percent are at least 60 years old. Majority of the household heads are Hindu (93 percent), 3 percent are Muslim, and 2 percent each are Christian and Buddhist. Hindus constitute a higher proportion of population in urban areas (96 percent) than in rural areas (91 percent). Only 3 percent of the rural households are Muslim, and the same percentage is of urban 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, Tripura, 2002-04

Characteristic	Total	Residence	
		Rural	Urban
Sex of the household head			
Male	95.9	96.9	93.5
Female	4.1	3.1	6.5
Age of the household head			
< 30	10.6	10.3	11.3
30-44	53.7	54.2	52.5
45-59	27.9	27.6	28.6
60+	7.8	7.8	7.7
Median age of the household head	40.9	40.7	41.3
Religion of the household head			
Hindu	92.7	91.4	95.7
Muslim	3.3	3.3	3.4
Christian	2.4	3.0	1.0
Sikh	0.1	0.1	0.0
Buddhist	1.5	2.2	0.0
No Religion	0.0	0.0	0.0
Other	0.0	0.0	0.0
Caste/tribe of the household head			
Scheduled caste	19.9	20.9	17.6
Scheduled tribe	17.4	22.2	6.1
Other backward class	22.2	23.4	19.5
Other #	39.9	33.0	55.7
Don't know	0.7	0.5	1.1
Number of usual members			
1	0.3	0.2	0.3
2	4.9	5.2	4.2
3	25.0	24.4	26.4
4	31.6	31.6	31.4
5	20.8	20.5	21.5
6	9.3	9.7	8.5
7	4.0	4.0	4.1
8	2.5	2.7	2.0
9+	1.6	1.6	1.6
Mean household size	4.3	4.4	4.3
Total percent	100.0	100.0	100.0
Number of households	4,300	2,995	1,305

Note: Table is based on the *de jure* population. # Higher caste (Not belonging to a scheduled caste, a scheduled tribe and an other backward class).

Twenty percent of the households in Tripura belong to schedule caste, 17 percent to schedule tribe, 22 percent to other backward classes while the remaining 40 percent of the households are headed by other castes not under schedule caste, schedule tribe and other backward classes. About 21 percent of the household head belong to schedule caste and 22 percent to scheduled tribe in rural areas and the corresponding percentage in urban areas is18 and 6 percent respectively. The overall state average household size is 4.3 persons. The rural-urban differential in average household size is 4.4 in rural areas and 4.3 in urban areas.

2.3 Educational Level

The educational background of Tripura presented in this section is based on *de facto* 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, Tripura, 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			
					Total				
					Male				
7-9	23.1	2.3	73.3	0.4	0.0	0.0	0.8	100.0	554
10-14	6.7	0.3	55.1	33.8	3.9	0.0	0.3	100.0	1,093
15-19	8.0	0.7	17.7	24.6	34.7	14.2	0.0	100.0	910
20-29	8.2	0.3	13.9	19.4	28.3	29.7	0.2	100.0	1,637
30-39	12.8	0.2	14.6	17.6	29.8	25.1	0.0	100.0	1,866
40-49	21.0	0.2	18.8	17.1	21.7	21.0	0.1	100.0	1,497
50+	32.8	1.3	17.7	15.6	17.0	15.2	0.4	100.0	1,150
Total	15.4	0.5	24.8	19.3	21.8	18.1	0.2	100.0	8,707
					Female				
7-9	22.2	2.1	74.1	0.7	0.0	0.0	0.9	100.0	579
10-14	7.9	0.1	57.2	33.0	1.4	0.0	0.4	100.0	867
15-19	10.0	0.2	17.3	26.5	34.4	11.6	0.0	100.0	964
20-29	12.8	0.5	17.4	20.2	29.6	19.3	0.2	100.0	2,148
30-39	21.1	0.4	19.3	21.1	24.3	13.8	0.0	100.0	1,742
40-49	38.5	1.2	17.8	16.4	16.5	9.4	0.2	100.0	994
50+	53.7	3.2	23.3	8.8	5.7	5.3	0.0	100.0	724
Total	21.3	0.8	26.8	19.6	20.1	11.2	0.2	100.0	8,017
					Total				
7-9	22.6	2.2	73.7	0.6	0.0	0.0	0.9	100.0	1,132
10-14	7.2	0.2	56.0	33.5	2.8	0.0	0.3	100.0	1,960
15-19	9.1	0.4	17.5	25.6	34.5	12.9	0.0	100.0	1,873
20-29	10.8	0.4	15.9	19.9	29.1	23.8	0.2	100.0	3,785
30-39	16.8	0.3	16.9	19.3	27.1	19.6	0.0	100.0	3,609
40-49	28.0	0.6	18.4	16.8	19.6	16.4	0.2	100.0	2,491
50+	40.9	2.0	19.9	12.9	12.6	11.4	0.3	100.0	1,875
Total	18.2	0.7	25.7	19.4	21.0	14.8	0.2	100.0	16,725

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

Table 2.3 indicates that, 18 percent of the population aged seven and above are non-literate. The proportion of non-literates is 21 percent for females compared to 15 percent for males. The proportion of non-literate is much higher among the older cohorts compared to the younger ones. For both males and females, going by expected trend, the level of literacy is higher in the younger population than in the older age groups with the exception of the youngest age group of 7-9 years (Figure 2.2).

Figure 2.2
Percentage Literate by Age and Sex

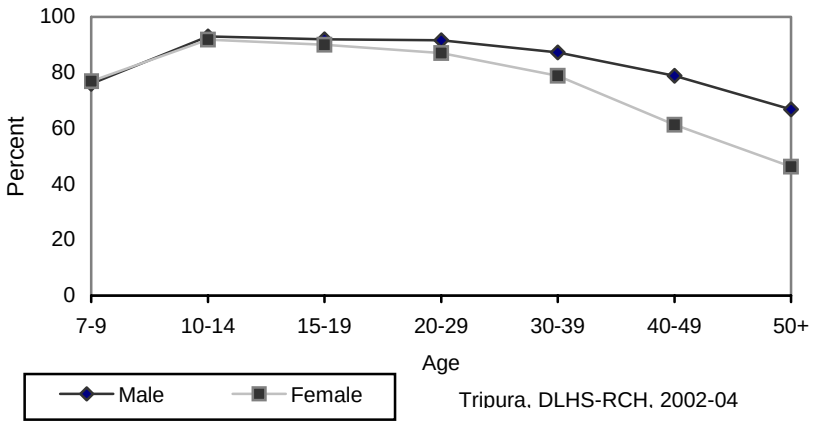


Table 2.3 EDUCATIONAL LEVEL OF THE HOUSEHOLD POPULATION

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

Age	Non-literate	Literate but no schooling	Years of schooling: 1-5	6-8	9-10	11 or more	Missing	Total Percent	Number of persons
				RURAL					
				Male					
7-9	30.0	1.8	67.8	0.2	0.0	0.0	0.2	100.0	400
10-14	7.4	0.4	58.1	31.5	2.5	0.0	0.2	100.0	752
15-19	9.2	0.9	19.3	25.6	33.6	11.4	0.0	100.0	636
20-29	9.3	0.0	16.4	22.0	30.2	22.1	0.0	100.0	1,115
30-39	15.4	0.2	17.2	20.0	28.5	18.7	0.0	100.0	1,290
40-49	27.6	0.3	21.5	18.3	18.3	13.7	0.2	100.0	1,003
50+	41.1	1.4	21.4	17.1	11.3	7.6	0.0	100.0	770
Total	18.9	0.5	27.1	20.4	20.2	12.7	0.1	100.0	5,966
				Female					
7-9	24.8	1.5	72.4	0.2	0.0	0.0	1.1	100.0	409
10-14	9.0	0.2	60.4	28.4	1.6	0.0	0.4	100.0	625
15-19	12.2	0.2	19.9	30.4	28.2	9.0	0.0	100.0	692
20-29	15.3	0.7	19.9	23.5	28.7	11.7	0.2	100.0	1,457
30-39	28.1	0.5	21.8	20.5	20.0	9.0	0.1	100.0	1,144
40-49	50.2	1.4	17.9	15.8	11.5	2.8	0.4	100.0	679
50+	61.2	4.4	22.0	7.8	2.7	1.8	0.0	100.0	522
Total	26.2	1.0	28.7	20.2	17.1	6.6	0.3	100.0	5,526
				Total					
7-9	27.3	1.7	70.1	0.2	0.0	0.0	0.7	100.0	809
10-14	8.1	0.3	59.2	30.1	2.1	0.0	0.3	100.0	1,377
15-19	10.8	0.5	19.7	28.1	30.8	10.2	0.0	100.0	1,328
20-29	12.7	0.4	18.4	22.8	29.3	16.2	0.1	100.0	2,572
30-39	21.4	0.4	19.4	20.2	24.5	14.1	0.0	100.0	2,435
40-49	36.7	0.7	20.1	17.3	15.5	9.3	0.3	100.0	1,681
50+	49.2	2.7	21.7	13.3	7.8	5.3	0.0	100.0	1,291
Total	22.4	0.8	27.9	20.3	18.7	9.8	0.2	100.0	11,493

Contd.

Around 73 percent of males and 74 percent females in this age group had 1-5 years of schooling. Nearly 25 percent of males have had education for 1-5 years. Females are also not far behind compared to their male counterparts in this category with a corresponding share of 27 percent. Lesser proportion of females are found in higher education of 9-10 years (20 percent) and 11 or more years (11 percent) compared to the males having corresponding figures of 22 percent and 18 percent respectively. Less than one percent of the total population and same for males and females 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, Tripura, 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	5.2	3.5	87.9	1.0	0.0	0.0	2.4	100.0	153
10-14	5.2	0.1	48.5	38.9	6.9	0.0	0.3	100.0	341
15-19	5.4	0.2	14.1	22.4	37.2	20.7	0.0	100.0	274
20-29	5.9	0.8	8.6	14.0	24.2	45.9	0.6	100.0	522
30-39	7.0	0.0	8.8	12.2	32.7	39.3	0.0	100.0	576
40-49	7.6	0.1	13.4	14.5	28.6	35.8	0.0	100.0	494
50+	16.0	1.0	10.2	12.6	28.5	30.5	1.3	100.0	381
Total	7.7	0.5	19.7	16.7	25.2	29.8	0.5	100.0	2,742
					Female				
7-9	15.9	3.4	78.2	2.1	0.0	0.0	0.5	100.0	170
10-14	4.9	0.0	49.0	45.0	0.8	0.0	0.2	100.0	242
15-19	4.5	0.1	10.4	16.5	50.2	18.3	0.0	100.0	272
20-29	7.6	0.1	11.9	13.3	31.7	35.3	0.1	100.0	691
30-39	7.6	0.1	14.5	22.2	32.4	23.1	0.0	100.0	598
40-49	13.2	0.9	17.5	17.5	27.2	23.7	0.0	100.0	316
50+	34.3	0.1	26.7	11.2	13.5	14.2	0.0	100.0	203
Total	10.5	0.4	22.4	18.4	26.7	21.5	0.1	100.0	2,490
					Total				
7-9	10.9	3.4	82.8	1.6	0.0	0.0	1.4	100.0	324
10-14	5.1	0.1	48.7	41.4	4.4	0.0	0.3	100.0	583
15-19	5.0	0.2	12.2	19.4	43.7	19.5	0.0	100.0	546
20-29	6.9	0.4	10.5	13.6	28.5	39.9	0.3	100.0	1,212
30-39	7.3	0.1	11.7	17.3	32.5	31.1	0.0	100.0	1,174
40-49	9.8	0.4	15.0	15.7	28.1	31.1	0.0	100.0	810
50+	22.3	0.7	15.9	12.1	23.3	24.9	0.8	100.0	583
Total	9.0	0.5	21.0	17.5	25.9	25.8	0.3	100.0	5,232

An examination of the educational attainment by place of residence revealed that the urban-rural differential was quite pronounced. In urban areas, only 9 percent of the total population is non-literate in comparison to 22 percent of the rural population. The numbers of non-literate females live in rural areas of Tripura accruing a share as high as 26 percent, while non-literate rural males is 19 percent. Prevalence of illiterate is much less in urban areas with figures of 11 percent and 8 percent non-literate females and males respectively. A contrasting feature of rural-urban difference in educational level is that in rural areas most people had 1-5 years of schooling (28 percent), and those who had 10 or more years of schooling was just 10 percent, whereas in urban areas a significant proportion of people (25 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. Twenty-two percent of females in the age group 15-19 years, followed by 87 percent in the age group 25-29 years, and 96 percent in the age group 30-44 years, are currently married. The proportion of never married for both males and female is 34 percent in the state, and it is higher for males (38 percent) than for females (29 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. A similar pattern has been observed in the case of females, with the lowest never married proportion for the age group 30-34 years. The proportions of divorced, separated or widowed are negligible and limited to the older ages. Sixty-two percent of women aged 60 years or above are widowed /divorced /separated. Among the *de facto* population aged 10 years and above, 59 percent of males and 65 percent of females are currently married.

Table 2.4 MARITAL STATUS OF THE HOUSEHOLD POPULATION

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

Age	Marital status					Total Percent	Number of persons
	Never married	Currently married	Married, g*aunna* not performed	Widowed/ divorced/ Separated	Missing		
			Male				
10-14	95.8	3.3	0.8	0.2	0.0	100.0	1,093
15-19	97.4	2.3	0.3	0.0	0.0	100.0	910
20-24	80.1	17.9	1.4	0.3	0.4	100.0	785
25-29	39.9	59.2	0.4	0.6	0.0	100.0	852
30-44	7.2	91.9	0.0	0.8	0.1	100.0	2,723
45-59	1.1	94.6	0.3	4.0	0.0	100.0	1,264
60+	0.6	80.4	2.2	16.3	0.5	100.0	527
Total	38.2	59.1	0.5	2.1	0.1	100.0	8,154
			Female				
10-14	97.0	1.9	0.7	0.4	0.0	100.0	867
15-19	77.7	21.7	0.2	0.3	0.0	100.0	964
20-24	33.9	64.8	0.3	0.9	0.1	100.0	1,014
25-29	11.8	87.7	0.3	0.2	0.0	100.0	1,134
30-44	1.3	96.0	0.1	2.6	0.0	100.0	2,510
45-59	2.6	75.3	1.5	20.6	0.0	100.0	571
60+	1.6	34.1	2.3	62.0	0.0	100.0	379
Total	28.5	65.1	0.5	5.9	0.0	100.0	7,438
			Total				
10-14	96.3	2.7	0.7	0.3	0.0	100.0	1,960
15-19	87.3	12.3	0.3	0.2	0.0	100.0	1,873
20-24	54.1	44.3	0.8	0.6	0.2	100.0	1,799
25-29	23.8	75.5	0.3	0.4	0.0	100.0	1,986
30-44	4.4	93.8	0.1	1.7	0.1	100.0	5,234
45-59	1.6	88.6	0.7	9.1	0.0	100.0	1,835
60+	1.0	61.0	2.2	35.5	0.3	100.0	905
Total	33.6	62.0	0.5	3.9	0.1	100.0	15,593

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

2.5 Marriage

Marriage in the household is an important event that reflects the socio-cultural practices of the communities surveyed in DLHS. This section outlines the marriages ceremonies during the three years period prior to the survey. Mean age at marriage by sex and percentage of total marriages which are below legal age at marriage, 21 years for boys and 18 years for girls by resident 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, Tripura, 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	27.3	20.9	14.0	21.6
State-Rural	27.3	20.4	10.7	25.3
State-Urban	27.2	22.3	25.2	11.5
District				
Dhalai	28.0	23.9	24.5	0.0
North Tripura	28.2	21.3	6.8	15.6
South Tripura	27.9	20.3	6.1	28.8
West Tripura	25.9	21.5	28.3	15.6

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.

Mean age at marriage for boys and girls in urban areas of Tripura are 27 years and 22 years respectively. The corresponding figures in rural areas are 27 years and 20 years. On the whole, as far as Tripura is concerned, both boys and girls seem to oblige the legal age marriage, the average age at marriage being 27 years for boys and 21 years for girls. However, 14 percent of boys and nearly 22 percent girls got married below the corresponding specified legal age marriage. The proportion for girls is much higher in the rural areas compared to the urban areas of the state and it is the opposite for boys.

When it comes to district level variation in mean age at marriage, it is highest in Dhalai, North Tripura and South Tripura, 28 years for boys and 24 years for girls in Dhalai. The lowest mean age at marriage for boys is 26 years recorded for the district of West Tripura, and for the girls, the lowest is 20 years in South Tripura.

It is also found that, the percentage of girls who were married below the legal age at marriage was the highest in South Tripura (29 percent) and the lowest in Dhalai (zero percent). In 3 out of 4 districts more than 15 percent girls were marrying below the legal age at marriage (see Map-1). In the case of boys, marriages below the legal age at marriage are the highest in West Tripura (28 percent) and lowest in South Tripura (6 percent).

2.6 Morbidity Rates

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

Table 2.6 MORBIDITY RATES

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

Morbidity	Total	Residence	
		Rural	Urban
Prevalence rate of blindness			
Male			
Partial	3,221	2,812	4,164
Complete	1,305	980	2,055
Night blindness	210	164	316
Female			
Partial	3,206	3,027	3,623
Complete	1,512	1,225	2,179
Night blindness	413	309	654
Persons			
Partial	3,214	2,915	3,905
Complete	1,404	1,097	2,114
Night blindness	307	234	477
Prevalence rate of tuberculosis			
Male	751	653	978
Female	760	649	1,017
Person	755	651	997
Prevalence rate of malaria[1]			
Male	1,363	1,615	786
Female	881	1,032	531
Person	1,132	1,335	664

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

Partial, Complete and Night Blindness

The overall prevalence of partial blindness is 3,221 per 100,000 populations in the state and is lower in rural areas (2,812 per 100,000) than in urban areas (4,164 per 100,000). It is more among females. The prevalence of complete blindness is 1,305 per 100,000 populations with a rural-urban differential of 980 against 2,055 per 100,000. Sex differential in complete blindness is not significant. The prevalence of night blindness due to vitamin A deficiency is 210 per 100,000 populations, and is much lower in rural areas (164) than in urban areas (316).

Tuberculosis

The prevalence of tuberculosis is 755 per 100,000 populations, with urban areas having a higher prevalence of 997 compared to 651 per 100,000 in rural areas. The prevalence of TB is higher among females (760 per 100,000) than among males (751 per 100,000).

Malaria

In the DLHS-RCH, household respondents were asked to state whether any member of their household suffered from malaria (characterized by recurrent fever with shivering) any time during the two weeks prior the survey. In the state of Tripura, 1,132 persons per 100,000 populations were reported to have suffered from malaria. Rural residents are much more likely to suffer from malaria (1,335 per 100,000) than urban residents (664 per 100,000). The reported prevalence of malaria is higher for males than for females.

2.7 Morbidity Rates by Districts

Table 2.7 shows the prevalence of blindness, tuberculosis and malaria in the districts of Tripura. The prevalence of partial blindness varies considerably among the districts the lowest being 861 per 100,000 in Dhalai and the highest, 6,843 per 100,000 in North Tripura.

Table 2.7 MORBIDITY RATES BY DISTRICTS

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

District	Prevalence[1] of morbidity			
	Partial blindness	Complete blindness	Tuberculosis	Malaria[2]
Dhalai	861	2,484	1,092	1,340
North Tripura	6,843	511	567	1,605
South Tripura	3,106	1,168	824	665
West Tripura	2,542	1,409	768	1,247
Tripura	3,214	1,404	755	1,132

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

The districts with a prevalence rate below 1,000 per 100,000 are Dhalai. The prevalence rate of complete blindness ranges from 511 per 100,000 in North Tripura to 2,484 per 100,000 in Dhalai. Inter-district variations are substantial for tuberculosis and malaria.

The prevalence rate of tuberculosis is the highest in Dhalai district (1,092 per 100,000 population) and it is lowest in North Tripura (567 per 100,000). In the case of malaria, the prevalence rate is highest in North Tripura (1,605 per 100,000) and lowest in South Tripura (665 per 100,000).

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. Seventy-seven percent of the households in Tripura have electricity connection and it is much more in urban areas (93 percent) than in rural areas (70 percent).

As regards household source of drinking water more than half (55 percent) of the households get drinking water through taps, while 19 percent drink water from hand pumps/ bore-wells, and 9 percent drink water from wells. About 68 percent of households in urban areas get piped water for drinking, whereas in rural areas only 49 percent of the households have such provision.

When it comes to sanitation facility, only 26 percent of the households have flush toilets, while 61 percent have pit based toilets or latrines, 9 percent depend on shared toilets and nearly 2 percent of the households have no toilet facility at all. There is a rural-urban difference; 2 percent of rural households have no toilet facility, compared to just 1 percent of urban households.

DLHS-RCH has also collected data on type of fuel used in the households for cooking. Thirty-two percent of the households used liquid petroleum/gas or electricity for cooking in Tripura. About 63 percent of households rely on fire woods, 4 percent on kerosene, and a minor proportion of households (less than one percent) use other types of fuel for cooking. The use of liquid petroleum gas/electricity for cooking is reported more in urban areas (67 percent), and firewood as source for cooking are reported more in rural areas (79 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*. Sixty-four percent of the households are living in *kachcha* houses, 25 percent in semi *pucca* houses and 12 percent in *pucca* houses. Twenty-eight percent of urban households live in *pucca* houses compared to 5 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 majority of the households in the state own bicycles (41 percent), an electric fan (66 percent), radio/transistor (32 percent) and television (47 percent).

Table 2.8 HOUSING CHARACTERISTICS

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

Housing characteristic	Total	Residence	
		Rural	Urban
Electricity			
Yes	76.8	69.9	92.6
No	23.2	30.1	7.4
Source of drinking water			
Tap inside	21.4	14.4	37.6
Tap shared public	33.6	35.0	30.1
Hand pump/ bore well	19.4	17.3	24.1
Well covered	9.4	12.1	3.3
Well uncovered	11.8	16.4	1.1
River	0.2	0.2	0.1
Pond	0.6	0.5	0.9
Spring	0.3	0.2	0.4
Other	3.4	3.9	2.4
Sanitation facility			
Own flush toilet	26.3	16.8	48.2
Own pit toilet / latrine	61.4	70.9	39.5
Shared toilet of any type	8.5	8.8	8.0
Public / community toilet	1.9	1.4	3.0
No toilet facility	1.9	2.1	1.3
Main type of fuel used for cooking			
Liquid petroleum gas/ electricity	31.9	16.5	67.1
Kerosene	4.4	3.9	5.5
Wood	63.2	79.3	26.3
Other	0.5	0.2	1.1
Type of house			
Kachcha	63.6	72.3	43.7
Semi - pucca	24.8	22.7	29.6
Pucca	11.6	5.0	26.7
Household assets			
Fan	66.3	56.5	88.8
Radio/transistor	32.0	26.7	44.1
Sewing machine	13.1	6.0	29.4
Television	46.7	37.7	67.4
Telephone	19.3	10.4	39.7
Bicycle	41.3	40.2	43.9
Motor cycle/ scooter	10.6	6.1	20.7
Car / Jeep	3.0	1.7	6.2
Tractor	0.7	0.7	0.6
Standard of living index			
Low	38.2	49.3	12.9
Medium	41.4	41.1	42.1
High	20.4	9.7	45.0
Number of households	4,300	2,995	1,305

Other durable goods found in the surveyed households are telephone (19 percent), sewing machine (13 percent), and motorcycle or scooter (11 percent). Car/jeep are owned by 3 percent of households in Tripura. Ownership of most of the consumer durable items is more among the urban households than among the rural households.

Considering household amenities, such as, source of drinking water, type of house, source of lighting, fuel for cooking, toilet facility and ownership of durable goods a composite

measure, standard of living index (SLI) is made for classification of households. The standard of living index is calculated as by adding the following scores;
Source of drinking water: 3 for Tap (own), 2 for Tap (shared), 1 for hand pump and well, and 0 for other;

Type of house: 4 for *pucca*, 2 for semi-*pucca*, and 0 for *kachcha*;
Source of lighting: 2 for electricity, 1 for kerosene, and 0 for other;
Fuel for cooking: 2 for LPG gas/electricity, 1 for kerosene and 0 for other;
Toilet facility: 4 for own flush toilet, 2 for own pit toilet, 2 for shared toilet and 0 for no toilet;
Ownership for items: 4 each for car and tractor, 3 each for television, telephone and motorcycle/scooter, and 2 each for fan, radio/transistor, sewing machine and bicycle.
The total of the scores may vary from the lowest of a 0 to maximum of 40. On the basis of total score, households are divided into three categories as;

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

As per the standard of living index, nearly 38 percent of the households come under the low standard of living category, 41 percent of households to medium standard of living, and 20 percent of the households to high standard of living.

The proportion of sample households with medium and high standard of living is comparatively higher in urban areas than in rural areas, and the proportion of households with a low standard of living is much higher in rural households (49 percent) than in urban households (13 percent) in the state of Tripura.

2.9 Housing Characteristics by Districts

The 4 districts in Tripura 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 more than the state average of 77 percent in all the districts except North Tripura (67 percent). The household with electricity is highest in Dhalai and South Tripura (80 percent). Ninety percent or more of households used piped water or water from a hand pump for drinking in two districts – South and West Tripura (93 percent). The lowest in this category is North Tripura (53 percent).

Largely the districts in Tripura have inadequate toilet facility, in all the 4 districts more than 95 percent of the households have toilet facilities except in North Tripura where it is 94 percent.

In West Tripura district the percentage of households using liquid petroleum gas/electricity for cooking is 37 percent and in the rest of the districts, it is relatively low ranging between 25 to 30 percent. The percentage of households living in *pucca* houses is quite low in all the districts of Tripura. In Dhalai only seven percent of the households live in *pucca* houses whereas the highest is North Tripura where 13 percent households live in *pucca* houses.

Table 2.9 HOUSING CHARACTERISTICS BY DISTRICT

Selected housing characteristics by district, Tripura, 2002-04

Districts	Percentage of households: With electricity	With drinking water[1]	With toilet facility	Using Liquid petroleum gas/ electricity	Living in *pucca* house
Dhalai	79.8	78.5	96.2	29.5	7.0
North Tripura	66.7	52.9	94.4	26.8	12.8
South Tripura	79.9	92.8	99.8	25.4	10.6
West Tripura	78.9	93.4	99.5	37.2	12.1
Tripura	76.8	83.8	98.1	31.9	11.6

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

2.10 Iodization of Salt

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

In the DLHS-RCH survey, each interviewer was provided with a test kit to measure the level of iodine content of salt consumed by the surveyed households. The test results (Table 2.10) are classified by degree of ionization of salt and categorised by background characteristics. It is observed that nearly 45 percent of households used salt that contained a minimum recommended 15 ppm or higher level of iodine content whereas 2 percent of households used salt that is not iodized at all and another 33 percent used salt, which was inadequately iodized.

In rural areas, 3 percent of households against 1 percent in urban areas used non-iodized salts. Percentage of households using inadequately iodized salt in rural areas is more than two times higher compared to that in urban areas. Number of households using non-iodized or inadequately iodized salt is closely associated with the educational level of the household head. Nearly 44 percent of households headed by persons who had more than 10 years of schooling reported the use of adequately iodized salts. Consumption of adequately iodised salt among households of other caste is 48 percent, followed by 47 percent in other backward class households and among scheduled caste it is 34 percent while in scheduled tribe it is 44 percent of households.

Table 2.10 IODIZATION OF SALT

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

Background characteristic	Not Iodised	7ppm	15+ppm	Other[1]	Total percent	Number of households
Place of Residence						
Rural	2.8	39.9	51.9	5.4	100.0	2,995
Urban	1.3	15.6	27.4	55.7	100.0	1,305
Education of the household heads						
Non-literate	2.9	44.7	42.1	10.3	100.0	863
0-9@ years	2.9	35.9	45.7	15.5	100.0	1,999
10 and above	1.3	20.7	44.0	34.0	100.0	1,433
Religion of household head						
Hindu	2.4	32.1	44.2	21.4	100.0	3,985
Muslim	3.9	31.3	44.6	20.2	100.0	143
Christian	1.2	42.9	51.6	4.3	100.0	101
Buddhist	2.3	46.6	51.1	0.0	100.0	66
Caste/tribe of the household head#						
Scheduled caste	2.8	37.2	34.4	25.6	100.0	854
Scheduled tribe	2.5	45.5	43.7	8.4	100.0	746
Other backward class	2.7	33.6	47.1	16.6	100.0	955
Other	2.0	24.4	48.4	25.2	100.0	1,717
Standard of living index						
Low	3.1	42.9	44.2	9.9	100.0	1,643
Medium	2.2	31.0	46.6	20.2	100.0	1,781
High	1.4	16.4	40.7	41.5	100.0	877
Total	2.4	32.6	44.5	20.6	100.0	4,300

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. Total includes 6 cases in religion- other were not shown separately.

Differential in the consumption of properly iodized salt is more pronounced when analysed by religion of the household head and standard of living index. Percentage of households using adequately iodized salt is only 44 percent among Hindu households, whereas the corresponding figures for Christian and Buddhist households are 52 percent and 51 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. While 3 percent of households with low standard of living used non-iodized salt, only 1 percent households with a high standard of living fall in this category. The number of households with a medium standard of living using adequately iodized salt is 47 percent while those with a low standard of living it is 44 percent.

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. West Tripura has the lowest proportion of households (less than one percent) using non-iodized salt, whereas North Tripura has the highest proportion of households (5 percent) using non-iodized salt. Percentage of households using inadequately iodized salt is the highest (69 percent) in Dhalai and the lowest in West Tripura (25 percent). Around 45 percent of the households in the state used adequately iodized salt, the highest being in the district of North Tripura (66 percent). About 44 percent of the households in West Tripura and (57 percent) in South Tripura were using adequately iodized salt (see Map-2).

Table 2.11 IODIZATION OF SALT BY DISTRICT

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

District	Not idolized	7ppm	15+ppm	Other[1]
Dhalai	2.2	69.3	20.4	8.2
North Tripura	5.4	28.1	66.1	0.4
South Tripura	5.0	37.3	57.4	0.3
West Tripura	0.2	25.3	44.4	30.1
Tripura	2.4	32.6	44.5	20.6

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 of the village, if not available within the village, from various types of education facilities, including primary school, middle school, secondary school, higher secondary school, college, *Gurujee* scheme and '*Madarsa*'. Further information on the distance of the village, if not available within the village, from various types of health facility, including sub-centres, primary health centres (PHCs), community health centres/ Rural Hospitals (CHCs/RHs), Government dispensary, hospital, private clinic or hospitals and health facilities of Indian system of Medicine (ISM).

Table 2.12 gives the distance of surveyed villages from an education facility. The unit of analysis is usual residents of rural population. Majority of the rural residents (91 percent) (the *de jure* rural population) in the state live in villages that have a primary school, 84 percent live in villages with middle school and 66 of the rural population live in villages with secondary schools. Higher secondary schools are available for 52 percent of the rural population. Sixteen percent of the rural population live in villages, which have *Madarassas*. Only six percent of the surveyed villages have a college. As regards the distribution of educational institutions within 5 kilometres distance from of the village, it can be seen that, 9 percent of the villages have middle school, 16 percent have secondary school, 16 percent have higher secondary school and 9 percent have a '*Madarassa'* within this distance. For 65 percent of the villages, the college is more than 10 kilometres away and *madarassa* are available at this distance for 26 percent of the villages.

Table 2.12 DISTANCE FROM THE NEAREST EDUCATION FACILITY

Percent distribution of rural household population by distance from the nearest education facility, Tripura, 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	90.5	2.7	0.8	0.0	6.0	100.0
Middle School	83.6	8.7	0.7	0.0	6.9	100.0
Secondary School	66.3	15.6	10.0	1.0	7.1	100.0
Higher Secondary School	52.4	16.3	13.2	10.8	7.3	100.0
College	6.3	9.6	11.9	64.5	7.7	100.0
Gurujee Scheme	0.0	1.5	0.0	0.3	98.2	100.0
Madarsa	16.0	9.1	4.7	26.2	44.1	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, Tripura, 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	48.3	7.6	18.3	18.8	7.0	100.0
Primary health centre	33.6	16.2	26.7	15.5	7.9	100.0
Either sub-centre or PHC	66.8	8.4	10.7	7.1	7.0	100.0
Community health centre/ Referral hospital	20.8	9.2	24.3	37.4	8.3	100.0
Government dispensary	22.8	14.4	25.2	29.1	8.4	100.0
Government hospital	22.1	10.3	24.1	33.0	10.6	100.0
Private clinic	26.0	7.8	20.9	37.3	8.0	100.0
Private hospital	1.7	3.7	15.3	69.7	9.6	100.0
ISM health facility	8.3	8.1	17.1	17.9	48.6	100.0

Note: Table based on rural de jure population.

Table 2.13 summarises the availability of health facilities within the surveyed villages and provides information on the distance between the villages and the nearest health facility. About 48 percent of the rural population live in villages with Sub-centres. Only 34 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 67 percent. The proportion of rural population with other health facilities are 21 percent for CHCs/RHs, 23 percent for Government dispensary, 22 percent for Government hospitals, 26 percent for private clinics, 2 percent for private hospitals and 8 percent for Indian System of Medicine.

Table 2.14 AVAILABILITY OF SERVICES

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

Services	Percentage of rural residents
Anganwadi center	92.0
Anganwadi worker	91.4
Private doctor	35.0
Visiting doctor	31.5
Homeopathic doctor	25.6
Village health guide	33.3
Trained birth attendant	38.7
Traditional healer	25.2
Dai	74.2

Note: Table based on rural de jure population.

The proportion of rural population located within a distance of 5 kilometres from health facilities are 8 percent for sub-centres, 16 percent for primary health centres, 9 percent for CHCs/RHs. 14 percent for a Government dispensary, 10 percent for Government hospitals, 8 percent for private clinic, 4 percent for private hospitals and 8 percent for ISM health facilities. Distance of particular health facilities is beyond 10 kilometres from surveyed villages in the case of Government hospitals (33 percent) and for private hospitals, (70 percent).

Table 2.14 shows the proportion of rural residents in the state that live in the villages with various health services. Almost 92 percent of rural residents live in villages that have an *anganwadi*, (a nursery school for children age 3-6 years) and at the same time 91 percent of rural households live in villages with *anganwadi* workers (*Anganwadi* workers provide integrated child development services) are available.

About 35 percent of the rural residents live in villages that have a private doctor, 32 percent live in villages with a visiting doctor, 26 percent with a homeopathy doctor, 33 percent with a village health guide, 39 percent with a trained birth attendant and 25 percent with a traditional healer. Little less than three-fourth 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 Tripura. In the districts of North, South and West Tripura, all the rural population have access to primary schools or middle schools. In the state of Tripura, 94 percent of the rural population live in villages having primary schools. Around 48 percent of the rural population in the state have sub-centres within the village, with the highest coverage of 72 percent in North Tripura and the lowest of 21 percent of the population in Dhalai.

About 34 percent of rural population of the state live in villages with PHCs. In West Tripura, all the households in the rural area have access to at least one government health facility including sub-centre, primary health centre, community health centre or referral hospital, government hospital and government dispensary within the village.

Table 2.15 AVAILABILITY OF FACILITY AND SERVICES BY DISTRICT

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

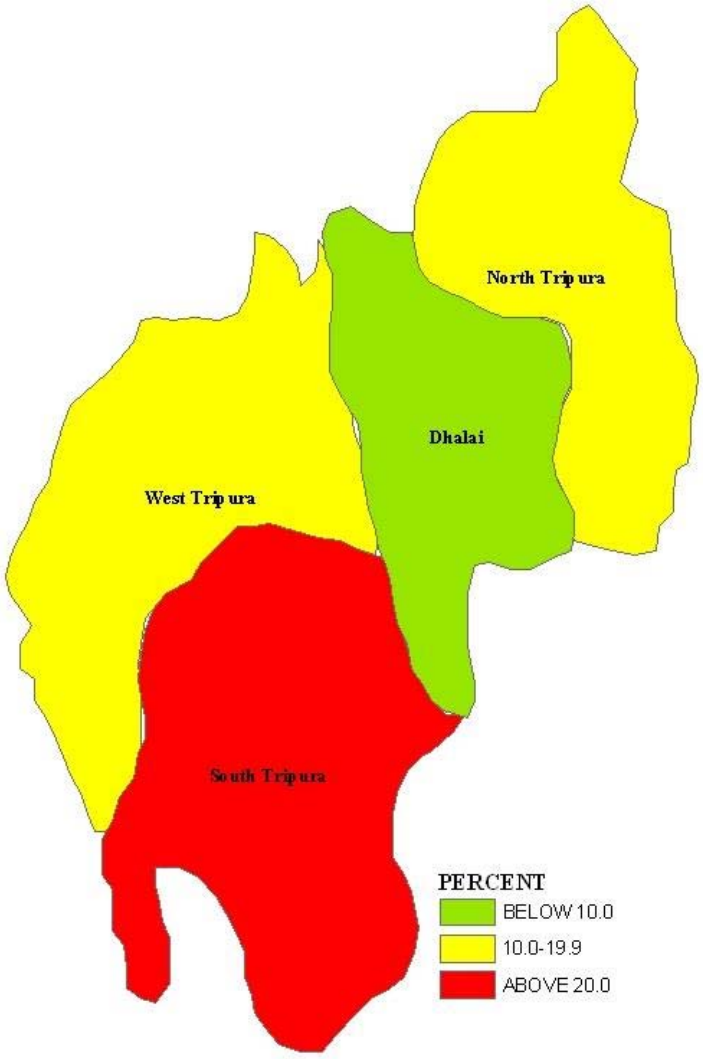
Districts	Percentage of rural household population with:						
	Primary or middle school	Sub-centre	PHCs	Any govern-ment health facility[1]	Doctor[2]	TBA[3]	*Angan-wadi* worker
Dhalai	40.5	21.4	11.5	25.4	28.0	13.6	32.5
North Tripura	100.0	72.1	11.4	79.4	16.8	61.9	100.0
South Tripura	100.0	48.6	20.2	59.8	36.1	36.4	93.6
West Tripura	100.0	41.9	60.9	92.8	61.5	33.9	100.0
Tripura	94.0	48.3	33.6	73.7	41.2	38.7	91.4

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.

Around 41 percent of the rural population are visited either by private or by visiting doctors in the state, the highest in this category being West Tripura (62 percent) and lowest North Tripura (17 percent). Highest numbers of rural population (62 percent) are attended by trained birth assistants in North Tripura, while only 14 percent of rural population, availed themselves of such a provision in Dhalai. A visit by *anganwadi* workers to rural households is highest (100 percent) in North and west Tripura and the lowest in Dhalai (33 percent).

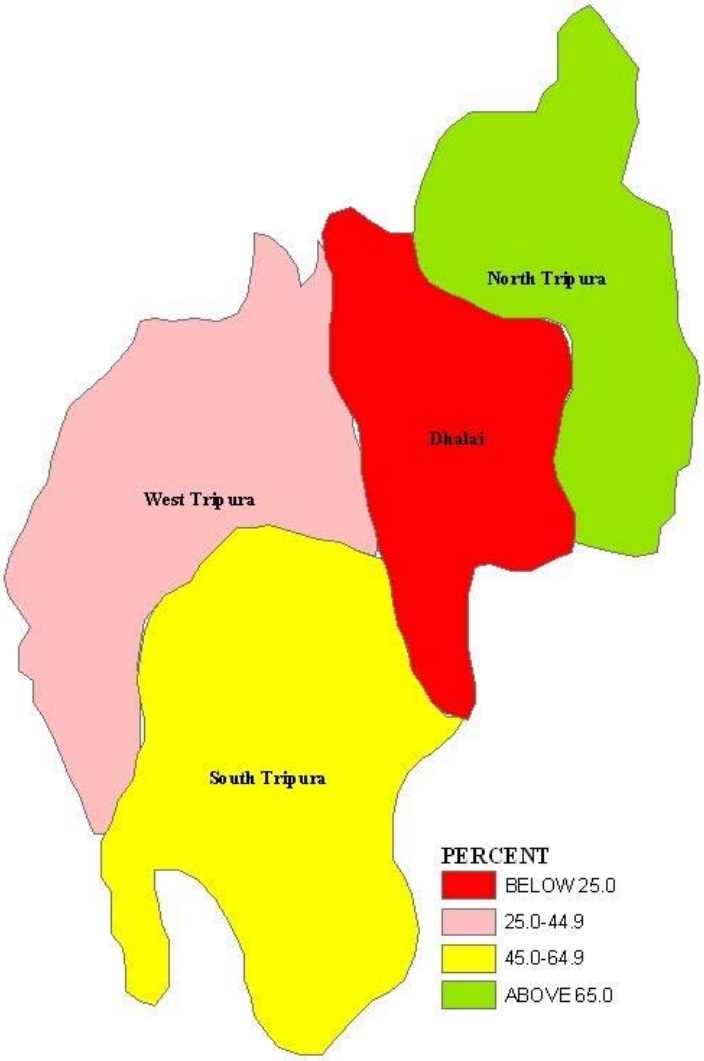
MAP – 1

Percent Girl Marrying Below Legal Age at Marriage



MAP-2

Percentage of Households Uing 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 3,884 eligible women represents the state of Tripura in DLHS-RCH and more than half of these women are drawn from rural areas. About 58 percent of the currently married women are in the age range of 20-34 years and a similar age distribution is observed both for urban and rural areas. Age at consummation of marriage, particularly in rural areas is found to be very low with as many as 43 percent of the women having cohabited before 18 years of age, while it is 26 percent in urban areas. Looking at the distribution of marital duration it is noted that about 37 percent of the women across the state are married for more than 15 years.

Among the sample 3,884 representative women in Tripura, Hindus, Muslims and Christians constitute 93 percent, 3 percent and 3 percent respectively. More, Hindu women are found in urban areas (95 percent) than in rural areas (91 percent) though the difference is not much. The presence of women belonging to other religious groups is insignificant in proportional and absolute terms. Twenty percent of the women belong to scheduled castes, 18 percent to scheduled tribes and 22 to other backward classes. Majority of the sample women (39 percent) belong to a general caste other than scheduled caste/tribe and other backward class. In rural areas, there are more women belonging to scheduled caste, scheduled tribe and other backward classes than in urban areas, while more women from other castes are found in urban areas. There

is a clear rural-urban differential in the educational attainment of women. For the state of Tripura, 21 percent of women are non-literate and women of this literacy category constitute 26 percent in rural areas, while it is just 10 percent in urban areas.

Table 3.1 BACKGROUND CHARACTERISTICS OF WOMEN

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

Background characteristic	Total	Residence	
		Rural	Urban
Age group			
15-19	4.0	4.5	2.7
20-24	14.6	15.1	13.6
25-29	23.1	25.0	18.5
30-34	20.1	19.6	21.2
35-39	20.3	18.8	24.0
40-44	17.9	17.0	19.9
Age at consummation of marriage			
Below 18 years	37.7	42.5	26.3
18 years & above	62.3	57.5	73.7
Marital duration			
0-4	18.7	18.4	19.2
5-9	21.0	21.1	20.8
10-14	23.0	23.1	22.7
15+	37.3	37.3	37.3
Religion			
Hindu	92.5	91.3	95.4
Muslim	3.3	3.2	3.6
Christian	2.5	3.1	1.0
Sikh	0.1	0.1	0.0
Buddhist	1.6	2.3	0.0
Other	0.0	0.0	0.0
Caste/tribe			
Scheduled caste	19.8	20.6	17.8
Scheduled tribe	17.9	22.6	6.5
Other backward class	22.3	23.5	19.6
Other #	39.3	32.8	55.0
Don't know	0.7	0.5	1.2
Education (Years of schooling)			
Non-literate	21.4	26.1	10.3
0-9@ years	52.8	55.8	45.6
10 years & above	25.8	18.1	44.1
Missing	0.0	0.0	0.0
Husband's education (Years of schooling)			
Non-literate	17.4	20.9	8.9
0-9@ years	46.9	51.1	36.8
10 years & above	35.6	27.8	54.3
Don't know	0.1	0.2	0.0
Missing	0.1	0.1	0.0
Standard of living index			
Low	38.4	49.1	12.9
Medium	41.2	41.0	41.7
High	20.4	9.9	45.4
Number of women	3,884	2,740	1,144

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

More than 53 percent of women across the state have completed 0-9 years of schooling. Only a handful, 18 percent of rural women have completed 10 or more years of schooling compared to 44 percent for urban women. Men are more literate than their spouses. In Tripura,

17 percent of the husbands of eligible women are non-literate and the corresponding figures are 21 percent in rural areas and 9 percent in urban areas. The DLHS-RCH, includes data on materials used for floor, walls and roofs of the housing structure along with status of possession of a list of durables and these are utilized to construct a composite index of household standard of living. Households are further classified as those with low, medium and high standard of living. Thirty-eight percent of women in the state live in low standard of living households and this is 49 percent in rural areas and 13 percent in urban areas. Majority of women across the state live in households categorised as medium standard of living. In urban areas, 45 percent of women belong to high standard of living households and the corresponding figure is just 10 percent in rural areas.

3.2 Educational Level of Women

Table 3.2 provides details of educational level of eligible women in terms of classification by years of schooling, and selected background characteristics, such as, place of residence, religion, and caste and husbands' education. As regards distribution of non-literate women, it is observed that a lesser proportion of younger women below 30 years of age are non-literate compared to older women above 30 years. This age divide remains true even among literate women. A distinct pattern of educational attainment of women is that maximum of them attended schooling either for 1-5 years or 6-8 years or 9-10 years and not many had 11 or more years of schooling. For the women in the age group 15-19 years, 28 percent and 29 percent of them in the age group 6-8 years had 1-5 years of schooling, while only 5 percent had 11 or more years of schooling. Among the senior women in the age group 40-44 years, distribution by year of schooling is more or less uniform with 18 percent, 19 percent, 16 percent and 11 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 Tripura. About 26 percent of rural eligible women are non-literate and 22 percent, 23 percent, 22 percent and 7 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 10 percent non-literate and 17 percent, 21 percent, 28 percent and 25 percent respectively. More Buddhist women (50 percent) are non-literate compared to Hindu women (20 percent), Christian women (46 percent) and Muslim women (42 percent). For literate eligible women from all religious communities, maximum of them have either 1-5 or 6-8 years of schooling. The proportion of Hindu women with 1-5 years of schooling is 21 percent and the same is 19 percent for Muslim women, 10 percent for Christian women and 24 percent for Buddhist women. Among the literate Buddhist women zero percent of them have 11 or more years of schooling, while 13 percent of literate Hindu women have attained this level of education.

The uneven level of educational attainment by caste can be noted from the recorded proportion of non-literate women among scheduled caste (21 percent), scheduled tribe (46 percent), other backward class (17 percent) and other caste or tribe (13 percent). The literate women belonging to other backward classes and other caste category or tribes are concentrated more in the range of 1-5 to 6-8 years of schooling. The husband's education is an important characteristic, which has strong association with the education of eligible women. As many as 77 percent of women whose husbands are non-literate are also non-literate, while only 2 percent of

women whose husbands have 11 or more or years of schooling are non-literate. Forty four percent of literate women educated for 11 or more years of schooling have husbands who have the same level of education.

Table 3.2 LEVEL OF EDUCATION OF ELIGIBLE WOMEN

Percent distribution of currently married women aged 15-44 by years of schooling, according to selected background characteristics, Tripura, 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	Total percent	Number of women
Age group								
15-19	16.8	0.0	27.8	29.0	20.9	5.4	100.0	156
20-24	12.5	0.2	19.5	24.5	32.3	11.0	100.0	568
25-29	16.6	0.8	22.2	23.4	25.6	11.5	100.0	896
30-34	21.7	0.5	18.6	20.8	25.7	12.8	100.0	781
35-39	20.1	0.4	20.6	21.3	21.9	15.7	100.0	790
40-44	37.2	0.0	17.6	18.5	15.7	11.0	100.0	694
Place of residence								
Rural	26.1	0.5	21.7	22.5	22.3	6.9	100.0	2,740
Urban	10.3	0.0	16.6	20.5	27.7	24.9	100.0	1,144
Religion								
Hindu	19.6	0.3	20.5	22.2	24.8	12.6	100.0	3,593
Muslim	41.9	0.3	18.6	16.2	11.5	11.4	100.0	129
Christian	46.4	0.6	10.3	20.4	14.9	7.4	100.0	95
Buddhist	49.5	3.1	23.5	14.2	9.7	0.0	100.0	62
Caste/tribe #								
Scheduled caste	21.4	0.7	26.2	20.8	18.9	12.0	100.0	768
Scheduled tribe	46.2	0.6	16.4	15.7	17.9	3.3	100.0	693
Other backward class	17.2	0.3	23.9	21.9	25.4	11.3	100.0	868
Other	12.5	0.2	16.7	25.4	28.6	16.6	100.0	1,527
Husband's education								
Non-literate	77.3	0.6	13.2	4.9	2.2	1.8	100.0	674
1-5 years	22.5	0.3	48.8	20.2	7.8	0.3	100.0	669
6-8 years	10.9	0.7	30.6	40.8	15.0	2.1	100.0	736
9-10 years	5.8	0.2	12.5	32.9	40.2	8.5	100.0	977
11 or more years	2.5	0.0	2.6	7.1	43.7	44.1	100.0	817
Total	21.4	0.4	20.2	21.9	23.9	12.2	100.0	3,884

Note: Table includes 1 case with missing and 5 cases with do not know cases on husband's education who were not shown separately.# Total number may not add upto N due to don't know and missing cases. Total includes 5 cases in other religions and 4 cases in Husband's education-Literate but no schooling 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 Tripura, husbands are mostly in the age group 35-44 years. Fewer husbands are less than 25 years. In Tripura, 92 percent of the husbands are Hindus, 3 percent each are Muslims and Christians and presence of other religious groups is insignificant. Nineteen percent of husbands in the state belong to the scheduled caste and it is little more in rural areas (19 percent) than in urban areas (15 percent).

Nearly 41percent of the husbands belong to castes other than scheduled caste, scheduled tribe and other backward classes. In urban areas husbands from other castes constitute 57 percent, while it is 33 percent rural areas. As regards educational characteristics of the husbands of surveyed eligible women, more than 47 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 21 percent in rural areas, while the overall state figure is 17 percent.

Table 3.3 BACKGROUND CHARACTERISTICS OF MEN

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

Background characteristic	Total	Residence	
		Rural	Urban
Age group			
< 25	2.7	2.9	2.2
25-34	28.7	30.1	25.5
35-44	44.1	43.6	45.2
45 +	24.6	23.5	27.0
Religion			
Hindu	92.0	90.7	95.1
Muslim	3.4	3.1	4.1
Christian	2.6	3.4	0.8
Sikh	0.1	0.1	0.0
Buddhist	1.8	2.6	0.0
Other	0.0	0.0	0.0
Caste/tribe			
Scheduled caste	18.2	19.4	15.3
Scheduled tribe	18.2	22.8	7.5
Other backward class	22.5	24.2	18.4
Other #	40.5	33.2	57.3
Don't know	0.8	0.4	1.5
Education (Years of schooling)			
Non-literate	17.3	21.1	8.7
0-9@ years	47.1	51.1	37.7
10 years & above	35.6	27.8	53.7
Standard of living index			
Low	37.2	48.2	11.5
Medium	42.0	42.1	41.8
High	20.8	9.7	46.7
Number of living children			
0	10.5	10.0	11.6
1	33.2	32.6	34.5
2	32.3	32.1	32.8
3	15.4	15.7	14.7
4+	8.6	9.6	6.4
Number of Men	2,939	2,055	884

Note:# Not belonging to a scheduled caste, scheduled tribe and other backward classes.
@ 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 37 percent, 42 percent and 21 percent respectively. In rural areas, 48 percent of the husbands live in low standard of living households compared to 12 percent in urban areas. This is complementary in the case of husbands living in high standard of living households, 47 percent in urban and 10 percent in rural. In terms of household standard of living composition, those living in medium standard of living, it is almost the same in urban is (43 percent) and in rural areas (42 percent). Around 32 percent of husbands across the state reported to have two living children. More husbands in urban areas (35 percent) reported to have one living child, while more husbands in rural areas (16 percent) have 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, it is, for husbands below 25 years (11 percent) and other than 45 years (26 percent) compared to 10 percent and 17 percent for husbands in the age groups 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 1-8 years of schooling, 43 percent of those below 25 years and 35 percent of those above 45 years of age. As expected few of the younger husbands (18 percent) below 25 years have 11 or more years of schooling compared to 22 percent of those in 35-44 years. As in the case of eligible women, 24 percent of Muslim husbands are non-literate while the corresponding non-literate husbands of Hindu, Christian and Buddhist are 16 percent, 48 percent and 27 percent respectively. The proportions of husbands of Hindu, Muslim, Christian and Buddhist religions who have 11 or more years of schooling constituted 21 percent, 20 percent, 10 percent and 6 percent respectively. Most of the literate Muslim husbands (33 percent) have completed 1-5 years of schooling and the corresponding numbers are 16 percent and 26 percent respectively for Hindu and Buddhist 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 tribes (31percent) followed by scheduled caste husbands (21 percent). Among the scheduled caste and scheduled tribe husbands, 17 percent and 18 percent of them have 9 or more years of schooling. The literacy level of other backward classes is comparable with that of husbands from castes other than scheduled tribe, scheduled caste and other backward classes. Among the husbands belonging to other backward classes, 16 percent of them are non-literate and 44 percent of them have 9 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, Tripura, 2002-04

Background characteristics	Non-literate	Literate but no schooling	Years of schooling: 1-5 years	6-8 years	9-10 years	11 or more years	Total percent	Number of men
Age group								
< 25	11.3	0.0	19.8	22.7	28.5	17.7	100.0	78
25-34	10.0	0.0	15.5	22.4	28.9	23.1	100.0	844
35-44	17.4	0.0	18.3	16.4	26.1	21.8	100.0	1,295
45+	26.4	0.2	15.2	20.0	22.2	16.0	100.0	722
Place of residence								
Rural	21.1	0.1	18.6	21.4	23.6	15.2	100.0	2,055
Urban	8.7	0.0	12.5	14.1	31.4	33.3	100.0	884
Religion								
Hindu	16.0	0.1	16.3	19.6	26.7	21.3	100.0	2,705
Muslim	23.7	0.0	32.6	11.0	13.0	19.7	100.0	101
Christian	48.2	0.0	6.9	21.5	13.4	10.1	100.0	76
Buddhist	27.1	0.0	25.7	10.9	30.6	5.7	100.0	54
Caste/tribe #								
Scheduled caste	20.6	0.0	23.7	20.6	17.4	17.7	100.0	533
Scheduled tribe	30.9	0.3	14.5	17.8	25.5	10.9	100.0	534
Other backward class	15.5	0.0	19.6	20.9	26.4	17.6	100.0	660
Other	10.7	0.0	13.2	18.4	29.8	27.9	100.0	1,189
Total	17.3	0.0	16.8	19.2	26.0	20.7	100.0	2,939

Note: # Total number may not add upto N due to don't know and missing cases. Total includes 3 cases in other religions were not shown separately.

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 experience more average live births than younger women. On the average, women in the reproductive age group have given birth to more male children than female children and similar a 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 2.5 for the state of Tripura and it comprises an average of 1.4 male children and 1.0 female children. Out of the 2.5 mean children ever born to women in the 40-44 year age group an average of 2.4 children survived. By sex of children, out of 1.4 mean numbers of males, 1.3 survived on the average and the corresponding mean number of females surviving was 1.0 out of 1.0.

Women with longer marital duration have higher mean children ever born. On the average, women who are married for 15 or more years have 2.5 children ever born and on the average 2.4 of them are surviving. There is a clear rural-urban divide in terms of mean children ever born with 1.9 children in rural areas and 1.6 children in urban areas. The mean children ever born to women who are Hindu, Muslim, Christian and Buddhist religions are 1.8, 2.2, 2.0 and 2.6

respectively. The corresponding mean surviving children are respectively 1.7, 2.2, 1.9 and 2.3 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 2.0, for the scheduled tribe are 1.8, other backward classes are 1.8 and other castes are 1.7**.** For all religious groups, the mean number of surviving children is slightly more than 1 shared almost by one surviving male and one surviving female children on the average.

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, Tripura, 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	0.6	0.3	0.3	0.6	0.3	0.3	156
20-24	1.0	0.5	0.5	1.0	0.5	0.5	568
25-29	1.6	0.8	0.8	1.5	0.8	0.8	896
30-34	1.9	1.1	0.9	1.8	1.0	0.8	781
35-39	2.2	1.2	1.0	2.1	1.1	1.0	790
40-44	2.5	1.4	1.0	2.4	1.3	1.0	694
Marital duration							
0-4	0.6	0.3	0.3	0.6	0.3	0.3	724
5-9	1.5	0.8	0.7	1.4	0.7	0.7	817
10-14	1.9	1.0	0.9	1.9	0.9	0.9	894
15+	2.5	1.4	1.1	2.4	1.3	1.1	1,448
Residence							
Rural	1.9	1.0	0.9	1.8	1.0	0.8	2,740
Urban	1.6	0.8	0.8	1.6	0.8	0.8	1,144
Religion							
Hindu	1.8	1.0	0.8	1.7	0.9	0.8	3,593
Muslim	2.2	1.2	1.0	2.2	1.2	1.0	129
Christian	2.0	1.2	0.8	1.9	1.1	0.8	95
Buddhist	2.6	1.3	1.3	2.3	1.1	1.2	62
Caste/tribe #							
Scheduled caste	2.0	1.1	0.9	1.9	1.0	0.9	768
Scheduled tribe	1.8	1.0	0.8	1.7	1.0	0.8	693
Other backward class	1.8	1.0	0.8	1.7	0.9	0.8	868
Other	1.7	0.9	0.8	1.7	0.9	0.8	1,527
Education							
Non-literate	2.4	1.3	1.0	2.2	1.2	1.0	833
0-9@ years	1.9	1.0	0.9	1.8	0.9	0.8	2,050
10 years & above	1.2	0.6	0.6	1.2	0.6	0.6	1,001
Standard of living index							
Low	2.1	1.1	1.0	1.9	1.0	0.9	1,492
Medium	1.8	1.0	0.8	1.7	0.9	0.8	1,601
High	1.4	0.7	0.7	1.4	0.7	0.7	791
All women	1.8	1.0	0.8	1.7	0.9	0.8	3,884

Note: # Total number may not add up to N due to don't know and missing cases. @ Literate women with no year of schooling are included. Total includes 5 cases in other religions were not shown separately.

The mean children ever born is higher for non-literate women (2.4) than women who have completed 0-9 years of schooling (1.9) and 10 or more years of schooling (1.4). The mean number of surviving children for women corresponding to these educational levels is 2.2, 1.8 and 1.2 respectively. Further the mean children ever born for women classified into low, medium and high standard of living by SLI are 2.1, 1.8 and 1.4 respectively. For the state of Tripura, 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 Tripura together with mean number of surviving children are shown in Table 3.6. On the average, women on the verge of completing reproductive period have given birth to 2.5 children in their reproductive life of which 2.4 children are surviving on the average. Completed fertility in Tripura varies from the low of 2.0 mean children ever born for West Tripura to the highest of 3.2 children in North Tripura district. Completed fertility in terms of mean children ever born, in the districts of Dhalai is 2.7 and in South Tripura district it is 2.8. With the exception of North Tripura, mean children ever born in all other districts of Tripura is more than 2 children. It is also true that in all the districts mean number of male children is more than the mean of female children born to women in the 40-44 year age group. North Tripura district (2.9) recorded highest mean number of surviving children. Looking at the absolute difference between mean children ever born and mean number of surviving children, it seems that infant and child mortality is quite high and varies among districts in Tripura.

Table 3.6 CHILDREN EVER BORN AND LIVING BY DISTRICT

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

District	Mean children ever born			Mean children surviving		
	Total	Male	Female	Total	Male	Female
Dhalai	2.7	1.6	1.2	2.7	1.6	1.2
North Tripura	3.2	1.8	1.4	2.9	1.5	1.4
South Tripura	2.8	1.7	1.1	2.6	1.5	1.1
West Tripura	2.0	1.2	0.8	2.0	1.2	0.8
Tripura	2.5	1.4	1.0	2.4	1.3	1.0

3.7 Birth Order

Birth order distribution by selected background characteristics of women are 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, Tripura, 2002-04

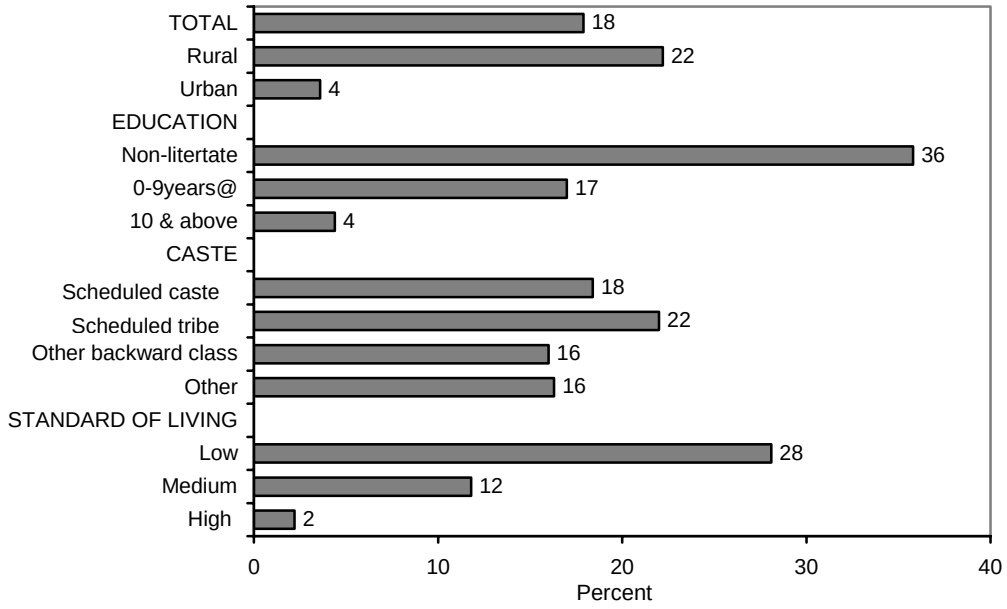
Background characteristic	Birth order				Total percent	Number of births
	1	2	3	4+		
Age of women						
15-19	93.8	6.2	0.0	0.0	100.0	88
20-24	66.3	30.3	3.0	0.4	100.0	276
25-29	40.6	37.8	12.9	8.7	100.0	228
30-34	21.7	39.8	13.2	25.2	100.0	102
35-39	17.1	25.2	26.2	31.5	100.0	59
Place of residence						
Rural	48.3	29.4	10.7	11.5	100.0	595
Urban	64.3	32.8	2.1	0.8	100.0	172
Education (Years of schooling)						
Non-literate	30.6	33.5	10.8	25.0	100.0	163
0-9@ years	50.6	32.3	11.0	6.0	100.0	413
10 years & above	72.9	22.7	2.2	2.2	100.0	191
Religion						
Hindu	54.2	29.6	9.1	7.1	100.0	681
Muslim	(27.5)	(41.2)	(7.8)	(23.5)	100.0	41
Buddhist	(22.2)	(33.3)	(7.4)	(37.0)	100.0	28
Caste/tribe #						
Scheduled caste	51.7	30.0	10.9	7.5	100.0	160
Scheduled tribe	52.7	25.3	7.7	14.3	100.0	150
Other backward class	57.0	26.9	10.3	5.7	100.0	149
Other	48.7	35.0	7.5	8.8	100.0	298
Standard of living index						
Low	39.0	33.0	13.0	15.1	100.0	340
Medium	61.3	26.9	6.3	5.5	100.0	332
High	65.8	32.0	2.2	0.0	100.0	94
Total	51.9	30.2	8.8	9.1	100.0	767

Note: @ Literate women with no year of schooling are included.# Total number of births may not add upto N due to don't know and missing cases. ( ) Based on less than 50 unweighed cases. Total includes 13 cases in age of women 40-44 and 17 cases in religion- Christian were not shown separately.

For the state of Tripura, 52 percent of the births born in the three years period preceding the survey were of first order, 30 percent of second order and the remaining 18 percent were of order 3 and higher order births. By current age of eligible women, more than 58 percent of births to women in the age group 35-39 years are 3 and higher order births. For women of 15-19 years, 94 percent births are of first order and 6 percent births are of second order. In the case of eligible women in urban areas 3 percent of the births are of 3 and higher whereas this order births constitute 22 percent for rural women indicating that higher order births are more concentrated in

rural areas. Of the total births born to non-literate women, 36 percent are 3 and higher order births, followed by 17 percent for women with 0-9 years of schooling and 4 percent for women who had 10 or more years of schooling. In short, births born to non-literate women are of higher order whereas much lower order births occurred to women who completed 10 or more years of schooling. Looking at the religion differential in birth order distribution, it is observed that 31 percent of births born to Muslim women are 3 and higher order births. For Hindu and women from Buddhist religions, the 3 and higher order births constitute 16 percent and 44 percent respectively. The occurrence of births of order 3 and above is more among scheduled tribe (22 percent) than among scheduled caste (18 percent), other backward classes (16 percent) and other castes (16 percent) women. Incidence of births of order 3 and above for women classified by household standard of living index are 2 percent for high, 12 percent for medium and 28 percent for low living standard households women.

Figure 3.1
Birth Order 3 & above by Selected Background Characteristic



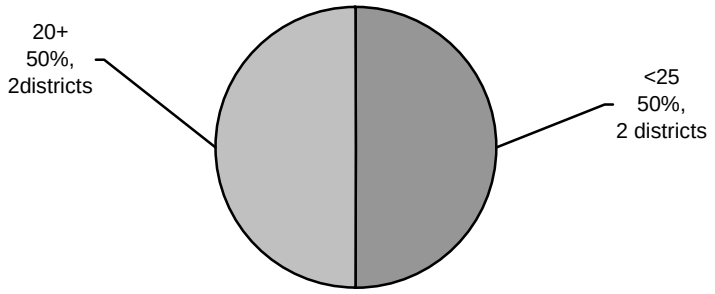
@ Literate women with no years of schooling are also included

Tripura, 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 Tripura. The proportion of births of order 3 and above, ranges from the lowest of 7 percent in West Tripura to the highest of 29 percent in North Tripura. The other two districts have the following proportion of births of order 3 and above – Dhalai (27 Percent) and South Tripura (16 percent).

Figure 3.2
Birth Order 3 & above by District



Tripura, 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, Tripura, 2002-04

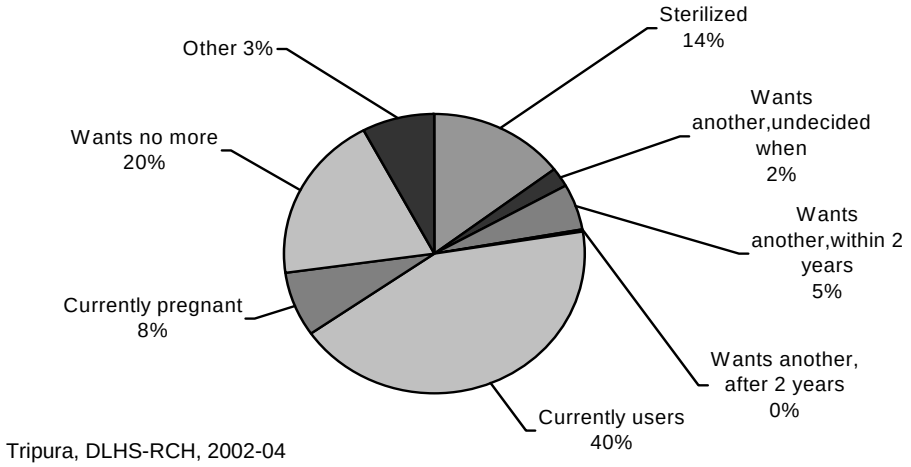
District	Birth order			
	1	2	3	4+
Dhalai	42.0	30.6	18.9	8.5
North Tripura	38.3	32.8	11.8	17.0
South Tripura	50.8	33.3	7.7	8.2
West Tripura	68.0	24.9	6.1	1.1
Tripura	51.9	30.2	8.8	9.1

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 418 women with no living child, 32 percent are currently pregnant and 17 percent are using spacing methods, while 19 percent want to have children within two years, less than one percent want to have children after two years, 4 percent are undecided about the timing of birth and 6 percent desired not to have any children. Among the currently married women, the desire for additional children dwindles down with increasing number of living children. As many as 49 percent of the women having one living child are using spacing methods, 5 percent of them want additional children within two years, 0.3 percent after two years, 4 percent are undecided about the timing of the next child, 13 percent of them want no more additional children and 9 percent are sterilized. Use of permanent as well as temporary means of contraception tends to be accelerated with number of living children. In the state of Tripura, out of the 3,884 surveyed representative women, 5 percent desired to have additional children within two years, less than one percent after two years, 19 percent want no more children, 7 percent are currently pregnant and 40 percent are using either terminal or temporary contraceptive methods. A total of 494 women want additional children irrespective of the number of living children. Out of 146 women

who have no living children and desire for additional children, 31percent want a boy as the first child, 7 percent desired for girl, for 49 percent, the sex of the child is immaterial and 14 percent leave it to God. With increasing number of living children, is male the dominating preferred sex of the next child though a sizeable proportion of women desiring additional children expressed that the sex of the child was immaterial.

Figure 3.3
Fertility Preference



Tripura, DLHS-RCH, 2002-04

Table 3.9 FERTILITY PREFERENCE

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

Desire for children	Number of living children					Total
	0	1	2	3	4+	
Desire for additional child						
Wants another soon[1]	19.2	5.1	2.8	1.6	0.4	5.0
Wants another later[2]	0.4	0.3	0.4	0.0	0.0	0.3
Want another, undecided when	4.0	3.5	1.1	0.2	0.7	2.1
Undecided	8.3	4.8	2.7	2.3	0.5	3.8
Up to God	3.0	2.5	1.0	0.3	1.2	1.7
Want no more	5.8	12.8	24.6	23.3	26.2	18.5
Sterilized	0.6	8.6	14.7	26.3	30.5	14.1
Currently users[3]	16.6	48.7	43.2	36.2	32.3	40.3
Currently pregnant	31.9	6.4	3.2	2.0	1.4	7.1
Declared infecund	10.0	7.4	6.3	7.7	6.7	7.3
Missing	0.3	0.0	0.0	0.0	0.0	0.0
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	418	1,340	1,232	544	350	3,884
Preferred sex of additional children						
Boy	30.7	41.7	44.2	*	*	39.5
Girl	7.2	31.1	17.2	*	*	20.2
Doesn't matter	48.6	17.6	18.3	*	*	26.7
Upto God	13.5	9.3	20.3	*	*	13.5
Missing	0.0	0.3	0.0	*	*	0.1
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	146	217	98	24	10	494

Note:[1] Wants next births within 2 years. [2] Wants to delay next birth for 2 or more years. [3] Other than sterilization.
* Percentage not shown – Based on very few cases.

3.10 Pregnancy Outcomes

Table 3.10 shows distribution of pregnancy outcomes including live birth, stillbirth, induced abortion and spontaneous abortion by districts in Tripura. For the state as a whole, 97 percent of pregnancy ends in live births, 1 percent in induced abortions, 1 percent in spontaneous abortion and less than one percent in stillbirth. More pregnancies in urban areas end in live births (98 percent) than in rural areas (97 percent), while the incidence of spontaneous abortion is more in urban areas (2 percent) than in rural areas (1 percent). The proportion of pregnancies ending in live births ranges from 90 percent in Dhalai to 98 percent each in North and West Tripura. The incidence of stillbirth is highest in South Tripura (2 percent) and in the rest of the districts it is either nil (Dhalai and West Tripura) or less than one percent (North Tripura). Induced abortion is highest in the district of West Tripura (2 percent) followed by Dhalai and North Tripura (1 percent). It is the least in South Tripura (less than one percent. Spontaneous abortion is least in West Tripura (less than one percent) and highest in Dhalai (9 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, Tripura, 2002-04

Districts	Live birth	Stillbirth	Induced abortion	Spontaneous abortion	Total percent
State-Rural	96.7	0.7	1.3	1.3	100.0
State-Urban	97.6	0.5	0.1	1.8	100.0
State-Total	96.9	0.6	1.1	1.4	100.0
Dhalai	90.0	0.0	1.1	8.8	100.0
North Tripura	97.5	0.3	1.0	1.2	100.0
South Tripura	95.9	2.0	0.5	1.6	100.0
West Tripura	97.7	0.0	1.8	0.5	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 programme services for antenatal care, includes at least three antenatal care visits, iron prophylaxis for pregnant and lactating women, at least one dose of tetanus toxoid vaccine, detection and treatment of anaemia in mothers, and management and referral of high-risk pregnancies, natal care, that is encouragement of safe delivery, post-natal care, and management of unwanted pregnancies. In rural areas, the government delivers reproductive health and other health services through its network of Sub-Centres (SCs), Primary Health Centres (PHCs) and other health facilities. In addition, pregnant women and children can get services from private maternity homes, hospitals, private practitioners, and in some case non-governmental organisations (NGOs) and trust hospitals. In urban areas, reproductive health services are available mainly through government or municipal hospitals, Urban Health Posts (UHPs), Urban Family Welfare Centres (UFWCs), hospitals and nursing homes operated by NGOs, and private nursing and maternity homes.

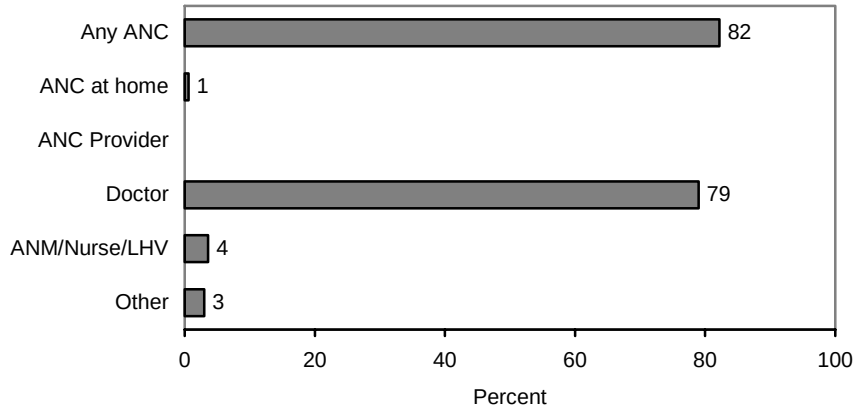
The National Population Policy (NPP), 2000 adopted by the Government of India (Ministry of Health and Family Welfare, 2000) reiterates the Government's commitments to the safe motherhood programme within the wider context of reproductive health. Among the national socio-demographic goals for 2010 specified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

In DLHS-RCH Phase-I, 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 stillbirth.

4.1 Antenatal Check-Ups

Women who had given a birth during the three years preceding the survey were asked whether they had gone for antenatal check-ups outside the home, and if they had, what type of service provider had given them the check-ups. They were also asked whether any health worker had visited them at home to provide antenatal check-ups. Table 4.1 and Figure 4.1 present the percentage of women who had given birth during the three years preceding the survey and information regarding the antenatal check-ups they had by source of antenatal check-ups according to some selected background characteristics. Results show that nine out of every ten women received antenatal check-ups during the three years preceding the survey, slightly more than RCH Round I (69.2 percent). Seventy-nine percent of women received antenatal check-ups from doctors, and 4 percent from ANM/Nurse/LHV. Only one percent women received antenatal check-ups at the doorstep from the ANMs or health worker.

Figure 4.1
Source of Antenatal Care



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

Tripura, DLHS-RCH, 2002-04

Antenatal check-ups are more common among younger women age below 34 years than among older women, and it is more common among those women who had given their first birth. The percentage of women who received antenatal check-up was comparatively higher in urban areas (89 percent) than in rural areas (80 percent), and the percentage of women who received antenatal check-ups from doctors is much higher in urban areas (83 percent) than in rural areas (78 percent), and on the other hand an 2 percent of rural women received antenatal check-ups from auxiliary nurse midwife, nurse or LHVs, the same for women in urban areas is 8 percent. Fifty-nine percent of non-literate women received antenatal check-ups, nearly all women (91 percent) who had completed high school received antenatal check-ups for their last pregnancy that terminated into births (either live or still birth) during the three years preceding the survey.

Table 4.1 ANTENATAL CHECK-UP

Percentage of women* who received any antenatal check-up (ANC) during pregnancy by source of antenatal provider, according to selected background characteristics, Tripura , 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	82.3	0.0	74.8	7.3	4.3	12.4	71
20-34 years	83.5	0.8	81.1	2.9	0.7	1.9	696
35 years & above	71.1	0.0	66.1	6.4	1.2	2.6	87
Children ever born							
1	88.1	0.8	84.3	4.0	1.4	3.6	412
2	86.2	0.5	83.2	3.6	0.8	1.6	279
3	73.4	0.8	72.6	2.8	1.5	2.3	80
4+	46.2	0.0	43.4	2.9	0.0	3.8	76
Residence							
Rural	80.1	0.6	77.9	2.3	0.7	2.7	668
Urban	89.4	0.9	83.2	8.4	2.5	3.2	186
Education							
Non-literate	59.1	0.4	54.8	6.0	0.7	4.2	175
0-9 @ years	86.7	1.0	83.1	2.8	0.9	2.0	475
10 years & above	91.4	0.0	90.3	3.4	1.7	3.7	204
Religion							
Hindu	85.0	0.6	81.6	3.5	1.1	2.4	756
Muslim	(65.5)	(1.8)	(61.8)	(3.6)	(0.0)	(7.3)	47
Other	54.6	0.0	54.6	4.7	2.3	4.7	51
Caste/tribe#							
Scheduled caste	83.1	0.0	80.1	4.7	3.9	4.5	172
Scheduled tribe	63.7	0.4	60.9	1.8	0.1	3.2	157
Other backward class	90.6	0.9	86.5	4.7	0.6	2.9	190
Other	86.7	1.0	83.8	3.3	0.4	1.8	326
Standard of living index							
Low	73.7	0.9	69.1	4.6	0.8	1.8	381
Medium	88.9	0.6	87.0	2.2	0.7	3.3	360
High	89.1	0.0	87.1	4.6	3.1	4.7	113
Availability of health facility[4] in the village							
No	69.0	0.4	68.0	0.5	0.4	0.6	178
Yes	84.2	0.7	81.5	2.9	0.8	3.5	490
Total	82.2	0.6	79.0	3.6	1.1	2.8	854

Note: * Women who had their last live/still birth since 1-1-1999/1-1-2001. Total includes 7 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. ( ) based on less than 50 unweighted cases.

The proportion of women who received antenatal check-ups from a doctor, increased steadily with the level of education and the standard of living index. Fifty-five percent non-literate women as compared to 90 percent having education of more than 10 years received ANC from doctors. Similarly, 69 percent women belonging to households with a low standard of living against 87 percent of that from a high standard of living fall in this category. The proportion of Hindu women who received antenatal check-ups from doctors (82 percent) was much higher than that of Muslim women (62 percent), and 'other' religion women (55 percent). Eighty-four percent of women from the 'other castes' category received antenatal check-ups from doctors, while it was 80 percent for scheduled caste women, and 61 percent for scheduled tribe women, and for women from other backward classes, it was highest at 87

percent. Two percent of scheduled tribe women received antenatal check-ups from ANMs, while it was 5 percent each among scheduled castes and other backward class women, and 3 percent of women from the 'other' castes category.

4.2 Antenatal Check-Ups at Health Facility

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

Table 4.2 PLACE OF ANTENATAL CHECK-UP

Percentage of women* who received any antenatal check-ups (ANC) during pregnancy by source and place of antenatal check-ups, according to selected background characteristics, Tripura, 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 Govt.	ISM[4] facility Private	Other	
Age group									
Less than 20 years	0.0	63.9	16.7	4.9	0.0	0.6	5.8	3.5	71
20-34 years	0.8	56.6	23.5	2.2	1.6	1.1	3.6	2.0	696
35 years & above	0.0	47.4	19.8	0.0	0.0	0.0	5.5	1.3	87
Children ever born									
1	0.8	58.5	23.8	2.6	1.2	1.7	5.9	1.4	412
2	0.5	63.2	20.5	1.9	1.0	0.3	2.0	2.3	279
3	0.8	48.3	23.7	2.9	2.6	0.2	1.9	3.7	80
4+	0.0	26.5	19.7	0.0	2.3	0.0	0.0	4.5	76
Residence									
Rural	0.6	55.8	20.7	2.8	1.6	0.6	3.3	2.1	668
Urban	0.9	58.0	29.3	0.4	0.4	2.4	6.1	1.7	186
Education									
Non-literate	0.4	43.1	15.2	5.4	1.4	0.0	0.6	5.0	175
0-9 @ years	1.0	61.0	22.1	1.3	1.7	0.9	3.3	2.1	475
10 years & above	0.0	56.6	29.9	2.5	0.4	1.8	7.1	0.2	204
Religion									
Hindu	0.6	57.8	24.1	2.2	0.8	0.9	4.0	1.9	756
Muslim	(1.8)	(40.0)	(14.5)	(2.9)	(2.9)	(0.0)	(8.6)	(8.6)	47
Other	0.0	42.8	9.2	0.0	7.3	5.2	0.0	0.0	51
Caste/tribe#									
Scheduled caste	0.0	58.7	23.5	3.3	1.9	1.0	2.6	2.6	172
Scheduled tribe	0.4	52.7	11.8	1.7	5.6	0.0	0.7	1.1	157
Other backward class	0.9	61.3	23.2	3.0	0.3	1.1	5.7	1.7	190
Other	1.0	54.6	27.2	1.5	0.1	1.3	4.7	2.3	326
Standard of living index									
Low	0.9	57.3	14.1	3.5	2.0	0.0	1.5	2.7	381
Medium	0.6	58.8	26.2	1.7	0.9	1.3	4.8	1.7	360
High	0.0	44.5	39.9	0.5	0.7	2.8	8.0	1.4	113
Availability of health facility[5] in the village									
No	0.4	43.4	20.0	2.3	5.2	1.3	5.8	3.2	178
Yes	0.7	60.3	21.0	3.0	0.5	0.4	2.5	1.8	490
Total	0.6	56.3	22.6	2.2	1.3	1.0	3.9	2.0	854

Note:* Women who had their last live/still birth since 1-1-1999/1-1-2001. Total includes 7 women with zero parity who were not shown separately. # Total figure may not add to N due to do not know and missing cases. @ Literate women with no years of schooling are also included. [1]Antenatal check-ups outside home and percentage add more than 100.0 due to multiple responses.[2] Includes sub-centre, primary health centre, community health centre or rural hospital, urban health centre/ urban health post/ urban family welfare centre, government hospital or dispensary.[3] Includes Private hospital/clinic or non-governmental hospital/ trust hospital or clinic.[4] Indian system of medicine.[5] Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village.( ) based on less than 50 unweighted cases.

Table 4.2 shows the percentage of women who had received antenatal check-ups during pregnancy by place. During pregnancy, women received antenatal check-ups from multiple sources such as, health workers providing ANC at home, Government health facility, private health facility, and at Indian System of medicine etc. Women who received antenatal check-ups both at home and outside the home are categorised as having received care outside the home. Around 56 percent of women received antenatal check-ups at Government health facility, including 2 percent through primary health centre and 1 percent through sub-centre, and 23 percent at a private health facility. Other than this, 1 percent of women reported that they had received antenatal check-ups at the Government Indian system of medicine, and 4 percent at private Indian system of medicine. As mentioned above women availed antenatal check-ups from multiple sources. Women who were visited by an ANM might have also visited government and/ or private health facilities including Indian system of medicine.

Younger women were more likely to receive antenatal-check-ups at government health facilities (64 percent) than older women 57 percent for age 20-34 and 47 percent for age 35 and above. Fifty-six percent women from rural areas availed government health facilities for antenatal check-ups that was higher than women in urban areas (58 percent), and a high proportion of women (29 percent) from urban areas availed private health facilities for antenatal check-ups than women from rural areas (21 percent). It may be mentioned that about 2 percent of the women from rural areas received antenatal check-ups at sub-centre. This indicates that the services are reaching the target population, particularly through the public sector. A comparatively high proportion of women who received antenatal check-ups at Government health facilities are non-literate, Hindu, scheduled caste or tribe, living in households with a low standard of living and women from those villages where health facilities are not available.

4.3 Antenatal Check-Ups by District

Table 4.3 indicates the antenatal coverage in Tripura that ranges from the highest of 89 percent in West Tripura to the lowest of 76 percent in Dhalai. In the other two districts, more than 80 percent of women got some kind of antenatal check-ups for their last births during the three years preceding the survey. Antenatal check-ups received from doctor was low in Dhalai (73 percent), and in the remaining districts it was 79 percent for North Tripura, 81 percent for South Tripura and highest of 83 percent in West Tripura. In 3 out of 4 districts, North Tripura (1 percent), South South Tripura (4 percent), and west Tripura (5 percent) very few women received antenatal check-ups by ANM/Nurse/LHV. The highest in this category is Dhalai where 19 percent women received antenatal check-ups by ANM/Nurse/LHV.

The extent of utilisation of government health facilities for antenatal check-ups was higher than that of private health facilities. The range of antenatal check-ups coverage through government facilities was highest in West Tripura (81percent) to the lowest of 43 percent in South Tripura., and only in two districts North and South Tripura more than thirty percent of the women visited private health facility. In Tripura, 15 percent pregnant women in Dhalai district availed the Indian system of medicine (either government or private) for an antenatal check-up. In the other districts, the percentage of women who availed such services through

the Indian system of medicine ranged from 2 percent in West tripura, 3 percent in North Tripura and 7 percent in South Tripura.

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, Tripura, 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
Dhalai	75.6	0.0	73.0	19.3	71.8	5.8	15.1
North Tripura	80.1	0.8	78.5	1.4	43.8	30.9	2.7
South Tripura	81.4	0.5	80.8	4.1	43.4	32.0	6.7
West Tripura	89.4	0.4	83.4	4.7	81.1	7.9	1.9
Tripura	82.2	0.6	79.0	3.6	56.3	22.6	3.7

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. Sixty-three percent of women stated that it was not necessary to have an antenatal check-up.Sixty-two percent of the women stated that an antenatal check-up was not necessary in villages with a health facility whereas 74 percent of women from those villages where a health facility is not available fall in this category. About 7 percent of women felt that it was not customary to go for an antenatal check-up. Other factors contributing to non-use of antenatal care were that it costs too much (15 percent), it was situated too far, or there was no transportation (9 percent), no time to go (7 percent), family did not allow availing antenatal care (6 percent), and other 11 percent were reported lack of knowledge of these services. Six percent of the women reported 'poor quality of services' as the main reason. Five percent of women from villages with a health facility reported that they had no time to go, and 4 percent of women reported that their family did not allow them to have an antenatal check-up. The corresponding figures were 6 percent of women each from villages without a health facility.

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, Tripura, 2002-04

Reason	Total	Residence		Availability of health facility[1] in the village	
		Rural	Urban	No	Yes
Not Necessary	63.1	66.8	*	74.3	61.5
Not customary	7.2	8.2	*	2.9	12.0
Cost too much	15.3	17.0	*	11.3	21.1
Health facility too far/ No transport	8.5	7.1	*	6.7	7.4
Poor quality service	5.8	6.6	*	2.8	9.3
No time to go	6.6	5.3	*	6.3	4.5
Family did not allow	6.1	4.7	*	6.3	3.6
Lack of knowledge	10.8	8.6	*	7.2	9.6
Other	3.3	3.7	*	3.8	3.6
Number of women	150	132	18	55	76

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. * Percentage not shown – based on very few cases.

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 components of check-ups by residence. Except for X-rays (which are not recommended as a standard component of antenatal care), all of the measurements and tests are part of essential obstetric care or are required for monitoring high-risk pregnancies.

Seventy-one percent of women were weighted, 65 percent had their blood pressure checked, and 57 percent had an abdominal examination as the part of the antenatal check-ups. Other common components of antenatal check-ups were blood test (64 percent), urine test (70 percent), the measurement of height (32 percent), internal examination (26 percent), and breast examination (15 percent). About 10 percent of women had a sonogram or ultrasound, 7 percent had an X-ray and only two percent of women reported that they had amniocentesis test. All of these measurements or producers were performed more often during antenatal check-ups in urban areas than in rural areas.

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 66 percent of urban women as compared to 75 percent of rural women and 73 percent in general. Forty-one percent of the women received advice on danger signs of pregnancy. Women were less likely to receive advice on delivery care (49 percent), on breastfeeding (30 percent), and on newborn care (33 percent). Advice on family planning was given to 15 percent of rural women and 27 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, Tripura, 2002-04

Components of antenatal check-ups	Total	Rural	Urban
Antenatal measurements/tests			
Weight measured	71.0	72.8	65.2
Height measured	31.5	28.7	40.6
Blood pressure checked	64.9	64.6	65.6
Blood tested	64.0	61.7	71.3
Urine tested	70.3	69.3	73.8
Abdomen examined	56.5	56.8	55.7
Internal examined	26.4	23.9	34.4
Breast examined	15.4	15.3	15.7
X-ray	7.2	4.9	14.4
Sonography /ultrasound	10.3	8.5	15.9
Amniocentesis	2.1	0.9	5.8
Antenatal advice			
Diet	72.5	74.6	65.9
Danger signs of pregnancy	41.3	36.1	57.9
Delivery care	48.9	43.6	66.0
Breast feeding	30.1	24.4	48.4
New born care	32.8	28.4	47.1
Family planning	17.5	14.5	27.0
Number of women who received any antenatal check-up	702	535	166

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 includes all pregnant women should be registered in the first 12-16 weeks (Ministry of Health and Family Welfare, 1997). Accordingly the first antenatal check-ups should take place at latest during the first trimester of the pregnancy. It also includes the provision of at least three antenatal care visits, of at least one tetanus toxoid injection, and supplementary iron in the form of IFA tablets daily for 100 days. To assess whether the women had received all the care during pregnancy, information was collected regarding number of antenatal visits, timing of the first visit, received tetanus toxoid injection and supplement iron folic acid tablets. The results are presented in Table 4.6. In Tripura, 14 percent of the women received at least three antenatal check-ups and 52 percent had four or more check-ups. At least three antenatal check-ups were received by 17 percent of women in urban areas compared with 13 percent of women in rural areas. Number of visits for antenatal care varies by education, children ever born, religion, caste and standard of living index. Twenty-seven percent of non-literate, 54 percent literate women (educated below high school) and 70 percent of women who had 10 or more years of schooling visited for more than four antenatal checkups. Parity of women is negatively associated with antenatal check-ups. About 15 percent of women with parity one received three antenatal check-ups compared to 6 percent of the 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, Tripura, 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	17.6	19.7	9.9	40.9	13.0	8.2	11.7	13.7	25.2	53.8
1	3.7	3.8	3.6	4.4	4.1	2.3	2.5	4.2	7.2	5.1
2	12.4	13.1	9.6	13.0	13.8	8.4	11.7	15.6	8.1	8.5
3	13.9	13.0	17.0	14.9	15.1	10.3	15.2	14.6	8.6	6.2
4+	52.2	50.3	59.2	26.8	53.8	70.3	58.6	51.8	49.6	26.5
Stage of pregnancy at the time of the first antenatal check-up										
No antenatal check-up	17.6	19.7	9.9	40.9	13.0	8.2	11.7	13.7	25.2	53.8
First trimester	61.1	58.2	71.7	36.3	62.7	78.7	69.0	62.6	50.2	30.4
Second trimester	18.1	18.5	16.8	18.0	21.6	10.2	16.1	19.9	21.3	14.8
Third trimester	2.9	3.5	0.8	4.8	2.4	2.5	3.0	3.7	1.9	1.0
Women who received TT										
No TT	25.5	26.1	23.2	45.1	20.8	19.5	21.9	24.6	27.9	44.7
1	3.1	3.1	3.2	6.8	2.4	1.6	1.9	3.4	4.3	7.5
2+	68.3	68.7	66.9	46.5	72.5	77.3	71.5	71.2	66.1	47.9
Do not remember/missing	3.1	2.1	6.8	1.6	4.3	1.6	4.7	0.8	1.7	0.0
Women who received IFA tablets/syrup										
No IFA/syrup	32.7	31.0	39.0	55.7	30.6	18.0	26.9	29.4	42.2	60.6
Received but not consumed	2.6	1.9	5.0	3.2	2.1	3.2	3.0	2.9	2.1	0.0
Consumed one IFA per day	44.2	48.2	29.7	32.7	46.2	49.3	44.4	48.2	42.9	33.5
Received 100+ IFA tablets/syrup	15.9	14.9	19.2	8.5	17.6	18.2	16.5	18.6	13.6	6.5
Percentage of women who received full [1] antenatal check-ups	13.6	12.8	16.6	4.9	16.6	14.1	13.5	16.4	12.2	6.5
Number of women	854	668	186	175	475	204	412	279	80	76

Note: Total includes 7 women with zero parity who were not shown separately. @ Literate women with no years of schooling are also included. [1] At least three visits for antenatal check-ups, at least one TT injection received and were given adequate amount of IFA tablets/syrup.

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, Tripura, 2002-04

Antenatal care indicators	Religion			Caste#				Standard of living index			Availability of health facility[2] in the village	
	Hindu	Muslim	Other	Scheduled caste	Scheduled tribe	Other backward class	Other	Low	Medium	High	No	Yes
Number of ANC visits												
No visit	14.7	(34.5)	45.4	16.9	36.3	9.4	12.6	26.0	10.9	10.5	31.0	15.6
1	3.5	(9.1)	3.1	2.7	3.1	5.6	3.4	4.4	3.2	3.2	4.8	3.4
2	12.8	(7.3)	8.1	14.5	14.8	13.5	9.7	12.6	14.0	6.1	11.5	13.7
3	14.7	(9.1)	6.9	17.4	16.3	14.5	10.2	12.5	17.8	6.2	9.7	14.2
4+	54.0	(40.0)	36.5	48.6	29.5	56.9	63.4	44.2	53.9	73.7	43.0	52.9
Stage of pregnancy at the time of the first antenatal check-up												
No antenatal check-up	14.7	(34.5)	45.4	16.9	36.3	9.4	12.6	26.0	10.9	10.5	31.0	15.6
First trimester	62.3	(47.3)	54.6	59.1	49.5	63.2	67.1	48.4	70.6	73.9	52.0	60.4
Second trimester	19.5	(16.4)	0.0	22.4	10.9	21.8	17.7	20.6	16.6	14.7	15.2	19.7
Third trimester	3.2	(1.8)	0.0	1.7	3.3	5.6	1.9	4.7	1.7	0.5	1.8	4.1
Women who received TT												
No TT	23.5	(27.3)	48.6	24.1	45.5	19.3	19.4	33.1	18.3	22.9	34.7	23.0
1	2.9	(5.5)	5.2	3.1	3.1	2.3	3.7	4.8	1.6	2.2	2.0	3.5
2+	70.1	(67.3)	46.2	69.5	47.3	73.7	75.3	60.5	75.6	71.3	63.0	70.8
Do not remember/missing	3.5	(0.0)	0.0	3.4	4.1	4.7	1.6	1.6	4.6	3.6	0.3	2.7
Women who received IFA tablets/syrup												
No IFA/syrup	31.6	(40.0)	46.2	31.3	58.3	25.3	24.6	38.8	28.1	27.2	36.6	29.0
Received but not consumed	2.8	(0.0)	2.6	4.2	1.5	1.7	2.9	2.6	2.0	4.5	3.4	1.4
Consumed one IFA per day	44.4	(49.1)	34.5	40.4	23.7	51.7	52.0	44.7	44.1	42.4	44.4	49.6
Received 100+ IFA tablets/syrup	17.0	(12.7)	3.4	18.6	7.0	22.9	14.7	11.5	17.6	25.0	10.4	16.5
Percentage of women who received full [1] antenatal check-ups	14.7	(9.1)	3.4	16.5	4.8	18.6	13.5	9.8	15.7	19.9	9.0	14.1
Number of women	756	47	51	172	157	190	326	381	360	113	178	490

Note: [1] At least three visits for antenatal check-ups, at least one TT injection received and was given adequate amount of IFA tablets/syrup. # Total figure may not add to N due to don't 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. ( ) based on less than 50 unweighted cases.

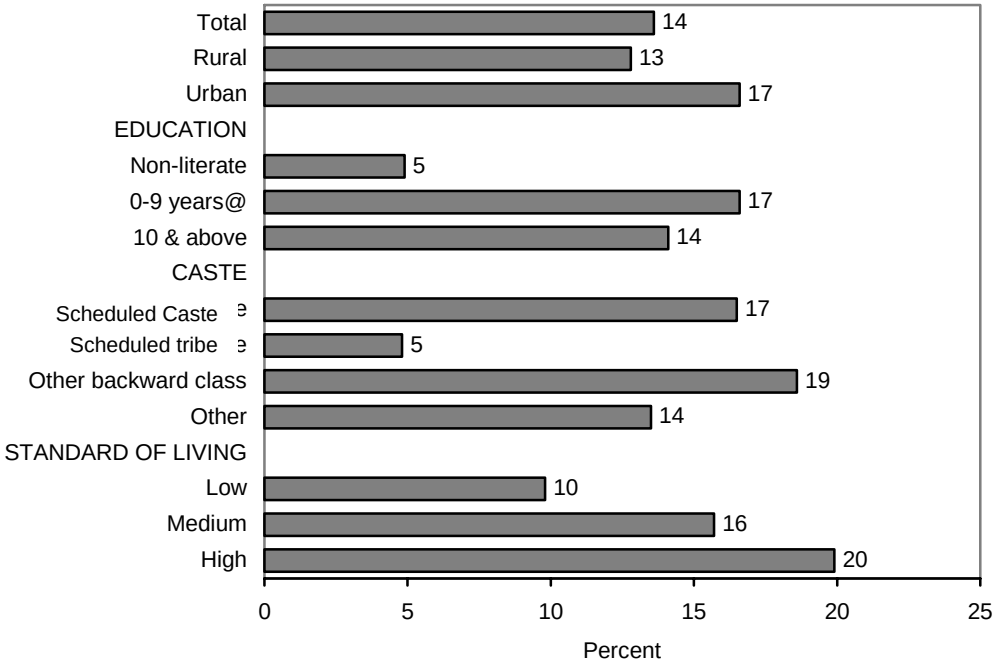
Hindu women (15 percent) were more likely to have at least three visits for antenatal check-ups than Muslim women (9 percent) and women from 'other' religions (7 percent). Coverage is substantially lower for women from scheduled-tribes (16 percent) than to women of other than scheduled tribe (15-10 percent). Having four or more antenatal visits also increased with the standard of living-44 percent for women with a low standard of living, 54 percent for women with a medium standard of living and 74 percent for women with a high standard of living. Availability of health facility in the village makes very little difference to the minimum three visits for antenatal check-ups.

Data on timing of first antenatal check-ups shows that about sixty-one of the women received their first antenatal check-up in the first trimester of pregnancy, and another 18 percent received their first check-up in the second trimester, and 3 percent of women received their first check-up in the third trimester. A relatively higher proportion of women in the urban areas (72 percent) as compared to those in rural areas (58 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. Thirty six percent of non-literate women had undergone their first antenatal check-up in the first trimester, and 79 percent of women who had completed at least 10 years of schooling received their first antenatal check-up in the first trimester. More than half of the women (69 percent) with parity-1 were visited in first trimester and a little more than one-quarter (30 percent) women with parity- four and above had undergone antenatal check-up in first trimester. Muslim women were less likely to go for first antenatal check-up in first trimester of their pregnancy as compared to Hindu and women of other religion, and half (50 percent) of scheduled tribe women were visited in first trimester for first antenatal check-ups compared with 59 percent to scheduled caste women, 63 percent of other backward class of women and 67 percent women from 'other' caste category. Forty-eight percent women with low standard of living, 71 percent with medium standard of living, and 74 percent of women with high standard of living respectively had undergone their first antenatal check-up in the first trimester of their pregnancy period

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 receiving iron folic acid tablets/syrup during pregnancy is also collected. Table 4.6 shows that women in Tripura received IFA supplements for about 44 percent of the last birth during three years preceding the survey. The coverage of IFA tablets is relatively higher in rural areas (48 percent) than in urban areas (30 percent). IFA coverage is much below for non-literate women, women with low standard of living, scheduled tribe women, and women of higher parity. IFA coverage is also lower among 'other' religion women (35 percent) than Hindu (44 percent) and Muslim (49 percent) women. Again, during pregnancy in the last three years preceding the survey, only 16 percent of women received 100 or more IFA, 15 percent in rural areas and 19 percent in urban areas. Intake of 100 or more IFA is positively associated with education and standard of living index and negatively associated with parity. Women from other religions and other backward classes received 100 or more IFA than their counterparts. Such a large difference in receiving IFA or intake of 100 or more IFA tablets/syrup is not found while analysing the situation by availability of health facility in the village.

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 sixty-eight percent of the women received two or more tetanus toxoid injections. Coverage of two or more TT injection is slightly lower in urban areas (67 percent) than that in rural areas (69 percent). The coverage of more than two tetanus toxoid injection for Hindu women (70 percent) is more than that for Muslim women (67 percent) and women from other religions (46 percent). Coverage of at least one tetanus toxoid injection is almost similar for schedule tribe (3 percent), schedule caste (3 percent), other backward classes (2 percent), and for 'other' caste category women (4 percent). Non-literate women received at least one tetanus toxoid injection for 7 percent of their last birth, whereas literate women with 9 years of schooling received at least one tetanus toxoid injection for 2 percent, and women who had completed 10 years or more of schooling received at least one tetanus toxoid injection for 2 percent of their last birth. Seventy-one percent of women with a high standard of living received more than two tetanus toxoid injection, and 61-76 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. More than two tetanus toxoid injection was received by 72 percent women of Parity-1 compared with 48 percent of Parity 4 and above.

Figure 4.2
Full Antenatal Care by Background Characteristic



@ Literate mothers with no years of schooling are also included. Tripura, 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 14 percent of women in Tripura received full antenatal care. Coverage of full antenatal care is low for non-literate women, women with higher parity, 'other' religion women, women from scheduled tribe, women with a low standard of living, and women from those villages where health facilities are not available. Full antenatal coverage was also lower in rural areas (13 percent) than in urban areas (17 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; (the percentage who received antenatal check-up in the first trimester of pregnancy, the percentage who received at least three antenatal check-ups, the percentage who received at least one tetanus toxoid injection, the percentage given 100 or more iron folic acid tablets/syrup, and the percentage who received full antenatal care services) by district.

Table 4.7 ANTENATAL CARE INDICATORS BY DISTRICT

Percentage of women* who received different type of antenatal care by district, Tripura, 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
Dhalai	63.2	65.5	64.2	46.0	33.3
North Tripura	58.9	63.8	79.1	16.3	15.2
South Tripura	63.2	68.8	79.0	22.7	20.0
West Tripura	65.6	70.0	61.5	10.3	7.9
Tripura	61.1	66.1	71.4	15.9	13.6

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.

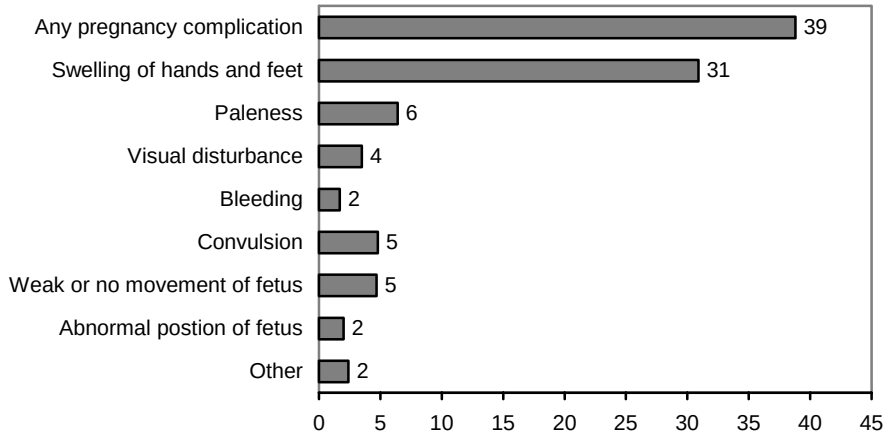
The utilisation of antenatal care services differs from district to district. In all the districts, except North Tripura (59 percent), more 63 percent the women received their first antenatal check-up in the first trimester of pregnancy. The percentage of women who received at least three visits for antenatal check-ups ranges from 64 percent in North Tripura to 70 percent in West Tripura. (see Map-3). There has been good coverage of tetanus toxoid injection in the all districts, ranging from 62 to 79 percent, but on the other hand, performance regarding receipt of 100 or more IFA is poor. In all the districts, the value ranges from 10 to 46 percent, and it is lowest in West Tripura. The percentage of women who received full antenatal care ranges from 8 percent in West Tripura to 33 percent in Dhalai. In 3 of 4 districts, Dhalai, North

Tripura and South Tripura coverage rate of full antenatal care is above that of the state average.

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 of the following pregnancy-related problems such as swelling of hands and feet, paleness, visual disturbance, vaginal bleeding, convulsions, weak or no movement of foetus, abnormal position of foetus, and other problems. All the information is based on women's self-reporting which is presented in Table 4.8 and Figure 4.3.

Figure 4.3
Percentage of women with Pregnancy Complication and by Symptoms



Tripura, DLHS-RCH, 2002-04

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, Tripura, 2002-04

Background characteristic	Percentage of women with any pregnancy complication	Type of pregnancy complication; Swelling of hands and feet	Paleness	Visual disturbances	Bleeding	Convulsion	Weak or no movement of foetus	Abnormal position of foetus	Other	Number of women
Age group (years)										
15-19	42.8	36.5	10.3	2.3	0.5	3.2	3.8	0.5	1.1	71
20-24	38.3	30.2	6.7	3.7	1.1	5.8	5.3	2.8	1.8	308
25-29	39.6	30.4	5.9	2.6	1.3	4.5	4.2	1.2	4.3	269
30-34	38.5	29.7	5.2	5.5	3.3	3.9	6.6	1.7	0.9	119
35-39	34.7	30.9	4.9	4.3	2.6	5.3	2.8	0.0	3.0	71
Children ever born										
1	39.4	31.5	7.7	2.9	1.2	4.5	5.4	2.5	2.2	412
2	35.1	29.2	3.4	2.1	2.0	4.0	4.0	1.8	2.4	279
3	46.7	30.0	8.2	6.2	3.5	11.8	5.4	2.4	4.9	80
4+	41.7	34.8	8.6	8.8	0.9	2.0	3.7	0.0	1.9	76
Residence										
Rural	36.4	29.2	7.4	3.9	1.0	3.4	3.2	0.8	1.2	668
Urban	47.5	37.0	2.7	1.9	3.9	9.9	10.1	6.5	6.8	186
Standard of living index										
Low	41.9	32.0	10.4	5.0	1.8	6.3	3.9	1.3	1.7	381
Medium	37.2	31.8	3.2	1.5	0.6	3.5	5.1	2.4	2.1	360
High	33.5	24.3	2.9	4.8	4.4	3.9	6.3	3.0	6.1	113
Received any ANC										
Yes	40.9	32.8	6.7	3.1	1.8	5.1	5.4	1.9	2.2	702
No	28.4	21.2	4.1	4.5	0.5	2.6	1.1	1.9	2.7	150
Total	38.8	30.9	6.4	3.5	1.7	4.8	4.7	2.0	2.4	854

Note: Total includes 15 cases in age of women 40-44, 7 women with zero parity and 2 with missing information on received any antenatal check-ups who were not shown separately. @ Literate women with no years of schooling are also included.

About 39 percent of the women experienced at least one pregnancy related problem. The proportion was higher among urban women (48 percent) than among rural women (36 percent). Women in the age group 15-19 years, and women with higher parity face at least one pregnancy related problem. This proportion is relatively high among women who had received some kind of antenatal care during the pregnancy. Forty-one percent of women who had an antenatal check-up reported that they had experienced at least one problem during their pregnancy while 28 percent of women did not receive any antenatal check-up during their pregnancy fall in this category. The major problems reported were 'swelling of hand and feet' (31 percent), 'paleness' (6 percent), and 'visual disturbance' (4 percent). Only 2 percent reported 'abnormal position of foetus', and 'vaginal bleeding' (2 percent), 'convulsions' (5 percent), and 'weak or no movement of foetus' (5 percent). Other problems related to pregnancy were reported by 2 percent of women. Swelling of hands and feet is more common among women in the age group 15-19 years, women with parity-1 and parity-4 and above, and women with low standard of living. The percentage of women who were more anaemic belonging to the age group 15-19, women from rural areas, women with a low standard of living and women who did not receive any kind of antenatal care during the pregnancy. Anaemia, visual disturbance, and convulsion increased steadily with increase of parity, whereas women with parity-3 reported vaginal bleeding and convulsions more. The older women (30-34 years of age) were more likely to report vaginal bleeding and weak or no movement of the foetus as pregnancy complications.

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 who obtained advice or had sought treatment by source of treatment according to residence and availability of health facility in the village. Fifty-four percent of women reported that they had obtained advice or consulted someone for their problem. The proportion was higher among urban women (62 percent) than among rural women (51 percent), and 50 percent of women sought treatment from those villages where health facility was available as compared to 54 percent of women with non-availability of health facility within the village.

Among women who sought treatment for pregnancy complications, 70 percent visited a government health facility including a primary health centre (7 percent) and sub-centre (7 percent). Twenty-nine percent of them visited a private health facility, and 5 percent had gone to a facility with the Indian system of medicine, while another 12 percent obtained advice from another health facility. The proportion of women who visited a private health facility is higher in urban areas (31 percent) than in rural areas (27 percent). Among women who sought treatment, 95 percent went to a doctor and 4 percent to an auxiliary nurse midwife or nurse or LHV, and another 1 percent to someone else. Ninety-five percent of these women in urban areas, and the same number in rural areas were examined by a doctor, whereas ANM/Nurse/LHV examined 3 percent women in rural areas and 5 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, Tripura, 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	53.8	50.9	61.8	54.4	50.2
Number of women	331	243	88	40	203
Percentage sought treatment at health facility					
Government health facility[1]	70.1	74.5	60.0	*	72.7
Primary health centre	6.7	6.5	7.0	*	5.1
Sub centre	7.2	8.1	4.9	*	6.8
Private health facility[2]	28.5	27.4	30.8	*	29.2
ISM[3] facility	5.3	5.1	5.6	*	5.6
Other	11.7	9.8	15.9	*	7.5
Percent distribution of women who obtained treatment from					
Doctor	95.1	95.1	95.0	*	94.1
ANM/nurse/midwife/LHV	3.6	2.9	5.0	*	3.6
Other[4]	1.3	1.9	0.0	*	2.3
Total percent	100.0	100.0	100.0	*	100.0
Number of women	178	124	55	22	102

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 includes 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. * Percentage not shown – based on very few cases.

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 under the supervision of trained health professionals. The provision of delivery services in the government health institutions is one of the components of the RCH programme. For each live/still birth during three years preceding the survey, DLHS-RCH asked the women where (place) their children were born, who assisted during the deliveries in case of home deliveries, characteristics of delivery, and any problems that occurred during the delivery. Table 4.10 and Figure 4.4 present the place of delivery. A little more than half of the birth (57 percent) took place in government health institutions, 5 percent in private health institutions, and a large proportion of births (38 percent) took place at home. About 83 percent of the deliveries in urban areas and 57 percent

of the deliveries in rural areas took place in health institutions. Deliveries in health facilities in Tripura rose from 46 percent in Round-I to 48 percent in Round-II.

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, Tripura, 2002-04

Background characteristics	Health institutions		Home	Other	Missing	Total percent	Number of women
	Public	Private					
Age group (in years)							
Below 20	64.7	0.0	35.3	0.0	0.0	100.0	71
20-34	55.8	5.5	38.5	0.1	0.0	100.0	696
35 and above	63.8	5.0	31.2	0.0	0.0	100.0	87
Children ever born							
1	64.4	9.2	26.3	0.1	0.0	100.0	412
2	58.8	1.4	39.6	0.3	0.0	100.0	279
3	47.0	1.1	51.9	0.0	0.0	100.0	80
4+	24.4	0.0	75.6	0.0	0.0	100.0	76
Residence							
Rural	53.8	2.8	43.3	0.1	0.0	100.0	668
Urban	70.4	12.7	16.7	0.1	0.1	100.0	186
Education							
Non-literate	36.8	1.0	62.2	0.0	0.0	100.0	175
0-9@ years	58.6	3.0	38.3	0.1	0.0	100.0	475
10 years & above	72.2	13.0	14.4	0.3	0.0	100.0	204
Religion							
Hindu	60.0	5.6	34.2	0.1	0.0	100.0	756
Muslim	(25.5)	(0.0)	(74.5)	(0.0)	(0.0)	(100.0)	47
Other	41.1	0.0	58.9	0.0	0.0	100.0	51
Caste#							
Scheduled caste	57.7	3.1	39.2	0.0	0.0	100.0	172
Scheduled tribe	55.4	1.9	42.8	0.0	0.0	100.0	157
Other backward class	55.6	9.2	35.2	0.0	0.0	100.0	190
Other	60.1	5.1	34.5	0.3	0.0	100.0	326
Standard of living index							
Low	47.0	1.5	51.4	0.2	0.0	100.0	381
Medium	63.9	4.9	31.1	0.1	0.0	100.0	360
High	71.9	16.9	11.1	0.0	0.1	100.0	113
Number of antenatal check-ups							
No check-up	22.1	2.6	75.3	0.0	0.0	100.0	150
1	37.3	0.4	62.3	0.0	0.0	100.0	32
2	60.7	5.0	34.4	0.0	0.0	100.0	105
3	58.6	6.2	35.2	0.0	0.0	100.0	119
4+	69.4	5.8	24.5	0.2	0.0	100.0	446
Delivery characteristics							
Normal	57.0	3.2	39.6	0.1	0.0	100.0	755
Caesarean	67.2	24.1	8.7	0.0	0.0	100.0	68
Assisted	44.3	6.4	49.3	0.0	0.0	100.0	31
Availability of health facility[1] in the village							
No	46.1	1.1	52.8	0.0	0.0	100.0	178
Yes	56.6	3.5	39.8	0.1	0.0	100.0	490
Total	57.4	5.0	37.5	0.1	0.0	100.0	854

Note: Total includes 7 women with zero parity and 2 with missing infromatation on number of antenatal check-ups who were not shown separately. # Total figure may not add to N due to do not know and missing cases. @ Literate women with no years of schooling are also included. [1] Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village. ( ) based on less than 50 unweighted cases.

The proportion of births occurring in health institutions is lower for young women under 35 years (65-61 percent) than for women aged 35 years and above (69 percent). Institutional deliveries, particularly in private health facilities, increase sharply with education and the standard of living. More than one-fourth (38 percent) of the births to non-literate women and 85 percent births to literate women who had completed at least 10 or more years of schooling took place at health institutions. Women with a high standard of living were more likely to give birth in health institutions than women with a low standard of living (Figure 4.4). The proportion of institutional deliveries increases as parity increases from parity one (38 percent) to parity four and above (75 percent). Institutional delivery is much lower for Muslim women (26 percent) than for Hindus (66 percent) and other religion women (41 percent). Only 57 percent births of women from scheduled-tribes are institutional deliveries as compared to 61 percent of births to women from scheduled-castes, 65 percent to other backward classes and 65 percent of births to women from the 'other' caste category. Institutional deliveries are more common among women who had four or more antenatal check-ups (75 percent) than among who had fewer antenatal check-ups (38-65 percent). Institutional deliveries are least prevalent among births to women who did not receive any antenatal check-ups (25 percent). As expected, a large proportion of births occurred through caesarean section (91 percent), and 51 percent of assisted deliveries took place at health institutions. At the same time, 9 percent of caesarean deliveries and 49 percent of assisted deliveries took place at home. 60 percent of births took place at health institutions in the village with availability of health facility compared to 47 percent of births from villages without any health facility.

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 type of attendant assisted during the delivery, then only the most qualified person is considered. In the last three years only 3 percent of home deliveries were attended by doctors, 4 percent by ANM or nurse or LHV, 24 percent by trained birth attendants, 64 percent by untrained *dais*, 5 percent were attended by relatives and friends. Overall, health professionals attended 31 percent of deliveries that took place at home. The percentage of births (home delivery) attended by health professionals do not differ much between women age. About 23-33 percent of births attended by health professional for women age below 20 and 20-34 years and only 20 percent of births for women age 35 and above were attended by health professionals. In rural areas, 26 percent of births were attended by health professionals as compared to 76 percent of that in urban areas. The percentage of births attended by health professionals were decreased steadily with increasing with parity of women.

Births to literate women who had completed 10 or more years of schooling which were attended by health professionals is a little less than three times than those of non-literate women. About 36 percent of home deliveries to women with a medium standard of living and 24 percent of deliveries to women with a low standard of living were attended by health professionals. Home deliveries are more likely to be attended by health professionals among Hindu women (33 percent) than among Muslim women (7 percent). Only 32 percent

Table 4.11 ASSISTANCE DURING HOME DELIVERY AND SAFE DELIVERY

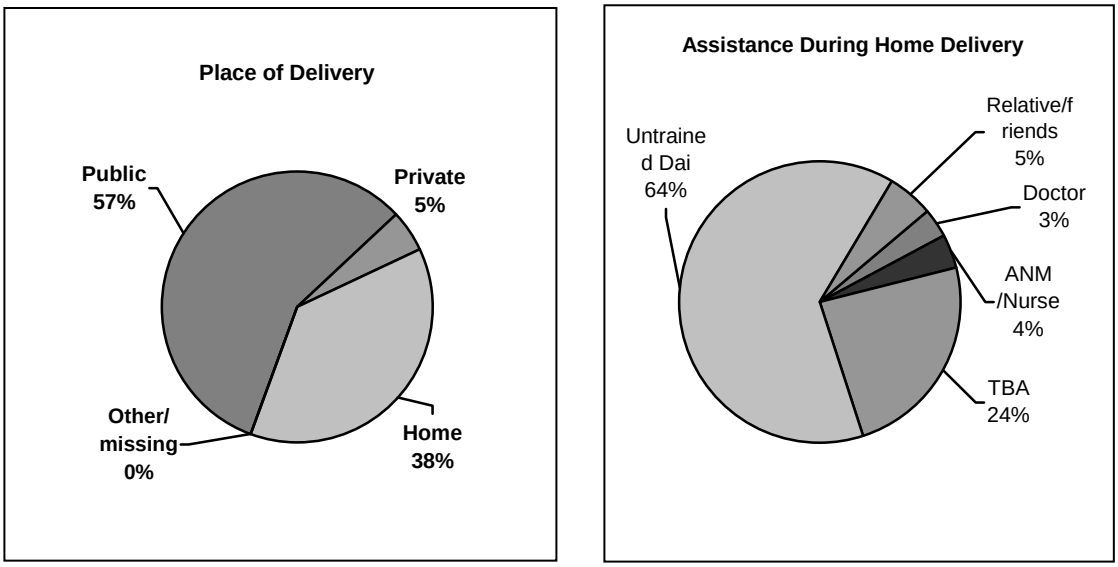
Percent distribution of women who had given live/still births during three years preceding the survey, by assistance during home delivery, and percentage of safe delivery, according to selected background characteristics, Tripura, 2002-04

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		
Age group (in years)							
Below 20	7.4	4.8	10.9	64.7	12.2	25	69.0
20-34	3.4	3.8	25.7	61.9	5.2	268	64.1
35 and above	0.0	3.7	15.9	79.9	0.6	27	70.0
Children ever born							
1	7.1	8.8	22.5	54.7	6.9	108	77.8
2	1.7	1.2	27.9	66.3	3.0	110	61.3
3	1.2	0.4	21.7	66.0	10.7	41	48.9
4+	1.4	1.4	17.0	76.6	3.6	57	26.5
Residence							
Rural	2.8	3.1	20.3	68.0	5.8	289	59.2
Urban	8.8	10.7	56.2	22.7	1.7	31	86.4
Education							
Non-literate	4.4	0.8	20.3	67.5	7.1	109	41.0
0-9@ years	2.3	1.7	24.9	66.2	4.7	182	63.2
10 years & above	6.4	28.2	29.3	33.3	2.8	29	90.2
Religion							
Hindu	4.2	3.6	25.2	61.3	5.7	259	68.3
Muslim	(0.0)	(0.0)	(7.3)	(87.8)	(4.9)	32	(25.5)
Other	(0.0)	(4.2)	(29.2)	(62.5)	(4.2)	30	(46.5)
Caste#							
Scheduled caste	4.3	1.1	26.2	60.3	8.1	67	62.9
Scheduled tribe	1.8	5.6	16.9	67.3	8.4	67	60.4
Other backward class	4.7	2.3	22.1	68.3	2.6	67	67.3
Other	3.2	5.5	27.5	62.3	1.5	112	68.2
Standard of living index							
Low	2.2	3.9	17.7	68.9	7.2	196	51.6
Medium	2.3	1.0	32.9	61.1	2.7	112	69.8
High	*	*	*	*	*	13	95.4
Number of antenatal check-ups							
No check-up	3.7	4.6	12.2	69.0	10.6	113	30.9
1	*	*	*	*	*	20	39.9
2	4.9	2.3	19.3	71.8	1.8	36	68.1
3	0.0	0.0	28.9	66.1	5.0	42	64.8
4+	3.9	5.7	35.0	53.0	2.3	109	77.6
Delivery characteristics							
Normal	2.0	0.8	24.4	67.0	5.8	299	61.4
Caesarean	*	*	*	*	*	6	91.5
Assisted	*	*	*	*	*	15	98.4
Availability of health facility[3] in the village							
No	5.2	3.4	18.9	68.1	4.4	94	51.8
Yes	1.7	3.0	20.9	68.0	6.4	195	61.9
Total	3.4	3.8	23.8	63.6	5.4	320	65.1

Note: Total includes 7 women with zero parity who were not shown separately. @ Literate women with no years of schooling are also included. # Total figure may not add to N due to do not know and missing cases. [1] If the respondent mentioned more than one attendant, only the most qualified attendant is shown. [2] Either institutional delivery or home delivery assisted by doctor/ANM/Nurse/LHV. [3] Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village. ( ) Based on less than 50 unweighted cases. * Percentage not shown – based on very few cases.

of births to women from scheduled castes, 24 percent to scheduled tribes, 29 percent to other backward classes and 36 percent to women belonging to 'other castes' category were attended by health professionals. Twenty-one percent of home deliveries to women who did not have any antenatal check-ups were attended by health professionals compared to 45 percent of home deliveries to women who had four or more antenatal check-ups. About 27 percent of home deliveries that were normal were attended by health professionals**.** Twenty-eight percent home deliveries were attended by health professionals in villages with non-availability of a health facility and in villages with availability of a health facility the same was 26 percent.

Figure 4.4
Place of Delivery and Assistance During Delivery



Note: Percentage may add more than 100.0 due to rounding

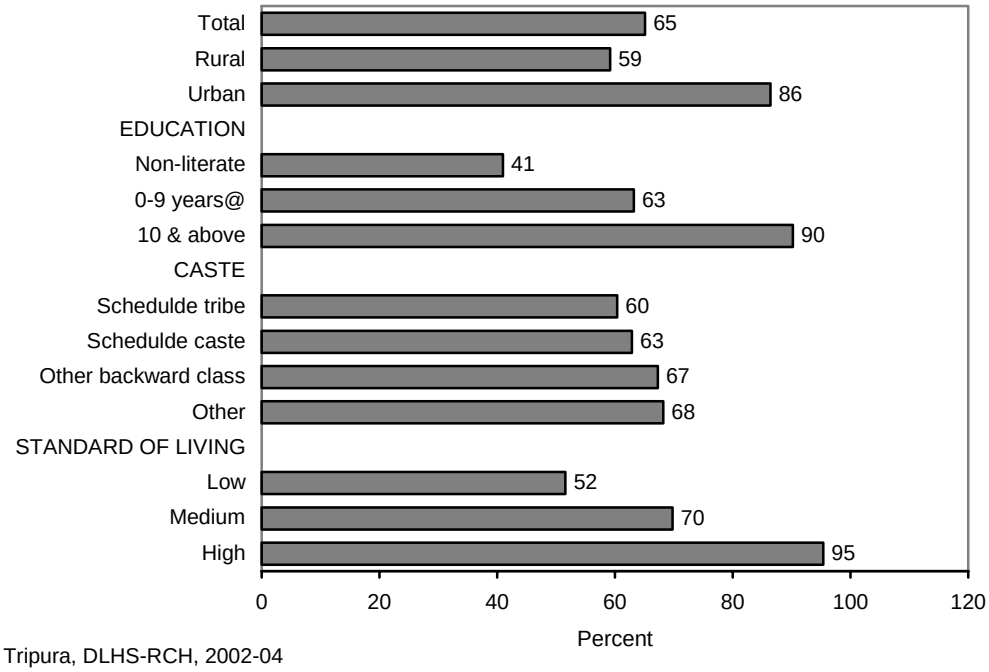
Tripura, DLHS-RCH, 2002-04

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). More than half of the births (65 percent) were safe in Tripura. In urban areas more than three-fourths (86 percent) of the deliveries were safe as against little more than half (59 percent) in rural areas. About 69-64 percent of the deliveries were safe for younger women aged below 35 and for the elderly women it was 70 percent. The proportion of safe deliveries was much lower among Muslim women (26 percent) than among Hindu women and women from other religions (68-47 percent). Only 60 percent of births to women from scheduled-tribe were safe deliveries, compared to 63 percent to women from scheduled-

castes, 67 percent to women from other backward classes, and 68 percent of births to women from 'other castes' category. Proportion of safe deliveries decreases as parity rises from 1 (78 percent) to 4 and above (27 percent). Safe deliveries were least prevalent among women who did not receive any antenatal check-ups (31 percent), and it is most prevalent among women who had four or more antenatal check-ups (78 percent). The proportion of safe deliveries increased sizeably with women's education and standard of living. Only forty-one percent of non-literate women had safe deliveries whereas its prevalence is 90 percent among women who had completed at least high school. Women with a high standard of living had 95 percent safe deliveries compared to 70 percent of women with a medium standard of living and 52 percent with a low standard of living. As compared to women who had caesarean and assisted deliveries (92-98 percent) only 61 percent of women with normal deliveries are safe deliveries. The proportion of safe deliveries was slightly higher in villages with a health facility than to women from those villages were health facilities are not available.

Figure 4.5
Delivery Assisted by Skilled Person by Background Characteristic



Tripura, DLHS-RCH, 2002-04

4.10 Reasons for Not Going to Health Institutions for Delivery

Table 4.12 shows the percentage distribution of women who did not deliver in 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. A little more than half (59 percent) of the women stated that it was not necessary to deliver in health institutions. A higher proportion of rural women (63 percent) than urban

women (17 percent) felt this way. Also, 59 percent of women stated that it was not necessary to deliver in health institutions when their villages were equipped with health facilities, when compared to 73 percent of women from villages where a health facility is not available. About two percent of the women felt that it was not customary to deliver in health institutions. Other factors contributing for not going to health institutions for delivery were, 'it cost too much' (8 percent), 'no transportation' or 'health facility is too far' (4 percent), 'no time to go' (6 percent), 'family did not allow' (5 percent), 'better care at home' (11 percent), and 'other' (4 percent). About one percent reported lack of knowledge regarding the delivery facilities. One percent women did not report for institutional delivery due to poor quality of services. The corresponding figures were 5 percent in urban areas and less than one percent in rural areas

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, Tripura, 2002-04

		Residence		Availability of health facility[1] in the village	
Reason	Total	Rural	Urban	No	Yes
Not Necessary	58.8	63.3	16.6	73.1	58.7
Not customary	1.9	0.9	10.5	1.8	0.5
Cost too much	7.8	7.1	13.7	6.5	7.5
Health facility too far/ No transport	3.8	4.2	0.0	2.8	4.8
Poor quality service	1.3	0.8	5.3	0.8	0.9
No time to go	5.7	5.5	8.1	3.5	6.4
Family did not allow	5.4	5.2	7.0	6.0	4.9
Better care at home	10.6	9.8	17.8	4.6	12.3
Lack of knowledge	1.4	0.0	14.0	0.0	0.0
Other	3.5	3.1	7.0	1.0	4.1
Total percent	100.0	100.0	100.0	100.0	100.0
Number of women	320	289	31	94	195

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 North Tripura (52 percent) and followed by South Tripura (60 percent) and it is highest in Dhalai (80 percent).

Table 4.13 DELIVERY CHARACTERISTICS BY DISTRICT

Place of delivery, assistance during home deliveries, and percentage of safe deliveries by district, Tripura, 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
Dhalai	80.4	18.8	(40.9)	88.1
North Tripura	51.9	48.1	1.8	52.7
South Tripura	60.2	39.4	6.7	62.8
West Tripura	78.3	21.7	15.1	81.6
Tripura	62.4	37.5	7.2	65.1

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

Compared to delivery in a private health facility, deliveries in a government health facility are more common in all the districts of Tripura. About 62 percent of births are institutional delivery in the state, but in North Tripura 48 percent of the births took place at home. About 41 percent of home deliveries in Dhalai and 15 percent in West Tripura were attended by a health professional. The extent of safe deliveries also varies by district, in 2 of 4 districts, the proportion of safe deliveries are below state average, it ranges from 53 percent in North Tripura to 88 percent in Dhalai. The proportion of safe deliveries is less than 65 percent in two districts i.e. North Tripura and South Tripura (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. More than half the women experienced at least one problem during delivery (Table 4.14 and Figure 4.6). The proportion of delivery complications is higher among urban women (58 percent) than among rural women (54 percent). Younger women below the age of 20 years, and women with low parity 1-2 reported more at least one delivery related problem than older women aged 35 years and above and women with higher parity. This proportion is relatively high among women who had received some kind of antenatal care during their pregnancy. Fifty-six percent of women who had not had any antenatal check-up reported that they experienced at least one problem during their pregnancy when compared to 41-52 percent of women who had received some kind of antenatal check-up. Among women who had assisted or caesarean delivery, 30-50 percent reported experiencing such problems, and 57 percent women with normal deliveries also cited complications during delivery. A relatively higher proportion of women who delivered in health institutions (61-64 percent) faced at least one delivery complication compared to those who delivered at home or other places (45 percent).

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, Tripura, 2002-04

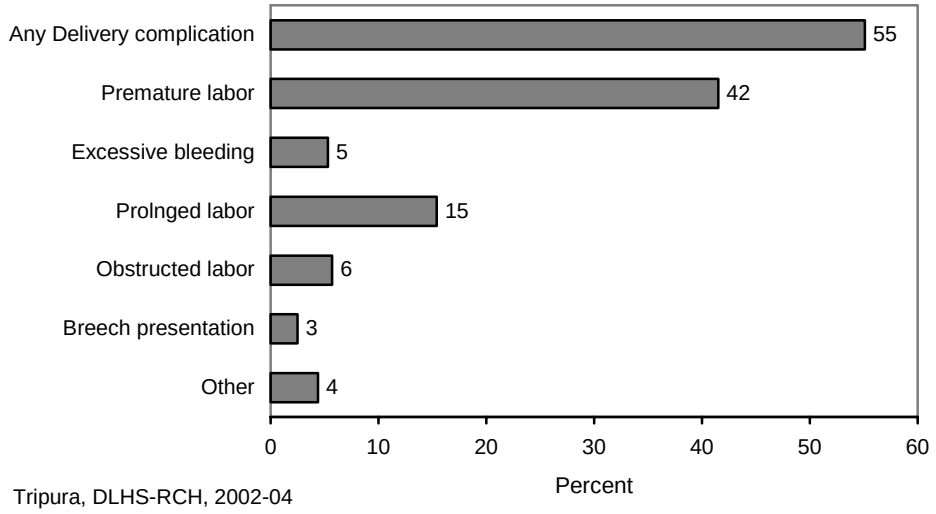
Background characteristic	Any delivery complic-ation	Type of delivery complication; Prematu-re labour	Excessi-ve bleeding	Prolong-ed labour	Obstruct-ed labour	Breech presnta-tion	Other	Number of women
Age group (in years)								
Below 20	62.8	47.2	13.5	11.4	0.6	1.9	2.6	71
25-34	54.3	40.6	4.9	16.5	5.8	1.7	5.0	696
35 and above	55.0	43.9	2.0	9.4	8.7	8.9	1.1	87
Children ever born								
1	56.5	43.0	7.7	15.9	7.6	2.3	5.0	412
2	54.3	37.3	2.1	14.7	4.5	2.5	3.5	279
3	50.4	38.8	4.8	15.5	4.0	3.7	3.4	80
4+	52.2	47.2	4.2	13.6	2.3	1.9	5.7	76
Residence								
Rural	54.3	41.3	5.4	16.6	4.4	1.7	4.2	668
Urban	57.9	41.9	4.8	11.1	10.5	5.2	5.2	186
Number of antenatal check-ups								
No check-up	56.1	48.4	7.3	10.8	2.3	3.0	3.3	150
1	41.1	29.8	6.2	20.2	0.9	2.2	12.0	32
2	62.1	54.2	5.5	13.5	3.5	0.3	2.4	105
3	62.8	40.6	6.3	17.3	5.3	2.6	7.8	119
4+	51.8	36.8	4.3	16.6	7.9	2.7	3.9	446
Delivery characteristics								
Normal	56.6	44.2	5.5	15.6	4.8	2.2	4.6	755
Caesarean	49.6	22.1	2.9	13.5	15.4	6.6	4.1	68
Assisted	29.5	17.0	5.6	14.7	6.1	0.0	0.0	31
Place of delivery								
Government sector	60.8	43.4	7.4	17.9	7.6	2.7	4.2	490
Private sector	64.3	51.2	12.9	17.6	18.4	7.1	15.2	43
Home	45.1	37.3	1.1	11.3	1.1	1.3	3.3	320
Total	55.1	41.5	5.3	15.4	5.7	2.5	4.4	854

Note: Table include 7 women with zero parity, 2 missing cases on number of antenatal check-ups and 1 case with other in place of delivery who were not shown separately.

The major problems reported were ‘obstructed labour’ (6 percent), ‘prolonged labour’ (15 percent), ‘premature labour’ (42 percent), and ‘excessive bleeding (5 percent). Only 3 percent reported ‘breech presentation’, and 4 percent reported ‘other’ problems related to delivery. Premature labour, prolonged labour and breech presentation are more common among younger women, and women with low parity. Rural women were more likely to report delivery complications such as excessive bleeding and prolonged labour, whereas premature labour and breech presentations are more prevalent among urban women. Premature labour, prolonged labour, obstructed labour and other health problems related to delivery were more among women whose last delivery was assisted with instruments, and breech presentation was more likely among those who had a caesarean, and excessive bleeding during delivery than by

women with normal delivery during the three years preceding the survey. Women whose recent delivery was performed in medical institutions were more likely to report premature labour, prolonged labour, breech presentation and obstructed labour compared with place of delivery other than medical institutions.

Figure 4.6
Percentage of women with Delivery Complication and by Symptoms



Tripura, 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 judged by any of the following during the first six-weeks of delivery- 'high fever', 'lower abdominal pain', 'foul smelling vaginal discharge', 'excessive bleeding', 'convulsion', 'severe headache', and 'other' problems. Thirty 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 in urban areas (35 percent) than in rural areas (29 percent). Younger women aged below 20 years, and women with higher parity 4 and over, had normal deliveries, and those whose deliveries took place at home are more prone to report at least one post delivery related problem.

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, Tripura, 2002-04

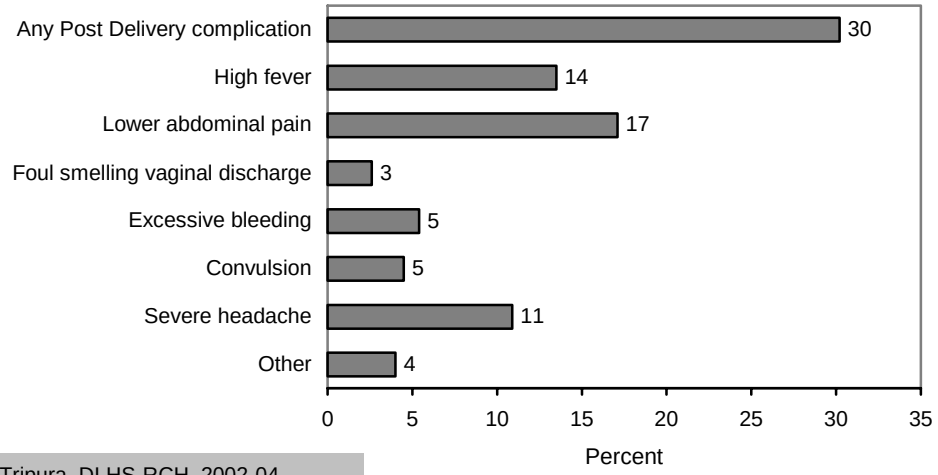
Background characteristic	Any post delivery complic-ation	Type of post delivery complication; High fever	Lower abdom-inal pain	Foul smelling vaginal discharge	Excess-ive bleeding	Convul-sion	Severe head-ache	Other	Number of women
Age									
Below 20	33.3	13.3	23.5	4.2	7.1	3.5	5.6	4.9	71
25-34	30.5	13.5	16.9	2.6	4.8	4.6	10.9	3.7	696
35 and above	24.9	14.1	13.7	0.8	8.2	4.6	15.3	5.8	87
Children ever born									
1	26.5	11.8	14.2	2.5	5.7	3.1	8.6	2.4	412
2	31.6	13.8	20.9	0.8	3.9	3.1	11.1	4.1	279
3	26.3	11.8	11.8	4.5	5.9	10.4	11.7	4.7	80
4+	42.2	25.2	23.2	1.9	9.1	11.5	23.1	11.0	76
Residence									
Rural	28.8	13.6	17.1	2.0	5.1	4.1	11.7	3.4	668
Urban	35.1	13.3	17.1	4.5	6.4	5.8	8.1	6.2	186
Number of antenatal check-ups									
No check-up	27.9	14.9	18.1	3.8	2.9	6.2	12.2	5.5	150
1	37.6	21.8	24.1	3.3	9.8	9.2	21.5	6.2	32
2	36.7	11.6	19.9	2.8	9.6	6.2	8.7	6.2	105
3	40.8	16.8	19.2	3.9	7.9	2.3	10.1	2.3	119
4+	26.1	12.1	15.2	1.7	4.2	3.8	10.5	3.3	446
Delivery characteristics									
Normal	30.7	14.2	17.7	2.8	5.7	4.8	11.1	4.3	755
Caesarean	27.2	9.8	14.8	1.0	1.9	1.7	7.2	2.3	68
Assisted	22.8	5.7	8.5	0.0	4.2	4.2	14.9	0.0	31
Place of delivery									
Government sector	28.3	12.7	16.8	3.2	5.0	3.3	9.2	3.3	490
Private sector	31.2	15.8	19.5	0.0	0.0	6.6	7.1	2.5	43
Home	32.7	14.5	17.4	2.0	6.5	6.0	14.1	5.3	320
Assistance during home delivery									
TBA	28.8	7.9	12.9	2.5	4.9	1.1	12.3	7.2	76
Untrained *dai*	35.7	18.5	20.4	1.9	7.7	9.1	14.7	5.5	204
Total	30.2	13.5	17.1	2.6	5.4	4.5	10.9	4.0	854

Note: Table include 7 women with zero parity, 2 missing cases on number of antenatal check-ups, 1 case with other in place of delivery, 11, 12 and 17 cases with doctor, ANM/Nurse/LHV and relatives/friends respectively in assistance during home delivery who were not shown separately.

Women reported high fever (14 percent), severe headache (11 percent), lower abdominal pain (17 percent), foul smelling vaginal discharge (3 percent), excessive vaginal bleeding (5 percent), and convulsion (5 percent). Four percent of women reported other problems. Rural-urban differences in all symptoms of postpartum complication are large. All the postpartum complications, except foul smelling vaginal discharge, are more prevalent among older women aged 35 years and above than among women below 35 years. The symptoms of postpartum complications were increasing steadily with increased parity. There

are minimal differences in the likelihood of having different symptoms in the postpartum period by place of delivery. Women who had the last delivery at home and were not assisted by anyone were more likely to have high fever, lower abdominal pain and other postpartum problems during the first six weeks of delivery. Symptoms like high fever and severe headache are more common for women who delivered at home assisted by a doctor than for women whose home deliveries were assisted by an ANM/nurse/LHV, trained birth attendant, untrained *dai*, or relatives or friends.

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



Tripura, 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. Forty-eight percent of women reported that they had obtained advice or had consulted someone for their problems. The proportion was higher among urban women (48 percent) than among rural women (47 percent), and 53 percent of women sought treatment from those villages where health facility was available as compared to 29 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, Tripura, 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	47.6	47.3	48.3	29.2	52.5
Number of women	258	192	65	43	149
Percentage sought treatment at health facility					
Government health facility[1]	63.9	61.6	70.4	*	62.9
Primary health centre	3.0	2.9	3.4	*	1.3
Sub centre	4.0	4.5	2.9	*	3.4
Private health facility[2]	22.6	18.6	34.1	*	14.2
ISM[3] facility	12.0	15.2	2.9	*	17.6
Other	10.2	11.8	5.4	*	10.1
Percent distribution of women who obtained treatment from					
Doctor	83.3	86.0	75.7	*	84.6
ANM/nurse/midwife/LHV	12.0	7.8	24.3	*	8.1
Other health professionals[4]	4.1	5.6	0.0	*	6.4
Other	0.5	0.7	0.0	*	0.8
Total percent	100.0	100.0	100.0	*	100.0
Number of women	122	91	32	13	78

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. * Percentage not shown – based on very few cases.

Among women who sought treatment for complications in the postpartum period, 64 percent visited a government health facility including primary health centre (3 percent) and sub-centre (4 percent). Twenty-three percent of women visited a private health facility, and 12 percent went to a facility with the Indian system of medicine (either government or private) and another 10 percent obtained advice from other health facilities. The proportion of women who visited a government health facility is relatively higher in urban areas (70 percent) than in rural areas (62 percent). Among women who sought treatment, 83 percent preferred to go to a doctor and 12 percent visited an auxiliary nurse midwife or nurse or LHV, 4 percent went to other health professionals, and less than one percent went to some one else. Seventy-six percent of these women in urban areas, and 86 percent in rural areas went to a doctor, whereas a visit to an ANM/nurse/LHV was 8 percent in rural areas and 24 percent in urban areas.

There are also differences by availability of health facilities and non-availability of health facilities in the village. Eighty five percent of women who belonged to villages with availability of health facilities were seen by doctor

4.14 Obstetric Morbidity by District

The extent of health problems/ complications women suffer during pregnancy, delivery and post delivery period indicates the state of obstetric morbidity. Table 4.17 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, 39 percent, 55 percent and 30 percent of the women experienced pregnancy, delivery and post delivery complications respectively. About 54 percent of the women sought treatment for pregnancy complications and 48 percent for post delivery complications. In every district, more than 20 percent of the women experienced at least one of the symptoms of pregnancy complications.

Table 4.17 PREGNANCY, DELIVERY AND POST DELIVERY COMPLICATIONS

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

	Percentage of women[1]				
District	Who had complication during pregnancy	Sought treatment for pregnancy complication[2]	Who had delivery complication	Who had post delivery complication	Sought treatment for post delivery complication[3]
Dhalai	21.7	(32.3)	73.6	17.0	(26.0)
North Tripura	39.3	62.1	57.7	38.9	42.5
South Tripura	25.5	75.9	33.7	19.9	50.3
West Tripura	54.3	38.2	76.7	32.6	53.8
Tripura	38.8	53.8	55.1	30.2	47.6

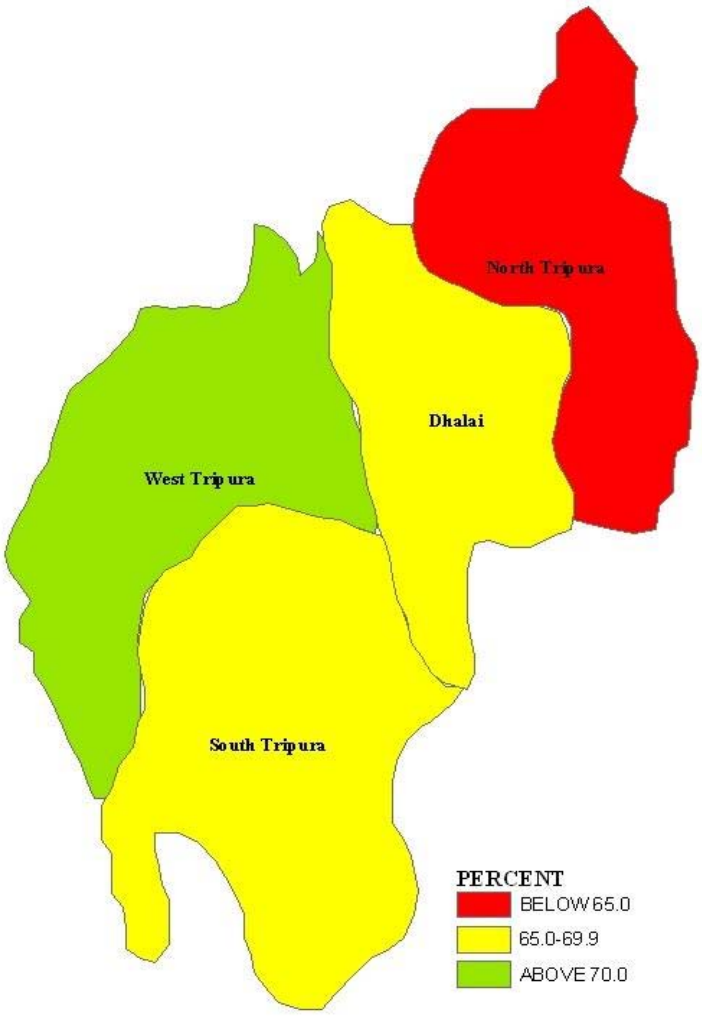
Note: [1] Women who had last live/still birth during three years preceding the survey. [2] Women who reported at least one complication of pregnancy. [3] Women who reported at least one post delivery complication. ( ) Based on less number of cases.

In West Tripura district (54 percent) the incidence of pregnancy complications is the highest and the lowest in this category is Dhalai (22 percent). The incidence of delivery complication is higher than that of pregnancy and post delivery complications. The percentage of women who experienced at least one type of delivery complication ranges from 34 percent in South Tripura to 77 percent in West Tripura, and incidence of post delivery complication varies from 17 percent in Dhalai to 39 percent in North Tripura. The incidence of all three types of complications seems to be linked with each other in varying proportions.

In most of the districts of Tripura about three-quarters of the women received some kind of antenatal care. In spite of a large proportion of women having contact with a doctor or any other health workers during the antenatal period, in 2 out of 4 districts (Dhalai and West Tripura) less than 50 percent of the women sought treatment for pregnancy complication. Similarly, among women who experienced at least one symptoms of postpartum complication, the proportion seeking treatment also varies across the districts, ranging from 26 percent in Dhalai to 54 percent in West Tripura.

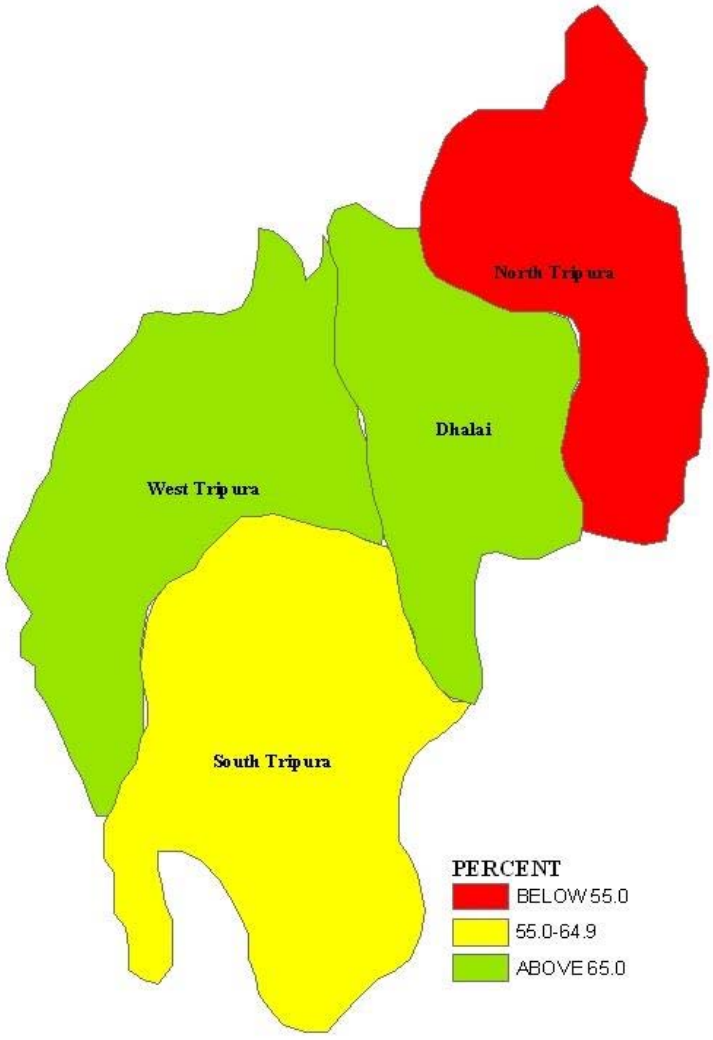
Map-3

Percentage of Women Received Three or More Antenatal Check-Up



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 on those breastfeeding currently and duration of breastfeeding. They were also asked about their awareness of diarrhoea management and danger signs of pneumonia and practices followed in case of episodes of diarrhoea and ARI among the children. Data on immunization, administering Vitamin A supplements and Iron prophylaxis was collected for the last two living children born after January 1, 1999/2001. This chapter presents an analysis of the data collected on the above aspects.

5.1 Breastfeeding

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

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

Table 5.1 shows the breastfeeding practices among children born during the three years preceding the survey in Tripura. Although, the practice of breastfeeding is common in Tripura, the initiation of breastfeeding within two hours of the birth of the child is not always followed. Fifty-three percent of the children were breastfed within two hours of birth, and 76 percent were breastfed within one day of birth (including those who were breastfed within two hours of birth), while 23 percent of children were breastfed after one day of birth. As shown in Figure 5.1, about 23 percent of the children were breastfed within one day of birth but after two hours of birth, 19 percent were breastfed after the first day of birth but before 3 days, and 4 percent children were put to the breast after three days. One percent of the children were never breastfed. Thirty-six 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. Not more than 60

percent of children in any socio-economic groups shown in Table 5.1 were breastfed within two hours of birth. Forty-six percent of children from scheduled tribe were breastfed within two hours of birth, and 59 percent of children from scheduled castes were breastfed within one day of birth. Women who reside in urban areas, women who have had high school education and above and women who live in households with a high standard of living are much less likely to start breastfeeding their children early. A large proportion of children from urban areas (82 percent), Hindu children (78 percent), children from scheduled castes (80 percent), children of non-literate mothers (80 percent), and children from households with a medium standard of living (80 percent) were put to the breast after one day of birth.

Table 5.1 INITIATION OF BREASTFEEDING

Percentage of children under age 3 whose mother started breastfeeding within two hours of birth, 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, Tripura, 2002-04

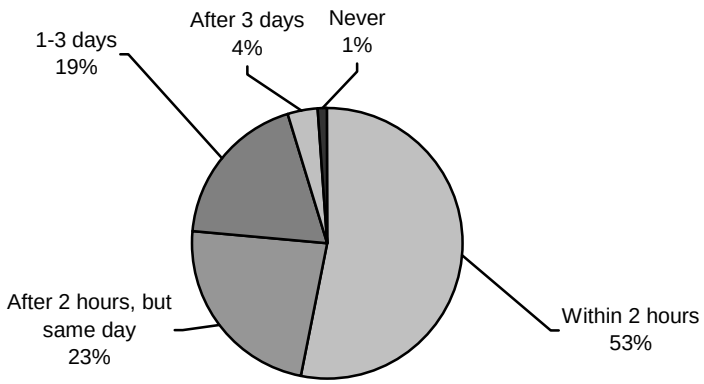
Background characteristic	Percentage started breastfeeding			Percentage whose mother squeezed first milk from breast	Number of children
	Within two hours of birth	Within one day of birth[1]	After one day of birth		
Residence					
Rural	55.1	74.4	24.7	37.8	531
Urban	46.6	82.4	16.3	30.0	169
Mother's education					
Non-literate	55.1	79.8	18.6	36.0	134
0-9@ years	50.3	76.4	23.0	36.6	382
10 and above	57.1	73.6	25.0	34.3	184
Religion					
Hindu	53.8	77.7	21.6	35.0	625
Other	46.2	64.3	31.5	43.5	74
Caste/tribe#					
Scheduled caste	58.7	80.1	18.8	32.6	144
Scheduled tribe	46.1	77.6	19.9	28.5	130
Other backward class	53.1	76.5	23.4	43.0	138
Other	52.6	73.3	26.0	36.8	280
Standard of living index					
Low	55.5	74.4	25.6	42.5	299
Medium	53.4	79.6	18.4	31.7	311
High	43.4	71.0	28.0	28.5	90
Total	53.0	76.3	22.7	35.9	700

Note: Table based on youngest living child born during the three years preceding the survey.[1] Includes children whose mother started breastfeeding within two hours of births @ Literate mother with no years of schooling are included. #Total figure may not add to N due to do not know and missing 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 other backward classes children, children with other religion, and children whose mothers are Non-literate. Children who live in households with a high standard of living are less likely than children in other households to have mothers who squeezed the first milk from the breast before breastfeeding. There is very minor Rural-Urban differential of the custom of squeezing the first milk from the breast before breastfeeding. Mothers of children born in the three years preceding the survey were asked whether the child had been fed breast milk exclusively and if so, what the duration

was. Here it needs to be mentioned that, exclusive breastfeeding includes breastfeeding the child without giving it anything including water. Results are shown in Table 5.2.

Figure 5.1
Initiation of Breastfeeding



Tripura, DLHS-RCH, 2002-04

Table 5.2 EXCLUSIVE BREASTFEEDING BY CHILD'S AGE
Percentage of children under age 3 years by exclusive breastfeeding and child's age in month, Tripura, 2002-04

Age in months	Status of exclusive breastfeeding			Number of children
	Exclusive breastfeeding	At least 4 months	At least 6 months	
<4	63.3	*	*	65
4-7	60.2	85.3	73.2	78
8-11	(39.4)	(81.8)	(54.5)	29
12-15	34.6	81.7	63.0	67
16-19	30.6	83.0	64.6	70
20-23	32.3	79.2	55.0	59
24-27	27.5	80.2	47.9	109
28-31	20.7	79.8	57.7	107
32-35	16.6	59.6	39.5	73
<4 months	63.3	*	*	65
4-6 months	56.2	82.7	67.6	63
7-9 months	52.5	91.4	66.9	55

Note: Table based on youngest living child born during the three years preceding the survey. ( ) based on less than 50 unweighted cases.

In Tripura, only 63 percent of children under four months of age are exclusively breastfed. The percentage of infants exclusively breastfed drops steadily from 63 percent for children under 4 months of age to 56 percent for children who are 4-6 months old. About 83 percent of children in the age group 4-6 months were exclusively breastfed up to 4 months and 67 percent of children in the age group 7-9 months are exclusively breastfed upto 6 months.

5.1.1 Breastfeeding by Districts

Table 5.3 shows that in all the districts of Tripura, except West Tripura, more than 50 percent of the children were put to the breast within two hours of birth. Less than 36 percent of the children were breastfed within two hours of birth in West Tripura district. Twenty-three percent of the children were put to the breast after one day of birth in North Tripura and highest in this category is Dhalai (33 percent). In 3 of the 4 districts, the mothers of more than 30 percent children squeezed the first milk before breastfeeding.

Table 5.3 BREASTFEEDING BY DISTRICT

Percentage of children under age 3 whose mother started breastfeeding within two hours of birth, within one day of birth and after one day of birth, percentage whose mother squeezed the first milk from her breast before breastfeeding and percentage of children who were exclusively breastfed by district, Tripura, 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		
Dhalai	56.8	66.3	33.2	34.0	69.6
North Tripura	67.9	76.8	22.8	67.4	78.7
South Tripura	49.7	73.1	26.9	32.2	43.6
West Tripura	36.1	70.6	26.9	16.7	50.4
Tripura	53.0	76.8	22.1	34.2	56.0

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

There is a great deal of variation in the extent of exclusive breastfeeding for six months. It is highest in North Tripura (79 percent) and lowest in West Tripura (50 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 12-25 months. Only 31 percent of the children are fully vaccinated, and around 9 percent have not received any routine vaccination. Coverage of each vaccination except Polio 0 is much higher than the percentage fully vaccinated. BCG, the first and second dose of DPT and Polio vaccine has each been given to more than three-fourths of children (Figure 5.3). Only 51 percent of the children have received three doses of DPT and 43 percent of the children received 3 drops of Polio, and only 50 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 22-percentage point for DPT and 23 percentage points for polio.

There has been some improvement in full vaccination coverage in Tripura since the time of Round I in 1998-99**.** These data indicate that despite the progress that has been made in immunization coverage for children in Tripura, coverage levels are still low and a large proportion of children who received some early vaccinations dropped out of the programme before receiving all of the recommended vaccinations.

Table 5.4 VACCINATION OF CHILDREN

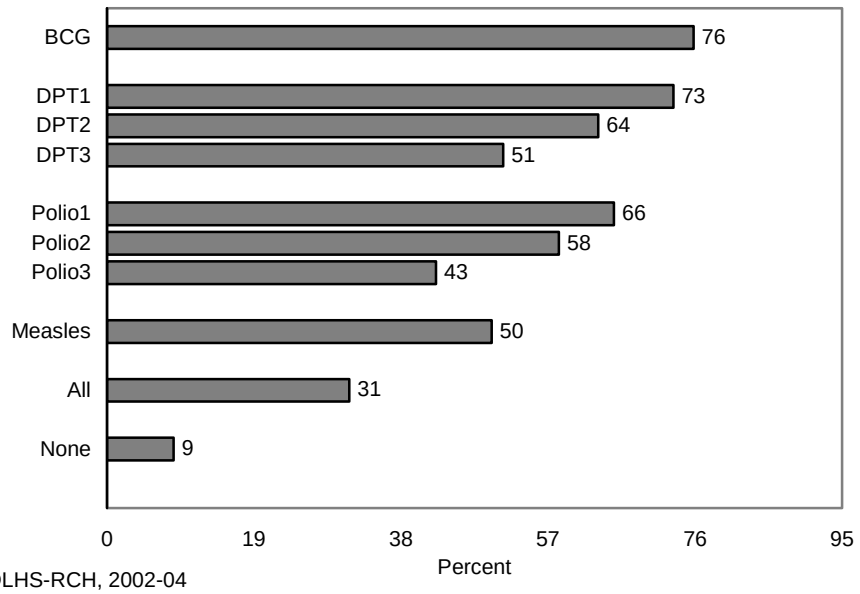
Percentage of children age 12-23 months who received vaccination according to some selected background characteristics, Tripura, 2002-04

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	61.6	76.9	74.5	63.4	50.4	66.6	59.6	44.0	49.9	30.7	10.6	160
Urban	(76.7)	(83.3)	(88.3)	(75.0)	(61.7)	(76.7)	(66.7)	(50.0)	(65.0)	(41.7)	(1.7)	44
Sex of the child												
Male	63.4	80.0	80.2	70.5	56.3	72.9	63.3	45.2	49.8	32.3	7.0	112
Female	67.4	70.7	64.6	54.9	45.0	56.3	52.5	39.3	49.4	30.1	10.5	92
Birth order												
1	72.5	75.0	65.1	55.8	47.8	69.0	60.6	42.0	47.0	34.4	6.1	99
2	60.3	73.2	76.1	67.9	55.9	60.4	57.2	39.5	53.7	26.7	10.9	67
3+	(54.9)	(72.5)	(86.3)	(64.7)	(43.1)	(68.6)	(54.9)	(49.0)	(47.1)	(27.5)	(13.7)	38
Mother's education												
Non-literate	(34.2)	(44.7)	(65.8)	(44.7)	(23.7)	(55.3)	(42.1)	(26.3)	(26.3)	(13.2)	(31.6)	29
0-9@ years	66.0	80.3	78.5	70.2	56.1	64.6	60.0	44.1	51.0	30.5	6.4	120
10 years and above	85.1	79.8	66.3	56.4	49.0	69.0	59.0	43.5	55.0	37.6	2.1	55
Religion												
Hindu	66.0	78.0	75.0	65.0	52.3	64.8	57.5	42.9	51.1	32.6	7.6	188
Caste/tribe#												
Scheduled caste	(67.4)	(82.6)	(84.8)	(71.7)	(45.7)	(73.9)	(67.4)	(58.7)	(47.8)	(32.6)	(6.5)	41
Scheduled tribe	(50.0)	(47.1)	(58.8)	(47.1)	(26.5)	(58.8)	(47.1)	(32.4)	(23.5)	(14.7)	(29.4)	30
Other backward class	(62.0)	(70.0)	(76.0)	(70.0)	(52.0)	(72.0)	(66.0)	(56.0)	(48.0)	(40.0)	(12.0)	44
Other	69.9	87.6	82.7	69.4	59.5	65.0	57.0	42.9	60.3	35.5	4.3	88
Standard of living index												
Low	56.9	71.1	72.9	62.6	49.6	53.6	48.3	36.5	43.2	24.9	14.2	98
Medium	64.8	80.8	77.2	66.7	54.4	80.1	71.3	46.5	57.8	36.9	4.5	75
High	(88.1)	(88.1)	(83.3)	(71.4)	(54.8)	(76.2)	(71.4)	(64.3)	(61.9)	(42.9)	(2.4)	31
Total	65.2	75.8	73.2	63.5	51.2	65.5	58.4	42.5	49.7	31.3	8.6	204

Note: Table includes only last and last but one living child born since 1.1.1999/1.1.2001. Total includes 16 children with other religion were not shown separately. @ Literate mothers with no years of schooling are included. # Total figure may not add to N due to do not and missing cases.[1] BCG, three injection of DPT, three doses of Polio (excluding Polio 0) and measles. ( ) based on less than 50 unweighted cases.

The data indicates that the coverage of each type of vaccine is more in urban areas than in rural areas. Thirty-one percent of the children in rural areas had received all the recommended vaccinations by the time of the survey, compared with 42 percent in urban areas. Differentials in rural-urban against polio 0 may be observed from the table. Seventy-seven percent of the children have received polio vaccine at the time of birth in urban areas whereas only 62 percent received the same in the rural areas.

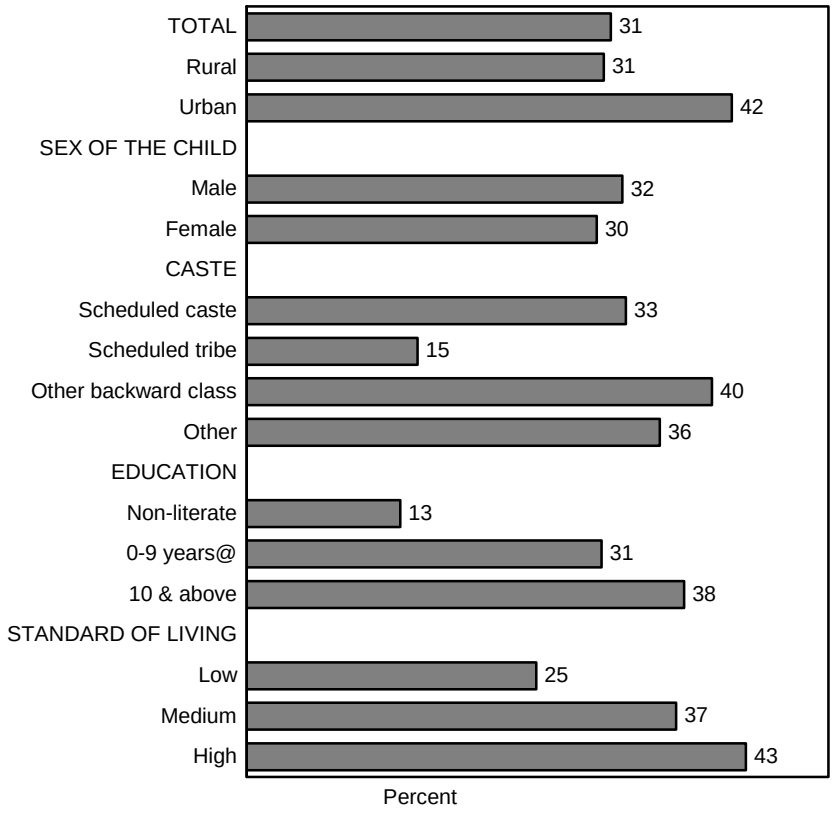
Figure 5.2
Percentage of Chidren Age 12-23 months who have Received Specific Vaccinations, Tripura



Tripura, DLHS-RCH, 2002-04

Female children (30 percent) are less likely than male children (32 percent) to be fully vaccinated. Female children are also less likely than male children to have received most of the individual vaccinations. The relationship between vaccination coverage and birth order is consistently negative for almost all vaccinations. A large majority of first-order births occur to younger women who are more likely than older women to utilize child health care services. As with the use of child health care services, there is a positive relationship between mother's education and children's vaccination coverage. Only 13 percent children of non-literate mothers are fully vaccinated compared to 31 percent of children with mothers' education below high school and 38 percent of mothers who have at least completed high school. Children from Scheduled Castes are more likely to have BCG, DPT-1, DPT-2, Polio-1, Polio-2, Polio-3 and measles vaccinations, and children from other Backward Classes are more likely to have Polio-1 and Polio-2. The standard of living index of the household has a strong positive relationship with vaccination coverage. Forty-three percent of children from households with a high standard of living are fully vaccinated, whereas only 25 percent of children are from households with a low standard of living are fully vaccinated.

Figure 5 .3
Percentage of Children Age 12-23 months
Who Have Received All Vaccination, Tripura



@ Literate mothers with no years of schooling are also included. Tripura, 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 interviewer was shown this vaccination card.

The proportion of children fully vaccinated by age 12 months decreased slightly from 31 percent for children in the age group 12-23 months to 24 percent for children in the age group 24-35 months. A rural-urban differential for the coverage of full vaccination is also observed. Thirty-one percent of children in the age group 12-23 months are fully vaccinated against 30 percent of children in the age group 24-35 months in rural areas, and this gap is much wider in urban areas (Figure 5.4). Only 42 percent of children in the age group 12-23 months have received all vaccinations in urban areas compared to 9 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, Tripura, 2002-04

Vaccination status	Total		Rural		Urban	
	12-23 months	24-35 months	12-23 months	24-35 months	12-23 months	24-35 months
Vaccination card shown to interviewer	60.2					
Percentage vaccinated by 12 months of age						
Polio 0	65.2					
BCG	75.8					
Polio doses						
No Polio	27.7					
1	7.1					
2	16.1					
3	43.1					
Don't remember	6.1					
DPT injection						
No DPT	22.8					
1	9.7					
2	Number of children					
3						
Don't remember/missing						
Measles						
Full [1] vaccination						
No vaccination at all						
Number of children						

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 Tripura. Most of the children (97 percent) were immunized at the government health facilities and only less than one percent at private health facilities. Further, among the children immunized, 11 percent of them had received vaccination from the sub-centre, 73 percent from municipal hospital, and 12 percent from community health centre or from primary health centre. The percentage of children receiving vaccination from the private sector is almost negligible both in rural as well as urban areas. Even in urban areas, however, 84 percent of children received their vaccination from the government health facility. The availability of a health facility in a village did not affect the number of children getting vaccinated.

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, Tripura, 2002-04

		Residence		Availability of health facility[1] in the village	
Source of vaccination	Total	Rural	Urban	No	Yes
Government health sector					
Government/municipal hospital	72.8	69.3	83.5	69.5	69.2
Community/primary health centre	12.3	13.0	10.2	9.0	14.3
Sub-centre	11.4	14.8	1.1	13.7	15.1
RCH/MCP camp	0.6	0.8	0.1	0.5	0.9
Private health sector					
Private hospital	0.1	0.2	0.0	0.0	0.2
Private doctor	0.1	0.0	0.3	0.0	0.0
Other	2.2	1.7	3.7	6.1	0.3
Do not remember	0.5	0.3	1.1	1.2	0.0
Total percent	100.0	100.0	100.0	100.0	100.0
Number of children	619	466	153	115	350

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.

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 28 percent of the children did not receive any vaccination because the mothers of children were unaware of the need for immunization, and 22 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 place or time of vaccination was not known (17 percent), place or time of vaccination was inconvenient (2 percent), fear of side effects (8 percent), no faith in vaccination (9 percent) and ANM absent/ vaccine not available (2 percent), family problems (10 percent) and other reasons (1 percent). The percentage of children who did not receive any vaccinations is considerably higher in rural areas (33 percent), as they were unaware of the need for immunization as reported by their mothers. Children from those 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. Where health facilities were available, fear of side effects and no faith in immunization were reported more as reasons for not immunizing the children compared to the areas without having the same.

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, Tripura, 2002-04

		Residence		Availability of health facility[1] in the village	
Reason	Total	Rural	Urban	No	Yes
Unaware of need for immunization	28.3	33.2	*	(57.8)	22.1
Place/time unknown	17.4	12.0	*	(6.7)	13.8
Place/time inconvenient	1.7	1.5	*	(0.0)	2.4
Fear of side effect	8.2	9.3	*	(4.4)	11.8
No faith in Immunization	9.2	11.5	*	(6.7)	13.4
ANM absent/vaccine not available	1.7	2.2	*	(4.4)	1.1
Child too young	22.4	18.9	*	(11.1)	22.7
Family problems[2]	10.1	10.1	*	(6.7)	12.7
Other	1.0	1.3	*	(2.2)	0.0
Total percent	100.0	100.0	100.0	100.0	100.0
Number of children	111	88	23	31	57

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

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 Tripura as a whole, 24 percent of the children received at least one dose of Vitamin A, and only six percent received IFA tablets/syrup. This indicates that a large number of children in Tripura 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, Tripura, 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	25.9	6.6	204
24-35 months	23.0	5.9	316
Sex of the child			
Male	26.7	6.1	264
Female	21.4	6.3	255
Birth order			
1	24.5	6.8	276
2	24.8	5.8	158
3+	21.7	5.0	86
Residence			
Rural	28.3	7.0	388
Urban	11.9	3.9	132
Mother's education			
Non-literate	6.0	1.6	100
0-9 years@	28.8	6.3	284
10 years and above	27.7	9.5	136
Religion			
Hindu	25.0	5.6	477
Other	(17.8)	(11.1)	43
Caste/tribe #			
Scheduled caste	22.9	7.8	108
Scheduled tribe	7.4	4.3	94
Other backward class	33.0	7.5	107
Other	28.4	5.5	205
Standard of living index			
Low	17.2	4.4	228
Medium	30.6	6.9	224
High	25.9	9.9	68
Availability of health facility in the village[1]			
Yes	26.5	5.8	290
No	33.6	10.6	98
Total	24.1	6.2	520

Note: Table includes last and last but one living children born in the three years preceding the survey. Total includes 4 children with missing information with mother education 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. ( ) based on less than 50 unweighted cases.

Children in the age group 24-35 months are less likely to receive at least one dose of Vitamin A and IFA tablets/syrup each than children in the age group 12-23 months. Male

children are more likely to receive Vitamin A than female children but in case of IFA tablets/syrup the pattern is reverse. Children living in rural areas, children whose mother completed high school and above, children living in households with a medium standard of living, and children living in those villages where health facilities are not available are more likely to receive a dose of Vitamin A and IFA tablets/syrup. Children of birth order 3 or above are much less likely than children of birth order 1or 2 to receive any dose of vitamin A and IFA tablets/syrup. Similarly, children from Schedule Tribes are less likely to receive at least one dose of Vitamin A and a dose of IFA tablets/syrup than other caste category.

Table 5.9 CHILDHOOD VACCINATION BY DISTRICT

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

	Percentage vaccinated[1]							Percentage received at least one dose of Vitamin A[3]
District	Polio 0	BCG	DPT3	Polio3	Measles	Full[2]	None	
Dhalai	90.1	72.6	11.1	47.2	16.3	5.0	11.9	17.9
North Tripura	40.6	72.3	63.9	61.2	61.7	53.7	21.0	35.9
South Tripura	75.6	92.4	69.6	58.9	75.2	41.8	1.6	44.6
West Tripura	78.3	68.4	31.4	6.2	26.5	4.5	0.0	5.2
Tripura	65.2	75.8	51.2	42.5	49.7	31.3	8.6	24.1

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 5 percent each in Dhalai and West Tripura to 54 percent in North Tripura. In two districts, namely Dhalai and West Tripura (5 percent each) the coverage of full immunization is below 40 percent (see Map-5) and it is also the coverage rate of full immunization is below the state average of 31 percent. Twenty-one percent of children in North Tripura district were not vaccinated at all, and in two districts out of four, the percentage of children not vaccinated is higher than the state average. In nearly all the districts, fewer children have received the measles vaccine than any of the other vaccinations. The coverage of polio drops at the time of birth varies from the lowest in North Tripura (41 percent) to the highest in Dhalai (90 percent).

District wise variations in the percentage of children who received at least one dose of Vitamin A are also shown in Table 5.9. The percentage of children in the age group 12-35 months who received at least one dose of Vitamin 'A' supplements ranges from 5 percent in West Tripura to 45 percent in South Tripura. Dhalai (18 percent) and West Tripura (5 percent)

stand out as having below the state average (24 percent) to receive at least one dose of Vitamin A.

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 Tripura, 80 percent of the mothers with births three years preceding the survey were aware of what to do when a child had diarrhoea, as compared to 45 percent in Round I, and 30 percent were aware of ORS, which was four percent point down from Round I. Fifty-nine percent of the women were aware of salt and sugar solution. Some of the women also reported that they would continue normal food (18 percent), continue breastfeeding (33 percent), and give plenty of fluids (17 percent), and about 46 percent of women did not know what to give a child who had diarrhoea. Knowledge of ORS is higher among rural women (67 percent) than urban women (41 percent), and among women with 0-9 years of schooling (63 percent) as compared to non-literate women (62 percent). Women belonging to Schedule Tribes (48 percent) are less likely to know about ORS than women belonging to other caste groups (68 percent). Sixty-three percent of women with children having a medium standard of living know about ORS and it declines to 61 percent for women with a low standard of living. Knowledge of ORS is more among middle age groups and among older women than among younger women. Women from villages with non availability of health facilities are more aware of diarrhoea management than women from other villages.

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, Tripura, 2002-04

Background characteristic	Knowledge of diarrhoea manage-ment	Type of practices to be followed 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	77.1	59.0	58.1	17.1	31.1	14.3	48.6	405
25-34	82.8	63.6	59.4	18.5	37.0	19.5	43.9	422
35-44	79.5	63.5	58.0	18.5	27.0	13.4	40.8	97
Residence								
Rural	84.3	67.4	64.8	18.6	37.1	18.1	44.6	715
Urban	64.9	41.3	37.4	15.7	20.6	11.4	49.1	209
Mother's education								
Non-literate	79.6	61.9	56.5	12.9	35.7	12.5	50.0	188
0-9@ years	81.1	63.2	59.6	17.8	34.1	17.4	46.9	507
10 and above	77.7	57.8	58.4	22.2	30.0	18.1	39.1	230
Religion								
Hindu	79.1	61.4	58.7	18.8	33.4	17.9	45.1	820
Muslim	87.3	64.8	58.0	7.4	33.8	3.7	57.6	52
Other	86.5	60.7	59.3	14.9	33.3	9.2	41.6	53
Caste/tribe#								
Scheduled caste	85.2	62.7	57.6	19.4	29.4	16.0	43.6	183
Scheduled tribe	69.5	47.6	48.4	11.2	32.4	9.7	56.6	172
Other backward class	83.5	61.6	64.7	21.9	33.2	24.2	41.6	198
Other	80.1	67.8	61.0	18.2	35.9	16.0	44.1	364
Standard of living index								
Low	81.5	60.7	60.0	11.9	31.5	14.1	44.0	414
Medium	80.2	62.9	61.0	23.9	36.0	18.6	47.0	387
High	73.8	60.4	46.9	19.3	31.6	18.5	46.6	124
Availability of health facility[2] in the village								
Yes	82.7	64.7	64.2	17.2	35.9	18.8	43.1	533
No	89.1	75.5	66.6	22.4	40.4	16.1	49.0	183
Total	80.0	61.6	58.7	17.9	33.4	16.6	45.6	925

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.

5.7.2 Treatment of Diarrhoea

During the two weeks before the survey, 8 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 54 percent of the women mentioned that they gave ORS therapy, and 69 percent of the women said that their child had been treated at health facility. Use of ORS for the treatment of childhood diarrhoea in Tripura is relatively high among rural women than among urban women.

It was observed that a relatively high proportion of women from those villages where health facilities are available within the village used ORS for the treatment of childhood diarrhoea.

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, Tripura, 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	7.6	7.9	6.7	9.3	4.0
Number of women	925	715	209	533	183
Percentage of women whose child suffered[1] from diarrhoea treated with ORS	53.7	52.6	*	(48.7)	*
Percentage of women whose child suffered[1] from diarrhoea sought treatment	68.9	68.5	*	(66.7)	*
Number of women	71	57	14	49	7
Source of treatment					
Government health facility					
Hospital/dispensary	(62.0)	(50.0)	*	(50.0)	*
UHC/UHP/UFWC	(1.3)	(0.0)	*	(0.0)	*
CHC/ Rural hospital	(7.6)	(12.5)	*	(11.5)	*
Primary health centre	(6.3)	(3.1)	*	(0.0)	*
Sub centre	(3.8)	(6.3)	*	(7.7)	*
Private health facility					
NGO/Trust hospital/clinic	(2.5)	(0.0)	*	(0.0)	*
Private hospital clinic	(16.5)	(15.6)	*	(19.2)	*
ISM[3] facility	(46.8)	(40.6)	*	(42.3)	*
Home remedy	(7.6)	(6.3)	*	(3.8)	*
Other	(2.5)	(0.0)	*	(0.0)	*
Percent distribution of women who seek treatment by					
Doctor	(89.9)	(90.6)	*	(88.5)	*
ANM/Nurse/LHV	(5.1)	(0.0)	*	(0.0)	*
Relative/friends	(1.3)	(3.1)	*	(3.8)	*
Chemist/medical shop	(3.8)	(6.3)	*	(7.7)	*
Total percent	100.0	100.0	*	100.0	*
Number of women	49	39	10	32	6

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

Among those mothers whose children suffered from diarrhoea during the last two weeks before the survey and those women who consulted or obtained advice, about 19 percent of women visited private hospitals/clinics and 47 percent of women treated their children through the Indian System of Medicine and as many as 81 percent sought treatment in a Government health facility.

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 (21 percent) of women with births three years preceding the survey in Tripura were aware of danger signs of pneumonia. The figure was slightly up from 14 percent in Round I. A relatively high proportion of women in rural areas (22 percent) were aware of the danger signs of pneumonia as compared to women from urban areas (18 percent). Knowledge of danger signs of pneumonia is higher among women in the age group 25-34 years (23 percent), Hindu women (22 percent), other castes category (25 percent), highly educated women (30 percent), women living in high standard of living household (28 percent), and women living in those villages with health facilities (23 percent).

Women, who were aware of the danger signs of pneumonia, were further asked about different types of signs of pneumonia. Most of the women mentioned about ‘difficulty in breathing’ (87 percent), ‘pain in chest and productive cough’ (46 percent), ‘wheezing / whistling’ (32 percent), ‘chest in drawing’ (48 percent), ‘not able to drink or take a feed’ (32 percent), ‘rapid breathing’ (36 percent), ‘condition get worse than before’ (27 percent) and ‘excessive drowsy and difficulty in keeping awake’ (29 percent).

5.7.4 Treatment of Pneumonia

About 26 percent of women reported that their child had suffered from pneumonia during two weeks before the survey, the corresponding figures were 25 percent in rural areas and 28 percent in urban areas (Table 5.13). The incidence of pneumonia varies 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. Sixty-six percent of women received some advice or treatment whose children were ill with ARI. This percentage is relatively low in rural areas (63 percent) than in urban areas (73 percent) and village without health facilities (67 percent) than village with health facility (62 percent).

Among them who got advice for children ill with ARI, 29 percent of women visited private hospital/clinic, and as many as 65 percent went to government hospital/dispensary, whereas 8 percent of them obtained treatment through Indian System of Medicine.

Table 5.12 AWARENESS OF PNEUMONIA

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

Background characteristic	Percentage of women aware of danger signs of pneumonia	Number of women	Danger signs of ARI								Number of women
			Difficulty in breathing	Chest in-drawing	Not able to drink or take a feeding	Excessive drowsy and difficulty in keeping awake	Pain in chest and productive cough	Conditions get worse than before	Wheezing/ whistling	Rapid breathing	
Age											
15- 24	20.3	405	88.4	49.0	30.9	16.8	49.1	24.0	36.1	39.7	82
25-34	22.7	422	88.1	42.9	33.8	38.5	47.4	29.9	33.4	38.9	96
35-44	17.6	97	*	*	*	*	*	*	*	*	17
Residence											
Rural	21.9	715	84.9	43.8	29.3	26.0	43.5	23.8	29.2	36.4	157
Urban	18.4	209	(96.8)	(73.7)	(50.5)	(29.5)	(40.0)	(32.6)	(35.8)	(43.2)	38
Mother's education											
Non-literate	10.5	188	*	*	*	*	*	*	*	*	20
0-9@ years	21.1	507	86.7	41.8	29.4	16.0	42.8	26.7	30.1	39.3	107
10 and above	29.7	230	87.6	63.2	40.2	45.0	44.7	31.2	35.4	34.3	68
Religion											
Hindu	22.3	820	86.9	47.7	32.1	27.6	45.6	28.5	30.8	36.6	183
Muslim	12.1	52	*	*	*	*	*	*	*	*	6
Other	11.7	53	*	*	*	*	*	*	*	*	6
Caste/tribe#											
Scheduled caste	21.9	183	(91.7)	(41.7)	(45.8)	(27.1)	(45.8)	(20.8)	(25.0)	(35.4)	40
Scheduled tribe	13.1	172	*	*	*	*	*	*	*	*	23
Other backward class	20.9	198	(88.7)	(50.9)	(32.1)	(32.1)	(52.8)	(17.0)	(26.4)	(32.1)	41
Other	24.9	364	86.5	47.6	33.0	29.6	36.6	26.2	25.1	38.4	90
Standard of living index											
Low	16.4	414	88.0	32.2	24.2	28.2	49.2	17.0	17.2	35.9	68
Medium	23.9	387	86.1	56.1	30.6	24.3	40.2	32.8	39.8	35.0	92
High	28.0	124	(93.8)	(65.6)	(50.0)	(34.4)	(43.8)	(32.8)	(32.8)	(42.2)	35
Availability of health facility [2] in the village											
Yes	23.2	533	82.3	46.1	28.2	26.2	41.2	26.0	26.5	34.4	123
No	18.3	183	(94.7)	(34.2)	(34.2)	(26.3)	(55.3)	(15.8)	(31.6)	(42.1)	33
Total	21.1	925	87.3	48.2	32.0	28.7	45.9	27.3	31.8	36.4	195

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

Table 5.13 TREATMENT OF PNEUMONIA

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

Sought treatment/ source of treatment	Total	Residence		Availability of health fcaility[2] in the village	
		Rural	Urban	Yes	No
Percentage of women whose child suffered from cough, cold and difficulty in breathing	25.5	24.7	28.1	27.8	15.5
Number of women	925	715	209	533	183
Percentage of women sought treatment whose child suffered from cough and cold	65.5	63.0	72.9	62.2	67.1
Number of women	235	177	59	148	28
Source of treatment					
Government health facility					
Hospital/dispensary	49.8	47.4	(44.9)	46.2	*
UHC/UHP/UFWC	6.6	4.2	(5.8)	5.1	*
CHC/ Rural hospital	3.0	3.3	(5.8)	3.2	*
Primary health centre	1.9	1.6	(7.2)	2.0	*
Sub centre	4.0	4.3	(5.8)	2.9	*
Private health facility					
NGO/Trust hospital/clinic	2.8	2.5	(5.8)	3.1	*
Private hospital clinic	25.8	25.1	(26.1)	27.1	*
ISM[3] facility	8.0	8.0	(17.4)	8.8	*
Home remedy	13.2	15.3	(11.6)	18.5	*
Other	4.1	4.6	(4.3)	3.1	*
Percent distribution of women who seek treatment by					
Doctor	80.7	82.1	(88.4)	78.6	*
ANM/Nurse/LHV	11.8	10.2	(7.2)	12.1	*
Dai (trained or untrained)	0.7	1.0	(0.0)	1.2	*
Relative/friends	2.9	3.6	(1.4)	4.3	*
Chemist/medical shop	1.4	1.9	(0.0)	2.3	*
ISM practitioner	0.7	0.6	(1.4)	0.7	*
Other	1.8	0.6	(1.4)	0.7	*
Total percent	100.0	100.0	100.0	100.0	*
Number of women	154	111	43	92	19

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

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

Table 5.14 presents the knowledge of diarrhoea management, knowledge of ORS, and incidence of diarrhoea by district. Although knowledge of diarrhoea management is high in almost all districts but knowledge about ORS is low. Knowledge of ORS is also not common, and it is

lowest in West Tripura (35 percent) followed by Dhalai (39 percent). The incidence of diarrhoea is 8 percent in the state as a whole and it varies from 7 percent each in South and West Tripura to 34 percent in Dhalai. 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, the awareness of danger signs of pneumonia is quite low. It is the lowest in West Tripura (13 percent) and highest in North Tripura (35 percent). Incidence of ARI symptoms is comparatively low in nearly all the districts in Tripura. It is highest in North and South Tripura (28 percent each) and lowest in Dhalai (23 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, Tripura, 2002-04

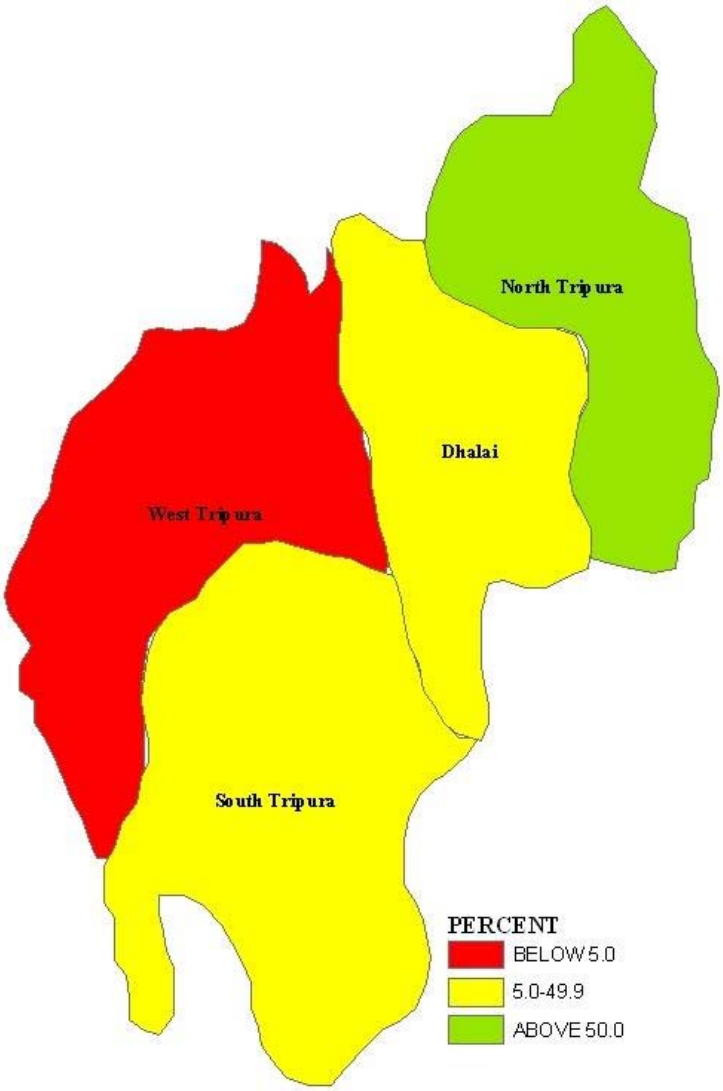
District	Percentage of women aware of		Percentage of women whose child suffered[1] from diarrhoea	Percentage of women aware of danger signs of pneumonia	Percentage of women whose child suffered[1] from pneumonia
	Diarrhoea Management	ORS			
Dhalai	52.8	39.0	33.5	34.3	23.1
North Tripura	94.3	72.9	10.0	35.3	27.9
South Tripura	100.0	92.7	7.0	21.1	27.9
West Tripura	59.6	34.5	6.5	13.0	24.5
Tripura	80.0	61.6	7.6	21.1	25.5

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

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

Map-5

Percentage of Children (age 12-23 months), Who have Received Full Immunization



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. The knowledge of no-scalpel vasectomy was also asked to the husbands of eligible women. If the respondent did not recognise the name of the family planning method, he was given a brief description on how the particular method was to be used. The DLHS-RCH assesses the knowledge of female sterilisation, male sterilisation including NSV, IUD, Pills, condom and traditional methods along similar lines.

The extent of knowledge of contraceptive methods among currently married women for specific methods and selected background characteristics are shown in Table 6.1 and Figure 6.1. Knowledge of any method including any modern contraceptive method is almost universal in the state of Tripura. 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 78 percent, and slightly higher among the women with an urban residence. There are large differentials in knowledge of all modern methods with respect to the aforesaid background characteristics. For instance, 90 percent of women from rural areas are aware about all modern methods compared to 91 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, Tripura, 2002-04

Contraceptive methods	Total	Residence		Availability of health facility in the village[3]	
		Rural	Urban	No	Yes
Any method	92.7	91.7	95.0	84.3	94.2
Any modern method	90.4	90.0	91.4	83.6	92.1
Any modern spacing method[1]	78.0	77.5	79.3	71.3	79.6
All modern methods[2]	17.7	17.9	17.3	18.3	17.8
Female sterilization	74.4	74.4	74.6	75.7	73.9
Tubectomy	22.7	24.0	19.5	35.1	20.3
Laparoscopy	12.0	11.2	13.8	17.2	9.2
Male sterilization	42.9	41.9	45.2	44.5	41.1
Vasectomy	18.3	19.5	15.4	24.2	17.8
No-scalpel vasectomy	8.9	7.1	13.1	6.9	7.1
IUD/Loop	40.6	39.8	42.3	41.6	39.2
Pills	63.2	65.3	58.0	62.5	66.2
Daily	39.0	39.0	38.9	46.6	36.4
Weekly	23.8	20.2	32.3	20.0	20.3
Condom/Nirodh	50.3	47.7	56.4	48.0	47.6
Sponge (today)	10.8	8.1	17.1	6.6	8.7
Injectables	14.0	14.5	12.9	17.3	13.6
Norplant	4.2	3.8	5.1	3.5	3.9
Contraceptive herbs	9.6	11.0	6.0	11.2	11.0
Any traditional method	37.5	42.9	24.5	52.1	39.7
Any other Indian system of medicinal contraceptives	3.6	3.5	3.7	4.2	3.2
Number of women	3,884	2,740	1,144	696	2,044

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.

Female sterilisation is the most widely known method of all contraceptive methods in Tripura followed by Pills. Overall, 74 percent of currently married women are aware of female sterilization and 43 percent knew about male sterilization. There is no rural - urban difference in knowledge of female sterilization but it is not the case of male sterilization. A sizable number of urban women (45 percent) know about male sterilization as compared to 74 percent of rural women. 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 (63 percent) and condoms (50 percent) respectively. Only 41 percent of women know about the IUD/Loop. There is a large differential in knowledge of spacing methods by residence only 48 percent of the rural women know condom compared to 56 percent of urban women. The modern spacing methods, Pill and IUD are known by 65 and 40 percent of rural women respectively while the corresponding figures in urban areas are 58 and 42 percent respectively of eligible women respondents. The knowledge of these spacing methods remains low as compared to knowledge of sterilization.

In Tripura, more than 38 percent of the women are aware of a traditional method and only 4 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 slightly more aware about modern spacing methods.

Figure 6.1
Knowledge of Family Planning Method

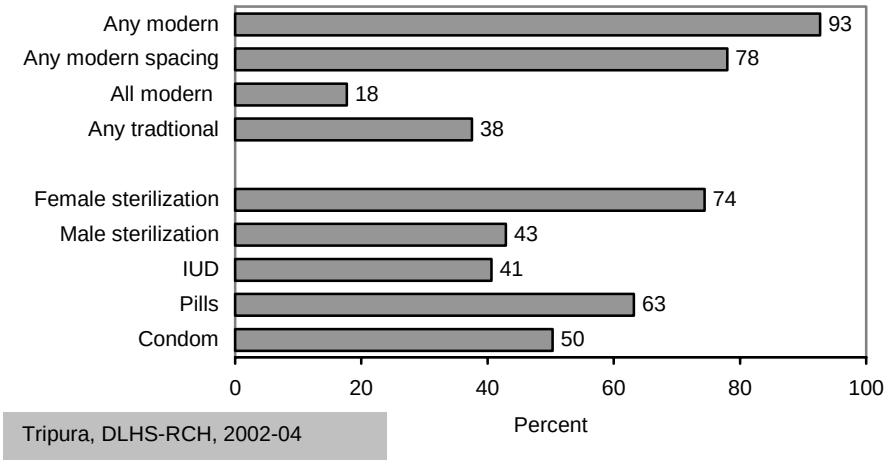


Table 6.2 KNOWLEDGE OF CONTRACEPTIVE METHODS BY DISTRICT

Percentage of currently married women age 15-44 years who know any contraceptive method by specific method and district, Tripura, 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
Dhalai	72.4	71.8	43.2	5.3	32.9	64.6	9.6	26.8	30.9	23.6
North Tripura	96.1	95.2	90.5	20.0	44.8	87.0	61.5	86.9	54.4	57.7
South Tripura	99.9	98.9	97.6	40.6	68.5	91.2	68.6	97.0	66.1	88.7
West Tripura	92.7	89.1	73.0	8.6	32.0	64.1	25.7	48.3	46.2	14.4
Tripura	92.7	90.4	78.0	17.7	42.9	74.4	40.6	63.2	50.3	37.5

Note:[1] Includes Female sterilization, Male sterilization, IUD, Pills and Condom.[2] Includes IUD, Pills and Condom.[3] Includes Female sterilization & Male sterilization & IUD & Pills and Condom.

6.1.1 Knowledge of Family Planning Methods by Districts

Table 6.2 shows the knowledge of contraceptive methods by districts in Tripura. In all districts more than 90 percent of women know about contraceptives including modern methods except in Dhalai (72 percent). A large differential is noticed in the knowledge of all modern methods by districts. The awareness ranges from 72 percent women in Dhalai to 99 percent in South Tripura district. There is not much variation in the knowledge of female sterilization, which is the lowest in West Tripura (64 percent) and the highest, in South Tripura district (91 percent). Knowledge about IUD/Loop and condom are 10 and 31 percent respectively in Dhalai, whereas the same is around 69 percent and 66 percent respectively in South Tripura district. As for any traditional method, awareness is 89 percent in South Tripura districts and the least in West Tripura district (14 percent).

6.1.2 Knowledge of No-Scalpel Vasectomy (NSV)

Knowledge of no-scalpel vasectomy among the husbands of currently married women in the state of Tripura is shown in Table 6.3. Only eleven percent of the husbands know about the no-scalpel vasectomy. In rural areas, 11 percent of husbands know about NSV compared to 10 percent in urban areas. For women residing in villages with a health facility, 11 percent of their husbands are aware of No-scalpel vasectomy and it is the same for those living in villages without health facilities. Among the husbands who know about NSV, 53 percent reported that NSV is simpler than a conventional family planning method, 27 percent feel that reported as NSV does not lead to any complication and 27 percent reported that NSV does not affect a man's sexual performance. Only 26 percent of the husbands in villages with a health facility reported that, NSV does not affect sexual performance compared to 35 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, Tripura, 2002-04.

Knowledge of NSV	Total	Residence		Availability of health facility in the village[1]	
		Rural	Urban	No	Yes
Percentage of husband who had knowledge about NSV	10.7	11.1	9.9	11.3	11.0
Number of husbands	2,939	2,055	884	530	1,525
Who know that NSV is simpler than conventional vasectomy	52.9	58.4	38.6	66.3	55.6
Who feel that NSV does not lead to any complication	27.3	29.4	21.7	40.6	25.4
Who feel that NSV does not affect man's sexual performance	26.5	28.3	21.7	35.3	25.8
Number of husbands	315	227	87	60	168

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

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

No-scalpel vasectomy awareness by districts in Tripura are provided in Table 6.4. The districts in which at least 11 percent of husbands know about NSV are South Tripura (19 percent) and North Tripura (35 percent). Only 2 percent of the husbands in West Tripura district know about the no-scalpel vasectomy. That NSV does not lead to any complications was reported by 71 percent of the husbands in Dhalai, followed by 38 percent in South Tripura and 31 percent in West Tripura and only 14 percent in North Tripura. The husbands who reported that the NSV does not affect a man's sexual performance were highest 61 percent in West Tripura district and the lowest in Dhalai (6 percent).

Table 6.4 NO-SCALPEL VASECTOMY BY DISTRICT

Percentage of husband of eligible women by knowledge of NSV by district, Tripura, 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
Dhalai	5.0	56.9	70.8	5.5
North Tripura	35.2	42.5	14.3	10.8
South Tripura	19.1	65.0	38.3	36.9
West Tripura	1.5	20.6	31.2	61.0
Tripura	10.7	52.9	27.3	26.5

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 Tripura. At the time of DLHS-RCH, 54 percent of currently married women were using some method of contraception, 45 percentage points up from Round I. Current contraceptive use is slightly higher in rural areas (56 percent) than in urban areas (51 percent). Use of modern method is reported by 43 percent of the women, the breakdown of which is 14 percent for permanent methods and 28 percent for spacing methods. Among the users of sterilization methods most prefer female sterilization, which invalidates the use of male sterilization (0.6 percent).

Table 6.5 CONTRACEPTIVE PREVALENCE RATE

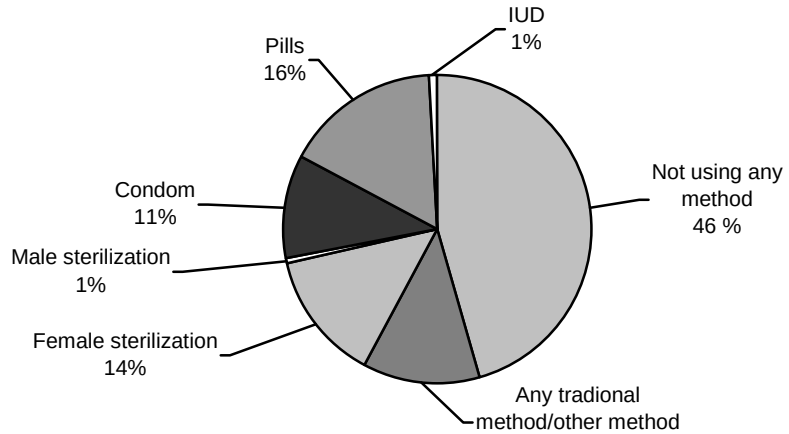
Percentage of currently married women age 15-44 years currently using any contraceptive method by selected background characteristics, Tripura, 2002-04

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	56.0	44.2	29.7	14.3	0.5	13.7	1.0	18.5	10.2	11.8	8.9	2.8	2,740
Urban	50.6	39.0	24.3	13.8	0.7	13.1	0.4	11.3	12.6	11.6	9.2	2.4	1,144
Education													
Non-literate	44.2	37.3	19.3	17.8	0.1	17.7	0.5	10.3	8.5	6.8	4.9	1.9	833
0-9@ years	59.9	46.9	31.4	15.2	0.8	14.4	1.0	18.9	11.6	13.0	9.8	3.1	2,050
10 years & above	51.6	38.6	28.7	8.8	0.5	8.4	0.7	16.3	11.6	13.0	10.7	2.3	1,001
Religion													
Hindu	55.0	42.9	28.1	14.3	0.5	13.8	0.9	16.5	10.7	12.1	9.2	2.8	3,593
Muslim	42.7	34.5	22.7	11.8	1.4	10.4	0.0	14.5	8.2	8.2	6.2	2.1	129
Christian	41.9	41.9	34.0	7.9	0.8	7.1	0.8	5.1	28.1	0.0	0.0	0.0	95
Buddhist	62.1	44.5	27.6	16.9	0.0	16.9	0.0	26.7	0.9	17.5	15.4	2.1	62
Other	96.9	96.9	74.0	22.9	0.0	22.9	0.0	74.0	0.0	0.0	0.0	0.0	5
Caste/tribe#													
Scheduled caste	57.1	43.9	27.5	16.2	0.8	15.4	0.5	19.4	7.7	13.2	10.7	2.3	768
Scheduled tribe	43.8	38.4	26.8	11.0	0.1	10.9	0.7	10.9	15.3	5.3	3.6	1.7	693
Other backward class	54.7	43.2	25.7	16.8	1.1	15.7	0.9	15.1	9.7	11.5	8.6	2.8	868
Other	57.7	43.9	30.4	13.1	0.3	12.7	1.0	18.1	11.3	13.8	10.6	3.2	1,527
Standard of living index													
Low	52.2	42.4	25.4	16.8	0.3	16.5	0.6	15.8	9.0	9.7	7.1	2.7	1,492
Medium	57.7	44.5	31.2	13.0	0.8	12.2	1.0	18.9	11.3	13.2	10.2	2.9	1,601
High	51.9	39.5	27.1	11.4	0.6	10.7	0.8	12.5	13.8	12.4	10.3	2.1	791
Availability of health facility in the village[4]													
No	51.1	38.5	26.7	11.8	0.5	11.3	0.6	19.5	6.6	12.6	10.1	2.5	696
Yes	57.7	46.2	30.8	15.1	0.5	14.6	1.1	18.2	11.4	11.5	8.5	2.9	2,044
Total	54.4	42.7	28.1	14.1	0.6	13.6	0.8	16.4	10.9	11.7	9.0	2.6	3,884

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.

The use of traditional methods is reported by 12 percent of the women of which 3 percent are using withdrawal and 9 percent follow the rhythm or periodic abstinence practice. The rural-urban differential is almost nil in the case of traditional methods, where 12 percent of the urban and rural women are using this means of contraception.

Figure 6.2
Practice of Family Planning Methods



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

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Current use of contraception is high among women of scheduled castes (57 percent) and other castes (58 percent) than among backward class women (55 percent). The current use is also high among the women who have 0-9 years of schooling (60 percent) than the women who have more than 10 years of schooling (52 percent) and also among non-literate women (44 percent). Similarly, current contraceptive use varies very little with respect to the standard of living of the women, increasing the prevalence rate from 52 percent to 58 percent for women from the lowest to the medium standard of living households. The availability of the health facility in the village is an important factor in motivating eligible women to use contraceptives. Fifty-eight percent of the women living in villages with a health facility are currently under contraception and this is higher than the women from villages deprived of a health facility (51 percent). The current use of the traditional method is also higher among women with a higher education level and with a high standard of living than their counterparts not on par with these categories of women.

6.2.1 Current Use of Family Planning Methods by Districts

Table 6.6 presents a picture of current contraceptive use in the districts of Tripura. The contraceptive use is a couple concepts as family planning methods can be used either by women or by their husbands. In 2 out of 4 districts, the current use of contraception exceeds 54 percent of eligible women except for the district of Dhalai and North Tripura (see Map-6). The state figure of current spacing methods use is 28 percent and it ranges from 11 percent in Dhalai district to 37 percent in South Tripura. 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, Tripura, 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
Dhalai	16.2	14.1	11.1	(0.3)	2.7	(0.1)	2.7	8.3	(2.1)
North Tripura	47.9	34.9	19.4	(0.0)	15.5	(2.0)	15.4	(1.9)	13.0
South Tripura	82.6	55.5	37.3	(0.5)	17.7	(0.8)	32.6	3.9	27.1
West Tripura	53.2	46.4	32.2	(0.7)	12.7	(0.7)	13.1	18.5	6.7
Tripura	54.4	42.7	28.1	0.6	13.6	0.8	16.4	10.9	11.7

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( ) Based on less than 25 cases

The pattern of use of contraceptive methods in Tripura is different from the general existing pattern in India. The contraceptive prevalence rate of 12 percent for traditional methods in the state is much higher than that in other states in the country. The use of oral Pills exceeds 15 percent in the districts of North and South Tripura. The districts in which the use of condom is more than 5 percent are in Dhalai and West Tripura district.

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 and number of surviving children, living sons and daughters. The current use of any method of contraception among currently married women in the 15-19 years age group is 41 percent and this attains a peak of 59 percent in the age group, 30-34 years. A similar age pattern of contraceptive use is also observed both in case of modern and traditional methods. The use of traditional method is 13 percent for the women aged 35-39 years and it is least (11 percent) for the women in age groups 40-44 years. The use of modern methods ranges from 28 percent for women in the age group 15-19 years to 48 percent for women in the age group 30-34 years.

Table 6.7 USE OF CONTRACEPTION BY WOMEN

Percentage of currently married women in 15-44 years by current use and ever use of contraception according to selected demographic characteristics, Tripura, 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	27.9	12.7	40.5	59.5	50.4	49.6	156
20-24	36.3	11.7	48.0	52.0	55.0	45.0	568
25-29	43.9	11.4	55.3	44.7	62.2	37.8	896
30-34	48.1	11.1	59.2	40.8	64.3	35.7	781
35-39	45.0	13.0	58.0	42.0	61.3	38.7	790
40-44	41.0	11.1	52.1	47.9	58.6	41.4	694
Surviving children							
0	10.1	7.4	17.5	82.5	24.5	75.5	441
1	44.9	12.4	57.3	42.7	63.6	36.4	1,354
2	45.6	13.6	59.2	40.8	64.5	35.5	1,264
3 or more	52.0	10.0	62.0	38.0	67.5	32.5	824
Surviving sons							
0	33.2	10.5	43.7	56.3	50.0	50.0	1,351
1	47.0	12.7	59.7	40.3	65.4	34.6	1,685
2 or more	49.3	11.6	60.9	39.1	66.4	33.6	847
Surviving daughters							
0	35.6	10.8	46.5	53.5	53.0	47.0	1,623
1	47.2	13.7	60.8	39.2	66.0	34.0	1,568
2 or more	49.1	9.3	58.4	41.6	64.5	35.5	693
All women	42.7	11.7	54.4	45.6	60.3	39.7	3,884

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

It is crucial to understand the association between the number of living children and contraceptive use. The contraceptive use is high among the women who have three or more surviving children invariably of methods in Tripura. The use of any method of contraception is 61 percent for the women who have two or more sons and is marginally higher than the women who have two or more daughters (58 percent). The same trend can be observed in the case of use of any modern method which is 49 percent for the women who have two or more surviving sons and it is higher than the women who have two or more daughters (49 percent).

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

Information pertaining to current use of family planning methods among the husbands of currently married women in Tripura 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 45 percent and it gradually picks up with the age of husband, to a peak of 60 percent in the age group, 35-44 years. Similar age patterns of contraceptive use are observed both in the case of modern methods. Among the

husbands in all the age groups, the use of traditional methods is 14 percent. The use of modern methods ranges from 31 percent for husbands below 25 years of age to 46 percent for the husbands in the age group 35-44 years.

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, Tripura, 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	31.2	13.8	45.0	55.0	78
25-34	40.7	14.0	54.7	45.3	844
35-44	46.1	13.6	59.7	40.3	1,295
45+	46.3	13.5	59.8	40.2	722
Surviving children					
0	14.7	5.6	20.3	79.7	309
1	45.1	14.2	59.3	40.7	975
2	45.8	17.8	63.6	36.4	949
3 or more	53.7	10.9	64.7	35.3	706
Surviving sons					
0	35.4	13.6	49.0	51.0	966
1	48.5	14.2	62.8	37.2	1,263
2 or more	48.5	12.9	61.4	38.6	710
Surviving daughters					
0	36.8	11.8	48.6	51.4	1,184
1	48.2	15.5	63.7	36.3	1,205
2 or more	51.5	13.7	65.2	34.8	550
All men	44.2	13.7	57.9	42.1	2,939

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 Tripura. Among all the husbands interviewed, 46 percent reported about female methods. Reporting of female methods is higher in rural areas (51 percent) than in urban areas (35 percent). The reasons cited for not preferring the male methods are fear of weakness (31 percent), greater popularity of female methods (63 percent), lack of sexual pleasure (3 percent), fear of method failure (3 percent) and fear of operation (3 percent). Only three percent reported fear of impotency as one of the reasons for not using male methods. However, there is not much rural-urban differential in the reasons for not using male methods, except in the case of fear of weakness. The expression for fear of weakness is higher in rural

areas (35 percent) than in urban areas (16 percent). Popularity of female methods as a reason for not using male methods of contraception is more in urban areas (70 percent) than in rural areas (61 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, Tripura, 2002-04

Female method users and reason for not accepting male methods	Total	Residence	
		Rural	Urban
Percentage of husband who have reported female methods	46.3	51.2	35.3
Number of men	1,702	1,180	521
Reasons for not accepting male methods*			
Fear of impotency	2.9	2.6	3.9
Lack of sexual pleasure	3.0	2.0	6.3
Fear of method failure	2.9	3.2	1.8
Fear of operation	2.7	2.6	2.9
Fear of weakness	30.8	35.2	16.7
Female methods are more popular	63.3	61.2	70.2
Other	6.3	6.2	6.8
Number of men	788	604	184

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

6.4 Source of Contraceptive Methods

To asses 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 Tripura are provided primarily through a network of government hospitals. The services are also provided by private hospitals and clinics, as well as non-governmental organisations (NGOs). Modern spacing methods like IUD, Pill and condom are available through both the government and private sectors. Government/municipal hospitals are the main source for female sterilization (80 percent) followed by community health centres or primary health centres (8 percent) and private hospital (4 percent). For male sterilization as well the aforesaid are the main sources with the exception of 6 percent obtaining the service from sub-centre. Among the IUD users, 74 percent reported the source as government/municipal hospital and 12 percent from the sub-centres and 3 percent from private medical centre. It is found that the chemist is the main source for Pills (63 percent) and condom (56 percent).

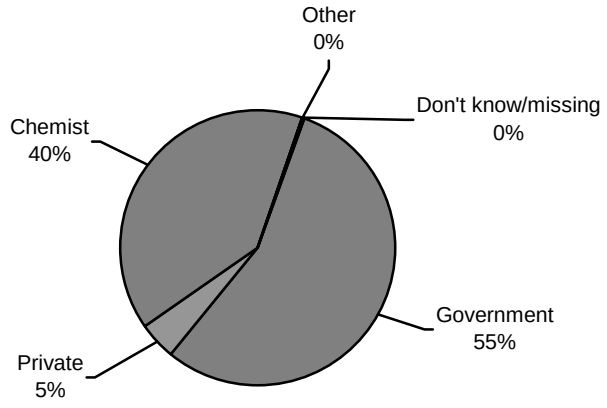
Table 6.10 SOURCE OF MODERN CONTRACEPTIVE METHODS

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

Source	Contraceptive method					All modern methods[1]
	Female sterilization	Male sterilization	IUD/ Loop	Pills	Condom / Nirodh	
Government medical centre	93.4	83.1	88.6	34.3	35.1	55.1
Government/Municipal hospital	80.3	49.1	73.8	26.4	25.0	44.6
CHC/PHC	7.5	27.1	0.0	0.5	4.7	4.2
Sub-centre	0.6	0.0	11.1	1.5	0.5	1.1
Government doctor	2.6	0.0	2.3	0.0	0.9	1.1
Government nurse/ ANM	0.5	0.0	1.4	0.3	0.1	0.3
Family planning/RCH camp	1.8	6.9	0.0	0.2	1.6	1.1
Out reach/MCP clinic in village	0.0	0.0	0.0	3.3	0.7	1.5
Mobile clinic	0.1	0.0	0.0	2.1	1.6	1.2
Private medical centre	4.2	7.5	3.3	2.4	8.7	4.7
Private hospital	4.1	7.5	0.0	0.2	4.2	2.6
Private doctor	0.0	0.0	3.3	2.0	3.8	1.8
Private nurse	0.1	0.0	0.0	0.2	0.8	0.3
Chemist	NA	NA	NA	63.1	56.2	39.0
Other	2.2	9.4	1.8	0.2	0.0	0.9
Do not know	0.3	0.0	6.4	0.0	0.0	0.2
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of users	527	22	31	637	424	1,641

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

Figure 6.3
Source of Family Planning Among Current Users of Modern Contraceptive Methods



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

6.5 Problems with Current Use of Contraceptive Methods

Women who were using a modern contraceptive method were asked if they had experienced any problems related with the current methods they are using. Table 6.11 shows the percentage of current contraceptive users who reported specific health problems, treatment seeking behaviour and their satisfaction about the method. The analysis of the method specific problems reveals that 8 percent of the sterilized women have problem with the contraceptive methods in use. The most common problems experienced by sterilized women are weakness or inability to work (80 percent), white discharge (2 percent), dizziness (39 percent), body ache or backache (41 percent), cramps (4 percent), irregular periods (7 percent), nausea or vomiting (30 percent) and excessive bleeding (4 percent). With regard to the modern spacing methods, 5 percent and 6 percent of women had problems in using Pills and IUD respectively. The most common problems of Pill users were dizziness (69 percent), weakness or inability to work (74 percent), white discharge (3 percent), nausea or vomiting (54 percent), body ache or backache (15 percent), cramps (18 percent) and irregular periods (15 percent).

Table 6.11 HEALTH PROBLEMS WITH CURRENT USE OF CONTRACEPTION

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

Health problems/side effect	Type of method		
	Female sterilizations	IUD/loop	Pill
Women who were informed about all the available methods	58.0	(0.0)	0.0
Women who were informed about the side effects before adoption of the method	26.6	(39.4)	33.9
Women who had side effect/health problem due to use of contraceptive method	8.3	(6.1)	5.0
Number of current users	527	31	637
Type of health problems/side effects[1]			
Weakness/inability to work	(80.4)	*	(74.4)
Body ache/ backache	(41.3)	*	(15.4)
Cramps	(4.3)	*	(17.9)
Weight gain	(6.5)	*	(5.1)
Dizziness	(39.1)	*	(69.2)
Nausea/vomiting	(30.4)	*	(53.8)
Breast tenderness	(6.5)	*	(7.7)
Irregular periods	(6.5)	*	(15.4)
Excessive bleeding	(4.3)	*	(5.6)
Spotting	(4.3)	*	(5.1)
White discharge	(2.2)	*	(2.6)
Number of users with side effects	44	1	32

Note:[1] Percentages may add to more than 100.0 because multiple problems could be recorded.
( ) Based on less than 50 un weighted cases. * Percentage not shown – based on very few cases.

6.6 Treatment for Health Problems with Current Use of Contraception

The study of respondents who sought treatment for contraceptive related health problems reveals that 61 percent of the sterilized women sought treatment and 21 percent in the case of Pills. Regarding the satisfaction about the method, 85 percent of the sterilized women reported satisfaction with sterilization. In the case of spacing methods, 94 percent of women using Pills and 85 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, Tripura, 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	5.4	(3.0)	5.0
Women who are satisfied with method of current use	85.2	(84.8)	93.6
Number of current users	527	31	637
Women who sought treatment for the health problem	(60.9)	*	(20.5)
Number of women with side effects	44	1	32
Source of treatments			
Government health facility			
Government hospital/dispensary	*	*	*
Private health facility			
Private hospital/clinic	*	*	*
ISM health facility[1]	*	*	*
Chemist/Medical shop	*	*	*
Number of women with side effects	23	1	5

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

6.7 Advice to Non-Users and their Future Intention 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 9 percent of the women were advised by ANM/health worker to adopt any family planning method in Tripura. Among rural

women, 8 percent were advised by ANM/health worker to adopt any method and it is higher than the urban women (11 percent) who were advised so.

Table 6.13 ADVICE ON CONTRACEPTIVE USE

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

		Residence		Availability of health facility in the village[1]	
Advise/future intension to use	Total	Rural	Urban	No	Yes
Percentage of current non-users advised by ANM/health worker to use of contraceptive method	8.7	7.8	10.9	10.3	6.7
Number of non-users	1,486	1,062	423	313	749
Percent distribution of women who were advised by method					
Female sterilization	30.5	34.6	(47.9)	(21.6)	41.7
Male sterilization	51.8	51.5	(27.1)	(70.3)	45.6
IUD/loop	5.1	4.5	(4.2)	(1.4)	3.4
Pill	5.9	4.2	(14.6)	(2.7)	3.1
Condom/Nirodh	4.8	2.8	(2.1)	(4.1)	2.3
Rhythmic /periodic abstinence	1.1	1.4	(2.1)	(0.0)	2.2
Other	0.7	1.1	(0.0)	(0.0)	1.7
Missin	0.1	0.0	(2.1)	(0.0)	0.0
Total percent	100.0	100.0	100.0	100.0	100.0
Number of non-users	129	83	46	32	50

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. ( ) Based on les than 50 unweighted cases.

The recommended contraceptive methods by ANM/health worker is dominated by male sterilization (52 percent) and female sterilization (31 percent). Only 5 percent were advised either to adopt IUD/loop and Condom/Nirodh (5 percent) as spacing methods. This pattern of advice also emerges irrespective of residence and availability of health facility in the village.

6.7.1 Future Intentions

Among the non-users, 13 percent of women have expressed their intention to use any method of contraception in the future. The intention to use any method of contraception is higher in urban areas (15 percent) than in rural areas (11 percent).

Among the women who intended to use permanent methods of contraception, 37 percent preferred female sterilization whereas only 17 percent of the women preferred male sterilization. In case of temporary methods, the preferred methods by women are oral Pills (30 percent), rhythm/periodic abstinence (3 percent), condoms (9 percent), withdrawal (less than one percent) and IUD (2 percent).

Sixteen percent of the husbands intended to use contraception in the future, among them 15 percent belong to rural areas and 18 from urban areas. Method wise choice in intention to use contraception is dominated female sterilization being reported by 40 percent, followed by

Condom (27 percent), pills (13 percent), rhythm/periodic abstinence (4 percent) and male sterilization (6 percent)

Table 6.14 FUTURE INTENTION TO USE

Percentage of current non-users*[*] who were intended to use contraception in future by preferred method according to place of residence, Tripura, 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	12.7	11.9	14.8	15.8	14.9	17.8
Number of non-users	1,486	1,062	423	1,235	875	360
Percent distribution of non-user who were preferred to use family methods by preferred method						
Female sterilization	36.8	42.8	24.7	39.6	51.5	15.2
Male sterilization	16.5	11.7	26.3	5.6	2.7	11.7
IUD/copper-T/loop	2.1	2.7	1.0	4.1	3.9	4.5
Oral pills	30.4	29.2	32.9	13.1	12.2	15.0
Condom/Nirodh	9.3	10.1	7.7	27.4	15.0	52.7
Rhythm/periodic abstinence	3.0	0.8	7.5	3.8	5.6	0.0
Withdrawal	0.8	1.1	0.0	0.7	1.0	0.0
Missing	1.1	1.6	0.0	5.8	8.1	0.9
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of non-users	189	127	63	195	131	64

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 the type of contraceptives that are likely to be in demand. Table 6.15 provides the information on intention to use contraception in future according to number of living children and residence background in Tripura. Among the current non-users, around 5 percent of the women intended to use contraception within the next twelve months. Only 4 percent of women wanted to use within one to two years whereas 4 percent reported their intention to use contraceptives after two years. About 42 percent are not sure of their intention to use, where as 45 percent reported no intention to use. 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. Around 64 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, Tripura, 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	0.1	2.4	7.8	6.7	12.5	4.6
One to two years	0.8	5.6	3.6	5.1	1.2	3.7
More than two years	5.1	6.6	3.4	1.1	0.7	4.4
Does not intend to use	29.5	42.4	53.7	50.7	63.9	45.2
Not yet decided	64.3	42.9	31.2	36.3	21.7	42.0
Missing	0.0	0.0	0.2	0.0	0.0	0.1
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	320	480	436	155	95	1,486
			Rural			
Intends to use in next 12 months	0.0	3.6	6.5	6.4	13.4	4.8
One to two years	1.0	4.4	3.2	3.7	1.2	3.0
More than two years	3.4	6.8	4.0	1.3	0.8	4.1
Does not intend to use	29.7	40.3	50.8	49.1	61.8	44.0
Not yet decided	65.9	45.0	35.3	39.4	22.7	44.1
Missing	0.0	0.0	0.3	0.0	0.0	0.1
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	228	302	313	130	88	1,062
			Urban			
Intends to use in next 12 months	0.5	0.4	11.1	8.0	*	4.0
One to two years	0.5	7.6	4.8	12.5	*	5.4
More than two years	9.4	6.4	2.1	0.4	*	5.4
Does not intend to use	29.1	46.2	61.1	59.1	*	48.3
Not yet decided	60.5	39.4	20.9	20.1	*	36.9
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	91	177	123	25	7	423

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

6.8 Reasons for Discontinuation and Non-Use of Contraception

Currently married non-pregnant women who were not using any contraceptive method at the time of survey were categorised as past users and never users according to their contraceptive experience. In DLHS-RCH, women who had discontinued contraceptive use were asked about the main reason for discontinuation. The survey also asked women who had never used contraceptives about the main reason for not doing so. Table 6.16 shows the main reason for not using contraceptives among both the past never users and current non users. Among the past users, around 48 percent of the women mentioned that they discontinued the use because they had wanted child, method failed/became pregnant (14 percent), weakness/inability to work (5 percent), irregular periods (4 percent), lack of pleasure (8 percent), dizziness (3 percent) and

other reasons (10 percent). For urban women 10 percent have reported method failure/become pregnant due to discontinuation. In urban areas, 20 percent of women reported as other reason for discontinuing the use and where as the same is 7 percent among rural women.

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, Tripura, 2002-04

Reasons	Total	Place of residence	
		Rural	Urban
Reason for discontinuation			
Wanted child	48.0	56.4	28.3
Method failed/became pregnant	14.0	15.5	10.4
Supply not available	4.0	3.7	4.7
Difficult to get method	1.3	1.3	1.3
Weakness/inability to work	4.5	6.1	0.7
Body ache/ Backache	0.8	1.1	0.2
Weight gain	0.6	0.7	0.2
Dizziness	3.0	1.1	7.5
Nausea/vomiting	0.4	0.5	0.0
Breast tenderness	0.2	0.2	0.2
Irregular periods	3.8	3.3	4.8
Lack of pleasure	8.2	3.0	20.2
Method was inconvenient	0.9	0.4	1.9
Other	10.4	6.5	19.7
Total percent	100.0	100.0	100.0
Number of past users	228	160	68

6.8.1 Reasons for Not Using Contraceptive Methods

DLHS asked women and husbands who are currently not using any contraception and main reasons why they were not currently using a method. The reported main reasons for not using contraceptives are, difficult to become pregnant (7 percent), health does not permit (9 percent), lack of knowledge about family planning methods (26 percent), opposed to family planning (12 percent), against the religion (5 percent) and afraid of sterilization (4 percent). About 17 percent of the women reported other reasons for not using contraception. As far as rural-urban differentials are concerned, variation is observed in the reasons for not using any contraceptive.

Table 6.17 REASON FOR NOT USING CONTRACEPTIVE METHOD

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

Reason	Women			Husband*		
	Total	Rural	Urban	Total	Rural	Urban
Lack of Knowledge about FP method	26.3	30.5	17.2	15.5	16.8	13.0
Against the Religion	5.1	4.4	6.5	8.6	6.7	12.3
Opposed to family planning	11.6	13.7	7.2	11.1	13.5	6.2
Not like existing method	1.6	2.0	0.9	3.7	4.4	2.3
Afraid of sterilization	3.8	5.0	1.4	4.0	3.9	4.2
Can not work after sterilization	1.0	0.5	2.2	4.1	4.2	3.7
Worry about side effects	5.0	5.0	5.0	5.8	3.4	10.7
Costs too much	7.2	7.7	6.2	10.4	8.9	13.4
Health does not permit	9.2	10.1	7.1	13.7	15.5	9.9
Hard/inconvenient to get method	2.5	1.0	5.6	2.4	2.0	3.2
Inconvenient to use method	0.9	1.2	0.3	2.0	0.9	4.2
Difficult to become pregnant	7.2	5.6	10.5	1.5	1.4	1.8
Wife is pregnant[1]	-	-	-	0.8	0.8	0.9
Other	16.9	11.8	27.6	16.0	17.1	13.8
Missing	1.8	1.6	2.2	0.5	0.6	0.2
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of current non-users	985	670	315	762	509	253

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

6.9 Unmet Need for Family Planning Services

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

The unmet need is high for women below 20 years, mainly for spacing rather than for limiting. Unmet need is also relatively high for women aged 20-24 years (24 percent) for both spacing and limiting. Among the older women of age 25-29 years, 25 percent have unmet need, and mostly for limiting. Among the women age 30 years and above, unmet need is exclusively for limiting. The urban women have high unmet need (27 percent) than the rural women (24 percent). The unmet need for family planning is higher (33 percent) among the non-literate women than among the women with 0-9 years of schooling (22 percent) and 10 or more years of schooling (26 percent) women. Hindu women have lesser unmet need for family planning (26 percent) compared to the Muslim women (29 percent) or Christian women (35 percent). Unmet

need for family planning is higher (32 percent) for Scheduled tribe followed by other backward class (25 percent), Scheduled caste (24 percent) other caste (22 percent) women.

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, Tripura, 2002-04

Background Characteristic	Unmet need for FP			Number of women
	Spacing[1]	Limiting[2]	Total	
Age				
15-19	13.5	2.2	15.7	156
20-24	12.8	11.4	24.2	568
25-29	9.7	15.0	24.7	896
30-34	6.1	17.4	23.5	781
35-39	2.4	26.6	29.0	790
40-44	1.1	24.4	25.5	694
Residence				
Rural	6.2	18.2	24.4	2,740
Urban	7.4	19.2	26.6	1,144
Education				
Illiterate	5.9	26.7	32.7	833
0-9 @ years	5.9	15.8	21.7	2,050
10 years and above	8.5	17.1	25.6	1,001
Religion				
Hindu	6.6	18.1	24.7	3,593
Muslim	10.2	18.5	28.8	129
Christian	3.0	31.9	34.9	95
Buddhist	4.5	20.1	24.6	62
Caste/tribe#				
Scheduled caste	6.7	17.0	23.7	768
Scheduled tribe	9.5	22.9	32.3	693
Other backward class	5.6	19.8	25.4	868
Others	5.5	16.4	21.9	1,527
Number of living children				
0	9.7	5.9	15.6	441
1	10.7	13.2	23.9	1,354
2	4.0	24.1	28.2	1,264
3	2.3	22.9	25.2	543
4+	1.5	29.8	31.3	281
Standard of living Index				
Low	7.1	20.1	27.2	1,492
Medium	5.6	17.2	22.7	1,601
High	7.5	18.1	25.7	791
All women	6.6	18.5	25.1	3,884

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. Total includes 5 cases in religion-other were not shown separately.

Women in low standard of living have high (27 percent) unmet need than the women of medium (23 percent) and high standard of living (26 percent). Unmet need is much higher for the women with one living child (24 percent) than women with no children (16 percent). Among the women with no children or one child the unmet need is mainly for spacing, where as for women with two children or more unmet need is exclusively for limiting.

6.9.1 Unmet Need for Family Planning Services by Districts

Table 6.19 provides the information about unmet need for limiting, spacing and total by district. The unmet need for family planning services for state is 25 percent and it ranges from 7 percent in South Tripura to 67 percent in Dhalai. In 2, out of 4 districts unmet need for family planning is more than state average. Unmet need for limiting was found lowest in South Tripura (5 percent) followed by West Tripura (17 percent), and highest in Dhalai (56 percent). Similarly, unmet need for spacing was lowest to two percent in South Tripura to 11 percent each in Dhalai and North Tripura. It may also observe that in all the districts of Tripura unmet need for limiting was more than spacing.

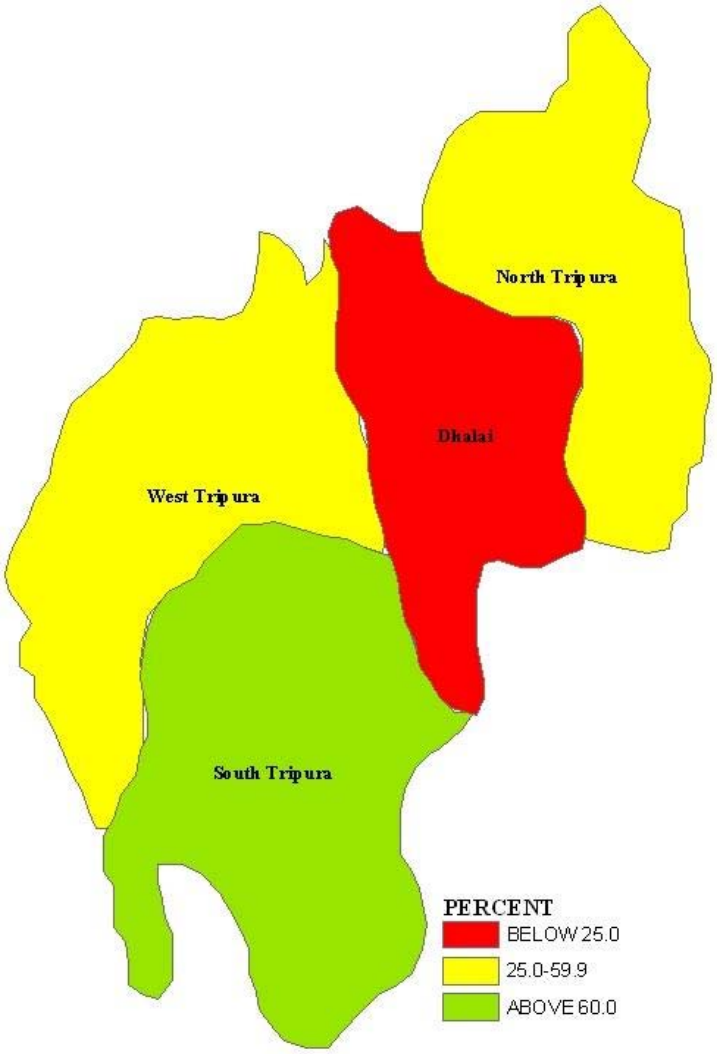
Table 6.19 UNMET NEED BY DISTRICT

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

	Unmet need for		
Districts	Spacing	Limiting	Total
Dhalai	11.0	55.5	66.5
North Tripura	11.1	20.0	31.1
South Tripura	1.8	4.7	6.5
West Tripura	5.6	16.6	22.1
Tripura	6.6	18.5	25.1

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 creditability of services and establish necessary rapport with the clients. In order to assess the extent of utilisation of government health facilities by all eligible women and to find out whether ANM/health workers reach the households for providing RCH services, a separate section in the women's questionnaire was canvassed to all the eligible women. This chapter deals with the accessibility and the opinion of women about the services provided by the government health workers. The quality of care offered by the government health programme as perceived by currently married women is also presented.

7.1 Home Visit by Health Workers

Table 7.1 shows the percentage of currently married women visited by health workers at home during the three months prior to the survey. Around 3 percent of the women in Tripura reported that the health worker visited them at their residence at least once in last three months preceding the survey. Younger women as well as older women reported a home visit. Three percent of women in the age group 15-24 years reported at least one home visit compared to only 3 percent of women in the age group 35 years and older. The percentage of women in Tripura receiving home visits is same in rural areas as well as in urban areas (3 percent each). Women who had done 0-9 years of schooling (4 percent) and women with a low and medium standard of living (3 percent) seemed more likely to report home visits. More Buddhist women (5 percent) reported home visits than Hindu women (3 percent) and Muslim and Christian (less than one percent). There was not much variation by caste/tribe. Home visits were the same for women residing in the villages with or without a health facility.

Women who reported a home visit during the three months preceding the survey were asked who visited their household during the past three months and whether they were satisfied with the kind of services/advice received, and the time spent by these health workers. Among women who received services at home, less than 3 percent received services .There were less rural-urban differentials by visit of households by health worker

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, Tripura, 2002-04

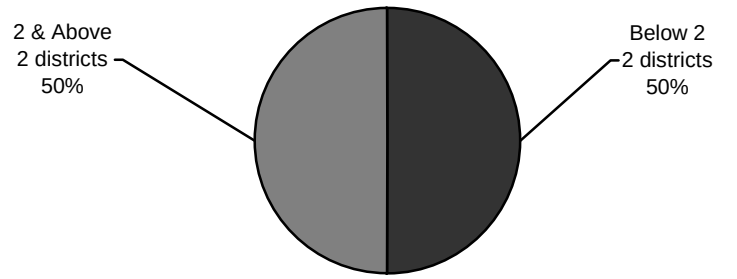
Background characteristic	Percentage with home visit	Number of women
Age		
15-24	2.5	724
25-34	3.1	1,676
35-44	2.5	1,484
Residence		
Rural	2.7	2,740
Urban	2.8	1,144
Education		
Non-literate	1.7	833
0-9 years@	3.6	2,050
10 and above	2.0	1,001
Religion		
Hindu	2.8	3,593
Muslim	0.9	129
Christian	0.1	95
Buddhist	4.7	62
Caste/tribe#		
Scheduled caste	2.0	768
Scheduled tribe	2.5	693
Other backward class	2.6	868
Other	3.3	1,527
Standard of living index		
Low	3.0	1,492
Medium	3.0	1,601
High	1.7	791
Availability of health facility[2] in the village		
No	2.7	696
Yes	2.7	2,044
Total	2.7	3,884

Note: Total includes 5 cases of other religious group 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

In half of the districts in Tripura, health workers visited less than 3 percent of the women at home (Table 7.2 and Figure 7.1). In districts like Dhalai and West Tripura (2 percent each) of the women were visited by health workers, followed by North Tripura (3 percent) and the highest number of visits were reported in South Tripura (4 percent).

Figure 7.1
Distribution of Districts by
Home Visit by Health Worker



Tripura, 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, Tripura, 2002-04

District	Percentage with home visit
Dhalai	1.9
North Tripura	3.0
South Tripura	4.0
West Tripura	2.3
Tripura	2.7

7.3 Matters Discussed during Home visits or Visits to Health Facilities

Women who were visited at home by a family planning worker, as well as those who visited government health facility or other health facility during the three months preceding the survey were asked about the different topics discussed with the workers during any of these visits. Table 7.3 shows the percentage of women who discussed the health and family planning or any health related matters to the health workers during home visits or visits to a health facility during the past three months. There are 32 pregnant woman or women with children born during the reference period, and other women includes 54 current users and 20 current non-users, who were visited by health workers at home.

The major focus of discussion during home visits was childcare (21 percent) and immunization (37 percent). In addition, discussions were also made on disease prevention (27 percent), family planning (47 percent), and antenatal care (15 percent), nutrition (25 percent), treatment of health problems (24 percent). As expected, pregnant women or women with child born after reference period were much more likely than other women to report that they discussed childcare, immunization, antenatal care, postpartum care, and breastfeeding. A higher proportion of current contraceptive users and current non-users discussed, disease prevention, treatment of health problems, sanitation/cleanliness and other health related matters during home visit by health workers past three months preceding the survey.

Table 7.3 MATTER DISCUSSED DURING CONTACT WITH A HEALTH WORKER

Percentage of women who were visited by health worker in the three months preceding the survey, and percentage of women who visited health facility, and the percentage of women[1] who discussed specific topics with the health worker, Tripura, 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	(39.5)	42.4	*	47.0
Family planning	(5.3)	8.0	*	8.9
Breastfeeding	(15.8)	16.3	*	20.7
Supplementary feeding	(36.8)	32.3	*	36.9
Immunization	(15.8)	14.1	*	25.0
Nutrition	(26.3)	27.1	*	26.7
Diseases prevention	(13.2)	26.6	*	23.6
Treatment of health problem	(28.9)	9.0	*	14.6
Antenatal care	(21.1)	7.0	*	11.0
Delivery care	(21.1)	9.6	*	16.1
Postpartum care	(28.9)	15.8	*	17.9
Childcare	(21.1)	16.5	*	13.8
Sanitation / cleanliness	(5.3)	7.7	*	4.6
Oral rehyderation	(0.0)	4.4	*	2.2
Number of women	32	54	20	106
During visit to health facility				
Family planning	5.8	11.3	(9.4)	7.5
Breastfeeding	5.5	0.0	(6.3)	3.3
Supplementary feeding	4.8	1.6	(4.7)	3.2
Immunization	25.2	1.9	(7.8)	15.0
Nutrition	10.6	1.6	(12.5)	6.5
Diseases prevention	10.1	26.6	(31.3)	17.7
Treatment of health problem	20.4	43.5	(35.9)	29.2
Antenatal care	18.6	2.7	(23.4)	13.1
Delivery care	15.1	2.5	(14.1)	9.3
Postpartum care	9.1	1.5	(9.4)	5.4
Childcare	21.8	15.7	(10.9)	17.4
Sanitation / cleanliness	4.3	4.8	(12.5)	6.8
Oral rehyderation	1.5	2.3	(1.6)	1.8
Other	0.9	2.8	(1.6)	1.8
Number of women	163	122	45	330

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 (29 percent), immunization (15 percent), disease prevention (18 percent), childcare (17 percent) antenatal care (13 percent) and other health related topics (2 percent). Only eight percent women reported that they discussed family planning during the visit. During visit to health facility about one-fourth of the pregnant women or women with children born during reference period discussed on immunization, 19 percent discussed about antenatal care, 22 percent discussed childcare, 20 percent discussed treatment of a health problem, and 10 percent discussed disease prevention. A few pregnant women or women with children born after reference period also discussed about delivery care, postpartum care, breastfeeding, nutrition, oral re-hydration and breastfeeding during visit to health facility. A higher proportion of current users and non-users discussed on treatment of health problems, disease prevention, and other health related problems than pregnant women with children after reference period during visit to health facility in three months prior to survey.

7.4 Visit to Health Facility

Table 7.4 presents the percentage of currently married women who needed to visit health facility and visited the health facility by residence and availability of health facility in the village. Around 53 percent of women needed to visit health facility but did not visit in comparison with 15 percent of women who needed to visit health facility and visited in past three months of the survey. The proportion of such women was higher in rural areas (16 percent) than in urban areas (13 percent). Among them who visited any health facility, 8 percent of women reported that they had visited a private dispensary, (3 percent in rural areas and 21 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, Tripura, 2002-04

Health facility	Total	Residence		Availability of health facility[1] in the village	
		Rural	Urban	No	Yes
Percentage of women who needed to visit health facility and not visited	52.8	49.0	61.9	31.5	54.9
Percentage of women who needed to visit health facility and visited	15.0	15.9	12.8	14.7	16.3
Number of women	3,884	2,740	1,144	696	2,044
Government health facility					
Hospital / CHC / FRU /RH	25.5	24.3	29.3	25.4	23.9
Dispensary	21.3	26.1	6.9	36.5	22.9
Primary health center	7.5	8.2	5.5	5.9	8.9
Sub-center	2.0	1.2	4.1	1.9	1.0
Private health facility					
Hospital	4.4	3.1	8.1	0.0	4.1
Dispensary	7.7	3.4	20.6	0.7	4.2
ISM[2] hospital/dispensary	31.4	33.7	24.5	29.6	35.0
Other	0.2	0.0	1.0	0.0	0.0
Total percent	100.0	100.0	100.0	100.0	100.0
Number of women	582	435	146	102	333

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.

Fifty-six percent of the women visited a government health facility, of which 26 percent visited government health facility such as, hospital/CHC/FRU/RH, 2 percent visited sub-centres, 8 percent visited primary health centre and 21 percent visited to government dispensary. Thirty-one percent of the women reported that they visited Indian system of medicine hospital/ dispensary either government or private. There are not much differences in visit to any health facility according to availability of health facility in the village in the past three months of the survey.

7.5 Visit to Health Facility by Districts

Table 7.5 presents the percentage of currently married women who needed to visit health facility and visited the health facility by districts. 26 percent of currently married women in South Tripura and 74 percent in West Tripura, needed to visit a health facility, but they did not visit. Out of 4, in 2 districts i.e. North and South Tripura more than 15 percent of the women visited health facility for their health problems. Among them who visited health facility, 36 percent women visited government health facility in North Tripura and the ighest was in Dhalai (91 percent).

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, Tripura, 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
Dhalai	30.2	6.0	91.2	8.8
North Tripura	34.2	29.4	36.2	63.3
South Tripura	26.4	22.3	59.2	39.8
West Tripura	73.5	8.5	68.4	31.6
Tripura	52.8	15.0	56.4	43.3

7.6 Client's Perception of Quality of Government Health Services

Utilization of services is an essential indicator reflecting the quality of services. Better quality of services would have a higher utilization rate, which is very important from the policy point of view. Unless clients are satisfied with the services provided by the government, efforts made by the government will be wasted. In order to assess the utilization of government health facilities, a question was asked whether they had visited any health facility for their health problem during past three months to the survey. Those who visited the government health facility were asked their perceptions about quality of services, (personal manner like courtesy, respect, sensitivity, and friendliness of the physician and staff, technical skills and quality like thoroughness, carefulness, and competence and waiting time for receiving the services) and same is presented in Table 7.6. Women in general perceived that the quality of services, personal manner as well technical skills and quality of physician, ANM/nurse and other staff was good. Majority of the respondents perceived that personal manner (courtesy, respect, sensitivity, and friendliness) and technical skills (thoroughness, carefulness, and competence) of the physician, nurses and other staff were good, a few respondents mentioned that length of time spend towards waiting (5 percent), technical skills of the nurse (3 percent), and general comfort (3 percent) was excellent.

Table 7.6 QUALITY OF GOVERNMENT HEALTH FACILITY

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

Quality indicator	Poor	Good	Excellent
The convenience of the health facility location	21.4	78.1	0.5
Length[1] of time spend towards waiting	27.4	67.3	5.3
Personal manner[2] of the physician[5]	13.4	85.8	0.8
The technical skills and quality[3] of the physician[5]	17.4	80.9	1.6
Personal manner[2] of nurse	24.3	75.3	0.4
The technical skills and quality[3] of nurse	20.4	76.8	2.8
Personal manner of other staff[5]	24.4	74.1	1.5
The technical skills and quality of other[4] staff	28.5	69.9	1.6
The explanation of what was done to her	37.8	60.5	1.7
Medical, surgical and diagnostic equipment	50.8	48.6	0.7
General comfort	45.2	51.9	2.9

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. Twenty-six percent of the currently married women reported inconvenient location of the centre as one of the reason for not visiting the government health centre for their health problems, as expected this reason is more reported by rural women (11 percent) than urban women (5 percent), and women from those village where health facilities are available (13 percent). About 7 percent reported that they did not feel necessity to visit the government health centre due to poor quality of service, 6 percent in rural area and 8 percent in urban area. Other reasons for not visiting government health centres were: time is not suited (7 percent), heavy rush (11 percent), doctor/ health workers do not examine properly (34 percent), medicine rarely/not given or of bad quality (7 percent), non-availability or rare availability of doctors/ health workers (16 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, Tripura, 2002-04

Reason	Total	Residence		Availability of health facility[1] in the village	
		Rural	Urban	No	Yes
Not conveniently located	9.3	11.4	4.5	(5.6)	12.5
Time is not suited	6.6	5.7	8.6	(5.6)	5.5
Poor quality of services	6.6	6.2	7.6	(13.9)	3.9
Heavy rush	10.9	13.0	5.9	(19.4)	12.4
Non/rare-availability of doctors/health workers	15.8	13.5	21.2	(5.6)	14.6
Doctors/health workers do not examine properly	34.1	33.7	35.3	(33.3)	34.6
Medicine not/rarely given or of bad quality	7.3	6.7	8.7	(11.1)	5.6
Doctors/paramedical staff does not behave properly	.9	1.4	0.0	(0.0)	1.7
Services are charged	1.1	1.5	0.0	(0.0)	1.8
Referred by government doctor	6.1	5.6	7.4	(5.6)	5.7
Other	1.2	1.4	0.9	(0.0)	1.7
Total percent	100.0	100.0	100.0	(100.0)	100.0
Number of women	252	175	77	31	144

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. Seventeen percent of currently non-users said that they had advices or discussion on method of family planning with ANM or family planning health worker (Table 7.8). The most frequently discussed method was male sterilization (52 percent) and female sterilization (31 percent). Only five percent of women received advices to adopt condom and IUD as a contraceptive method while 6 percent where advised to take pills. Discussions about traditional method, such as rhythm or withdrawal were rare. There is no much variation by types of residence in terms of family planning information and advice received.

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 that they had been able to get their supply whenever needed. The results are presented in Table 7.9. Only 4 percent of condom users and 21 percent of pills users reported that they had a problem in getting these methods. A little higher proportion of urban women than rural women had problems in getting a supply of condom and it was the opposite in case of Pills.

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, Tripura, 2002-04

Advice/method	Total	Rural	Urban
Percentage of non-users who were advised to adopt family planning method	8.7	7.8	10.9
Number of women	1,486	1,062	423
Method			
Female sterilization	30.5	34.6	(47.9)
Male sterilization	51.8	51.5	(27.1)
IUD	5.1	4.5	(4.2)
Pills	5.9	4.2	(14.6)
Condom	4.8	2.8	(2.1)
Rhythm/periodic abstinence	1.1	1.4	(2.1)
Other	0.7	1.1	(0.0)
Missing	0.1	0.0	(2.1)
Total percent	100.0	100.0	(100.0)
Number of women	129	83	46

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, Tripura, 2002-04

Method/residence	Percentage who had a problem getting supply	Number of users
Condom		
Rural	3.3	508
Urban	7.8	130
Total	4.2	637
Pills		
Rural	21.3	280
Urban	19.2	144
Total	20.6	424

7.10 Quality of Care of Family Planning Services

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

Around 57 percent of sterilized women reported that ANM or health worker informed them about alternative methods that they could use (Table 7.10) before adopting sterilization. Around sixty percent of sterilized women received such information by a ANM or health worker in the government 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, Tripura, 2002-04

Source of sterilization	Total	Rural	Urban	Number of users
Government health facility	60.0	61.8	55.1	499
Family planning or RCH camp/ village session	*	*	*	11
Private health facility	*	*	*	24
Other	*	*	*	13
Total	57.2	59.9	50.5	549

Note: Total includes 2 women who said that they do not know 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, Tripura, 2002-04

Information/follow-up	Total	Rural	Urban
Told about side effects			
Sterilization	26.7	25.1	30.4
Other modern method	32.1	34.2	25.9
Any modern method	30.3	31.2	27.7
Received follow-up			
Sterilization	5.7	3.1	12.0
Other modern method	5.6	5.4	6.1
Any modern method	5.6	4.6	8.3

Another important facet of informed contraceptive choice is being fully informed about any side effects and any other problems associated with the method. In Tripura, 30 percent of users of any modern method were informed about possible side effects or health problems associated with their current method. Twenty-five percent of acceptors of sterilization in rural area and 30 percent in urban area reported that they were informed about side effects. Among users of modern method other than sterilization, 34 percent of rural users and 26 percent of urban users were informed about side effects. It is clear from the result that ANM or health workers in Tripura are providing sufficient information to couples who need to make an informed choice about contraceptive methods. The situation with respect to follow-up services is also not encouraging. Follow-up services among sterilization users are lower than user of modern methods. About three percent of sterilization users in rural area and

about 12 percent in urban area reported that they received follow-up services by ANM or health worker. Only 6 percent of the users of other modern method received follow-up services. In all, only 5 percent of the users of any modern method in rural area and only 8 percent in urban areas received follow-up services.

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, Tripura, 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	
Dhalai	26.9	41.8	31.0	15.1	8.3	14.3
North Tripura	63.7	15.6	11.7	1.8	0.5	3.2
South Tripura	74.6	42.7	31.4	4.4	6.1	3.9
West Tripura	45.3	22.2	38.7	7.2	6.0	9.8
Tripura	57.2	26.7	32.1	5.7	5.6	8.7

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

The percentage of sterilization-users who were told about alternate method is lowest in Dhalai (27 percent) but it is highest in South Tripura (75 percent). There are also large inter-district variations in the percentage of sterilization- users and users of modern contraceptive methods who were told about the possible side effect. In case of sterilization, the proportion varied from a low of 16 percent in North Tripura to a high of 43 percent in South Tripura. For other modern contraceptive methods, more than 39 percent users in West Tripura and a minimum of 12 percent of users in North Tripura were told about the side effects of the method. Follow-up services are slightly better for acceptors of sterilization than for other modern methods in most of the districts of Tripura. 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 3 percent in North Tripura to a high of 14 percent in Dhalai.

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

7.12 Quality of Care of Maternal Health Care

Information on few other aspects of quality of care in terms of maternal care was also collected. Women with last live/still births during three years preceding the survey were asked whether the Doctor/ANM/health worker advised you 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 care at least one visit within six weeks of delivery. The same information is presented in Table 7.13.

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

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

Advise/follow-up service	Total	Rural	Urban
Percentage of women who were advised to have delivery at health facility	47.4	47.3	47.9
Percentage of women who were visited within 2 weeks of delivery	5.0	5.2	4.1
Percentage of women who were visited at least once within 6 weeks of delivery	9.4	8.7	11.6
Number of women	854	668	186

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

About forty-seven 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 (48 percent) were more likely than rural areas (47 percent) to get advised to deliver their child at health facility.

In district wise variation, the percentage varies from as low as 42 percent in North Tripura to as high as 66 percent in Dhalai (Table 7.14). In 3 of the 4 districts, more than half women were advised for 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, Tripura, 2002-04

District	Percentage of women		
	Advised to have delivery at health facility by doctor/ health worker	Visited within 2 weeks of delivery by ANM	Visited at least one within 6 weeks of delivery by ANM
Dhalai	66.0	19.9	30.6
North Tripura	41.9	2.4	2.4
South Tripura	51.9	9.7	10.9
West Tripura	52.6	1.8	11.8
Tripura	47.4	5.0	9.4

Twenty percent of the women in Dhalai reported that they were visited by an ANM within two weeks of delivery; such visit was only 2 percent in North and South Tripura. Only 31 percent of the women in Dhalai and 2 percent in North Tripura received at least one follow-up service within six weeks of delivery. Not more than 20 percent women were received postpartum check-up within 2 weeks of delivery in any district of Tripura, and the proportion of women who had at least one postpartum check-up within six weeks of delivery varied from a low of 2.4 percent in North Tripura to high of 12 percent in West Tripura (Table 7.14).

CHAPTER – VIII

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

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

8.1 Awareness of RTI/STI

An attempt was made to asses 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.

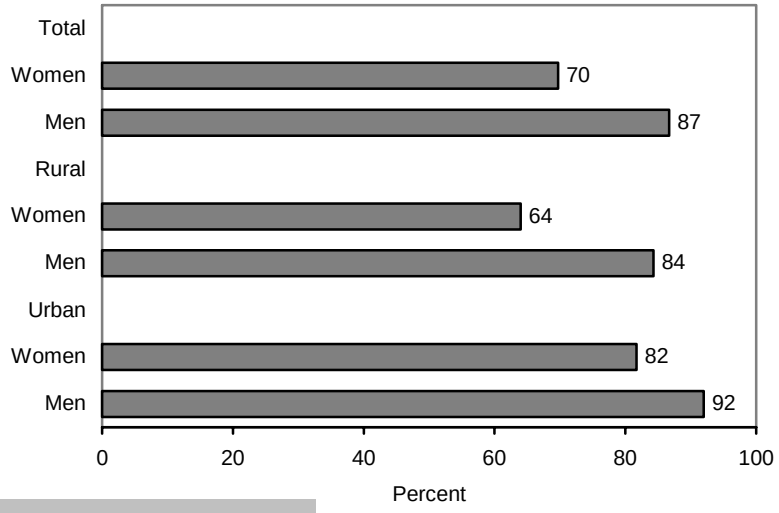
Table 8.1 shows the percentage of women aware of RTI/STI by background characteristics. About 17 percent of the women in Tripura were aware of RTI/STI. The proportion of women who were aware of RTI/STI is much higher in urban areas (19 percent) than in rural areas (16 percent) Figure 8.1. Awareness of RTI/STI is much lower among younger women, non-literate women, women from Buddhist religions, scheduled tribe women and women from households with a low standard of living. Awareness of RTI/STI increases from 4 percent among non-literate women to 30 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 11 percent among women with a low standard of living to 28 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. Almost 40 percent of the women reported that they received information of RTI/STI from friends or relatives. Other sources of information of RTI/STI as reported by women were television (69 percent), newspaper or books or magazines (51 percent), slogans or posters or pamphlets or wall hoardings (29 percent) and radio (51 percent). Twenty-six percent of women received this information from doctors and 21 percent from health workers, and about 7 percent of the women reported that they had heard of RTI/STI from another source.

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 Tripura, the percentage of men who heard of RTI/STI is higher than that of

women (Figure 8.1). About 26 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 Buddhist religion and mainly from scheduled tribes are less likely to report awareness of RTI/STI. The awareness of RTI/STI is high among men in Tripura. The level of awareness of RTI/STI increases with an increase in education level and standard of living. Only 7 percent of non-literate men were aware of RTI/STI as compared to 44 percent of men who had completed 10 or more years of schooling. About 17 percent of men from households with a low standard of living were aware of RTI/STI as compared to 42 percent of men with a high standard of living.

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



Tripura, DLHS-RCH, 2002-04

Relatives or friends are the most prominent source of RTI/STI for men in Tripura. About 34 percent of men who knew about RTI/STI received information from relatives or friends. Other important sources of information about RTI/STI are the television (74 percent) followed by newspaper or books or magazines (68 percent), slogans or posters or pamphlets or wall hoardings (36 percent), and radio (43 percent). About 23 percent of the men received this information from a doctor, 19 percent from health workers, 26 percent from community meetings and 15 percent mentioned that they had received information about RTI/STI from school teachers. About 6 percent of the men reported that they heard of RTI/STI from other sources. Relatives or friends are the most important source of information of RTI/STI in all the groups. Men from rural areas, non-literate men, Muslim men, Men from scheduled-tribes, men with a low standard of living and younger men are more prone to receive information from relatives or friends. Electronic media such as 'television' is also an important source of information of RTI/STI for men who are from urban areas and belong to Buddhist religion as well 'other' castes category. The differences in the knowledge of RTI/STI from television as a

source of information by educational level and standard of living household are quite visible. Only 61 percent of non-literate men had heard of RTI/STI from television which increased to 78 percent for men who have completed 10 or more years of schooling.

Men from rural areas, men who have completed 0-9 years of schooling, men belonging to Buddhist religion, men from other backward classes, men with a medium standard of living and younger men are more prone to receive information from relatives or friends.

Table 8.1 SOURCE OF KNOWLEDGE ABOUT RTI/STI AMONG WOMEN

Percentage of currently married women age 15 - 44 who have heard about RTI/STI and among women who have heard about RTI/STI, percentage who received information from specific sources by selected background characteristics, Tripura, 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	10.1	156	*	*	*	*	*	*	*	*	*	*	18
20-24	18.7	568	48.5	62.6	46.5	27.3	24.2	19.2	5.1	18.2	34.3	6.1	99
25-29	18.9	896	56.1	71.7	56.1	25.7	19.8	20.9	15.0	25.7	41.7	7.5	187
30-34	21.2	781	46.4	66.5	47.5	29.6	27.4	19.0	6.7	23.5	45.3	6.7	179
35-39	13.7	790	52.5	72.7	54.7	31.7	29.5	20.1	10.8	25.2	33.1	7.2	139
40-44	12.2	694	52.2	69.6	48.9	34.8	31.5	25.0	8.7	17.4	38.0	10.9	92
Residence													
Rural	15.7	2,740	39.8	53.4	41.4	28.6	23.7	19.9	6.8	21.8	38.7	6.5	367
Urban	19.2	1,144	62.5	84.4	60.8	30.0	28.2	21.9	12.4	23.9	42.1	8.1	347
Education													
Non-literate	3.9	833	(40.4)	(51.1)	(19.1)	(10.6)	(17.0)	(21.3)	(8.5)	(27.7)	(31.9)	(14.9)	47
0-9@ years	15.6	2,050	40.7	59.3	38.6	21.6	23.1	22.5	6.5	24.4	49.1	6.5	324
10 and above	29.7	1,001	61.8	79.6	66.8	39.1	29.7	19.2	12.5	20.7	33.2	7.0	343
Religion													
Hindu	17.2	3,593	51.8	69.2	51.9	29.8	26.5	20.9	9.8	22.5	40.4	7.3	684
Muslim	11.8	129	*	*	*	*	*	*	*	*	*	*	18
Christian	10.7	95	*	*	*	*	*	*	*	*	*	*	7
Buddhist	7.2	62	*	*	*	*	*	*	*	*	*	*	4
Caste/tribe#													
Scheduled caste	16.0	768	52.5	60.7	45.9	27.0	19.7	20.5	10.7	24.6	47.5	8.2	122
Scheduled tribe	8.2	693	60.3	65.5	37.9	25.9	29.3	31.0	0.0	19.0	31.0	8.6	58
Other backward class	15.5	868	43.2	64.7	46.8	25.2	23.0	14.4	8.6	28.8	45.3	12.2	139
Other	21.6	1,527	51.7	72.5	55.5	32.4	28.3	21.6	11.1	20.8	38.0	5.1	389
Standard of living index													
Low	10.7	1,492	41.4	42.9	25.7	17.1	22.9	23.6	9.3	29.3	42.1	10.0	140
Medium	17.0	1,601	45.8	68.0	46.8	27.3	24.6	20.9	6.7	22.6	45.1	7.1	297
High	27.7	791	61.0	81.9	67.9	37.5	28.9	19.5	12.6	19.9	34.3	6.1	277
Total	16.7	3,884	50.8	68.5	50.8	29.3	25.9	20.9	9.5	22.8	40.3	7.3	714

Note: @ 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 very few cases. ( ) based on less than 50 unweighted cases. Total includes 5 cases with religion-other in aware of RTI/STI were not shown separately.

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, Tripura, 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	14.8	78	*	*	*	*	*	*	*	*	*	*	12
25-34	23.8	844	33.8	67.5	61.6	32.6	18.0	16.2	10.6	20.2	41.9	3.4	201
35-44	29.5	1,295	45.5	79.1	68.9	37.0	26.7	20.5	18.0	27.9	28.4	6.3	383
45+	22.4	722	47.7	71.4	72.8	38.1	20.2	18.9	11.4	27.2	37.8	7.4	162
Residence													
Rural	23.7	2,055	47.1	73.1	64.7	33.1	20.8	20.5	17.4	34.3	44.1	5.7	486
Urban	30.6	884	36.2	76.0	72.8	40.2	26.5	16.4	9.8	10.4	16.4	5.7	270
Education													
Non-literate	7.4	510	(51.2)	(60.5)	(55.8)	(16.3)	(9.3)	(4.7)	(11.6)	(23.3)	(39.5)	(7.0)	38
0-9@ years	18.8	1,383	38.6	68.1	57.6	33.0	20.8	19.6	15.0	25.0	36.9	7.6	260
10 and above	43.8	1,046	45.0	78.1	73.9	38.6	25.3	20.1	15.0	25.9	31.5	4.4	459
Religion													
Hindu	26.1	2,705	42.6	73.4	67.6	36.7	23.7	19.3	14.6	25.5	34.4	5.8	706
Muslim	29.2	101	(62.2)	(78.4)	(62.2)	(18.9)	(16.2)	(18.9)	(2.7)	(18.9)	(29.7)	(8.1)	29
Christian	23.2	76	*	*	*	*	*	*	*	*	*	*	18
Buddhist	6.9	54	*	*	*	*	*	*	*	*	*	*	4
Caste/tribe#													
Scheduled caste	20.8	533	44.1	71.2	62.6	34.1	25.5	14.9	4.9	19.4	30.8	5.8	111
Scheduled tribe	16.9	534	56.1	75.0	63.0	48.0	8.5	20.7	17.4	36.4	52.3	5.6	90
Other backward class	27.0	660	39.4	75.0	64.5	30.3	26.3	23.7	16.3	30.2	41.7	5.7	178
Other	30.6	1,189	42.0	74.5	70.9	36.6	24.5	17.1	16.6	23.3	27.7	5.9	364
Standard of living index													
Low	17.1	1,092	43.8	64.7	59.6	35.9	19.0	19.2	13.0	28.5	44.6	4.9	187
Medium	25.5	1,234	44.5	77.1	61.9	30.9	20.7	19.2	18.0	30.4	39.3	5.8	315
High	41.6	613	41.1	77.4	80.5	41.3	28.4	18.7	11.8	18.0	20.2	6.2	255
Total	25.8	2,939	43.2	74.1	67.6	35.7	22.9	19.0	14.7	25.8	34.2	5.7	757

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 very few cases. ( ) Based on less than 50 unweighted cases. Total includes 3 cases with other in religion were not shown separately.

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, 18 percent of them did not know anything further about the mode of transmission of this disease. This proportion is relatively higher among rural women, young women, women with 0-9years of schooling women from other backward classes and women coming from households with low standard of living. Nineteen percent of rural women do not know about the mode of transmission of RTI/STI compared to 17 percent of urban women. Heterosexual intercourse (68 percent) and lack of personnel hygiene (38 percent) were mentioned by women as mode of transmission of RTI/STI. Only 32 percent of women reported homosexual intercourse and 9 percent reported other modes of transmission of RTI/STI.

Table 8.3 SOURCE OF KNOWLEDGE ABOUT MODE OF TRANSMISSION OF RTI/STI AMONG WOMEN

Percentage of currently married women age 15-44 who have heard of RTI/STI, knowledge of mode of transmission by selected background characteristics, Tripura, 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	40.3	68.6	44.0	4.8	17.5	106
25-29	19.2	63.2	34.0	6.2	21.9	169
30-34	36.2	71.9	44.0	14.5	13.2	165
35-39	34.1	65.2	28.6	8.2	20.9	108
40-44	36.2	74.5	41.5	8.5	19.3	85
Residence						
Rural	28.2	67.4	38.3	6.6	19.1	430
Urban	38.5	70.0	38.8	13.2	17.2	219
Education						
Non-literate	(29.8)	(63.8)	(29.8)	(27.7)	(19.1)	33
0-9@ years	22.5	62.0	33.1	7.1	23.9	320
10 years and above	42.2	76.5	45.4	8.8	11.6	297
Religion						
Hindu	31.1	68.2	38.2	8.2	19.1	619
Caste/tribe#						
Scheduled caste	37.6	67.5	37.3	6.2	15.1	123
Scheduled tribe	44.7	70.6	32.6	8.5	14.8	57
Other backward class	20.7	58.0	38.3	9.4	27.0	134
Other	32.2	72.0	40.2	9.7	17.2	330
Standard of living index						
Low	21.9	60.0	33.4	5.4	26.4	159
Medium	28.4	67.2	39.7	6.3	17.2	271
High	42.9	75.6	40.8	14.4	14.2	219
Total	31.7	68.3	38.5	8.8	18.4	649

Note: @ Literate women with no year of schooling are also included. #Total figure may not add to N due to do not know and missing cases. ( ) based on less than 50 unweighted cases. Total includes 16 cases in age 15-19 and 15, 10, 4, 1 cases with Muslim, Christian, Buddhist and other respectively in religion were not shown separately.

Table 8.4 presents the knowledge of mode of transmission of RTI/STI among men. Among men who had heard of RTI/STI, 26 percent of them mentioned that they did not know any

thing about the mode of transmission of this disease. The percentage of men who did not know about the mode of transmission is higher among younger men, rural men, non-literate men, Hindu men, men from scheduled castes, and men from households with a low standard of living. Among the men who new the modes of transmission of RTI/STI, 54 percent mentioned heterosexual intercourse, 35 percent reported lack of personnel hygiene, and 31 percent mentioned homosexual intercourse, and 8 percent reported other modes of transmission.

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

Percentage of husbands of currently married women who have heard of RTI/STI , knowledge of mode of transmission by selected background characteristics, Tripura, 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	28.6	49.5	25.6	7.8	33.6	201
35-44	31.7	58.7	40.2	7.6	21.6	383
45+	32.8	48.9	33.5	7.2	29.3	162
Residence						
Rural	27.8	51.4	30.3	7.1	28.4	486
Urban	36.9	59.9	42.7	8.4	22.5	270
Education						
Non-literate	(14.0)	(18.6)	(7.0)	(2.3)	(72.1)	38
0-9@ years	22.0	47.5	24.5	7.5	34.1	260
10 years and above	37.8	61.6	43.1	8.2	17.6	459
Religion						
Hindu	30.8	53.9	34.5	7.1	27.2	706
Muslim	(27.0)	(64.9)	(51.4)	(13.5)	(16.2)	29
Caste/tribe#						
Scheduled caste	27.4	51.1	23.2	4.3	31.0	111
Scheduled tribe	36.1	55.0	37.5	8.2	23.2	90
Other backward class	30.1	53.9	42.9	13.2	26.6	178
Other	32.1	55.3	33.0	5.7	25.6	364
Standard of living index						
Low	23.1	38.4	24.5	5.1	38.2	187
Medium	30.2	53.6	29.2	8.4	26.2	315
High	37.9	67.1	49.1	8.3	17.7	255
Total	31.1	54.4	34.8	7.6	26.3	757

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 12 cases in age of men < 25 and 18, 4 cases with Christian, Buddhist respectively in religion were not shown separately. ( ) based on less than 50 unweighted cases.

8.2 Prevalence of RTI/STI

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

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

Table 8.5 and Figure 8.2 show that around one-third of currently married women (31 percent) reported at least one reproductive health problem. The problems reported by women were 'low backache' (13 percent), 'pain in lower abdomen' (11 percent), 'involuntary escape of urine while coughing or sneezing' (4 percent), and 'itching over vulva' (15 percent), 'painful sexual intercourse (5 percent), and 'frequent / painful passage of urine' (4 percent). Other symptoms of reproductive health reported by women were 'fever' (2 percent), 'boils/ ulcers/ warts around vulva' (6 percent), 'some mass coming out of vagina' (2 percent) and 'swelling / lump in breast' (1 percent). Very few women reported 'bleeding after sexual intercourse' and 'swelling in the groin'. The prevalence of reproductive health problems is common among rural and urban women.

Table 8.5 SYMPTOMS OF RTI/STI AMONG WOMEN

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

Symptoms	Total	Residence	
		Rural	Urban
Percentage of women reported any RTI/STI symptoms	31.2	33.0	26.8
Symptoms			
Itching over vulva	14.6	16.2	10.6
Boils/ ulcers/ warts around vulva	6.2	6.4	5.6
Pain in lower abdomen not related to menses	10.7	10.8	10.5
Low backache	12.8	14.2	9.5
Pain during sexual intercourse	4.8	5.2	3.8
Bleeding after sexual intercourse	1.4	1.4	1.7
Swelling in the groin	1.1	1.0	1.3
Frequent / painful passage of urine	3.6	4.3	2.2
Fever	2.0	2.2	1.7
Some mass coming out of vagina	1.9	1.8	2.2
Any involuntary escape of urine while coughing or sneezing	4.1	5.1	1.5
Swelling / lump in breast	0.9	0.7	1.4
Number of women	3,884	2,740	1,144

Figure 8.2
Symptomps of RTI/STI among Women

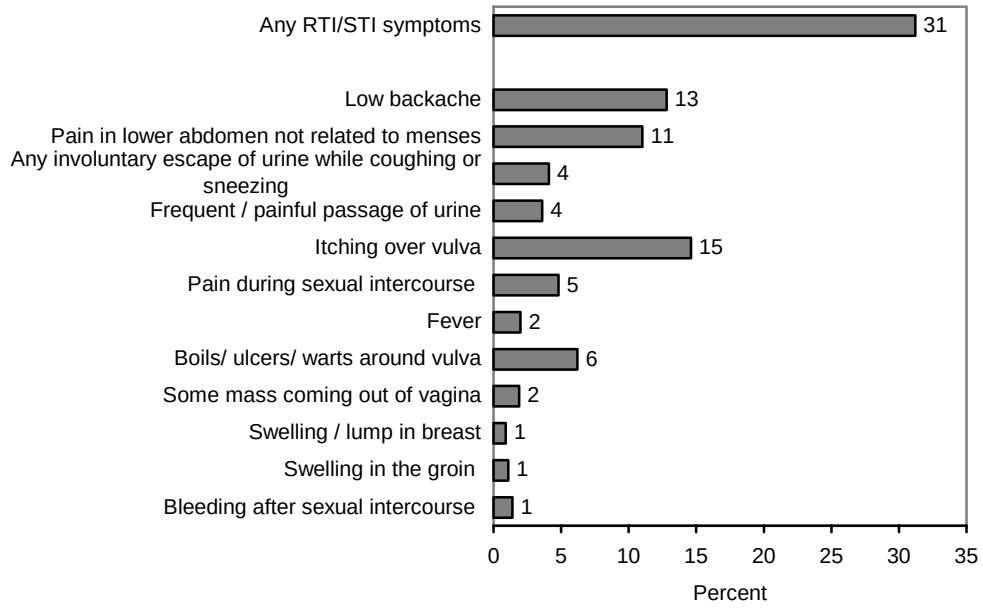


Figure 8.3
Symptomps of RTI/STI among Husbands

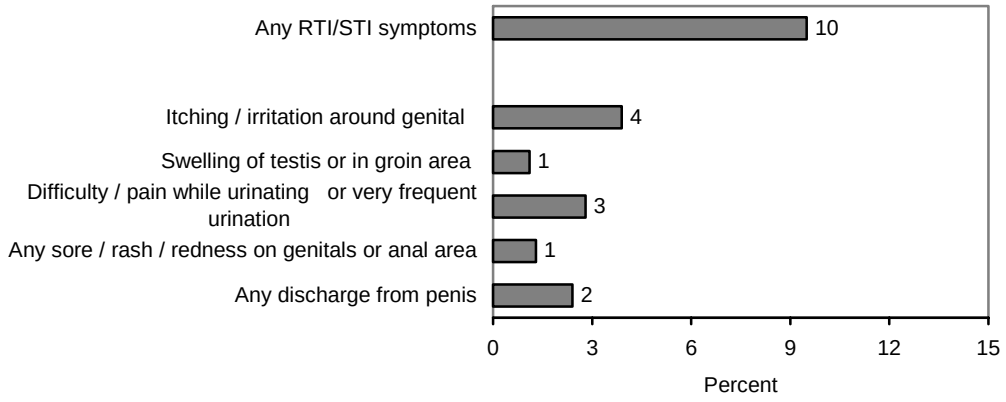


Table 8.6 and Figure 8.3 show the prevalence of reproductive health problems among husbands of currently married women. The prevalence of RTI/STI among men was judged by the reporting of symptoms. About 10 percent of men reported experiencing at least one symptom of reproductive health problem in the last three months preceding the survey. The prevalence of reproductive health problems is higher among urban men (14 percent) than among rural men (8 percent). The specific problem of reproductive health experienced by men is 'difficulty / pain while urinating or very frequent urination (3 percent), 'discharge from penis' (2 percent), 'itching / irritation around genital' (4 percent), 'sore / rash / redness on genitals or anal area' (1 percent), and 'swelling of testes or in groin area' (1 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, Tripura, 2002-04

Symptoms and treatment	Total	Residence	
		Rural	Urban
Percentage of men reported any RTI/STI symptoms	9.5	7.7	13.8
Symptoms			
Any discharge from penis	2.4	1.2	5.2
Any sore / rash / redness on genitals or anal area	1.3	1.1	1.8
Difficulty / pain while urinating or very frequent urination	2.8	3.0	2.2
Swelling of testis or in groin area	1.1	1.1	0.8
Itching / irritation around genital	3.9	3.3	5.1
Number of men	2,939	2,055	884
Percentage of men sought treatment for any RTI/STI	33.0	29.9	36.9
Number of men[1]	280	157	122
Percentage sought treatment at health facility[2]			
Government health facility[3]	55.8	(52.2)	(65.0)
Primary health centre	2.8	(0.0)	(2.5)
Sub centre	3.7	(0.0)	(7.5)
Private health facility[4]	24.3	(17.4)	(27.5)
ISM[5] facility	9.9	(13.0)	(10.0)
Chemist/ medical shop	12.4	(10.9)	(5.0)
Other	12.7	(15.2)	(7.5)
Percentage obtained treatment from[2]			
Doctor	79.7	(73.9)	(85.0)
Male health worker	4.9	(4.3)	(7.5)
Traditional healer	1.5	(2.2)	(0.0)
ISM practitioner	1.8	(2.2)	(2.5)
Home remedy	6.8	(13.0)	(0.0)
Chemist medical shop	3.0	(6.5)	(2.5)
Other	2.5	(0.0)	(2.5)
Number of men[6]	92	47	45

Note: [1] Based on men with any symptoms of RTI/STI. [2] Percentage may add to 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. ( ) based on less than 50 unweighted cases.

Among men who reported reproductive health problems, 33 percent of them sought treatment. There is some rural-urban differential in seeking treatment for reproductive health problems. Among them 56 percent visited a government health facility, including a primary health centre (3 percent) and sub-centre (4 percent) and 24 percent visited a private health facility. A sizeable number of men were treated by the Indian system of medicine (10 percent), 12 percent obtained treatment from a chemist or medical shop, and 13 percent of the men reported that they were treated at other sources. A relatively higher proportion of men from urban areas utilised the government health facility and private health facility for treatment; utilisation of the Indian system of medicine is much higher among rural men (13 percent) than among urban men (10 percent). A large proportion of men saw a doctor (80 percent), 85 percent in urban areas and 74 percent in rural areas. Five percent of men were seen by a male health worker, 2 percent by a traditional healer and 2 percent by an ISM practitioner. Seven percent of the men used home remedies and 3 percent of the men went to a chemist. Another 3 percent of the men obtained treatment from other sources. The percentage of men who obtained treatment, is somewhat higher in rural areas than in urban areas.

The DLHS-RCH also collected information from currently married women on symptoms of RTIs, that is, on abnormal vaginal discharge, texture, colour and odour of discharge in the three months immediately preceding the survey. The prevalence of reproductive health problems among currently married women is estimated from women's experiences. Table 8.7 shows the asymptotic prevalence of vaginal discharge related problems among currently married women in Tripura during the three months preceding the survey according to residence. Five percent of the women reported problems related to vaginal discharge. The prevalence of vaginal discharge problem is relatively higher among rural women (7 percent) than among urban women (2 percent).

Among the women who had reported symptoms of vaginal discharge, 37 percent went for treatments, higher percentage (46 percent) from urban areas compared to their rural counterparts (38 percent). A considerable proportion (34 percent) visited private health facilities followed by ISM (8 percent). Forty-six percent went to a government health facility, including less than one percent to the Primary Health Centre and 3 percent to Sub Centre and 11 percent took home remedies. The proportion of women who visited a private health facility in rural areas is (34 percent). A significantly higher proportion (80 percent) of women in the state of Tripura obtained treatment from doctors for their problems. Around 2 percent women were treated by ANM/Nurse/Midwife /LHV and 18 percent by other health professionals.

Table 8.7 ABNORMAL VAGINAL DISCHARGE

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

Symptoms and treatment	Total	Residence	
		Rural	Urban
Percentage of women reported abnormal vaginal discharge	5.3	6.5	2.4
Number of women	3,884	2,740	1,144
Percentage of women sought treatment for vaginal discharge	37.3	38.0	(46.4)
Number of women[1]	204	177	27
Percentage sought treatment at health facility [2]			
Government health facility[3]	46.1	47.2	*
Primary health centre	0.6	0.0	*
Sub centre	3.3	2.9	*
Private health facility[4]	33.9	33.8	*
ISM[5] facility	7.6	8.1	*
Home remedy	10.8	8.8	*
Percent distribution of women who obtained treatment from [2]			
Doctor	80.4	81.4	*
ANM/nurse/midwife/LHV	2.1	1.8	*
Other health professionals[6]	17.5	16.7	*
Total percent	100.0	100.0	100.0
Number of women	76	67	9

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

8.3 Menstruation Related Problems

Table 8.4 shows the percentage of women who had menstruation problems and who sought treatment during the three months preceding the survey. The Table shows that around 9 percent women in Tripura had menstruation problems, and the figures are 10 percent and 7 percent in the rural and urban areas respectively. The main symptoms of menstrual problems that were reported by the women in Tripura were painful periods (46.4 percent), delayed periods (24 percent) and frequent or short period (20.3 percent).

Table 8.8 MENSTRUATION RELATED PROBLEMS

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

Symptoms and treatment	Total	Residence	
		Rural	Urban
Percentage of women with any menstruation related problem	9.3	10.4	6.5
Symptoms			
No period	18.4	17.7	21.4
Painful period	46.4	47.0	44.2
Frequent or short period	20.3	22.1	13.6
Delayed period	24.1	24.2	23.7
Prolonged bleeding	5.5	5.4	6.1
Excessive bleeding	10.8	10.7	11.3
Continuous bleeding	1.4	0.5	4.7
Scanty bleeding	23.7	23.3	25.3
Inter-menstrual bleeding	6.2	5.7	8.6
Number of women[1]	3,182	2,254	928
Percentage of women sought treatment who had any menstruation related problems	50.0	51.2	45.6
Number of women	296	235	60
Percentage sought treatment at health facility[6]			
Government health facility[2]	64.2	70.8	(37.5)
Primary health centre	1.7	1.9	(4.2)
Sub centre	1.6	2.0	(0.0)
Private health facility[3]	28.3	23.4	(54.2)
ISM[4] facility	6.8	5.1	(8.3)
Other	5.9	4.3	(16.7)
Percentage of women obtained treatment from[6]			
Doctor	92.0	94.8	(89.6)
ANM/nurse/midwife/LHV	5.5	2.9	(12.5)
Other health professionals[5]	6.0	6.1	(6.3)
Other	3.5	2.3	(12.5)
Number of women	148	120	28

Note:[1] Based on women who reported any menstruated related problems.
[2] Includes Government municipal hospital, dispensary, UHC/ UHP /UWFC, CHC/ rural hospital, Primary health centre, sub-centre and out reach/ MCP clinic in village. [3] Includes private hospital/ clinic, non-governmental / trust hospital/clinic, chemist/ medical shop. [4] Either government or private hospital/clinic of Indian system of medicine, [6] Includes *dai* (trained or untrained), relative or friends and chemist/ medical shop. [6] Multiple responses. ( ) based on less than 50 unweighted cases.

The prevalence of painful periods is more among rural women as compared to delayed periods which were prevalent more among urban women. Among the women who had menstrual problems, about 50.2 percent sought treatment in the state and the figures for urban and rural areas are 45.6 percent and 51.2 percent respectively. The private health

facility and government health facility are the main sources of treatment for menstrual problems. Around 28.3 percent of women sought treatment at a private health facility and as many as 64.2 percent sought treatments at a government health facility. About 6.8 percent of the women sought treatment at an ISM facility. Most of the women went to a doctor for treatment (92 percent). The figures for urban and rural areas are 89.6 and 94.8 percent respectively.

8.4 Prevalence of RTIs/STIs by District

Table 8.9 presents the prevalence of RTIs/STIs among currently married women and their husbands by districts. The reported symptoms of RTIs/STIs among women is lowest in South Tripura (26 percent) and highest in North Tripura (38 percent). The problems related to abnormal vaginal discharge ranges from less than one percent in West Tripura to 11 percent each in North and South Tripura. In comparison to women, fewer men from all districts of Tripura reported symptoms of RTIs/STIs. Men from Dhalai (4 percent) reported the lowest prevalence of symptoms of RTIs/STIs and men from South Tripura (11 percent) reported the highest prevalence.

The percentage of women who have sought treatment for RTIs (abnormal vaginal discharge) ranges from 24 percent in West Tripura to 44 percent in South Tripura, and for men who have sought treatment; it ranges from 26 percent in West Tripura to 42 percent in South Tripura.

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, Tripura, 2002-04

District	Percentage of women			Percentage of men	
	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
Dhalai	26.5	4.7	37.8	3.6	36.0
North Tripura	37.5	10.6	33.9	7.0	40.1
South Tripura	26.2	10.9	43.5	10.7	42.0
West Tripura	34.0	0.7	(24.4)	9.8	25.9
Tripura	31.2	5.3	37.3	9.5	33.0

Note:( ) Based on less number of cases

8.5 HIV/AIDS

Acquired Immune Deficiency Syndrome (AIDS) is an illness caused by the Human Immune Virus (HIV), which weakens the immune system and leads to death through secondary infection such as tuberculosis or pneumonia. The virus is generally transmitted through sexual contact, through the placenta of HIV-infected women to their children, or through contact with contaminated needle (injections) or blood. Prevalence of HIV and AIDS has been on the

rise for more than a decade in India and has reached alarming proportions in recent years. To prevent HIV transmission, the government has been making various efforts.

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

8.5.1 Knowledge of HIV/AIDS

Table 8.10 shows the percentage of women who had heard about HIV/AIDS by some selected background characteristics. Fifty-seven percent of currently married women in Tripura have heard of HIV/AIDS, which is higher than RCH Round – I. In Round-I only 39 percent of currently married women were aware of HIV/AIDS**.**

Knowledge of HIV/AIDS is much lower among rural women, non-literate women, Buddhist women, and women from scheduled tribes, women from households with a low standard of living, younger women and women belonging to the age group 40-44 years. Sixty-seven percent of urban women had heard about HIV/AIDS compared to only 53 percent of rural women. Knowledge of HIV/AIDS steadily increased with increase in educational level and household standard of living. Less than one-fourth of non-literate women (22 percent) had heard of HIV/AIDS against 81 percent of women who had completed 10 or more years of schooling. Similarly a little more than one-third of the women (40 percent) with a low standard of living had heard of HIV/AIDS against 78 percent of women with a high standard of living. Except younger women (below the age of 20 and those in the age group 40-44 years) more than 55 percent of the women from other age groups have knowledge of HIV/AIDS. Buddhist women (37 percent) were less aware of HIV/AIDS compared to women from Hindu (58 percent), Muslim women (50 percent) and Christian (45 percent).Women from ‘other caste’ category were more knowledgeable about of HIV/AIDS (67 percent) than women belonging to other backward classes (58 percent), scheduled-caste (58 percent) and scheduled tribe women (33 percent).

The government has been using mass media, such as television, radio, and newspaper extensively to increase awareness among the general public about HIV/AIDS and its prevention. Table 8.10 shows the percentage of currently married women who were aware of HIV/AIDS from different sources. The most prominent source of information about HIV/AIDS is television. About 77 percent of women reported that television was their source of information about HIV/AIDS, followed by relatives or friends (33 percent), newspapers, books or magazines (55 percent), radio (50 percent) and slogans or pamphlets, posters or wall hoardings (51 percent). About 21percent of the women reported that a health worker had informed them about HIV/AIDS and 29 percent of the women received information of HIV/AIDS from a doctor.

Table 8.10 SOURCE OF KNOWLEDGE ABOUT HIV/AIDS AMONG WOMEN

Percentage of currently married women age 15 - 44 who have heard about HIV/AIDS and among women who have heard about HIV/AIDS, percentage who received information from specific sources by selected background characteristics, Tripura, 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	Commun ity Meeting	Relative/ Friends	Others	
Age group (years)													
15-19	47.7	156	39.5	77.9	48.7	50.3	23.7	17.3	13.6	16.1	36.2	2.7	74
20-24	65.5	568	49.9	78.4	51.8	51.2	27.4	19.0	11.7	21.0	30.6	2.7	372
25-29	60.0	896	54.3	77.6	52.7	52.0	28.3	18.1	11.3	20.4	33.4	3.1	537
30-34	56.4	781	42.5	78.9	56.4	54.3	28.0	20.9	11.1	21.9	34.4	4.8	440
35-39	59.8	790	52.8	76.8	58.5	49.5	33.6	27.1	14.3	26.9	30.5	5.9	472
40-44	46.3	694	54.5	75.0	55.0	47.4	29.1	18.9	11.4	24.9	33.2	5.4	321
Residence													
Rural	52.9	2,740	48.2	73.9	50.2	50.6	24.2	18.2	9.6	23.2	35.9	3.5	1,449
Urban	67.1	1,144	54.6	84.2	63.2	51.9	38.7	25.8	16.7	21.8	26.3	5.8	768
Education													
Non-literate	21.5	833	38.4	55.3	16.0	22.6	18.8	18.3	6.9	26.7	38.5	4.3	179
0-9@ years	59.9	2,050	46.9	74.6	46.0	46.7	24.4	18.0	8.3	21.0	34.9	3.0	1,229
10 and above	80.9	1,001	58.5	86.7	76.6	64.1	38.9	25.7	18.9	24.4	27.8	6.2	808
Religion													
Hindu	58.0	3,593	50.6	78.3	55.8	51.8	29.3	21.0	12.5	22.7	33.2	4.3	2,082
Muslim	50.3	129	40.9	63.1	29.6	26.5	29.0	21.3	3.6	31.3	18.2	0.0	65
Christian	45.2	95	(52.8)	(47.2)	(38.9)	(41.7)	(33.3)	(22.2)	(8.3)	(27.8)	(30.6)	(11.1)	43
Buddhist	37.1	62	*	*	*	*	*	*	*	*	*	*	23
Caste/tribe#													
Scheduled caste	58.4	768	54.7	74.9	47.5	47.9	24.5	21.3	15.3	25.2	36.8	4.6	448
Scheduled tribe	32.5	693	59.4	67.1	57.0	48.3	30.8	20.9	4.2	16.4	26.9	4.4	226
Other backward class	58.4	868	45.3	73.4	47.4	46.6	27.3	20.9	13.4	27.6	33.4	2.9	507
Other	66.6	1,527	49.2	82.6	61.4	55.5	32.1	20.7	11.5	20.8	31.8	4.8	1,017
Standard of living index													
Low	39.6	1,492	43.5	55.9	35.8	42.9	24.9	19.5	9.4	27.2	35.6	2.2	590
Medium	63.4	1,601	52.1	84.7	53.5	49.5	25.9	19.8	11.0	22.9	34.5	4.5	1,014
High	77.5	791	54.4	86.2	75.0	61.6	38.8	23.8	16.4	18.0	26.5	6.0	612
Total	57.1	3,884	50.4	77.4	54.7	51.1	29.2	20.8	12.0	22.7	32.6	4.3	2,216

Note: @ Literate women with no year of schooling are also included. #Total figure may not add to N due to do not know and missing cases. ( ) based on less than 50 unweighted cases. Total includes 5 cases in other religions were not shown separately. * Percentage not shown – based on very few cases.

Table 8.11 SOURCE OF KNOWLEDGE ABOUT HIV/AIDS AMONG MEN

Percentage of husbands 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, Tripura, 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	69.8	78	38.4	69.7	43.3	35.0	6.8	14.9	9.7	15.6	30.1	14.4	54
25-34	71.1	844	34.7	68.9	58.7	50.2	18.3	14.4	7.7	12.4	37.9	5.2	600
35-44	68.3	1,295	38.5	75.1	58.3	50.6	21.6	22.6	10.7	17.1	35.3	5.5	885
45+	64.6	722	34.6	67.0	49.5	51.8	16.8	16.2	6.4	14.9	30.7	6.8	467
Residence													
Rural	65.3	2,055	38.9	64.9	57.7	52.7	17.2	18.9	9.2	17.6	42.4	6.5	1,342
Urban	75.1	884	31.5	84.1	52.4	45.5	22.8	17.6	8.0	10.1	19.7	4.7	664
Education													
Non-literate	30.6	510	36.1	59.9	35.1	30.1	12.5	11.7	6.3	13.5	47.8	4.7	156
0-9@ years	73.1	1,383	30.9	63.1	46.2	50.2	13.8	16.9	5.3	11.0	36.4	4.7	1,011
10 and above	80.1	1,046	43.2	83.1	71.7	54.3	26.6	21.6	13.4	20.4	30.7	7.6	838
Religion													
Hindu	69.3	2,705	36.9	71.7	57.0	50.3	19.5	18.5	9.0	15.0	34.4	5.7	1,875
Muslim	61.9	101	32.5	63.6	39.2	40.0	9.9	13.2	2.5	11.7	37.1	9.4	62
Christian	41.4	76	(55.9)	(82.4)	(55.9)	(64.7)	(14.7)	(26.5)	(26.5)	(32.4)	(32.4)	(5.9)	32
Buddhist	62.8	54	(16.1)	(58.1)	(41.9)	(58.1)	(16.1)	(29.0)	(0.0)	(16.1)	(45.2)	(9.7)	34
Caste/tribe#													
Scheduled caste	72.3	533	34.3	69.0	51.2	45.6	18.6	16.3	6.2	12.6	34.9	6.1	386
Scheduled tribe	46.8	534	33.6	61.8	48.4	43.9	15.5	17.4	6.8	14.0	44.0	9.0	250
Other backward class	70.3	660	36.7	70.0	57.5	47.8	19.0	21.6	12.4	17.6	38.3	6.5	464
Other	74.7	1,189	38.0	75.1	58.6	55.6	20.3	17.5	8.7	14.8	30.8	4.8	888
Standard of living index													
Low	55.0	1,092	34.0	55.7	45.3	45.3	13.8	17.1	6.5	12.7	37.8	5.2	601
Medium	74.5	1,234	35.3	72.4	55.0	51.1	16.0	18.2	8.8	17.3	37.6	7.3	919
High	79.3	613	41.8	88.2	71.0	55.0	31.4	20.7	11.5	14.1	26.2	4.4	486
Total	68.2	2,939	36.5	71.2	56.0	50.3	19.1	18.5	8.8	15.1	34.9	5.9	2,006

Note: @ Literate men with no year of schooling are also included. # Total figure may not add to N due to don't and missing cases. ( ) Based on less than 50 unweighted cases. Total includes 3 cases in religion- other were not shown separately.

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

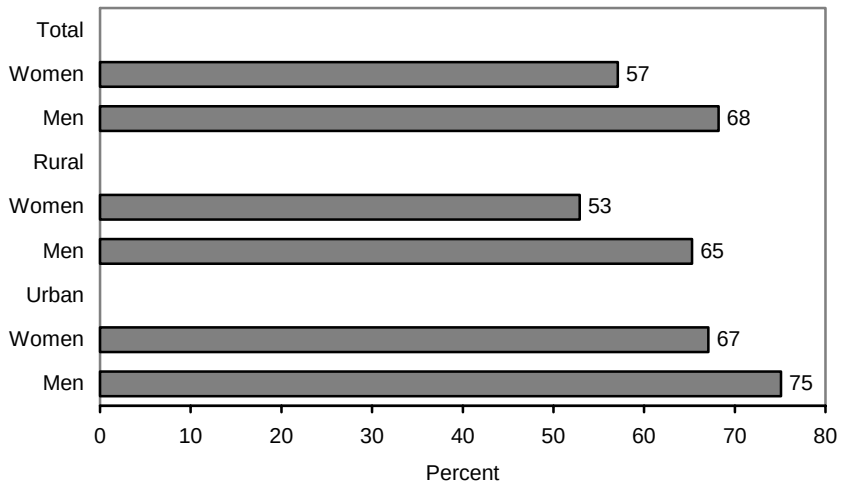


Table 8.11 shows the percentage of husbands of currently married women who had heard about HIV/AIDS. In Tripura, the proportion of men who had heard about HIV/AIDS is much higher than that of women. Sixty-eight percent of men had heard of HIV/AIDS as compared to 57 percent of women (Figure 8.4).

About 75 percent of urban men had heard about HIV/AIDS as compared to only 65 percent of rural men. Knowledge of HIV/AIDS varies by men's age, and it is higher for the age group, 25-34 years. Awareness of HIV/AIDS is much lower among non-literate men, Christian men, men from scheduled tribes, and men who belong to households with a low standard of living. A similar trend is observed in the case of women. About 31 percent of non-literate men had heard of HIV/AIDS, and it increased up to 73 percent for literate men and up to 80 percent of men who had completed 10 or more years of schooling. Thus, it is positively related to standard of living.

Table 8.11 also shows the percentage of husbands of currently married women who were aware of HIV/AIDS by different sources. As reported by the men of Tripura, the most prominent source of information of HIV/AIDS was television (71 percent). Other important sources of HIV/AIDS are the radio (37 percent) newspapers, books or magazines (56 percent), slogans or pamphlets, posters or wall hoardings (50 percent) and friends and relatives (35 percent). Nineteen percent of men reported that a doctor had informed them about HIV/AIDS and 19 percent men had received information of HIV/AIDS from a health worker

About 15 percent reported that they were informed through community meetings and nine percent received such information from a school teacher. Comparatively, a higher proportion of rural men received information about HIV/AIDS from the radio, health worker, schoolteacher and relative or friends than urban men. The information on awareness of

HIV/AIDS through mass media, such as television and newspapers, and books or magazines, was received more by older men (aged 35 and above), urban men, and Christian men and 'other castes' category, with at least 10 years of schooling, and men from households with a high standard of living. On the other hand, relative or friends were the main source of information for rural men, younger men below age 34 years, non-literate men, Buddhist men and scheduled tribes men.

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 age 15-44 who have heard of HIV/AIDS, knowledge of mode of transmission by selected background characteristics, Tripura, 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	14.7	63.8	32.0	24.2	39.2	6.1	23.6	74
20-24	26.6	61.9	33.7	22.9	36.2	8.8	25.7	372
25-29	23.9	57.2	27.3	22.7	32.7	7.6	29.2	537
30-34	32.9	66.8	32.6	26.2	39.3	8.8	23.4	440
35-39	26.4	46.1	26.7	19.2	30.6	6.5	36.5	472
40-44	25.5	47.0	31.2	23.7	33.1	8.0	32.3	321
Residence								
Rural	25.0	61.5	27.5	20.1	32.3	5.1	24.3	1,449
Urban	29.5	46.5	34.7	28.1	38.5	12.9	38.6	768
Education								
Non-literate	18.0	45.6	15.5	13.1	23.5	5.7	46.8	179
0-9@ years	20.2	54.3	24.5	16.5	30.0	5.3	30.8	1,229
10 years and above	38.2	61.6	41.6	34.8	43.6	12.0	23.0	808
Religion								
Hindu	26.7	56.3	30.1	23.2	34.7	7.8	29.3	2,082
Muslim	13.3	42.8	26.5	8.4	32.0	7.0	39.4	65
Christian	(52.8)	(72.2)	(25.0)	(27.8)	(27.8)	(16.7)	(19.4)	43
Caste/tribe#								
Scheduled caste	23.3	53.5	27.3	20.0	30.3	6.6	33.6	448
Scheduled tribe	35.5	57.8	29.0	28.9	32.6	11.1	32.0	226
Other backward class	20.7	53.5	26.4	17.8	28.8	7.7	33.3	507
Other	29.4	59.4	33.3	25.6	40.1	7.7	24.3	1,017
Standard of living index								
Low	20.0	51.9	17.8	14.6	23.6	3.9	34.7	590
Medium	23.1	57.1	29.3	19.6	32.5	6.5	29.4	1,014
High	38.7	59.0	43.0	36.4	48.1	13.8	23.9	612
Total	26.6	56.3	30.0	22.9	34.4	7.8	29.3	2,216

Note: @ Literate women with no year of schooling are also included. #Total figure may not add to N due to do not know and missing cases. ( ) based on less than 50 unweighted cases. Total includes 23 and 4 cases with Buddhist and other respectively in religion were not shown separately.

This proportion is relatively higher among urban women, older women, non-literate women, Muslim women, women from scheduled castes and women with a low standard of living. Thirty-nine percent of the urban women do not know about the mode of transmission of HIV/AIDS compared to 24 percent of rural women.

Among women who reported different ways of transmission of HIV/AIDS, a large proportion (56 percent) mentioned heterosexual intercourse as a mode of transmission. All the socio-economic groups reported that heterosexual intercourse was the main mode of transmission of HIV/AIDS. Other modes reported by women were transmission through needle or blade or skin puncture (30 percent), transfusion of infected blood (34 percent), mother to child, if pregnancy occurs during a stage of HIV (23 percent); only 27 percent of the women mentioned that homosexual intercourse could also be a mode of transmission. Eight percent stated that there were other ways of transmission of HIV/AIDS

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

Percentage of husbands of currently married women who have heard of HIV/AIDS, knowledge of mode of transmission by selected background characteristics, Tripura, 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	13.6	56.1	20.1	17.5	46.1	10.2	23.1	54
25-34	31.0	57.8	27.8	21.3	43.7	13.2	23.6	600
35-44	28.2	58.6	33.5	21.3	39.1	10.8	21.4	885
45+	28.2	51.4	26.8	14.9	35.1	8.9	23.3	467
Residence								
Rural	26.7	60.4	25.6	15.6	38.1	8.3	22.4	1,342
Urban	32.6	49.1	38.5	28.0	43.1	16.6	22.7	664
Education								
Non-literate	17.6	32.5	7.0	5.7	9.4	3.1	55.8	156
0-9@ years	22.8	55.3	19.3	10.2	35.0	7.8	24.6	1,011
10 years and above	37.8	62.7	46.8	33.7	51.0	16.4	13.8	838
Religion								
Hindu	28.7	56.8	30.0	20.1	39.9	11.0	22.6	1,875
Muslim	16.0	47.0	30.8	10.5	26.2	13.0	22.4	62
Christian	(58.8)	(61.8)	(47.1)	(23.5)	(41.2)	(11.8)	(17.6)	32
Buddhist	(32.3)	(64.5)	(12.9)	(3.2)	(45.2)	(12.9)	(19.4)	34
Caste/tribe#								
Scheduled caste	30.2	54.8	28.1	18.8	31.8	9.0	21.1	386
Scheduled tribe	31.3	46.8	18.2	16.7	34.2	9.7	30.4	250
Other backward class	25.5	57.5	33.2	22.1	42.7	13.8	21.6	464
Other	29.3	60.0	31.9	19.5	43.2	10.3	21.4	888
Standard of living index								
Low	22.5	47.4	16.3	8.2	27.2	5.7	32.0	601
Medium	27.3	58.4	28.1	16.5	40.8	10.4	20.1	919
High	38.8	64.7	49.8	39.9	53.2	18.7	15.4	486
Total	28.6	56.6	29.9	19.7	39.7	11.0	22.5	2,006

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. ( ) Based on less than 50 unweighted cases. Total includes 3 cases in religion- other were not shown separately.

Table 8.13 presents the knowledge about mode of transmission of HIV/AIDS among men. About 23 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, non-literate men, Hindu men, scheduled-castes, and men from households with a low standard of living. Among whom reported ways of transmission of HIV/AIDS, 57 percent of them mentioned heterosexual intercourse as a mode of transmission. All the groups reported that heterosexual intercourse was the main mode of transmission of HIV/AIDS. Other modes reported by men are transmission through needle or blade or skin puncture (30 percent), transfusion of infected blood (40 percent), mother to child, if pregnancy occurs during a stage of HIV (20 percent), and only 29 percent of men mentioned that homosexual intercourse could also be a mode of transmission of HIV/AIDS. Eleven percent stated that there were other ways of transmission of HIV/AIDS.

8.5.3 How to avoid HIV/AIDS

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

Among women who reported about awareness of HIV/AIDS, more than one-quarter of them did not know how to avoid becoming infected by HIV/AIDS. This percentage is higher among urban women than among rural women. The percentage of women who did not know of any way to avoid infection decreases with increasing levels of education and household standard of living. Forty-seven percent of non-literate women reported that they did not know of any way to avoid infection as compared to 20 percent of women who had completed ten or more years of schooling. Similarly, 35 percent of women with low a standard of living stated that they did not know of any way to avoid infection as compared to 21 percent of women with a high standard of living. The percentage of women who did not know ways to avoid infection is also high among Muslim women and scheduled-tribe women.

Among women who mentioned ways to avoid HIV/AIDS, a higher proportion of women (56 percent) said that “sex with only one partner is the way to avoid it”. Other ways to prevent HIV/AIDS mentioned by women were ‘using a condom correctly during each sexual intercourse’(43 percent), ‘sterilizing needles and syringe before injecting’ (42 percent), ‘checking blood prior to transfusion’ (33 percent), and 25 percent of the women reported that the pregnancy should be avoided if couples were infected by HIV/AIDS. All the specific ways to avoid becoming infected by HIV/AIDS reported by women are proportionally higher in Christian women, women who belong to ‘other castes’ category, women with a high level of education and women with a high standard of living.

Table 8.15 shows the percentage of men who reported that HIV/AIDS could be avoided by some selected background characteristics. Among men who are aware of HIV/AIDS, 21 percent of them did not know of any method to avoid infection, compared to 27 percent women in the state.

Table 8.14 KNOWLEDGE ABOUT AVOIDANCE OF HIV/AIDS AMONG WOMEN

Among currently married women age 15-44 who have heard about HIV/AIDS, the percentage of women reported HIV/AIDS can be avoided in specific ways by selected background characteristics, Tripura, 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	62.6	41.4	33.8	50.8	29.1	12.7	22.8	74
20-24	55.7	46.1	36.6	46.7	29.5	12.9	24.3	372
25-29	54.4	41.7	29.4	38.7	23.2	7.8	28.5	537
30-34	58.5	49.7	38.8	47.7	30.3	12.0	24.0	440
35-39	51.5	35.5	28.5	39.7	21.2	8.4	32.7	472
40-44	58.2	43.9	32.5	38.6	22.2	11.7	26.8	321
Residence								
Rural	53.9	43.2	31.4	42.6	22.7	6.3	24.0	1,449
Urban	58.9	42.6	35.7	42.1	30.2	17.9	33.7	768
Education								
Non-literate	37.6	30.6	18.8	24.5	13.9	6.4	46.7	179
0-9@ years	52.6	36.1	27.5	38.1	19.6	6.8	29.4	1,229
10 years and above	64.2	56.3	44.3	52.9	36.5	16.5	20.0	808
Religion								
Hindu	55.6	43.2	33.1	43.2	25.7	10.4	27.1	2,082
Muslim	53.8	20.7	21.0	25.1	3.2	4.9	41.4	65
Christian	(72.2)	(58.3)	(36.1)	(33.3)	(30.6)	(22.2)	(22.2)	43
Caste/tribe#								
Scheduled caste	49.4	40.5	29.8	37.2	26.4	9.7	28.8	448
Scheduled tribe	55.1	47.9	31.5	37.9	26.3	11.2	34.3	226
Other backward class	54.1	37.3	30.0	37.6	17.4	7.8	28.7	507
Other	59.4	45.9	35.8	48.2	28.3	11.3	24.5	1,017
Standard of living index								
Low	44.7	35.5	19.6	28.3	14.5	4.8	34.6	590
Medium	54.4	41.3	33.6	43.6	23.7	8.3	27.0	1,014
High	68.1	53.2	44.4	54.2	38.4	19.0	20.9	612
Total	55.6	43.0	32.9	42.4	25.3	10.3	27.4	2,216

Note: @ Literate women with no year of schooling are also included. #Total figure may not add to N due to do not know and missing cases. ( ) based on less than 50 unweighted cases. Total includes 23 and 4 cases with Buddhist and other respectively in religion were not shown separately.

In Tripura a higher proportion of women reported that 'sex with only one partner' is the way to avoid HIV/AIDS, a majority of men (67 percent) also reported the same, and this was the most commonly reported way to avoid HIV/AIDS in all the groups.

Other ways to prevent by HIV/AIDS mentioned by men are 'sterilizing needles and syringe before injecting' (39 percent), 'using a condom correctly during each sexual intercourse' (27 percent each) and 'checking blood prior to transfusion' (25 percent). All the specific ways to avoid becoming infected by HIV/AIDS reported by men 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, Tripura, 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	22.2	18.5	33.9	18.9	10.9	27.0	54
25-34	70.7	28.4	24.8	41.8	16.6	9.9	20.2	600
35-44	64.7	30.5	27.3	41.8	18.3	6.5	21.7	885
45+	68.4	19.4	20.1	31.0	13.4	6.9	21.4	467
Residence								
Rural	64.3	23.3	20.7	39.4	11.6	4.9	25.0	1,342
Urban	73.8	34.6	32.6	38.4	27.0	13.4	13.8	664
Education								
Non-literate	43.6	13.4	8.7	15.9	9.4	2.4	51.8	156
0-9@ years	65.9	16.3	13.8	30.6	8.0	5.1	25.5	1,011
10 years and above	73.7	42.6	40.7	53.5	28.5	11.9	10.5	838
Religion								
Hindu	67.1	27.5	25.0	39.4	17.1	8.1	21.3	1,875
Muslim	69.1	12.5	16.6	27.5	11.8	4.5	25.0	62
Christian	(79.4)	(47.1)	(26.5)	(38.2)	(14.7)	(2.9)	(17.6)	32
Buddhist	(67.7)	(29.0)	(16.1)	(51.6)	(9.7)	(3.2)	(19.4)	34
Caste/tribe#								
Scheduled caste	66.9	21.3	20.2	30.9	13.8	7.0	24.2	386
Scheduled tribe	66.7	22.2	15.7	31.0	10.3	3.0	25.8	250
Other backward class	66.5	26.8	27.0	38.8	15.3	9.1	20.7	464
Other	68.6	31.0	27.5	44.8	20.2	8.5	19.1	888
Standard of living index								
Low	59.1	13.9	10.2	24.7	6.4	2.9	33.4	601
Medium	68.9	25.9	22.4	38.3	13.7	6.4	19.2	919
High	74.8	45.6	46.7	58.3	35.1	16.3	10.4	486
Total	67.4	27.1	24.6	39.1	16.7	7.7	21.3	2,006

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. () Based on less than 50 unweighted cases. Total includes 3 cases in religion- other were not shown separately.

8.5.4 Misconception about HIV/AIDS

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

Table 8.16 shows the percentage of women with misconceptions about spreading HIV/AIDS through specific ways by selected background characteristics. Being bitten by mosquitoes, fleas or bedbugs is commonly reported as the way of getting HIV/AIDS infection bywomen in all the groups, and this percentage is higher among rural areas (34 percent) than

in urban areas (24 percent). Women who have completed nine years of schooling, women from households with a medium standard of living, Muslim and Christian women, and women from 'other' caste mentioned this method of transmission more often. Other misconceptions about the spreading of HIV/AIDS were 'stepping on urine/stool' (19 percent), 'sharing eating utensils' (20 percent), 'sharing clothes' (17 percent), 'kissing' (22 percent), 'hugging' (15 percent), and 'shaking hands' (13 percent). Most of these misconceptions is also higher among women who belong to scheduled tribes, scheduled castes, among Christian women, women who have completed 9 years of schooling and women with a low standard of living

Table 8.16 MISCONCEPTION ABOUT TRANSMISSION OF HIV/AIDS AMONG WOMEN

Among currently married women age 15-44 who have heard about HIV/AIDS, the percentage of women having misconception about the transmission of HIV/AIDS by selected background characteristics, Tripura, 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	15.2	17.3	24.5	20.5	25.2	22.6	33.9	1,449
Urban	9.1	10.1	16.2	9.0	9.3	10.6	23.8	768
Education								
Non-literate	9.4	10.8	18.6	16.2	17.8	18.9	29.0	179
0-9@ years	15.5	16.6	23.0	19.5	23.6	21.1	32.3	1,229
10 years and above	10.2	12.9	20.1	12.1	14.2	14.3	27.9	808
Religion								
Hindu	13.3	15.0	22.2	16.4	19.7	18.4	30.3	2,082
Muslim	10.3	13.7	9.9	10.3	12.0	20.4	31.0	65
Christian	(25.0)	(25.0)	(25.0)	(25.0)	(30.6)	(19.4)	(30.6)	43
Caste/tribe#								
Scheduled caste	14.2	18.0	21.8	17.3	17.6	16.4	25.5	448
Scheduled tribe	13.5	13.0	21.7	14.8	20.0	18.4	28.8	226
Other backward class	14.6	14.3	22.1	18.0	23.1	20.2	30.6	507
Other	11.7	13.9	21.1	15.4	18.6	18.1	33.0	1,017
Standard of living index								
Low	16.3	18.3	23.0	20.4	24.1	22.2	31.0	590
Medium	15.0	16.2	23.3	17.6	22.3	19.8	32.9	1,014
High	6.7	9.1	17.5	10.9	11.2	12.7	25.6	612
Total	13.0	14.8	21.6	16.5	19.7	18.5	30.4	2,216

Note: @ Literate women with no year of schooling are also included. #Total figure may not add to N due to do not know and missing cases. ( ) based on less than 50 unweighted cases. Total includes 23 and 4 cases with Buddhist and other respectively in religion were not shown separately.

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 insect bites, mosquitoes, through flea or bedbugs. Forty percent of the men in Tripura felt so. The percentage who reported that HIV/AIDS could be transmitted through the biting by mosquitoes or flees or bedbugs was much higher among rural men (46 percent) than among

urban men (28 percent). Literate men who have completed nine years of schooling, men from households with a low standard of living, Buddhist men, and scheduled tribes men are of the impression that HIV/AIDS spreads when one is bitten by mosquitoes, fleas or bedbugs. Other misconceptions about the spread of HIV/AIDS are 'sharing eating utensils' (18 percent), 'stepping on urine/stool'(19 percent), 'kissing' (25 percent), 'sharing clothes' (18 percent), 'hugging' (14 percent), and 'shaking hands' (12 percent). All the misconceptions reported by men are relatively higher than those reported by women. The percentage of all these misconceptions is also higher among men who belong to scheduled-tribe or caste, Christian men, non-literate men and men with a medium standard of living.

Table 8.17 MISCONCEPTION ABOUT TRANSMISSION OF HIV/AIDS AMONG MEN

Among husbands currently married women who have heard about HIV/AIDS, the percentage of men having misconception about the transmission of HIV/AIDS by selected background characteristics, Tripura, 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	13.3	17.4	31.1	22.0	23.4	24.3	46.4	1,342
Urban	8.1	8.1	11.7	8.3	6.4	6.7	28.1	664
Education								
Non-literate	17.3	22.1	32.7	26.4	32.6	28.3	40.7	156
0-9@ years	13.4	16.4	26.4	22.4	21.9	22.6	46.6	1,011
10 years and above	8.3	10.4	21.1	9.9	10.0	11.6	32.7	838
Religion								
Hindu	11.5	14.2	24.7	16.8	17.4	18.1	40.1	1,875
Muslim	9.5	13.5	21.9	20.0	11.6	12.4	30.8	62
Christian	(35.3)	(44.1)	(29.4)	(26.5)	(20.6)	(29.4)	(38.2)	32
Buddhist	(16.1)	(12.9)	(25.8)	(29.0)	(32.3)	(32.3)	(61.3)	34
Caste/tribe#								
Scheduled caste	13.5	13.6	24.0	18.3	19.6	19.4	41.7	386
Scheduled tribe	10.9	17.1	29.9	18.6	23.4	22.8	47.8	250
Other backward class	11.5	15.7	26.6	19.0	17.0	19.0	39.2	464
Other	10.8	12.9	22.5	16.1	15.7	16.7	38.1	888
Standard of living index								
Low	12.5	15.3	28.8	19.6	21.0	20.9	46.0	601
Medium	13.0	17.6	27.3	21.5	20.4	22.9	43.1	919
High	7.8	6.9	14.8	7.4	8.8	7.2	28.2	486
Total	11.6	14.3	24.7	17.5	17.7	18.5	40.4	2,006

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. ( ) Based on less than 50 unweighted cases. Total includes 3 cases in religion- other were not shown separately.

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. Around 11 percent women and 21 percent men have the notion that HIV/AIDS is curable, whereas 69 percent women and 61 percent men replied that the disease is not curable. Twenty percent women and 19 percent men do not have any idea regarding the curability of the disease. It can be safely asserted from the figures that both men and women of urban area having high level of education, belonging to Hindu religion and other backward classes and from households of high standard of living are showing better performance as far as the knowledge of curability of HIV/AIDS is concerned.

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, Tripura, 2002-04

	Percent distribution of women				Percent distribution of men			
Background characteristic	Yes	No	Do not know	Number of women	Yes	No	Do not know	Number of men
Residence								
Rural	12.3	64.4	23.4	1,449	17.4	62.0	20.5	1,342
Urban	8.1	78.8	13.2	768	27.7	58.0	14.3	664
Education								
Non-literate	12.9	47.3	39.9	179	17.2	46.3	36.4	156
0-9@ years	12.2	63.2	24.6	1,229	21.6	54.2	24.2	1,011
10 years and above	8.2	83.6	8.2	808	20.5	71.2	8.3	838
Religion								
Hindu	10.6	70.0	19.4	2,082	20.7	61.0	18.3	1,875
Muslim	12.1	60.1	27.8	65	30.5	36.6	32.9	62
Christian	(11.1)	(55.6)	(33.3)	43	(17.6)	(67.6)	(14.7)	32
Buddhist	*	*	*	23	(19.4)	(67.7)	(12.9)	34
Caste/tribe#								
Scheduled caste	11.0	63.2	25.8	448	21.6	59.2	19.3	386
Scheduled tribe	7.9	63.8	28.4	226	17.0	66.5	16.4	250
Other backward class	11.9	68.1	20.0	507	21.4	58.7	19.9	464
Other	10.8	74.1	15.2	1,017	21.2	60.9	17.9	888
Standard of living index								
Low	12.0	56.8	31.2	590	18.9	53.2	27.9	601
Medium	12.8	67.1	20.1	1,014	22.4	60.3	17.4	919
High	6.4	85.2	8.4	612	20.3	70.8	9.0	486
Total	10.8	69.4	19.8	2,216	20.8	60.7	18.5	2,006

Note: @ Literate persons with no year of schooling are also included. #Total figure may not add to N due to do not know and missing cases. ( ) Based on less than 50 unweighted cases. * Percentage not shown – based on very few cases. Total includes 4 and 3 cases with other in religion category were not shown separately of women and men respectively.

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

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

According to DLHS, 17 percent and 57 percent of women ware aware of RTI/STI and HIV/AIDS respectively and the corresponding figures for husbands of eligible women are 26 and 68 percent respectively. The awareness of RTI/STI and HIV/AIDS among men is higher than that among women by 9 and 11 percentage points.

In general, in all of the districts men are more aware of RTI/STI and HIV/AIDS than women. The highest level of awareness about RTI/STI among women was reported in North Tripura (24 percent), followed by South Tripura (20 percent) to the lowest in Dhalai (14 percent). Among men the highest level of awareness of RTI/STI was reported in North Tripura(33 percent), followed by West Tripura (32 percent) and to the lowest in South Tripura (16 percent).

The proportion of husbands of eligible women for currently married women ages 15-44 who are aware of HIV/AIDS in the districts of state Tripura are also presented Table 8.19. Among women the awareness about HIV/AIDS ranges from the highest of 80 percent in South Tripura to the lowest of 32 percent in Dhalai. A high level of awareness of HIV/AIDS among men exceeding 80 percent was reported in North and South Tripura and lowest was reported in Dhalai (36 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, Tripura, 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
Dhalai	13.5	32.3	20.5	35.8
North Tripura	24.1	66.8	32.7	83.2
South Tripura	19.9	79.8	16.0	87.9
West Tripura	16.9	50.7	32.4	60.6
Tripura	16.7	57.1	25.8	68.2

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, Tripura, 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	0.544	0.011	3,882	3,883	1.730	1.9	0.523	0.564
Rural	0.560	0.011	2,739	2,739	1.401	2.0	0.538	0.582
Urban	0.506	0.023	1,143	1,144	2.454	4.6	0.461	0.551
Unmet Need (Currently Married Women age 15-44)								
Total	0.250	0.009	3,882	3,881	1.626	3.5	0.233	0.268
Rural	0.244	0.009	2,739	2,738	1.201	3.7	0.226	0.262
Urban	0.266	0.021	1,143	1,143	2.565	7.9	0.225	0.307
Received Any Antenatal Check up (last live/still birth of past 3 years)								
Total	0.822	0.015	875	853	1.308	1.8	0.792	0.851
Rural	0.801	0.017	644	668	1.179	2.1	0.769	0.834
Urban	0.894	0.033	231	185	2.178	3.7	0.829	0.959
Received 3+ Antenatal Check up (last live/still birth of past 3 years)								
Total	0.664	0.019	875	855	1.435	2.9	0.626	0.702
Rural	0.634	0.021	644	669	1.312	3.4	0.592	0.676
Urban	0.768	0.045	231	186	2.145	5.9	0.680	0.857
Institutional Delivery (last live/still birth of past 3 years)								
Total	0.624	0.020	875	853	1.457	3.2	0.584	0.663
Rural	0.566	0.023	644	668	1.378	4.0	0.522	0.610
Urban	0.831	0.037	231	185	1.831	4.5	0.758	0.904
Safe Delivery (last live/still birth of past 3 years)								
Total	0.651	0.019	875	853	1.418	3.0	0.613	0.689
Rural	0.592	0.022	644	668	1.358	3.8	0.548	0.635
Urban	0.864	0.033	231	185	1.692	3.8	0.799	0.928
Received BCG Vaccination (last and last but one living children, age 12-23 months)								
Total	0.758	0.035	228	203	1.553	4.7	0.688	0.828
Rural	0.769	0.038	168	160	1.337	4.9	0.695	0.844
Urban	0.717	0.089	60	43	2.322	12.5	0.538	0.896
Received Measles (last and last but one living children, age 12-23 months)								
Total	0.497	0.042	228	203	1.629	8.5	0.413	0.580
Rural	0.499	0.048	168	160	1.519	9.6	0.405	0.593
Urban	0.488	0.092	60	43	2.020	19.0	0.303	0.673
Birth order 3+ (birth in last three years)								
Total	0.179	0.016	783	767	1.261	8.7	0.148	0.209
Rural	0.222	0.019	592	595	1.261	8.6	0.184	0.260
Urban	0.029	0.009	191	172	0.464	30.1	0.012	0.046

Sampling errors, Tripura, 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
Contraceptive Prevalence Rate (Currently Married Women age 15-44)							
Dhalai	0.162	0.012	990	990	7.7	0.138	0.186
North Tripura	0.479	0.017	919	919	3.5	0.446	0.512
South Tripura	0.826	0.013	966	966	1.5	0.801	0.850
West Tripura	0.531	0.017	1,007	1,008	3.2	0.497	0.565

Sampling errors, Tripura, 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
Unmet Need (Currently Married Women age 15-44)							
Dhalai	0.665	0.016	990	990	2.4	0.633	0.696
North Tripura	0.311	0.016	919	919	5.1	0.280	0.341
South Tripura	0.065	0.008	966	966	12.3	0.048	0.081
West Tripura	0.221	0.014	1,007	1,007	6.3	0.194	0.248

Sampling errors, Tripura, 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 Any Antenatal Check up (last live/still birth of past 3 years)							
Dhalai	0.756	0.045	110	103	6.0	0.669	0.844
North Tripura	0.801	0.023	337	347	2.9	0.757	0.846
South Tripura	0.814	0.023	292	292	2.8	0.768	0.860
West Tripura	0.894	0.027	136	147	3.0	0.842	0.947

Sampling errors, Tripura, 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 3+ Antenatal Check up (last live/still birth of past 3 years)							
Dhalai	0.655	0.049	110	102	7.5	0.559	0.751
North Tripura	0.638	0.027	337	347	4.2	0.585	0.690
South Tripura	0.702	0.027	292	290	3.8	0.648	0.756
West Tripura	0.700	0.042	136	146	6.0	0.618	0.783

Sampling errors, Tripura, 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
Institutional Delivery (last live/still birth of past 3 years)							
Dhalai	0.804	0.040	110	102	5.0	0.725	0.882
North Tripura	0.519	0.028	337	347	5.4	0.464	0.574
South Tripura	0.602	0.029	292	292	4.8	0.544	0.659
West Tripura	0.783	0.043	136	146	5.5	0.699	0.867

Sampling errors, Tripura, 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
Safe Delivery (last live/still birth of past 3 years)							
Dhalai	0.881	0.033	110	102	3.7	0.816	0.945
North Tripura	0.527	0.028	337	347	5.3	0.472	0.582
South Tripura	0.628	0.029	292	292	4.6	0.571	0.685
West Tripura	0.816	0.040	136	147	4.9	0.738	0.894

Sampling errors, Tripura, 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 BCG Vaccination (last and last but one living children, age 12-23 months)							
Dhalai	0.726	0.072	38	32	9.9	0.585	0.867
North Tripura	0.723	0.049	86	89	6.8	0.626	0.820
South Tripura	0.924	0.033	61	59	3.6	0.859	0.989
West Tripura	0.684	0.089	28	31	13.0	0.509	0.859

Sampling errors, Tripura, 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 Measles (last and last but one living children, age 12-23 months)							
Dhalai	0.163	0.065	38	32	40.1	0.034	0.291
North Tripura	0.617	0.053	86	89	8.6	0.512	0.722
South Tripura	0.752	0.053	61	59	7.0	0.648	0.857
West Tripura	0.265	0.095	28	31	35.7	0.079	0.452

Sampling errors, Tripura, 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
Birth order 3+ (birth in last three years)							
Dhalai	0.274	0.044	1997	2034	16.1	0.044	0.188
North Tripura	0.288	0.027	2048	2047	9.4	0.027	0.235
South Tripura	0.159	0.024	1843	1839	15.1	0.024	0.112
West Tripura	0.071	0.030	1580	1563	42.3	0.030	0.012

APPENDIX B

DLHS-RCH STAFF, TRIPURA

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APPENDIX -C

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NOTES